

April 2022

Installation and Operation Manual

Blackmagicdesign 

HyperDeck **Shuttle HD**



HyperDeck Shuttle HD

Languages

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Welcome

Thank you for purchasing your Blackmagic HyperDeck Shuttle HD disk recorder!

When we designed the original Blackmagic HyperDeck disk recorders we wanted to make it easier to record and play back video using fast SSD storage. Now we are excited to introduce HyperDeck Shuttle HD!

HyperDeck Shuttle HD is a small, portable HDMI video recorder designed for your desktop. A large search dial and familiar transport controls let you operate the recorder with one hand which makes HyperDeck Shuttle HD the perfect companion for live production with an ATEM Mini switcher. You can even use HyperDeck Shuttle HD as a teleprompter!

HyperDeck Shuttle HD records to SD cards or external flash disks using ProRes, DNxHD or H.264 codecs for lightning fast recording and playback.

Please check the support page at www.blackmagicdesign.com for the latest version of this manual and updates to the HyperDeck software. Keeping your software up to date will always ensure you get all the latest features. When downloading software, please register with your information so we can keep you updated when new software is released. We are constantly working on new features and improvements, so we would love to hear from you!

A handwritten signature in black ink that reads "Grant Petty". The signature is written in a cursive, flowing style.

Grant Petty

CEO Blackmagic Design

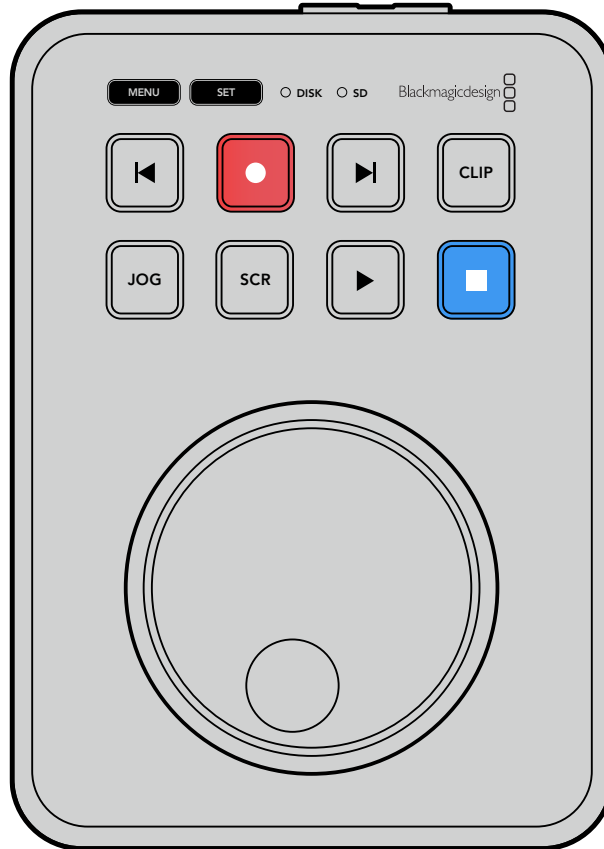
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Getting Started

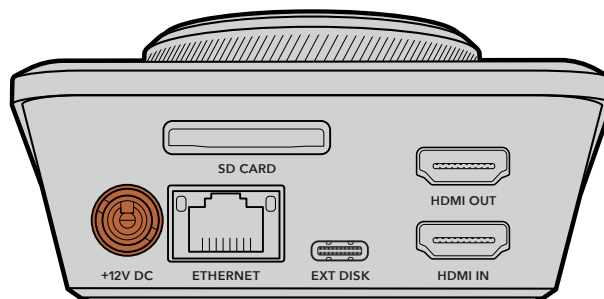
Getting started with your HyperDeck Shuttle HD is as easy as connecting power, plugging in an HDMI video source, inserting an SD card or external media, then pressing record!

This section of the manual shows how to get started using your HyperDeck Shuttle HD.



Plugging in Power

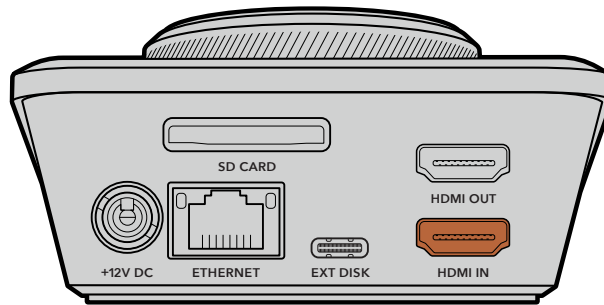
To power your HyperDeck Shuttle HD, plug the supplied power adapter into the power input on the rear panel. Tightening the locking ring secures the power cable to prevent accidental disconnection.



Secure the power adapter into HyperDeck Shuttle HD's power input

Connecting Video and Audio

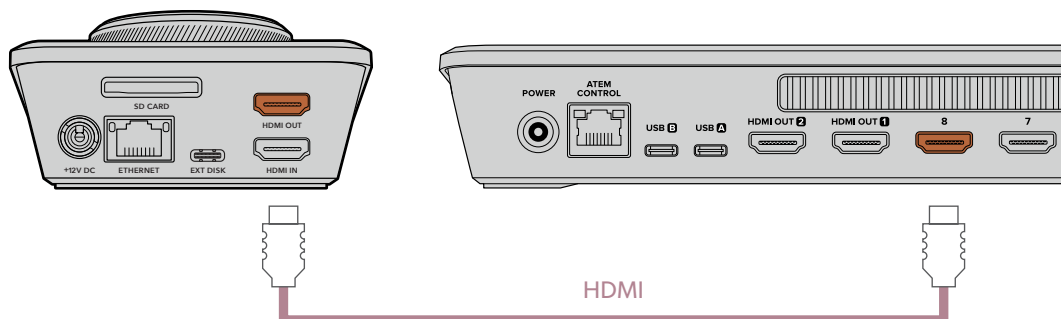
To connect video to your HyperDeck Shuttle HD, plug an HDMI video source into the HDMI input on the rear panel.



Connect your destination equipment to the HDMI output. For example, an ATEM Mini switcher or an HDMI television.

The HDMI output is also used to view the settings menu when changing settings for your HyperDeck. This is because the settings menu is viewed via video overlay on the HDMI output. More information about the menu settings can be found in the 'changing settings' section later in this manual.

TIP If you cannot see your input video source on the connected display, you may be in playback mode. Press the record button to enable record mode.



Plug the HDMI output into your destination equipment, such as an HDMI television or ATEM Mini switcher

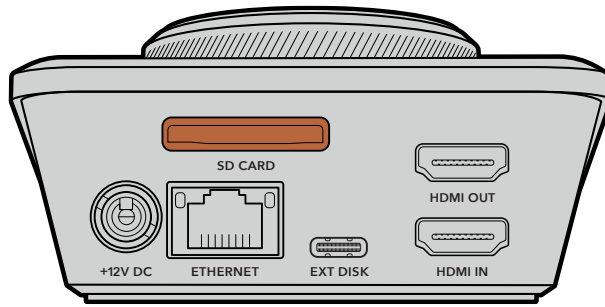
Plugging in Media

All HyperDeck Shuttle HD disk recorders ship ready to record immediately without having to configure any settings. All you need is a formatted SD card or external disk.

You can easily format media via the menu settings. You can also format using a computer. Refer to the 'formatting media' section in this manual for more information. You can also find information about the types of media that are best for recording video and a list of recommended SD cards and external disks.

To plug in an SD card:

- 1 Hold the SD card with the gold connectors facing up and align it with the media slot. Now gently push the card into the slot until you feel it lock firmly into place.



- 2 Your HyperDeck will verify the SD card. This is shown by an illuminated green SD indicator on the top of the HyperDeck Shuttle HD. Once verified, the indicator will turn off.



That's all there is to getting started and your HyperDeck Shuttle HD is now ready for recording and playback!

Keep reading this manual for detailed information about how to record and play back clips, change settings, and much more.

Recording Video

After confirming that your video source is displayed on the HDMI destination equipment, you can start recording straight away!

To start recording, press the record button. When recording to an SD card, the SD indicator will illuminate red and the record and play buttons will also illuminate. When recording to an external disk, the disk indicator will illuminate red.



To finish recording, press the stop button.

Playback

Press the 'play' button to start playback. During playback, the play button will illuminate and the 'disk' or 'SD' media slot indicator will illuminate green.

If there are multiple clips that have been recorded, you can quickly move through them by pressing the forward and backward skip buttons.



Using the Skip Buttons

Press the backward skip button to cue the clip at the start. Pressing more than once will move back through previously recorded clips.

Press the forward skip button to move forward through your clips.



Use the forward and backward skip buttons to cue to the start of each clip

TIP To play back video files on your HyperDeck, you will need to set the codec to match the codec used to record the files. You can do this using the menu. Refer to the 'changing settings' section later in this manual for more information.

Looping Clips

During playback, pressing the 'play' button again will set your HyperDeck Shuttle HD to loop all clips until you press the 'stop' button.

If you want to loop a single clip, set your HyperDeck to 'clip' mode and press the 'play' button once to play and again to loop.

Loop all clips	During playback, press the 'play' button a second time to loop all recorded clips
Loop current clip	When in clip mode, press the 'play' button a second time to loop the current clip

Clip Mode

Clip mode lets you limit playback to a single clip. For example, with clip mode enabled you can shuttle or skip to a clip and then press play knowing that playback will stop when the clip ends.






When clip mode is selected, pressing play a second time will loop the current clip

Using the Search Dial

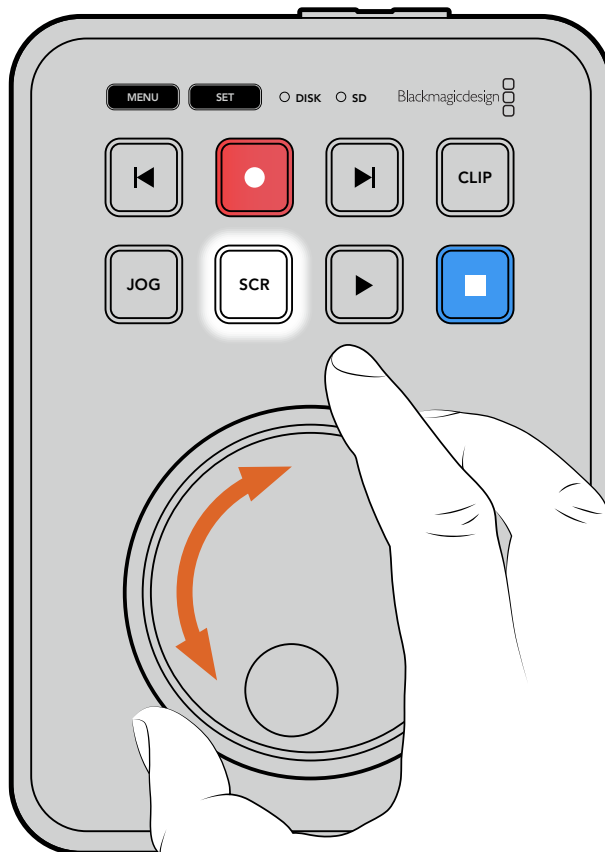
The search dial provides a fast way to move through your clips and select specific moments to play, or review them frame by frame. This can be important if you need to locate a specific moment by visually monitoring the clip as you turn the dial. It is also helpful for parking the playhead at a specific cue point, ready for the clip to be rolled to air during a live broadcast.

Search dial modes include Jog, Scroll and Shuttle.

	Jog	Plays through the clip frame by frame allowing precise control.
	Scroll	Scroll mode lets you quickly move forwards and backwards through all your recorded media. As you turn the search dial, scroll is locked to your movement so you have total control over where to position playback.
	Shuttle	Press the 'jog' and 'scr' buttons simultaneously to enter shuttle mode. Once in shuttle mode you can rewind or fast forward through your media by turning the dial left or right. As you turn the dial, the media will shuttle faster until you reach the maximum speed of x50. To slow the shuttle speed to a stop, turn the dial back to the start position. To stop at a specific point during shuttle, press the stop button, or press play to resume playback at the current position. It's worth noting the maximum shuttle speed can be lowered using the setup menu. For more information, see the 'Settings' section later in this manual.



Press the dedicated 'JOG' or 'SCR' buttons to select jog and scroll search modes



Once a search mode is selected, turn the search dial

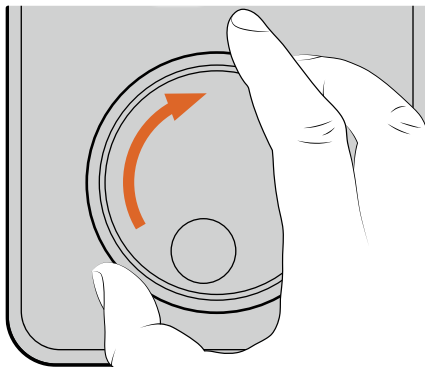
TIP To resume normal playback, press the 'play' or 'stop' button.

Changing Settings

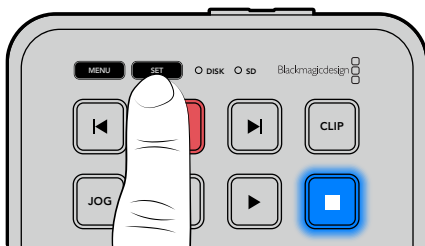
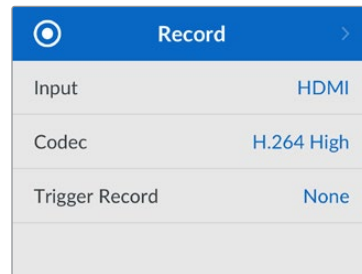
Pressing the 'menu' button will open the settings menu, which will appear as a video overlay on the bottom left corner of your connected HDMI display.



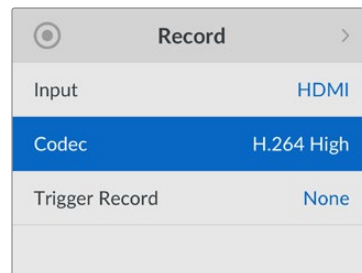
Press the menu button to open the settings menu



Use the search dial to navigate to the submenu or setting



Press the 'set' button to select the submenu or setting



Adjust settings using the search dial or the forward and backward skip buttons. Confirm the selection by pressing the 'set' button.

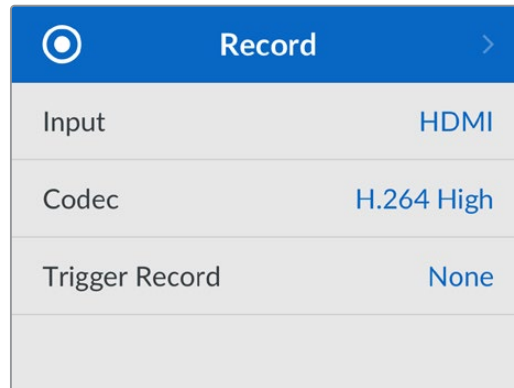
To leave the menu, press 'menu' to step back through the options and return to the home screen.

TIP You can position the menu to any of the four corners of your display using the setup menu. We recommend turning the menu off when you have finished changing settings to make sure the HDMI output is a clean feed when connected to an HDMI switcher, such as ATEM Mini Extreme.

Settings

The settings menu is arranged into 5 distinct categories, including record, monitor, audio, storage and setup. Each of these submenus contain related settings, most of which can be adjusted using the HyperDeck Shuttle HD control panel. Some settings are display only and will appear greyed out, for instance, filename prefix. In this case, the setting can be adjusted via the HyperDeck Setup utility.

Record Menu



Record	
Input	HDMI
Codec	H.264 High
Trigger Record	None

Input

Displays the HyperDeck Shuttle HD HDMI input.

Codec

HyperDeck Shuttle HD can record compressed video using H.264, Apple ProRes and DNxHD codecs. To use the teleprompter function, select 'teleprompter'.

Trigger Record

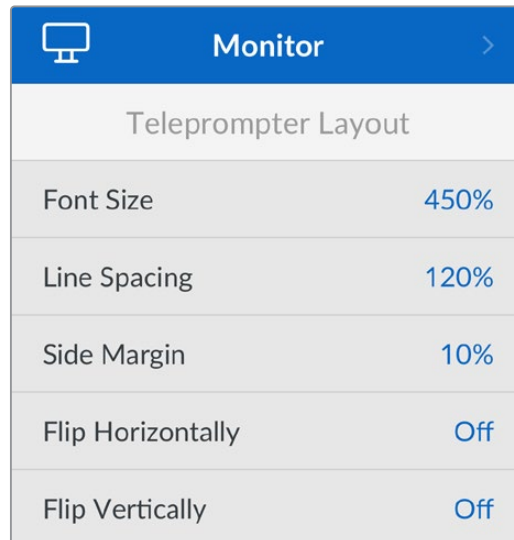
There are two trigger record modes available, including video start/stop and timecode run.

Some cameras, such as Blackmagic Pocket Cinema Camera 4K, send a signal over HDMI to start and stop recording on external recorders. Selecting 'video start/stop' will trigger the HyperDeck to start or stop recording when the record button is pressed on the camera.

Use the 'timecode' run option to trigger the unit to start recording when it receives a valid timecode signal via the HDMI input. When the signal stops, recording will also stop. Disable trigger recording by selecting the 'none' option.

NOTE When recording from an HDMI camera, make sure the output is clean with overlays turned off as any overlays that are present in your camera's video output will be recorded with your image.

Monitor Menu



Monitor	
Teleprompter Layout	
Font Size	450%
Line Spacing	120%
Side Margin	10%
Flip Horizontally	Off
Flip Vertically	Off

Teleprompter Layout

The monitor menu contains all the settings for when using HyperDeck Shuttle HD as a teleprompter.

Font Size

Adjust the size of the text by selecting the font size option and pressing set. Turn the dial clockwise to increase, or counterclockwise to decrease.

Line spacing

Turn the dial to increase or decrease the line spacing.

Side Margin

Adjust the widths of the side margins on both sides of the teleprompter display.

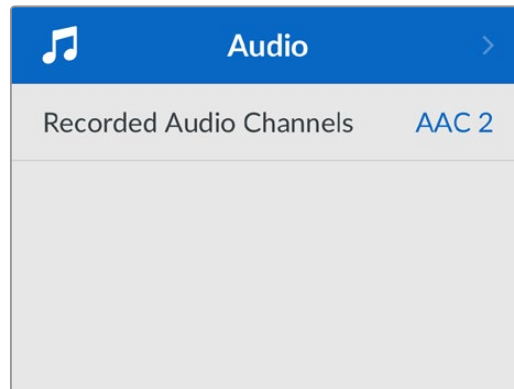
Flip

If your teleprompter monitor is set up to reflect onto glass, such as in front of a camera or at a speaker's podium, you will need to use the flip settings to make it readable for the presenter. There are two flip modes available:

Flip Horizontally - Use this when the bottom of the teleprompter monitor is mounted closest to the base of the glass.

Flip Vertically - Use this when the bottom of the teleprompter monitor is mounted away from the base of the glass.

Audio Menu

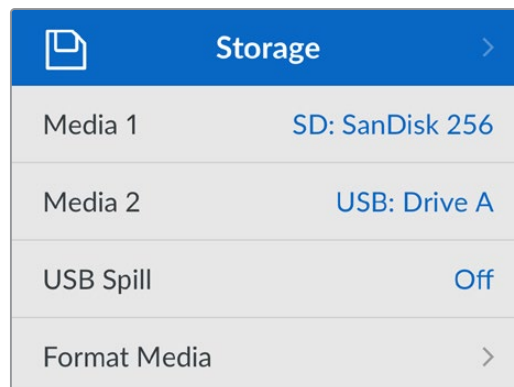


Recorded Audio Channels

HyperDeck Shuttle HD can record up to 8 channels of PCM audio at a time. To select the number of channels to record, expand the recorded audio channels list and select 2, 4 or 8 channels.

If the codec is set to H.264, you can also select 2 channels of AAC audio so you can upload recordings directly to YouTube.

Storage Menu



Connected media will appear in the storage settings. Media 1 will list the name of the connected SD card and media 2 will display any USB flash disk plugged into to the ext disk connector. When using a USB hub, such as Blackmagic MultiDock 10G, the active disk is displayed.

USB Spill

If you are using a Blackmagic MultiDock 10G or similar to connect more than one drive via the 'ext disk' usb connection, turning USB spill on will ensure that recording will spill from one external disk to the next.

Format Media

SD Cards and media connected via the rear ext disk connection can be formatted directly on the unit or via a Mac or Windows computer.

Preparing Media on HyperDeck Shuttle HD:

- 1 Using the search dial and set button, select format media.
- 2 Select the media to format from the list and press set.
- 3 Choose the format and press set.

- 4 A confirmation window will appear detailing which card is to be formatted and the selected format option, select format.
- 5 A formatting window will appear once completed, select Ok.

HFS+ is also known as Mac OS X Extended and is the recommended format as it supports 'journaling'. Data on journaled media is more likely to be recovered in the rare event that your storage media becomes corrupted. HFS+ is natively supported by Mac. exFAT is supported natively by Mac and Windows without needing any additional software but does not support journaling.

To format media on a Mac or Windows computer, refer to the 'formatting media' section in this manual.

Setup Menu

The setup menu contains settings including language selection and default standard as well as sections for the menu display, network settings and timecode options.

Setup	
Name	HyperDeck Shuttle HD
Language	English
Date	16 May 2022
Time	14:32
Time Zone	UTC±11:00
Software	8.1
Camera	A
Default Standard	1080p30
Shuttle Max Speed	x50

Name

When more than one HyperDeck Shuttle HD is on the network, you may wish to give them discrete names to help identify the different units. This can be done via Blackmagic HyperDeck Setup or Blackmagic HyperDeck Ethernet Protocol using a terminal application. The name will appear in the setup menu.

Language

HyperDeck Shuttle HD supports 13 languages, including English, Chinese, Japanese, Korean, Spanish, German, French, Russian, Italian, Portuguese, Turkish, Ukrainian and Polish.

To select the language:

- 1 Once the setup menu is highlighted, press set.
- 2 Scroll the search dial down to select language and press set.

- 3 Use the search dial to select the language and press set. Once selected you will automatically return to the setup menu.

Date

To adjust the date, select the date field and press set. Using the search dial you can select the day, month and year. This will populate the timestamp file suffix when selected.

Time

To adjust the time, select time and press set. Use the search dial to adjust the hours and minutes. HyperDeck Shuttle HD's internal clock is a 24 hour clock.

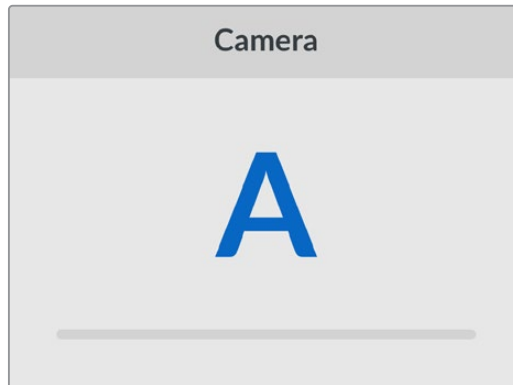
Software

Displays the current software version.

Camera

This setting is helpful when using HyperDeck to record ISO files from multiple cameras and then editing them on a multicamera timeline in DaVinci Resolve.

Each individual camera identification letter will appear in the files' metadata, allowing DaVinci Resolve to identify each angle easily when using the sync bin feature.



Assign your camera using characters A-Z or 1-9

Default Standard

Sometimes the HyperDeck Shuttle HD does not know what video standard you want to use. This setting will let the HyperDeck know the video standard you want to use most of the time.

A good example is if you have turned on a HyperDeck Shuttle HD, it has no video input connected and you insert a disk with files on it with 2 different video standards. Which video standard should the HyperDeck play? The default video standard will give it an indication which video standard you prefer and it will switch to that format and play those files.

The default video standard is also useful when you first turn on a HyperDeck Shuttle HD and it has no video input and no media disk inserted. In this case, the HyperDeck does not know which video standard to use for the monitoring output. The default video standard will guide it on what to do.

However, the default video standard is only a guide. It won't override anything. So if you had a media disk with only 1 type of video file on it and you press play, the HyperDeck disk recorder will switch to that video standard and play. It will ignore the default video standard because it's obvious you just want to play the files on the disk.

It's a similar situation with recording. If you press record, the HyperDeck will just record whatever video standard is connected to the video input. Plus, once you have done the recording, the HyperDeck Shuttle HD will playback the same video standard files on the disk,

even if there are other files on the disk that match the default video standard. It's assumed you want to playback the same video standard as you just recorded. If you unplug the media disk and plug it back in again, only then will the default video standard be used to choose which type of files to play back.

The default video standard is only a guide to help the HyperDeck Shuttle HD make decisions about what to do when it's not sure. It's not an override that forces the deck to behave in any specific way.

Max Shuttle Speed

The maximum shuttle speed on HyperDeck Shuttle HD is x50 speed. If you want to reduce this speed, you can select from one of the other speed presets.

Menu Settings

Using the menu settings you can adjust the location and appearance of the menu on the connected HDMI display.

Menu	
Appearance	Light
Opacity	100%
Position	Bottom Left

Appearance

Set your HyperDeck's onscreen menu to dark or light mode. Light mode will offer more contrast when media is dark, or when you are in teleprompter mode.

Menu	
Appearance	Light
Opacity	100%
Position	Bottom Left

Menu	
Appearance	Dark
Opacity	100%
Position	Bottom Left

Opacity

Adjust the levels to reduce the opacity of the menu overlay on the connected display from the default 100% to 20%.

Position

The menu overlay will default to the bottom left hand corner of the screen. To move the menu to a different location, select 'position' and press the 'set' button. Now you can select the top left, top right, bottom left or bottom right corner of the screen.

Network Settings

Network	
Protocol	Static IP
IP Address	192.168.24.100
Subnet Mask	255.255.255.0
Gateway	192.168.24.1

Protocol

Blackmagic HyperDeck is shipped set to DHCP, so once connected, your network server will automatically assign an IP address and no other network settings will need to be adjusted. If you need to set a manual address, you can connect via a static IP.

With 'protocol' selected press the 'set' button to access the menu, scroll to 'Static IP' and press 'set'.

IP Address, Subnet Mask, Gateway, Primary DNS and Secondary DNS

Once Static IP is selected, you can enter your network details manually.

To change the IP address:

- 1 Use the search dial to highlight 'IP address' and press the 'set' button on your HyperDeck's control panel.
- 2 Using the search dial, adjust the IP address, rotate the search dial to adjust your IP address, pressing 'set' to confirm before adjusting the next set of values.
- 3 Press 'set' to confirm the change and move to the next value.

When you have finished entering your IP address, you can repeat these steps to adjust the Subnet Mask and Gateway. Once finished, press the 'menu' button to exit and return to the home screen.

Timecode Settings

Set your timecode input and output options, including choosing between recording the source timecode, time of day timecode or setting your timecode manually.

Timecode	
Input	Video Input
Drop Frame	Default
Preset	00:00:00:00
Output	Timeline

Input

There are four timecode input options available when recording.

Video Input	Selecting video input will take the embedded timecode from HDMI sources with SMPTE RP 188 metadata. This will maintain sync between your HDMI source and the file recorded on the HyperDeck Shuttle HD.
Internal	Use this option to record time of day timecode via the built in timecode generator.
Last Clip Regen	By selecting 'last clip regen' for your timecode input, each file will start one frame after the last frame of the previous clip. For example, if your first clip ends on 10:28:30:10, the next clip timecode will start at 10:28:30:11.
Preset	If you want to set a timecode manually, select the preset option. Recorded clips will start at the timecode set via the 'preset' setting as shown later in this section.

Drop Frame

For NTSC sources at frame rates of 29.97 or 59.94, you can select 'drop frame' or 'non-drop frame' timecode. If the source is unknown, select 'default'. This will maintain the standard of the input, or default to drop frame if there is no valid timecode.

Preset

You can set your timecode manually by pressing the set button and entering the start timecode using the search dial and set button. Make sure the 'preset' option is selected under the input menu.

Output

Select your timecode options for your outputs.

Timeline	To output a continuous timecode for all clips recorded on a card or drive, select timeline.
Clip	Selecting the clip option will output the timecode of each individual clip.

File Settings

File Settings	
Filename Prefix	HyperDeck
Timestamp File Suffix	Off

Filename Prefix

When first set up, your HyperDeck Shuttle HD will record clips to your SD Card or USB flash disk using the following filename convention.

HyperDeck_0001	
HyperDeck_0001	Prefix
HyperDeck_ 0001	Clip Number

You can change the filename prefix via the HyperDeck Setup utility. For more information, refer to 'Blackmagic HyperDeck Setup' later in this manual.

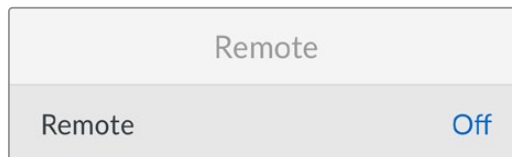
Timestamp File Suffix

The timestamp added to the filename is turned off by default. If you would like the date and time recorded in your filename, toggle the 'timestamp file suffix' option to on.

HyperDeck_2201061438_0001	
HyperDeck_2201061438_0001	Filename Prefix
HyperDeck_ 22 01061438_0001	Year
HyperDeck_22 01 061438_0001	Month
HyperDeck_2201 06 1438_0001	Day
HyperDeck_220106 14 38_0001	Hour
HyperDeck_22010614 38 _0001	Minute
HyperDeck_2201061438_ 0001	Clip Number

Remote Settings

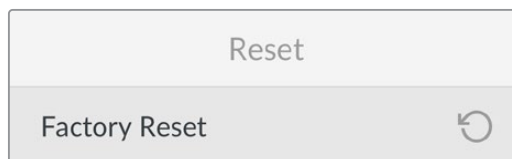
The remote setting lets the HyperDeck be controlled remotely by other video equipment, for example an ATEM Mini Extreme switcher.



Remote

Select 'remote' to enable remote control via Ethernet. Deselect remote to control the unit locally.

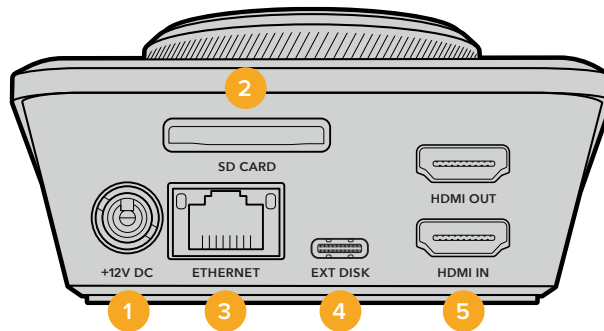
Reset Settings



Factory Reset

Highlight 'factory reset' in the setup menu to restore your HyperDeck to factory settings. Once you press 'set', you will be prompted to confirm your selection.

Rear Panel



1 Power

HyperDeck Shuttle HD is powered via an AC plug pack. The supplied power cable included features a locking connector to prevent disconnection, but you can also use any 36W 12V power cable to power the HyperDeck Shuttle HD.

2 SD Card

Insert SD cards into the slot for recording and playback.

3 Ethernet

The Ethernet port lets you connect to your network for fast ftp transfers or to remotely control the unit using the HyperDeck Ethernet Protocol. For more details on transferring files via an FTP client, see the ‘transferring files over a network’ section later in this manual.

When connected to the same network shared with an ATEM switcher, you can also control your HyperDeck using the ATEM switcher or an ATEM hardware panel.

4 Ext Disk

Connect a flash disk to the USB-C connector so you can record to external disks at up to 5Gb/s. You can also connect to multi port USB-C hubs or Blackmagic MultiDock 10G to connect one or multiple SSDs.

5 HDMI

Connect the HDMI output to HDMI televisions, monitors or even a switcher, such as ATEM Mini Extreme. The HDMI output is also used to view the menu overlay.

Storage Media

SD Card

For high quality HD recording we recommend high speed UHS-I SD cards. These cards need to be capable of write speeds above 220MB/s for recording up to Ultra HD 2160p60.

However, if you are recording at a lower bit rate with higher compression you might be able to use slower cards. Generally, the faster the cards the better.

It's worth regularly checking the latest version of this manual for more up to date information and can always be downloaded from the Blackmagic Design website at www.blackmagicdesign.com/support

What SD cards should I use with HyperDeck Shuttle HD?

The following SD Cards are recommended for 1080p up to 60 fps:

Brand	Model	Capacity
Angelbird	AV PRO SD UHS-II 300MB/s V90 SDXC	256GB
Angelbird	AV PRO SD UHS-II 260MB/s V60 SDXC	128GB
Angelbird	AV PRO SD UHS-II 260MB/s V60 SDXC	64GB
SanDisk	Extreme Pro UHS-I 95MB/s SDXC	64GB
Wise	SD2-64U3 UHS-II 285MB/s SDXC	64GB
Lexar	Professional 1000x UHS-II 150MB/s SDXC	128GB
SONY	Tough SF-G128T	128GB
Kingston	CANVAS GO! Plus 170MB/s V30	64GB
Kingston	CANVAS GO! Plus 170MB/s V30	128GB
Kingston	CANVAS GO! Plus 170MB/s V30	512GB
ProGrade Digital	SDXC UHS-II V90 300R	64GB
ProGrade Digital	SDXC UHS-II V90 300R	128GB
SONY	Tough SF-G64T UHS-II SDXC	64GB
Delkin Devices	Black UHS-II V90 SDXC	256GB
Delkin Devices	Power UHS-II V90 SDXC	128GB
Delkin Devices	Power UHS-II V90 SDXC	256GB
Delkin Devices	Black UHS-II V90 SDXC	128GB
Exascend	Essential SDXC UHS-II V90 R 300MB/s	64GB
Exascend	Essential SDXC UHS-II V90 R 300MB/s	128GB
Exascend	Catalyst SDXC UHS-II V90 R 300MB/s	64GB

EXT Disk

All HyperDeck models can record directly to USB-C flash disks. These fast, high capacity drives allow you to record video for long periods. You can then connect the flash disk to your computer and edit directly from them!

For even higher storage capacities, you can connect a USB-C dock or external hard drive. To connect your Blackmagic MultiDock 10G or USB-C flash disk, connect a cable from your USB-C connected device to the 'ext disk' port on the rear panel of your HyperDeck.

What USB-C drives should I use with HyperDeck Shuttle HD?

The following USB-C drives are recommended for 1080p ProRes HQ at up to 60 fps:

Brand	Model	Capacity
Wise	PTS-256 Portable SSD 4K	256GB
OWC	Envoy Pro Ex	240GB
BUFFALO	SSD-PHE500U3-BA	500GB

The following USB-C drives are recommended for 1080p ProRes HQ at up to 60 fps:

Brand	Model	Capacity
OWC	Envoy Pro Ex	240GB

The following USB-C drives are recommended for 1080p H.264 at up to 60 fps:

Brand	Model	Capacity
OWC	Envoy Pro Ex	240GB

Formatting Media

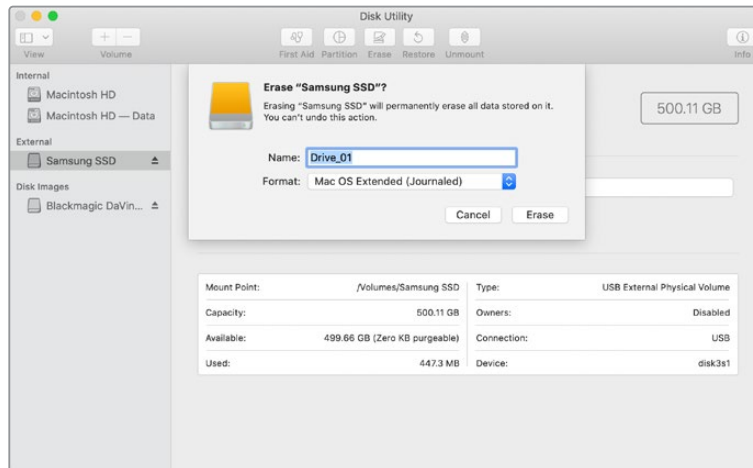
Preparing Media on a Computer

Formatting Media on a Mac Computer

The Disk Utility application included with Mac can format a drive in the HFS+ or exFAT formats.

Make sure you back up anything important from your disk as you will lose everything on it when it is formatted.

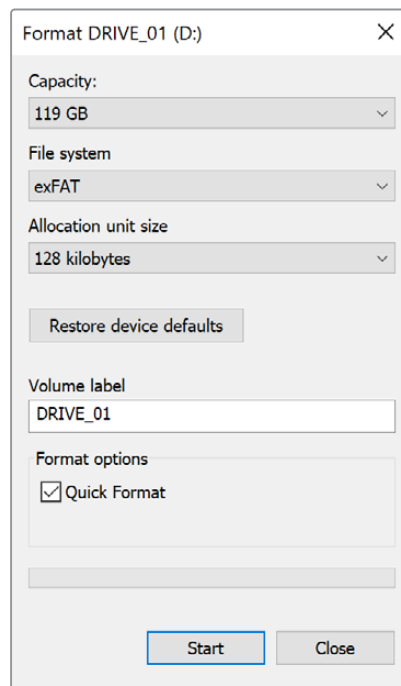
- 1 Connect a USB flash disk to your computer with an external dock or cable adapter and dismiss any message offering to use your SSD for Time Machine backups. For SD cards, connect it to your computer via an external card reader.
- 2 Go to applications/utilities and launch Disk Utility.
- 3 Click on the disk icon of your SD card or USB flash disk and then click the erase tab.
- 4 Set the format to Mac OS Extended (Journaled) or exFAT.
- 5 Type a name for the new volume and then click erase. Your media will quickly be formatted and made ready for use with HyperDeck.



Formatting Media on a Windows computer

The format dialog box can format a drive in the exFAT format on a Windows PC. Make sure you back up anything important from your SSD or SD card as you will lose everything on it when it is formatted.

- 1 Connect a USB flash disk to your computer with an external dock or cable adapter. For SD cards, connect it to your computer via an external card reader.
- 2 Open the start menu or start screen and choose computer. Right-click on your USB flash disk or SD card.
- 3 From the contextual menu, choose format.
- 4 Set the file system to exFAT and the allocation unit size to 128 kilobytes.
- 5 Type a volume label, select quick format and click Start.
- 6 Your media will quickly be formatted and made ready for use with HyperDeck.



Using the Teleprompter Function

Using a standard RTF file, you can use Blackmagic HyperDeck Shuttle HD as a teleprompter. Create your file in TextEdit or WordPad and save as a rich text format file in any of the 13 supported languages. Once opened with HyperDeck Shuttle HD, you can adjust the font size and line spacing of your script.

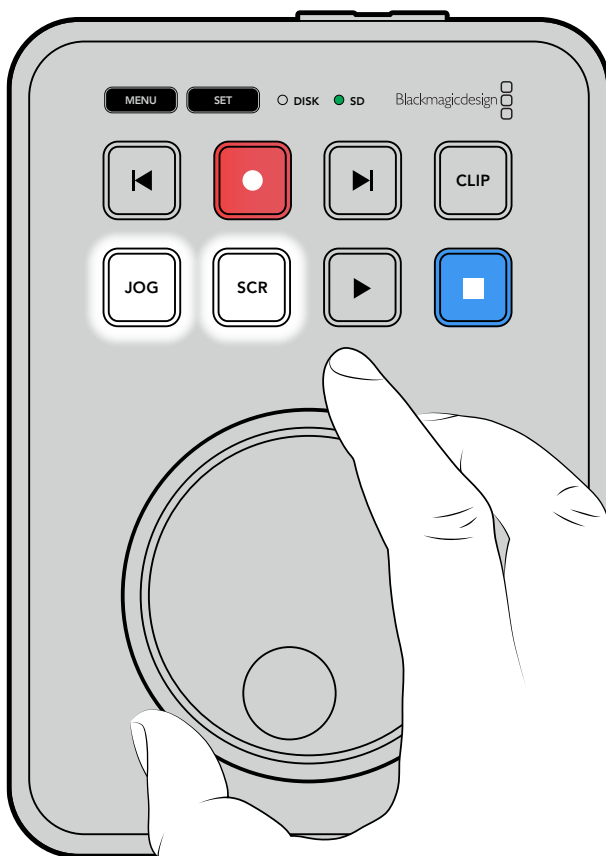
To use the teleprompter:

- 1 Connect HyperDeck Shuttle HD's HDMI out to the HDMI display you want to use.
- 2 Insert an SD card or connect an external USB flash disk containing your script.
- 3 From the record menu select the codec option. Navigate to 'teleprompter' setting and press set.

The script will appear on your display. From here you can start playback automatically using the play button, or for additional control use the dial.

Controlling teleprompter playback speed

The large dial on HyperDeck Shuttle HD can be used to control playback when in teleprompter mode much in the same way as it does for media playback. With a script loaded, press the 'jog' and 'scr' buttons together to turn on variable speed playback. Once selected, turn the dial. The script will move at a speed relative to the movement of the dial. For example, the faster the dial is turned, the faster the script will scroll.

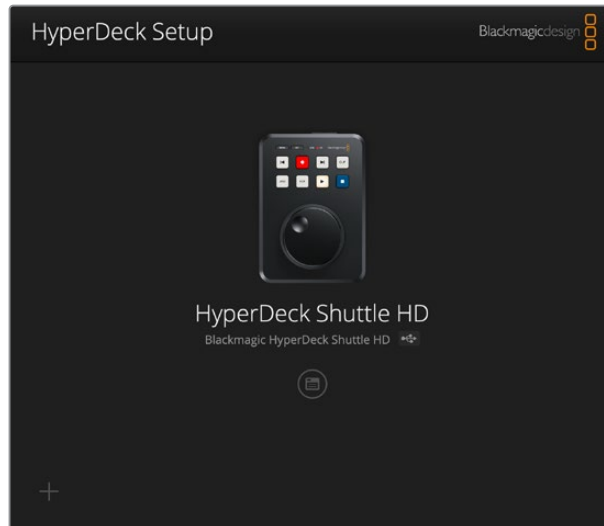


For constant speeds, you can use the jog and scroll buttons individually. Once selected, turning the dial will move the script at a constant low speed in jog mode, or a faster speed in scroll mode. To navigate between rtf files on your SD card or external disk, press the forward and back keys.

The teleprompter will acknowledge the font size, color and whether it is set to bold from the file. Additionally, you can adjust the font size, line spacing, margins or flip the display horizontally or vertically for when you are projecting the display to beam splitter glass using the monitor menu. For more information see 'menu settings' earlier in this manual.

Blackmagic HyperDeck Setup

Blackmagic HyperDeck Setup is a software utility you can use to change settings and update the internal software in your HyperDeck.

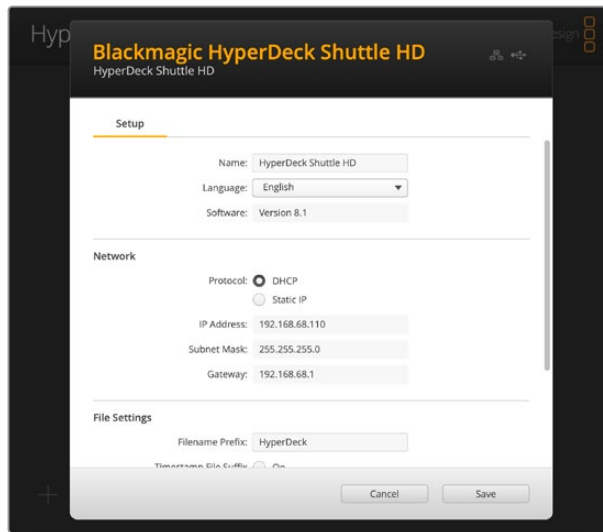


To install the software:

- 1 Download the newest Blackmagic HyperDeck Setup installer from www.blackmagicdesign.com/support.
- 2 Run the Blackmagic HyperDeck Setup installer on your computer and follow the onscreen instructions.
- 3 After installation is complete, connect your HyperDeck Shuttle HD to the computer via the USB or Ethernet connector on the rear panel.
- 4 Launch Blackmagic HyperDeck Setup and follow any onscreen prompt to update the internal software. If no prompt appears, the internal software is up to date and there is nothing further you need to do.

Click on the HyperDeck image or the settings icon to open the settings menu.

The home screen will show your HyperDeck Shuttle HD and the name of the unit. This name is helpful to identify the unit when more than one HyperDeck is connected to your computer and can be set using the utility's settings menu.



Network

Network

Protocol: DHCP
 Static IP

IP Address: 192.168.68.110

Subnet Mask: 255.255.255.0

Gateway: 192.168.68.1

Protocol

To control your HyperDeck Shuttle HD with ATEM switchers, or to control it remotely via HyperDeck Ethernet Protocol, the HyperDeck Shuttle HD needs be on the same network as your other equipment using DHCP or by manually adding a fixed IP address.

DHCP	HyperDeck Shuttle HD disk recorders arrive set to DHCP by default. The dynamic host configuration protocol, or DHCP, is a service on network servers that automatically finds your HyperDeck disk recorder and assigns an IP address. The DHCP is a great service that makes it easy to connect equipment via Ethernet and ensure their IP addresses do not conflict with each other. Most computers and network switchers support DHCP.
Static IP	When 'static ip' is selected, you can enter your network details manually. When setting IP addresses manually so all units can communicate, they must share the same subnet mask and gateway settings. In addition, the first three fields of numbers in the panel's IP address also need to match.

If there are other devices on the network that have the same identifying number in their IP address, there will be a conflict and the units won't connect. If you encounter a conflict, simply change the identifying number in the unit's IP address.

File Settings

The screenshot shows a 'File Settings' window. At the top, it says 'File Settings'. Below that, there is a label 'Filename Prefix:' followed by a text input field containing 'HyperDeck'. Underneath, there is a label 'Timestamp File Suffix' followed by two radio buttons: 'On' (which is unselected) and 'Off' (which is selected).

When first set up, your HyperDeck Shuttle HD will record clips to your SD card or USB flash disk using 'HyperDeck' as the prefix. Type in a new filename to change the prefix.

The timestamp added to the filename is turned off by default. If you would like the date and time recorded in your filename, switch it to on. Filename prefix and timestamp settings are also available via onscreen menu on HyperDeck Shuttle HD.

Transferring Files over a Network

Your HyperDeck disk recorder supports file transfer via file transfer protocol, or ftp. This powerful feature lets you copy files directly from your computer to your HyperDeck via a network with the fast speeds a local network can provide. For example, you could be copying new files to a remote HyperDeck unit based at another location for digital signage.

Connecting to HyperDeck Shuttle HD

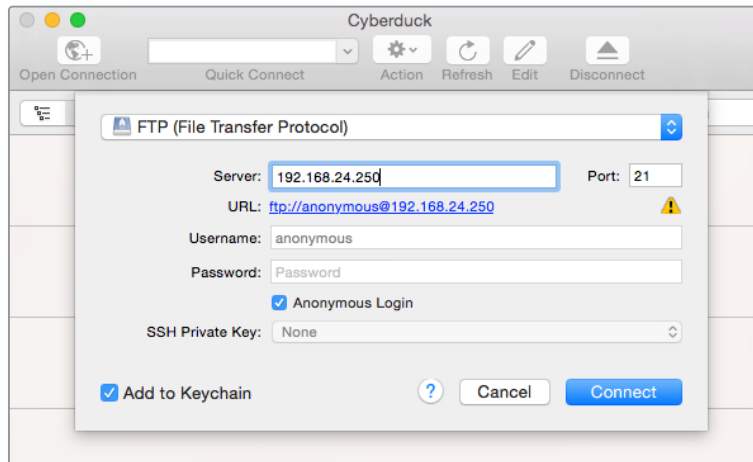
With your computer and HyperDeck Shuttle HD on the same network, all you will need is an ftp client and your HyperDeck Shuttle HD's IP address.

- 1 Download and install an FTP client on the computer you want to connect your HyperDeck to. We recommend Cyberduck, FileZilla or Transmit but most FTP applications will work. Cyberduck and FileZilla are free downloads.
- 2 Connect your HyperDeck Shuttle HD to your network using an Ethernet cable and note its IP address. To access the IP address, press the 'menu' button and rotate the search dial to access the 'network' screen. You'll see your HyperDeck's IP address at the bottom of this screen.

Network	
Protocol	Static IP
IP Address	192.168.24.100
Subnet Mask	255.255.255.0
Gateway	192.168.24.1

You can find your HyperDeck Shuttle HD's IP address in the network section of the setup menu.

- 3 Enter your HyperDeck's IP address into your TCP application's connection dialog. The naming and position of this box can vary between applications, but it is usually labeled 'server' or 'host.' If your FTP program includes an 'anonymous login' checkbox, make sure this is checked.



When connecting to HyperDeck Shuttle HD, you don't need to enter a username or password. Simply enter your disk recorder's IP address in your FTP application's 'server' or 'host' field and check an 'anonymous login' checkbox if one is available.

Transferring Files

Once connected to your HyperDeck you can transfer files as you normally would with your ftp program. Most ftp applications have a drag and drop interface but check your particular application for the appropriate method.

You can transfer any file to and from your HyperDeck, but it's worth noting that any files you intend to play back from HyperDeck Shuttle HD will need to conform to your HyperDeck's supported codecs and resolutions.

TIP You can transfer files over a network while your HyperDeck is recording. HyperDeck will automatically adjust transfer speeds to make sure recording is not affected.

Developer Information

Blackmagic HyperDeck Ethernet Protocol

The Blackmagic HyperDeck Ethernet Protocol is a text based protocol accessed by connecting to TCP port 9993 on HyperDeck models that have a built in Ethernet connection. If you are a software developer, you can use the protocol to construct devices that integrate with our products. Here at Blackmagic Design our approach is to open up our protocols and we eagerly look forward to seeing what you come up with!

Protocol Commands

Command	Command Description
help or ?	Provides help text on all commands and parameters
commands	return commands in XML format
device info	return device information
disk list	query clip list on active disk
disk list: slot id: {n}	query clip list on disk in slot {n}
quit	disconnect ethernet control
ping	check device is responding
preview: enable: {true/false}	switch to preview or output
play	play from current timecode
play: speed: {-5000 to 5000}	play at specific speed
play: loop: {true/false}	play in loops or stop-at-end
play: single clip: {true/false}	play current clip or all clips
playrange	query playrange setting
playrange set: clip id: {n}	set play range to play clip {n} only
playrange set: clip id: {n} count: {m}	set play range to {m} clips starting from clip {n}
playrange set: in: {inT} out: {outT}	set play range to play between: - timecode {inT} and timecode {outT}
playrange set: timeline in: {in} timeline out: {out}	set play range in units of frames between: - timeline position {in} and position {out} clear/reset play range setting
playrange clear	clear/reset play range setting
play on startup	query unit play on startup state
play on startup: enable: {true/false}	enable or disable play on startup
play on startup: single clip: {true/false}	play single clip or all clips on startup
play option	query play options
play option: stop mode: {lastframe/nextframe/black}	set output frame when playback stops
record	record from current input
record: name: {name}	record named clip

Command	Command Description
record spill	spill current recording to next slot
record: spill: slot id: {n}	spill current recording to specified slot use current id to spill to same slot
stop	stop playback or recording
clips count	query number of clips on timeline
clips get	query all timeline clips
clips get: clip id: {n}	query a timeline clip info
clips get: clip id: {n} count: {m}	query m clips starting from n
clips get: version: {1/2}	query clip info using specified output version: version 1: id: name startT duration version 2: id: startT duration inT outT name
clips add: name: {name}	append a clip to timeline
clips add: clip id: {n} name: {name}	insert clip before existing clip {n}
clips add: in: {inT} out: {outT} name: {name}	append the {inT} to {outT} portion of clip
clips remove: clip id: {n}	remove clip {n} from the timeline (invalidates clip ids following clip {n})
clips clear	empty timeline clip list
transport info	query current activity
slot info	query active slot
slot info: slot id: {n}	query slot {n}
slot select: slot id: {n}	switch to specified slot
slot select: video format: {format}	load clips of specified format
slot unblock	unblock active slot
slot unblock: slot id: {n}	unblock slot {n}
cache info	query cache status
dynamic range	query dynamic range settings
dynamic range: playback override: {off/Rec709/Rec2020_SDR/HLG/ ST2084_300/ST2084_500/ ST2084_800/ST2084_1000/ ST2084_2000/ST2084_4000/ST2084}	set playback dynamic range override
dynamic range: record override: {off/Rec709/Rec2020_SDR/HLG/ ST2084_300/ST2084_500/ ST2084_800/ST2084_1000/ ST2084_2000/ST2084_4000/ST2048}	set record dynamic range override
notify	query notification status
notify: remote: {true/false}	set remote notifications
notify: transport: {true/false}	set transport notifications
notify: slot: {true/false}	set slot notifications
notify: configuration: {true/false}	set configuration notifications

Command	Command Description
notify: dropped frames: {true/false}	set dropped frames notifications
notify: display timecode: {true/false}	set display timecode notifications
notify: timeline position: {true/false}	set playback timeline position notifications
notify: playrange: {true/false}	set playrange notifications
notify: cache: {true/false}	set cache notifications
notify: dynamic range: {true/false}	set dynamic range settings notifications
notify: slate: {true/false}	set digital slate notifications
notify: clips: {true/false}	set timeline clips notifications where two types of changes can occur: add: partial update with list of clips and insert positions snapshot: complete update of all clips on timeline
notify: disk: {true/false}	set disk clips notifications where two types of changes can occur: add: partial update with list of clips and insert positions snapshot: complete update of all clips on timeline
goto: clip id: {start/end}	goto first clip or last clip
goto: clip id: {n}	goto clip id {n}
goto: clip id: +{n}	go forward {n} clips
goto: clip id: -{n}	go backward {n} clips
goto: clip: {n}	goto frame position {n} within current clip
goto: clip: +{n}	go forward {n} frames within current clip
goto: clip: -{n}	go backward {n} frames within current clip
goto: clip: {start/end}	goto start or end of clip
goto: timeline: {n}	goto frame position {n} within timeline
goto: timeline: +{n}	o forward {n} frames within timeline
goto: timeline: -{n}	go backward {n} frames within timeline
goto: timeline: {start/end}	goto start or end of timeline
goto: timecode: {timecode}	goto specified timecode
goto: timecode: +{timecode}	go forward {timecode} duration
goto: timecode: -{timecode}	go backward {timecode} duration
goto: slot id: {n}	goto slot id {n}
jog: timecode: {timecode}	jog to timecode
jog: timecode: +{timecode}	jog forward {timecode} duration
jog: timecode: -{timecode}	jog backward {timecode} duration
shuttle: speed: {-5000 to 5000}	shuttle with speed
remote	query unit remote control state
remote: enable: {true/false}	enable or disable remote control
remote: override: {true/false}	session override remote control
configuration	query configuration settings
configuration: video input: SDI	switch to SDI input

Command	Command Description
configuration: video input: HDMI	switch to HDMI input
configuration: video input: component	switch to component input
configuration: audio input: embedded	capture embedded audio
configuration: audio input: XLR	capture XLR audio
configuration: audio input: RCA	capture RCA audio
configuration: file format: {format}	switch to specific file format
configuration: audio codec: PCM	switch to PCM audio
configuration: audio codec: AAC	switch to AAC audio
configuration: timecode input: {external/embedded/internal/preset/clip}	change the timecode input
configuration: timecode output: {clip/timeline}	change the timecode output
configuration: timecode preference: {default/dropframe/nondropframe}	whether or not to use drop frame timecodes when not otherwise specified
configuration: timecode preset: {timecode}	set the timecode preset
configuration: audio input channels: {n}	set the number of audio channels recorded to {n}
configuration: record trigger: {none/recorderbit/timecoderun}	change the record trigger
configuration: record prefix: {name}	set the record prefix name (supports UTF-8 name)
configuration: append timestamp: {true/false}	append timestamp to recorded filename
configuration: xlr input id: {n} xlr type: {line/mic}	configure xlr input type multiple xlr inputs can be configured in a single command
configuration: genlock input resync: {true/false}	enable or disable genlock input resync
uptime	return time since last boot
format: slot id: {n} prepare: {exFAT/HFS+} name: {name}	prepare a disk formatting operation to filesystem {format}
format: confirm: {token}	perform a pre-prepared formatting operation using token
identify: enable: {true/false}	identify the device
watchdog: period: {period in seconds}	client connection timeout
reboot	reboot device
slate clips	slate clips information
slate project	slate project information
slate lens	slate lens information

Multiline commands:	Command Description
slate clips↵	set slate clips information:
reel: {n}	slate reel number, where {n} is in [1, 999]
scene id: {id}	slate scene id value, where {id} is a string
shot type: {WS/MS/BCU/MCU/ECU/none}	slate shot type
take: {n}	slate take number, where {n} is in [1, 99]
take scenario: {PU/VFX/SER/none}	slate take scenario
take auto inc: {true/false}	slate take auto increment
good take: {true/false}	slate good take
environment: {interior/exterior}	slate environment
day night: {day/night}	slate day or night
slate project:↵	set slate project information:
project name: {name}	project name (can be empty, supports UTF-8)
camera: {index}	set camera index e.g. A
director: {name}	director (can be empty, supports UTF-8)
camera operator: {name}	camera operator (can be empty, supports UTF-8)
slate lens:↵	set lens information:
lens type: {type}	lens type (can be empty, supports UTF-8)
iris: {type}	camera iris (can be empty, supports UTF-8)
focal length: {length}	focal length (can be empty, supports UTF-8)
distance: {distance}	lens distance (can be empty, supports UTF-8)
filter: {filter}	lens filter (can be empty, supports UTF-8)

Command Combinations

You can combine the parameters into a single command, for example:

```
play: speed: 200 loop: true single clip: true
```

Or for configuration:

```
configuration: video input: SDI audio input: XLR
```

Or to switch to the second disk, but only play NTSC clips:

```
slot select: slot id: 2 video format: NTSC
```

Protocol Details

Connection

The HyperDeck Ethernet server listens on TCP port 9993.

Basic syntax

The HyperDeck protocol is a line oriented text protocol. Lines from the server will be separated by an ascii CR LF sequence. Messages from the client may be separated by LF or CR LF.

New lines are represented in this document as a "↵" symbol.

Single line command syntax

Command parameters are usually optional. A command with no parameters is terminated with a new line:

```
{Command name}↵
```

If parameters are specified, the command name is followed by a colon, then pairs of parameter names and values. Each parameter name is terminated with a colon character:

```
{Command name}: {Parameter}: {Value} {Parameter}: {Value} ...↵
```

Multiline command syntax

The HyperDeck protocol also supports an equivalent multiline syntax where each parameter-value pair is entered on a new line. E.g.

```
{Command name}:↵  
{Parameter}: {Value}↵  
{Parameter}: {Value}↵  
↵
```

Response syntax

Simple responses from the server consist of a three digit response code and descriptive text terminated by a new line:

```
{Response code} {Response text}↵
```

If a response carries parameters, the response text is terminated with a colon, and parameter name and value pairs follow on subsequent lines until a blank line is returned:

```
{Response code} {Response text}:↵  
{Parameter}: {Value}↵  
{Parameter}: {Value}↵  
...  
↵
```

Successful response codes

A simple acknowledgement of a command is indicated with a response code of 200:

```
200 ok↵
```

Other successful responses carry parameters and are indicated with response codes in the range of 201 to 299.

Failure response codes

Failure responses to commands are indicated with response codes in the range of 100 to 199:

```
100 syntax error
101 unsupported parameter
102 invalid value
103 unsupported
104 disk full
105 no disk
106 disk error
107 timeline empty
108 internal error
109 out of range
110 no input
111 remote control disabled
112 clip not found
120 connection rejected
150 invalid state
151 invalid codec
160 invalid format
161 invalid token
162 format not prepared
163 parameterized single line command not supported
```

Asynchronous response codes

The server may return asynchronous messages at any time. These responses are indicated with response codes in the range of 500 to 599:

```
5xx {Response Text}:↵
{Parameter}: {Value}↵
{Parameter}: {Value}↵
↵
```

Connection response

On connection, an asynchronous message will be delivered:

```
500 connection info:↵
protocol version: {Version}↵
model: {Model Name}↵
↵
```

Timecode syntax

Timecodes are expressed as non-drop-frame timecode in the format:

```
HH:MM:SS:FF
```

Handling of deck "remote" state

The "remote" command may be used to enable or disable the remote control of the deck. Any attempt to change the deck state over ethernet while remote access is disabled will generate an error:

```
111 remote control disabled↵
```

To enable or disable remote control:

```
remote: enable: {"true", "false"} ↵
```

The current remote control state may be overridden allowing remote access over ethernet irrespective of the current remote control state:

```
remote: override: {"true", "false"} ↵
```

The override state is only valid for the currently connected ethernet client and only while the connection remains open.

The "remote" command may be used to query the remote control state of the deck by specifying no parameters:

```
remote↵
```

The deck will return the current remote control state:

```
210 remote info:↵  
enabled: {"true", "false"}↵  
override: {"true", "false"}↵  
↵
```

Asynchronous remote control information change notification is disabled by default and may be configured with the "notify" command. When enabled, changes in remote state will generate a "510 remote info:" asynchronous message with the same parameters as the "210 remote info:" message.

Closing connection

The "quit" command instructs the server to cleanly shut down the connection:

```
quit↵
```

Checking connection status

The "ping" command has no function other than to determine if the server is responding:

```
ping↵
```

Getting help

The "help" or "?" commands return human readable help text describing all available commands and parameters:

```
help↵
```

Or:

```
?↵
```

The server will respond with a list of all supported commands:

```
201 help:↵  
{Help Text}↵  
{Help Text}↵  
↵
```

Switching to preview mode

The "preview" command instructs the deck to switch between preview mode and output mode:

```
preview: enable: {"true", "false"}↵
```

Playback will be stopped when the deck is switched to preview mode. Capturing will be stopped when the deck is switched to output mode.

Controlling device playback

The "play" command instructs the deck to start playing:

```
play↵
```

The play command accepts a number of parameters which may be used together in most combinations.

By default, the deck will play all remaining clips on the timeline then stop.

The "single clip" parameter may be used to override this behavior:

```
play: single clip: {"true", "false"}↵
```

By default, the deck will play at normal (100%) speed. An alternate speed may be specified in percentage between -5000 to 5000:

```
play: speed: {% normal speed}↵
```

By default, the deck will stop playing when it reaches to the end of the timeline. The "loop" parameter may be used to override this behavior:

```
play: loop: {"true", "false"}↵
```

The "playrange" command instructs the deck to play all the clips. To override this behavior: and select a particular clip:

```
playrange set: clip id: {Clip ID}↵
```

To only play a certain timecode range:

```
playrange set: in: {in timecode} out: {out timecode}↵
```

To clear a set playrange and return to the default value:

```
playrange clear↵
```

The "play on startup" command instructs the deck on what action to take on startup. By default, the deck will not play. Use the "enable" command to start playback after each power up.

```
play on startup: enable {"true", "false"}↵
```

By default, the unit will play back all clips on startup. Use the "single clip" command to override.

```
play on startup: single clip: {"true", "false"}↵
```

Stopping deck operation

The "stop" command instructs the deck to stop the current playback or capture:

```
stop↵
```

Changing timeline position

The "goto" command instructs the deck to switch to playback mode and change its position within the timeline.

To go to the start of a specific clip:

```
goto: clip id: {Clip ID}↵
```

To move forward/back {count} clips from the current clip on the current timeline:

```
goto: clip id: +/-{count}↵
```

Note that if the resultant clip id goes beyond the first or last clip on timeline, it will be clamp at the first or last clip.

To go to the start or end of the current clip:

```
goto: clip: {"start", "end"}↵
```

To go to the start of the first clip or the end of the last clip:

```
goto: timeline: {"start", "end"}↵
```

To go to a specified timecode:

```
goto: timecode: {timecode}↵
```

To move forward or back a specified duration in timecode:

```
goto: timecode: {"+", "-"}{duration in timecode}↵
```

To specify between slot 1 and slot 2:

```
goto: slot id: {Slot ID}↵
```

Note that only one parameter/value pair is allowed for each goto command.

Enumerating supported commands and parameters

The "commands" command returns the supported commands:

```
commands↵
```

The command list is returned in a computer readable XML format:

```
212 commands:
<commands>↵
  <command name="..."><parameter name="..."/>...</command>↵
  <command name="..."><parameter name="..."/>...</command>↵
  ...
</commands>↵
↵
```

Controlling asynchronous notifications

The "notify" command may be used to enable or disable asynchronous notifications from the server.

To enable or disable transport notifications:

```
notify: transport: {"true", "false"}↵
```

To enable or disable slot notifications:

```
notify: slot: {"true", "false"}↵
```

To enable or disable remote notifications:

```
notify: remote: {"true", "false"}↵
```

To enable or disable configuration notifications:

```
notify: configuration: {"true", "false"}↵
```

Multiple parameters may be specified. If no parameters are specified, the server returns the current state of all notifications:

```
209 notify:↵
transport: {"true", "false"}↵
slot: {"true", "false"}↵
remote: {"true", "false"}↵
configuration: {"true", "false"}↵
dropped frames: {"true", "false"}↵
display timecode: {"true", "false"}↵
timeline position: {"true", "false"}↵
playrange: {"true", "false"}↵
cache: {"true", "false"}↵
dynamic range: {"true", "false"}↵
slate: {"true", "false"}↵
clips: {"true", "false"}↵
disk: {"true", "false"}↵
↵
```

Retrieving device information

The "device info" command returns information about the connected deck device:

```
device info↵
```

The server will respond with:

```
204 device info:↵
protocol version: {Version}↵
model: {Model Name}↵
unique id: {unique alphanumeric identifier}↵
slot count: {number of storage slots}↵
software version: {software version}↵
↵
```


Retrieving slot information

The "slot info" command returns information about a slot. Without parameters, the command returns information for the currently selected slot:

```
slot info↵
```

If a slot id is specified, that slot will be queried:

```
slot info: slot id: {Slot ID}↵
```

The server will respond with slot specific information:

```
202 slot info:↵
slot id: {Slot ID}↵
status: {"empty", "mounting", "error", "mounted"}↵
volume name: {Volume name}↵
recording time: {recording time available in seconds}↵
video format: {disk's default video format}↵
blocked: {"true", "false"}↵
↵
```

Asynchronous slot information change notification is disabled by default and may be configured with the "notify" command. When enabled, changes in slot state will generate a "502 slot info:" asynchronous message with the same parameters as the "202 slot info:" message.

Retrieving clip information

The "disk list" command returns the information for each playable clip on a given disk. Without parameters, the command returns information for the current active disk:

```
disk list↵
```

If a slot id is specified, the disk in that slot will be queried:

```
disk list: slot id: {Slot ID}↵
```

The server responds with the list of all playable clips on the disk in the format of: Index, name, formats, and duration in timecode:

```
206 disk list:↵
slot id: {Slot ID}↵
{clip index}: {name} {file format} {video format} {Duration
timecode}↵
{clip index}: {name} {file format} {video format} {Duration
timecode}↵
...
↵
```

Note that the *clip index* starts from 1.

Retrieving clip count

The "clips count" command returns the number of clips on the current timeline:

```
clips count ↵
```

The server responds with the number of clips:

```
214 clips count: ↵
clip count: {Count}↵
```

Retrieving timeline information

The "clips get" command returns information for each available clip on the current timeline. Without parameters, the command returns information for all clips on timeline:

```
clips get↵
```

The server responds with a list of clip IDs, names and timecodes:

```
205 clips info:↵  
clip count: {Count}↵  
{Clip ID}: {Start timecode} {Duration timecode} {In timecode}  
{Out timecode} {Name}↵  
{Clip ID}: {Start timecode} {Duration timecode} {In timecode}  
{Out timecode} {Name}↵  
...  
↵
```

Retrieving transport information

The "transport info" command returns the state of the transport:

```
transport info ↵
```

The server responds with transport specific information:

```
208 transport info:  
status: {"preview", "stopped", "play", "forward", "rewind",  
"jog", "shuttle","record"}↵  
speed: {Play speed between -5000 and 5000 %}↵  
slot id: {Slot ID or "none"}↵  
clip id: {Clip ID or "none"}↵  
single clip: {"true", "false"}↵  
display timecode: {timecode}↵  
timecode: {timecode}↵  
video format: {Video format}↵  
loop: {"true", "false"}↵  
timeline: {n}↵  
input video format: {Video format}↵  
dynamic range: {"off", "Rec709", "Rec2020_SDR", "HLG",  
"ST2084_300", "ST2084_500", "ST2084_800", "ST2084_1000",  
"ST2084_2000", "ST2084_4000", "ST2048" or "none"}↵  
↵
```

The "timecode" value is the timecode within the current timeline for playback or the clip for record. The "display timecode" is the timecode displayed on the front of the deck. The two timecodes will differ in some deck modes.

Asynchronous transport information change notification is disabled by default and may be configured with the "notify" command. When enabled, changes in transport state will generate a "508 transport info:" asynchronous message with the same parameters as the "208 transport info:" message.

Video Formats

The following video formats are currently supported on HyperDeck Shuttle:

720p50, 720p5994, 720p60

1080p23976, 1080p24, 1080p25, 1080p2997, 1080p30, 1080p60

1080i50, 1080i5994, 1080i60

Video format support may vary between models and software releases.

File Formats

All HyperDeck models currently support the following file formats:

H.264High

H.264Medium

H.264Low

QuickTimeProResHQ

QuickTimeProRes

QuickTimeProResLT

QuickTimeProResProxy

QuickTimeDNxHD220x

DNxHD220x

QuickTimeDNxHD145

DNxHD145

QuickTimeDNxHD45

DNxHD45

Supported file formats may vary between models and software releases.

Querying and updating configuration information

The "configuration" command may be used to query the current configuration of the deck:

```
configuration↵
```

The server returns the configuration of the deck:

```
211 configuration:↵
audio input: {"embedded", "XLR", "RCA"}↵
audio mapping: {n}↵
video input: {"SDI", "HDMI", "component", "composite"}↵
file format: {format}↵
audio codec: {"PCM", "AAC"}↵
timecode input: {"external", "embedded", "preset", "clip"}↵
timecode output: {"clip", "timeline"}↵
timecode preference: {"default", "dropframe", "nondropframe"}↵
timecode preset: {timecode}↵
audio input channels: {n}↵
record trigger: {"none", "recordbit", "timecoderun"}↵
record prefix: {name}↵
append timestamp: {"true", "false"}↵
genlock input resync: {"true", "false"}↵
↵
```

One or more configuration parameters may be specified to change the configuration of the deck.

To change the current video input:

```
configuration: video input: {"SDI", "HDMI", "component"}↵
```

Valid video inputs may vary between models. To configure the current audio input:

```
configuration: audio input: {"embedded", "XLR", "RCA"}↵
```

Valid audio inputs may vary between models.

To configure the current file format:

```
configuration: file format: {File format}↵
```

Note that changes to the file format may require the deck to reset, which will cause the client connection to be closed. In such case, response code 213 will be returned (instead of 200) before the client connection is closed:

```
"213 deck rebooting"
```

Asynchronous configuration information change notification is disabled by default and may be configured with the "notify" command. When enabled, changes in configuration will generate a "511 configuration:" asynchronous message with the same parameters as the "211 configuration:" message.

Selecting active slot and video format

The "slot select" command instructs the deck to switch to a specified slot, or/and to select a specified output video format.

To switch to a specified slot:

```
slot select: slot id: {slot ID}↵
```

To select the output video format:

```
slot select: video format: {video format}↵
```

Either or all slot select parameters may be specified. Note that selecting video format will result in a rescan of the disk to reconstruct the timeline with all clips of the specified video format.

Clearing the current timeline

The "clips clear" command instructs the deck to empty the current timeline:

```
clips clear↵
```

The server responds with

```
200 ok↵
```

Adding a clip to the current timeline

The "clips add:" command instructs the deck to add a clip to the current timeline:

```
clips add: name: {clip name}↵
```

The server responds with

```
200 ok↵
```

or in case of error

```
lxx {error description}↵
```

Configuring the watchdog

The "watchdog" command instructs the deck to monitor the connected client and terminate the connection if the client is inactive for at least a specified period of time.

To configure the watchdog:

```
watchdog: period: {period in seconds}↵
```

To avoid disconnection, the client must send a command to the server at least every {period} seconds. Note that if the period is set to 0 or less than 0, connection monitoring will be disabled.

Help

Getting Help

The fastest way to obtain help is to go to the Blackmagic Design online support pages and check the latest support material available for your Blackmagic HyperDeck disk recorder.

Blackmagic Design Online Support Pages

The latest manual, software and support notes can be found at the Blackmagic Design support center at www.blackmagicdesign.com/support.

Blackmagic Design Forum

The Blackmagic Design forum on our website is a helpful resource you can visit for more information and creative ideas. This can also be a faster way of getting help as there may already be answers you can find from other experienced users and Blackmagic Design staff which will keep you moving forward. You can visit the forum at <https://forum.blackmagicdesign.com>

Contacting Blackmagic Design Support

If you can't find the help you need in our support material or on the forum, please use the "Send us an email" button on the support page to email a support request. Alternatively, click on the "Find your local support team" button on the support page and call your nearest Blackmagic Design support office.

Checking the Software Version Currently Installed

To check which version of Blackmagic HyperDeck software is installed on your computer, open the About Blackmagic HyperDeck Setup window.

- On Mac OS, open Blackmagic HyperDeck Setup from the Applications folder. Select About Blackmagic HyperDeck Setup from the application menu to reveal the version number.
- On Windows, open Blackmagic HyperDeck Setup utility from your Start menu or Start Screen. Click on the Help menu and select About Blackmagic HyperDeck Setup to reveal the version number.

How to Get the Latest Software Updates

After checking the version of Blackmagic HyperDeck Setup software installed on your computer, please visit the Blackmagic Design support center at www.blackmagicdesign.com/support to check for the latest updates. While it is usually a good idea to run the latest updates, it is wise to avoid updating any software if you are in the middle of an important project.

Regulatory Notices

Disposal of Waste of Electrical and Electronic Equipment Within the European Union.



The symbol on the product indicates that this equipment must not be disposed of with other waste materials. In order to dispose of your waste equipment, it must be handed over to a designated collection point for recycling. The separate collection and recycling of your waste equipment at the time of disposal will help conserve natural resources and ensure that it is recycled in a manner that protects human health and the environment. For more information about where you can drop off your waste equipment for recycling, please contact your local city recycling office or the dealer from whom you purchased the product.



This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. Operation of this product in a residential area is likely to cause harmful interference, in which case the user will be required to correct the interference at personal expense.

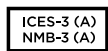
Operation is subject to the following two conditions:

- 1 This device may not cause harmful interference.
- 2 This device must accept any interference received, including interference that may cause undesired operation.



R-R-BMD-20211410001

ISED Canada Statement



This device complies with Canadian standards for Class A digital apparatus.

Any modifications or use of this product outside its intended use could void compliance to these standards.

Connection to HDMI interfaces must be made with high quality shielded HDMI cables.

This equipment has been tested for compliance with the intended use in a commercial environment. If the equipment is used in a domestic environment, it may cause radio interference.

Safety Information

Product is suitable for use in tropical locations with an ambient temperature of up to 40°C.

Ensure that adequate ventilation is provided around the product and that it is not restricted.

No operator serviceable parts inside product. Refer servicing to your local Blackmagic Design service center.



Use only at altitudes not more than 2000m above sea level.

State of California statement

This product can expose you to chemicals such as trace amounts of polybrominated biphenyls within plastic parts, which is known to the state of California to cause cancer and birth defects or other reproductive harm.

For more information go to www.P65Warnings.ca.gov.

Warranty

12 Month Limited Warranty

Blackmagic Design warrants that this product will be free from defects in materials and workmanship for a period of 12 months from the date of purchase. If a product proves to be defective during this warranty period, Blackmagic Design, at its option, either will repair the defective product without charge for parts and labor, or will provide a replacement in exchange for the defective product.

In order to obtain service under this warranty, you the Customer, must notify Blackmagic Design of the defect before the expiration of the warranty period and make suitable arrangements for the performance of service. The Customer shall be responsible for packaging and shipping the defective product to a designated service center nominated by Blackmagic Design, with shipping charges pre paid. Customer shall be responsible for paying all shipping charges, insurance, duties, taxes, and any other charges for products returned to us for any reason.

This warranty shall not apply to any defect, failure or damage caused by improper use or improper or inadequate maintenance and care. Blackmagic Design shall not be obligated to furnish service under this warranty: a) to repair damage resulting from attempts by personnel other than Blackmagic Design representatives to install, repair or service the product, b) to repair damage resulting from improper use or connection to incompatible equipment, c) to repair any damage or malfunction caused by the use of non Blackmagic Design parts or supplies, or d) to service a product that has been modified or integrated with other products when the effect of such a modification or integration increases the time or difficulty of servicing the product. THIS WARRANTY IS GIVEN BY BLACKMAGIC DESIGN IN LIEU OF ANY OTHER WARRANTIES, EXPRESS OR IMPLIED. BLACKMAGIC DESIGN AND ITS VENDORS DISCLAIM ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. BLACKMAGIC DESIGN'S RESPONSIBILITY TO REPAIR OR REPLACE DEFECTIVE PRODUCTS IS THE WHOLE AND EXCLUSIVE REMEDY PROVIDED TO THE CUSTOMER FOR ANY INDIRECT, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES IRRESPECTIVE OF WHETHER BLACKMAGIC DESIGN OR THE VENDOR HAS ADVANCE NOTICE OF THE POSSIBILITY OF SUCH DAMAGES. BLACKMAGIC DESIGN IS NOT LIABLE FOR ANY ILLEGAL USE OF EQUIPMENT BY CUSTOMER. BLACKMAGIC IS NOT LIABLE FOR ANY DAMAGES RESULTING FROM USE OF THIS PRODUCT. USER OPERATES THIS PRODUCT AT OWN RISK.

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HyperDeck Shuttle HD





ようこそ

Blackmagic HyperDeck Shuttle HDディスクレコーダーをお買い上げいただき誠にありがとうございます。
ございます。

Blackmagic HyperDeckのオリジナルモデルを設計した際、高速のSSDストレージを使用したビデオの収録・再生が実行できるディスクレコーダーを作りたいと考えていました。今回、HyperDeck Shuttle HDをご紹介できることを大変喜ばしく思っています。

HyperDeck Shuttle HDは、小型で可搬性に優れたHDMIビデオレコーダーで、デスクでの使用を意図して設計されています。HyperDeck Shuttle HDは、大型のサーチダイヤルと、馴染み深い放送コントロールを搭載しているので、片手で操作できます。これにより、ライブプロダクションでATEM Miniと共に使用するのに最適なレコーダーとなっています。また、テレプロンプターとして使用することも可能です！

HyperDeck Shuttle HDは、SDカードまたは外付けフラッシュディスクに、ProRes、DNxHD、H.264で収録するため、極めて高速に収録・再生が実行できます。

弊社のウェブサイトwww.blackmagicdesign.com/jpのサポートページで、最新バージョンのマニュアルおよびHyperDeckソフトウェアのアップデートをご確認ください。ソフトウェアをアップデートすることで、常に最新の機能をお使いいただけます。ソフトウェアをダウンロードする際にユーザー登録していただければ、新しいソフトウェアのリリース時にお知らせいたします。常に新機能の開発および製品の改善に努めていますので、ユーザーの皆様からご意見をいただければ幸いです。

A handwritten signature in black ink that reads "Grant Petty". The signature is written in a cursive, flowing style.

Blackmagic Design CEO

グラント・ペティ

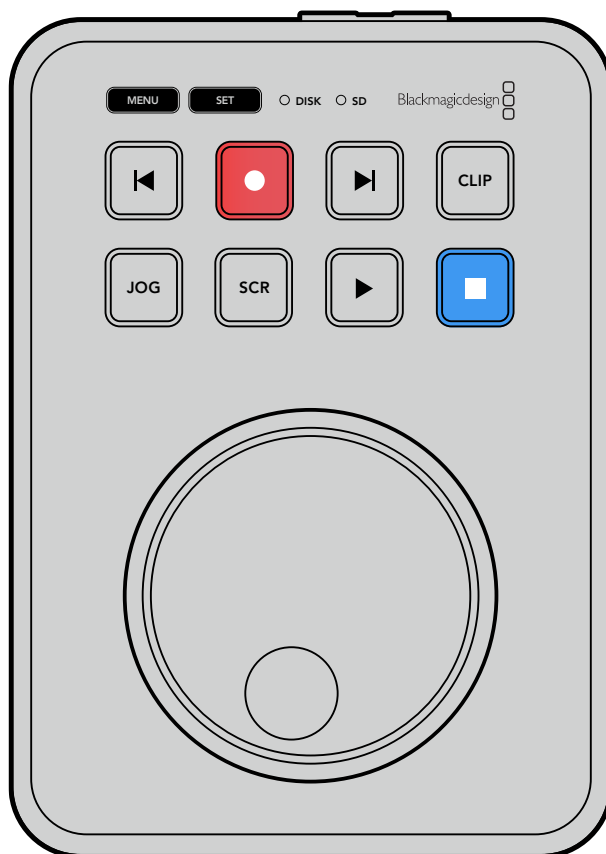
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はじめに

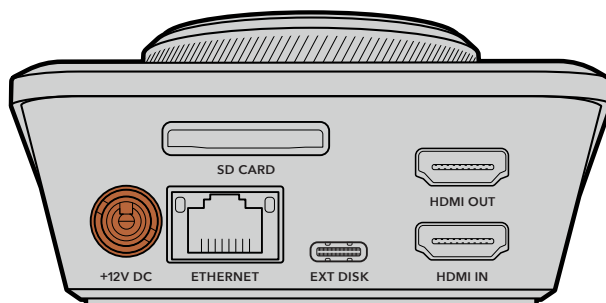
HyperDeck Shuttle HDは、電源に接続し、HDMIビデオソースをつなげ、SDカードまたは外付けメディアを挿入したら、収録ボタンを押すだけで使い始められます。

このセクションでは、HyperDeck Shuttle HDを使い始める手順を紹介します。



電源の接続

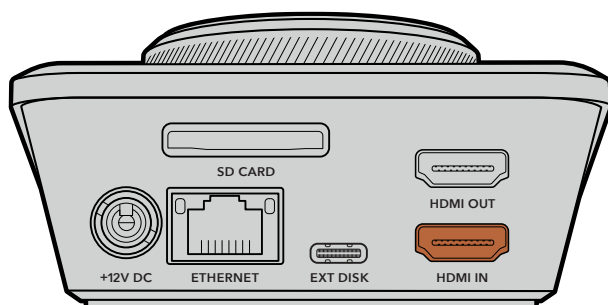
HyperDeck Shuttle HDに給電を行うには、同梱の電源アダプターをリアパネルの電源入力に接続します。ロックリングを締めることで、電源ケーブルが固定されるため、誤って外れることを防ぎます。



電源アダプターをHyperDeck Shuttle HDの電源入力に固定

ビデオとオーディオを接続

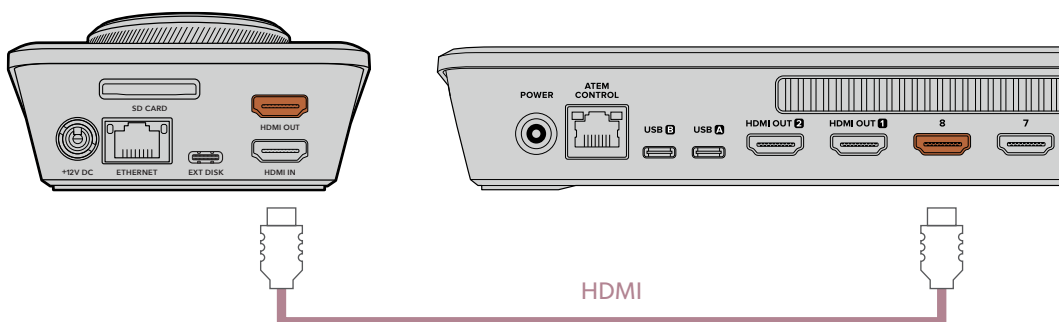
HyperDeck Shuttle HDにビデオを接続するには、HDMIビデオソースをリアパネルのHDMI入力に接続します。



送信先の機器をHDMI出力に接続します。例えば、ATEM MiniスイッチャーやHDMIテレビなどです。

HDMI出力は、HyperDeckの設定を変更する際に、設定メニューを表示する際にも使用します。その理由は、設定メニューがHDMI出力のビデオオーバーレイとして表示されるからです。メニュー設定に関する詳細は、「設定の変更」セクションを参照してください。

作業のこつ 接続したディスプレイに入力ビデオソースが表示されない場合、再生モードになっている可能性があります。収録ボタンを押すと、収録モードが有効になります。



HDMIテレビやATEM Miniスイッチャーなどの送信先の機器に、HDMI出力を接続

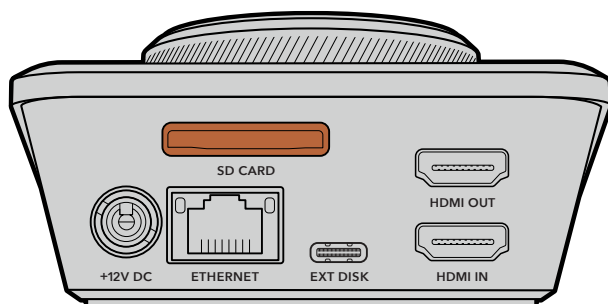
メディアの接続

HyperDeck Shuttle HDディスクレコーダーはすべて、すぐに収録できる状態で発送されており、設定を変更する必要はありません。必要な作業は、SDカードまたは外付けディスクのフォーマットだけです。

メディアのフォーマットは、メニュー設定を使用して簡単に実行できます。または、コンピューターでもフォーマットできます。詳細は「メディアをフォーマット」セクションを参照してください。ビデオの収録に適したメディアの種類、およびSDカードと外付けディスクのリストも同セクションに記載されています。

SDカードを挿入する：

- 1 金のコネクタが上を向くようにSDカードを持ち、メディアスロットと一直線になるようにします。カードをスロットに差し込み、固定されるまでゆっくりと押し込みます。



- HyperDeckがSDカードを検証します。検証中は、HyperDeck Shuttle HDの上部にあるSDカードのインジケータが緑に点灯します。検証が終わったら、インジケータのライトが消えます。



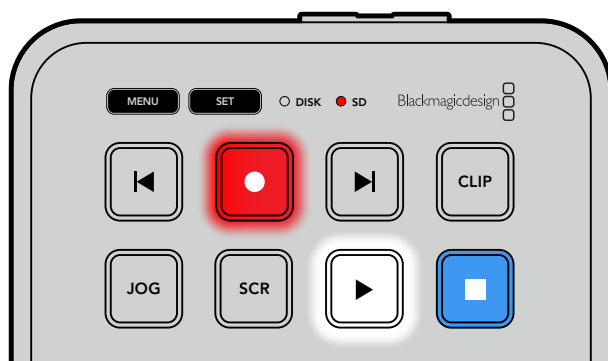
これで必要な準備が整い、HyperDeck Shuttle HDで収録・再生を行えるようになりました！

クリップの収録・再生、設定の変更などに関する詳細は、このマニュアルに後述されています。

ビデオの収録

ビデオソースが、送信先のHDMI機器に表示されたことを確認したら、収録を開始できます。

収録ボタンを押すと、収録が開始されます。SDカードに収録中は、SDカードのインジケータが赤に点灯し、収録および再生ボタンも点灯します。外付けディスクへ収録する際は、ディスクインジケータが赤に点灯します。



収録を停止するには、停止ボタンを押します。

再生

再生ボタンを押して、再生を開始します。再生中は、再生ボタンが点灯し、「DISK」または「SD」メディアスロット・インジケータが緑に光ります。

複数のクリップが収録されている場合、順方向/逆方向の頭出しボタンを押すと、すばやくクリップ間を移動できます。



頭出しボタンの使用

逆方向の頭出しボタンを押すと、クリップを頭出しできます。2回以上押すと、それより前のクリップを移動していきます。

順方向の頭出しボタンを押すと、後続のクリップを移動していきます。



順方向/逆方向の頭出しボタンを使用すると、各クリップの最初のフレームに頭出しが可能

作業のこつ HyperDeckでビデオファイルを再生するには、ファイルの収録に使用されたコーデックに設定する必要があります。これは、メニューで実行できます。詳細は、後述の「設定の変更」セクションを参照してください。

複数のクリップをループ

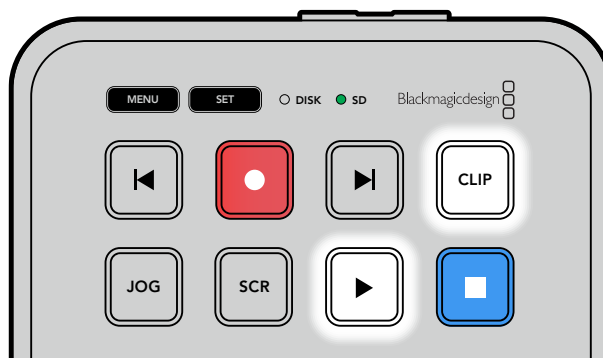
再生中に、再生ボタンを再び押すと、HyperDeck Shuttle HDはすべてのクリップをループします。停止ボタンを押すと、ループが停止します。

単一のクリップをループしたい場合は、HyperDeckをクリップモードにして、再生ボタンを一度押すと再生し、再度押すとループします。

すべてをループ	再生中に再生ボタンをもう一度押すと、収録されたクリップすべてがループで再生されます。
現在のクリップをループ	クリップモードで、再生ボタンを再び押すと、現在のクリップがループで再生されます。

クリップモード

クリップモードでは、再生を単一のクリップに制限できます。例えば、クリップモードが有効な状態では、クリップをシャトルやスキップでき、その後、再生ボタンを押すと、そのクリップの最後で再生が停止します。






クリップモードが選択されている場合、再生ボタンを2回押すと現在のクリップがループ

サーチダイヤルの使用

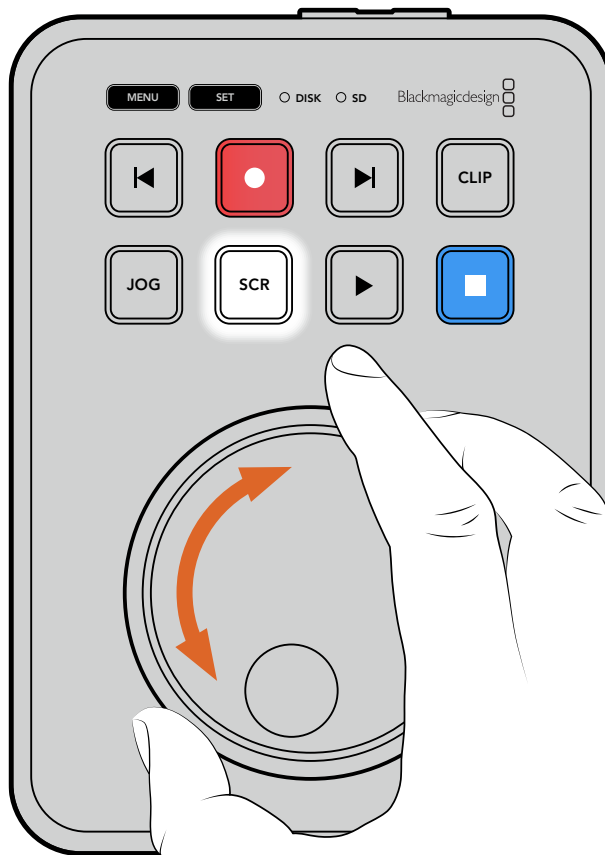
サーチダイヤルでは、クリップ間をすばやく移動して、特定の箇所を再生するために選択したり、フレームごとにクリップをチェックできます。特定の箇所を見つける必要がある場合に、この機能は重要です。ダイヤルを回転させて、視覚的にクリップをモニタリングして検索できます。特定の位置に再生ヘッドを配置し、生放送で該当のクリップを再生できるように準備しておく便利です。

サーチダイヤルのモードには、ジョグ (JOG)、スクロール (SCR)、シャトル (STL) があります。

	ジョグ	クリップをフレームごとに再生できるため、精度の高いコントロールが可能です。
	スクロール	スクロールモードでは、収録された全メディア内で順方向/逆方向にすばやく移動できます。サーチダイヤルを回転させると、スクロールがその動きにロックされるので、再生を開始する場所を完全にコントロールできます。
	シャトル	「JOG」と「SCR」ボタンを同時に押すと、シャトルモードになります。シャトルモードでは、ダイヤルを左右に回すことで、メディアを巻き戻し/早送りできます。ダイヤルを回転させると、メディアのシャトル速度が上がります。最高速度は50倍速です。停止するためにシャトル速度を下げるには、ダイヤルを元の位置まで回します。シャトル中に特定の位置で停止するには、停止ボタンを押すか、再生ボタンを押して、現在の位置から再生を再開します。シャトル最高速度は「セットアップ」メニューから変更できます。詳細は、後述の「設定」セクションを参照してください。



「JOG (ジョグ)」または「SCR (スクロール)」ボタンを押すと、検索モードをジョグまたはスクロールに設定可能

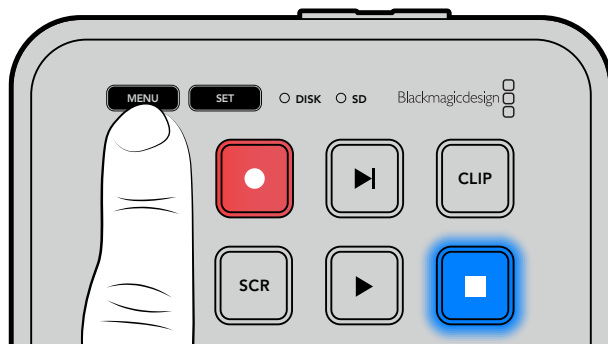


検索モードを選択したら、サーチダイヤルを回転させます

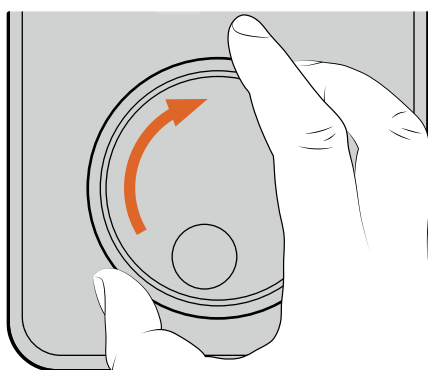
作業のこつ 通常の再生に戻るには、再生または停止ボタンを押します。

設定の変更

「MENU」ボタンを押すと、設定メニューが開きます。このメニューでは、接続したHDMIディスプレイの左下にビデオオーバーレイとして表示されます。

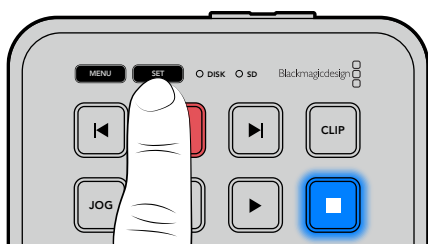


「MENU」ボタンを押して、設定メニューを開きます



サーチダイヤルを使用して、サブメニューや設定をナビゲートします

収録	
入力	HDMI
コーデック	H.264 高
トリガー収録	なし



「SET」ボタンを押して、サブメニューや設定を選択します

収録	
入力	HDMI
コーデック	H.264 高
トリガー収録	なし

サーチダイヤルや順方向/逆方向の頭出しボタンを使用して、設定を調整します。「SET」ボタンを押して、設定を確定します。

メニューを出るには「MENU」ボタンを押して、オプションを遡ってホームスクリーンに戻ります。

作業のこつ 「セットアップ」メニューを使用すると、メニューの表示位置は、ディスプレイの四隅のいずれにも変更可能です。設定の変更が完了したら、メニューをオフにすることをお勧めします。これにより、ATEM Mini ExtremeなどのHDMIスイッチャーにHDMI出力を接続している場合に、出力がクリーンフィードとなります。

設定

設定メニューは、収録、モニタリング、オーディオ、ストレージ、セットアップの5つのカテゴリーに分かれています。これらのカテゴリーのサブメニューには関連の設定が含まれており、ほとんどの設定がHyperDeck Shuttle HDのコントロールパネルで調整できます。一部の設定（例えば、ファイル名プレフィックス）は、メニューにはグレーで表示のみされます。このような場合、そういった設定はHyperDeck Setupユーティリティで調整できます。

収録メニュー

収録	
入力	HDMI
コーデック	H.264 高
トリガー収録	なし

入力

HyperDeck Shuttle HDのHDMI入力を表示します。

コーデック

HyperDeck Shuttle HDは、H.264、Apple ProRes、DNxHDコーデックで圧縮ビデオを収録します。テレプロンプター機能を使用するには、「テレプロンプター」を選択します。

トリガー収録

「ビデオ開始/停止」と「タイムコードトリガー」の2種類のトリガー収録から選択できます。

Blackmagic Pocket Cinema Camera 4Kなどの一部のカメラは、外部レコーダーの収録開始/停止をコントロールする信号をHDMI経由で送信します。「ビデオ開始/停止」を選択すると、カメラの録画ボタンが押された際に、HyperDeckで収録を開始/停止します。

「タイムコードトリガー」では、HDMI入力を介して有効なタイムコード信号を受信すると、HyperDeckで収録を開始します。信号が止まると、収録も停止します。トリガー収録を無効にするには「なし」を選択します。

メモ HDMIカメラから収録する場合、オーバーレイ機能がオフになっており、出力がクリーンなことを確認してください。カメラのビデオ出力にオーバーレイが付いていると、イメージと共にオーバーレイが収録されます。

モニタリングメニュー

モニタリング >	
テレプロンプター・レイアウト	
フォントサイズ	450%
行間隔	120%
サイド余白	10%
左右反転	オフ
上下反転	オフ

テレプロンプター・レイアウト

「モニタリング」メニューには、HyperDeck Shuttle HDをテレプロンプターとして使用する際に必要なすべての設定が含まれています。

フォントサイズ

フォントサイズのオプションを選択して、文字のサイズを調整し、「SET」を押して確定します。ダイヤル時計回りに回すと数値が上がり、反時計回りに回すと下がります。

行間隔

ダイヤルを回転させると、行の間のスペースを広げたり、縮めたりできます。

サイド余白

テレプロンプター・ディスプレイの両側の余白の幅を調整できます。

反転

テレプロンプターのモニターが、カメラの前や演壇で使用するために、ガラスに投射するようにセットアップされている場合、反転のオプションを使用することで、話者が読めるようになります。反転には2つのモードがあります。

左右反転 - テレプロンプターモニターの底部が、ガラスのベース部分に最も近づけた状態でマウントされている場合に使用します。

上下反転 - テレプロンプターモニターの底部が、ガラスのベース部分から離れた状態でマウントされている場合に使用します。

オーディオメニュー



オーディオチャンネル

HyperDeck Shuttle HDは同時に最大8チャンネルのPCMオーディオを収録できます。収録するオーディオチャンネル数を設定するには「オーディオチャンネル」に進み、2ch、4ch、8chから選択します。

コーデックがH.264に設定されている場合、2チャンネルのAACオーディオを選択できるため、直接YouTubeにアップロードできます。

ストレージメニュー



接続されているメディアが「ストレージ」の設定に表示されます。「メディア 1」には、接続されたSDカードの名前が表示され、「メディア 2」には、「EXT DISK (外付けディスク)」コネクタに接続されたUSBフラッシュディスクの名前が表示されます。Blackmagic MultiDock 10GなどのUSBハブを使用している場合は、アクティブなディスクが表示されます。

USBスピル

複数のドライブを接続するために、Blackmagic MultiDock 10Gまたは同様の機器を「EXT DISK」とラベルが付いたUSB接続を介して使用している場合、「USBスピル」をオンにすることで、収録が次の外付けディスクに継続されます。

メディアをフォーマット

SDカードや、リアパネルのEXT DISK (外付けディスク) コネクタに接続したメディアは、直接ユニットで、あるいはMacまたはWindowsコンピューターでフォーマットを実行できます。

HyperDeck Shuttle HDでメディアを準備する：

- 1 サーチダイヤルと「SET」ボタンを使用して「メディアをフォーマット」を選択します。
- 2 リストから初期化するメディアを選択して「SET」ボタンを押します。
- 3 フォーマットを選択して「SET」ボタンを押します。

- 4 初期化されるカードと、選択したフォーマットを確認するメッセージが表示されます。「初期化」を選択して確定します。
- 5 フォーマット中であることを示すメッセージが表示され、完了のメッセージが表示されたら「OK」を選択します。

HFS+は「Mac OS X Extended」としても知られており、ジャーナリングをサポートしているため推奨されるフォーマットです。万が一、ストレージメディアが破損した場合、ジャーナリングされたメディアのデータは回復できる可能性があります。HFS+はMacでネイティブサポートされています。exFATはMacおよびWindowsによりネイティブサポートされており、他のソフトウェアは必要ありませんが、ジャーナリングには対応していません。

MacまたはWindowsでのメディアのフォーマット方法は、「メディアをフォーマット」セクションを参照してください。

セットアップメニュー

「セットアップ」メニューには、言語の選択、デフォルトフォーマットに加え、メニュー表示、ネットワーク設定、タイムコードオプションに関するセクションが含まれています。

 セットアップ >	
名前	HyperDeck Shuttle HD
言語	日本語
日付	2022年5月16日
時刻	14:32
タイムゾーン	UTC±11:00
ソフトウェア	8.1
カメラ	A
デフォルトフォーマット	1080p30
シャトル最高速度	x50

名前

ネットワークで複数のHyperDeck Shuttle HDを使用している場合、個別の名前を付けると、ユニットをそれぞれ識別しやすくなります。これは、Blackmagic HyperDeck Setup、またはターミナルアプリを使用してBlackmagic HyperDeck Ethernet Protocolで実行できます。この名前は「セットアップ」メニューに表示されます。

言語

HyperDeck Shuttle HDは13ヶ国語をサポートしています。対応言語は、日本語、英語、中国語、韓国語、スペイン語、ドイツ語、フランス語、ロシア語、イタリア語、ポルトガル語、トルコ語、ウクライナ語、ポーランド語です。

言語を選択する：

- 1 「セットアップ」メニューがハイライトされたら「SET」を押します。
- 2 サーチダイヤルを回して、「言語」を選択したら「SET」を押します。

- 3 サーチダイヤルを使用して、使用する言語を選択したら「SET」を押します。言語が選択されると、自動的に「セットアップ」メニューに戻ります。

日付

日付を設定するには、「日付」設定を選択して「SET」ボタンを押します。サーチダイヤルを使用して、年、月、日を選択します。ファイルのタイムスタンプ・サフィックスを選択している場合、ここで設定した日付が使用されます。

時刻

時刻を設定するには、「時刻」設定を選択して「SET」ボタンを押します。サーチダイヤルを使用して、時間と分を調整します。HyperDeck Shuttle HDの内部クロックは24時制です。

ソフトウェア

現在のソフトウェアバージョンを表示します。

カメラ

この設定は、HyperDeckで複数のカメラから個別収録ファイルを収録し、DaVinci Resolveのマルチカムタイムラインで編集する際に便利です。

各カメラの識別文字がファイルのメタデータに記録されるため、同期ピン機能を使用する際にDaVinci Resolveが各アングルを簡単に識別できます。



カメラの識別文字にはA～Zまたは1～9が使用できます。

デフォルトフォーマット

HyperDeck Shuttle HDが、使用するビデオフォーマットを検出できない場合に、この設定を用いて、メインで使用するビデオフォーマットを設定します。

例えば、ビデオ入力を接続していない状態でHyperDeck Shuttle HDをオンにし、2つの異なるビデオフォーマットのファイルが存在するディスクを挿入した場合、再生に使用するビデオフォーマットをHyperDeckで指定する必要があります。「デフォルトフォーマット」では、HyperDeckで使用するビデオフォーマットを設定でき、そのフォーマットに切り替えて、これらのファイルを再生します。

この機能は、HyperDeck Shuttle HDにビデオ入力やメディアディスクが接続されていない状態で、初めてオンにする際にも便利です。この場合、HyperDeckはモニタリング出力に使用するビデオフォーマットを検出できないので、「デフォルトフォーマット」の情報を使用します。

しかし、この機能はガイドとして使用されるだけで、オーバーライドする訳ではありません。例えば、一種類のビデオファイルが収録されたメディアディスクを再生する場合、HyperDeckディスクレコーダーはそのビデオフォーマットに切り替えて再生を実行します。「デフォルトフォーマット」の情報は使用されません。

これは収録でも同様です。収録ボタンを押すと、HyperDeckはビデオ入力に接続されたビデオフォーマットを使用します。収録の終了後、HyperDeck Shuttle HDは収録に使用したのと同じビデオフォーマットで、そのファイルを再生します。これは、「デフォルトフォーマット」と一致するビデオフォーマットのファイルがディスクに存在する場合でも同様です。デッキは、収録に使用したのと同じビデオフォーマット

を再生します。メディアディスクの接続を外し、接続し直した場合のみ、「デフォルトフォーマット」の設定に基づき、再生に使用するファイルの種類が選択されます。

この機能は、HyperDeck Shuttle HDが使用するフォーマットを自動的に決めることができない場合にガイドとして使用されるだけであり、デッキを特定の 방법으로動作させるようにオーバーライドする機能ではありません。

シャトル最高速度

HyperDeck Shuttle HDのシャトル最高速度は50倍速です。この速度を下げたい場合は、他の速度プリセットを選択します。

メニュー設定

「メニュー」設定を使用することで、接続したHDMIディスプレイにメニューが表示される場所と表示モードを調整できます。

メニュー	
画面表示モード	ライト
不透明度	100%
位置	左下

画面表示モード

HyperDeckのオンスクリーンメニューをダークまたはライトモードに設定できます。ライトモードでは、メディアが暗い映像の場合や、テレプロンプターとして使用している場合に、はっきりとしたコントラストでメニューが表示されます。

メニュー	
画面表示モード	ライト
不透明度	100%
位置	左下

メニュー	
画面表示モード	ダーク
不透明度	100%
位置	左下

不透明度

接続されたディスプレイに表示されるメニューオーバーレイの不透明度を下げるできます。調整可能な範囲は、デフォルトの100%から20%までです。

位置

メニューオーバーレイは画面の左下に表示されます。メニューを異なる場所に表示したい場合は、「位置」を選択し、「SET」ボタンを押します。表示場所は「左上」、「右上」、「左下」、「右下」から選択できます。

ネットワーク設定

ネットワーク	
プロトコル	静的IPアドレス
IPアドレス	192.168.24.100
サブネット	255.255.255.0
ゲートウェイ	192.168.24.1

プロトコル

Blackmagic HyperDeckはデフォルトでDHCPに設定されて出荷されます。そのため、ネットワークに接続するとネットワークサーバーが自動的にIPアドレスを割り当てるので、その他のネットワーク設定を調整する必要はありません。マニュアルでアドレスを設定する必要がある場合、静的IPアドレス経由で接続できます。

「プロトコル」を選択した状態で、「SET」ボタンを押してメニューに進み、「静的IPアドレス」を選択し「SET」ボタンを押します。

IPアドレス、サブネット、ゲートウェイ、プライマリDNS、セカンダリDNS

「静的IPアドレス」を選択すると、ネットワークの詳細をマニュアルで入力できます。

IPアドレスを変更する：

- 1 サーチダイヤルを使用して「IPアドレス」をハイライトし、HyperDeckのコントロールパネルで「SET」ボタンを押します。
- 2 サーチダイヤルを回転させてIPアドレスを調整し、「SET」ボタンを押して確定し、次の数値に進みます。
- 3 「SET」ボタンを押して変更を確定し、次の数値に進みます。

IPアドレスの入力が終わったら、上記の手順を繰り返し、「サブネットマスク」と「ゲートウェイ」も調整できます。終了したら、「MENU」ボタンを押してメニューを出て、ホームスクリーンに戻ります。

タイムコード設定

タイムコード入出力のオプションを設定できます。収録に使用するタイムコードをソースタイムコードや時刻タイムコードから選択するか、マニュアルで設定するかなどを選択できます。

タイムコード	
入力	ビデオ入力
ドロップフレーム	デフォルト
プリセット	00:00:00:00
出力	タイムライン

入力

収録中、4つのタイムコード入力オプションを使用できます。

ビデオ入力	「ビデオ入力」を選択すると、SMPTE RP 188メタデータの付いたHDMIソースのエンベデッドタイムコードを使用します。これにより、HDMIソースと、HyperDeck Shuttle HDで収録されるファイルの同期が維持されます。
内部	内蔵のタイムコードジェネレーターを介して、時刻タイムコードを収録する場合に、このオプションを選択します。
前のクリップから生成	タイムコード入力に「前のクリップから生成」を選択すると、各ファイルは、前のクリップの最終フレームの1つ後のフレームから開始されます。例えば、最初のクリップが10:28:30:10で終わる場合、次のクリップのタイムコードは10:28:30:11から開始します。
プリセット	タイムコードをマニュアルで設定したい場合は「プリセット」オプションを選択します。収録されたクリップは、「プリセット」で設定されたタイムコードで開始します。詳細は、このセクションに後述されています。

ドロップフレーム

29.97および59.94fpsのNTSCソースでは「ドロップフレーム」または「ノンドロップフレーム」を選択できます。ソースが不明な場合は「デフォルト」を選択します。これにより、入力の規格が維持されます。有効なタイムコードがない場合はデフォルトのドロップフレームになります。

プリセット

タイムコードをマニュアルで設定できます。「SET」ボタンを押し、サーチダイヤルと「SET」ボタンで開始タイムコードを入力します。「入力」メニューで「プリセット」が選択されている必要があります。

出力

出力に使用するタイムコードのオプションを選択します。

タイムライン	カードまたはドライブに収録された全クリップを通して、継続したタイムコードを出力するには「タイムライン」を選択します。
クリップ	「クリップ」を選択すると、個別のクリップごとにタイムコードを出力します。

ファイル設定

ファイル設定	
ファイル名プレフィックス	HyperDeck
タイムスタンプ・サフィックス	オフ

ファイル名プレフィックス

HyperDeck Shuttle HDを最初にセットアップすると、以下のファイル命名規則を用いて、クリップがSDカードまたはUSBフラッシュディスクに保存されます。

HyperDeck_0001

HyperDeck_0001

プレフィックス

HyperDeck_0001

クリップ番号

ファイル名のプレフィックスは、HyperDeck Setupユーティリティで変更できます。詳細は、このマニュアルの「Blackmagic HyperDeck Setup」セクションを参照してください。

タイムスタンプ・サフィックス

ファイル名に追加されるタイムスタンプは、デフォルトではオフに設定されています。ファイル名に日付と時刻を記録したい場合は、「タイムスタンプ・サフィックス」のオプションをオンにします。

HyperDeck_2201061438_0001	
HyperDeck_2201061438_0001	ファイル名プレフィックス
HyperDeck_ 22 01061438_0001	年
HyperDeck_22 01 061438_0001	月
HyperDeck_2201 06 1438_0001	日
HyperDeck_220106 14 38_0001	時
HyperDeck_22010614 38 _0001	分
HyperDeck_2201061438_ 0001	クリップ番号

リモート設定

「リモート」では、ATEM Mini Extremeなどの他のビデオ機器でHyperDeckをコントロールできるように設定できます。



リモート

イーサネットを介したリモートコントロールを有効にするには、「リモート」を選択します。オフにすると、ローカルでユニットを操作できます。

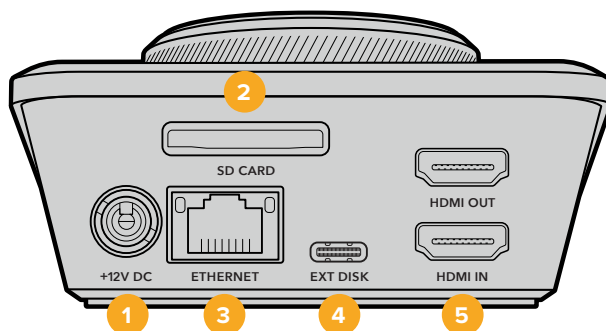
リセット設定



出荷時設定にリセット

「セットアップ」メニューで「出荷時設定にリセット」をハイライトすると、HyperDeckを出荷時の設定に戻せます。「SET」ボタンを押すと、操作を実行するか確認する画面が表示されます。

リアパネル



1 電源

HyperDeck Shuttle HDは、ACプラグパックを介して給電されます。同梱の電源ケーブルには、接続が外れることを防ぐためにロック式コネクタが採用されていますが、36Wの12V電源ケーブルであれば種類を問わず、HyperDeck Shuttle HDの給電に使用できます。

2 SD CARD (SDカード)

SDカードをスロットに挿入して収録・再生します。

3 ETHERNET (イーサネット)

イーサネットポートでは、ネットワークに接続し、高速のFTPを使用してファイルの転送や、HyperDeck Ethernet Protocolを使用してユニットをリモートコントロールできます。FTPクライアントを使用したファイルの転送に関しては、後述の「ネットワークでファイルを転送」セクションを参照してください。

ATEMスイッチャーを同じネットワークに接続している場合、ATEMスイッチャーまたはATEMハードウェアパネルからHyperDeckを操作できます。

4 EXT DISK (外付けディスク)

フラッシュディスクをUSB-Cコネクタに接続すると、最大5Gb/sで外付けディスクに収録します。また、マルチポートのUSB-CハブやBlackmagic MultiDock 10Gを接続すると、1枚または複数のSSDを使用できます。

5 HDMI

HDMI出力をHDMIテレビ、モニター、さらにはATEM Mini Extremeなどのスイッチャーに接続できます。HDMI出力は、メニューオーバーレイの表示にも使用されます。

ストレージメディア

SDカード

高品質のHD収録には、高速のUHS-I SDカードを推奨します。Ultra HD 2160p60までの収録には、220MB/s以上の書き込み速度に対応しているカードを使用する必要があります。

低ビットレートで高い圧縮率を用いて収録する場合、低速のカードも使用可能ですが、一般的には、高速であるほど良い品質が得られます。

定期的にこのマニュアルの最新バージョンを確認し、常に新しい情報を入手することをお勧めします。マニュアルはBlackmagic Designウェブサイト (www.blackmagicdesign.com/jp/support) でダウンロードできます。

HyperDeck Shuttle HDで使用が推奨されるSDカードは？

1080p (60fpsまで) には、以下のSDカードを推奨します。

メーカー	モデル	容量
Angelbird	AV PRO SD UHS-II 300MB/s V90 SDXC	256GB
Angelbird	AV PRO SD UHS-II 260MB/s V60 SDXC	128GB
Angelbird	AV PRO SD UHS-II 260MB/s V60 SDXC	64GB
SanDisk	Extreme Pro UHS-I 95MB/s SDXC	64GB
Wise	SD2-64U3 UHS-II 285MB/s SDXC	64GB
Lexar	Professional 1000x UHS-II 150MB/s SDXC	128GB
SONY	Tough SF-G128T	128GB
Kingston	CANVAS GO! Plus 170MB/s V30	64GB
Kingston	CANVAS GO! Plus 170MB/s V30	128GB
Kingston	CANVAS GO! Plus 170MB/s V30	512GB
ProGrade Digital	SDXC UHS-II V90 300R	64GB
ProGrade Digital	SDXC UHS-II V90 300R	128GB
SONY	Tough SF-G64T UHS-II SDXC	64GB
Delkin Devices	Black UHS-II V90 SDXC	256GB
Delkin Devices	Power UHS-II V90 SDXC	128GB
Delkin Devices	Power UHS-II V90 SDXC	256GB
Delkin Devices	Black UHS-II V90 SDXC	128GB
Exascend	Essential SDXC UHS-II V90 R 300MB/s	64GB
Exascend	Essential SDXC UHS-II V90 R 300MB/s	128GB
Exascend	Catalyst SDXC UHS-II V90 R 300MB/s	64GB

外付けディスク

HyperDeckの全モデルは、直接USB-Cフラッシュディスクに収録できます。これらのドライブは高速で大容量なため、ビデオを長時間収録できます。収録に使用したフラッシュディスクは、コンピューターに接続して直接編集を行えます。

さらに大きな容量が必要な場合は、USB-Cドックや外付けハードドライブを接続できます。Blackmagic MultiDock 10GまたはUSB-Cフラッシュディスクを接続するには、機材のUSB-Cポートに接続したケーブルをHyperDeckのリアパネルの「EXT DISK (外付けディスク)」ポートに接続します。

HyperDeck Shuttle HDで使用が推奨されるUSB-Cドライブは？

1080p ProRes HQ (60fpsまで) には、以下のUSB-Cドライブを推奨します。

メーカー	モデル	容量
Wise	PTS-256 Portable SSD 4K	256GB
OWC	Envoy Pro Ex	240GB
BUFFALO	SSD-PHE500U3-BA	500GB

1080p DNxHR HQX (60fpsまで) には、以下のUSB-Cドライブを推奨します。

メーカー	モデル	容量
OWC	Envoy Pro Ex	240GB

1080p H.264 (60fpsまで) には、以下のUSB-Cドライブを推奨します。

メーカー	モデル	容量
OWC	Envoy Pro Ex	240GB

メディアをフォーマット

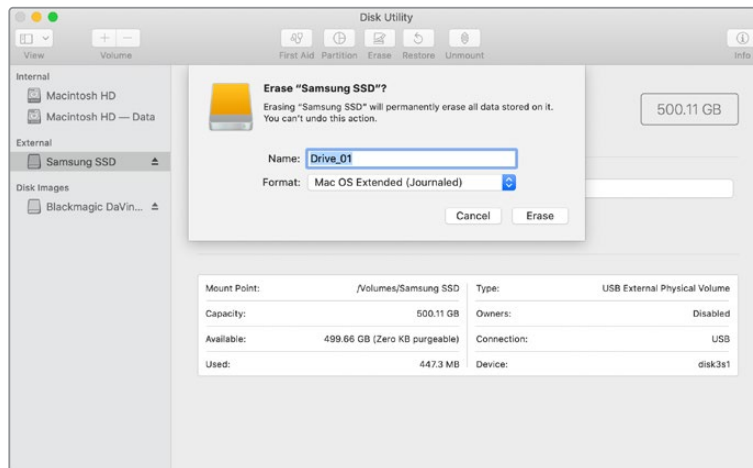
コンピューターでメディアを準備

Macコンピューターでメディアをフォーマット

MacのDisk Utilityアプリケーションで、ドライブをHFS+またはexFATでフォーマットできます。

ディスクをフォーマットするとすべての情報が消去されるため、重要な情報は必ずバックアップしてください。

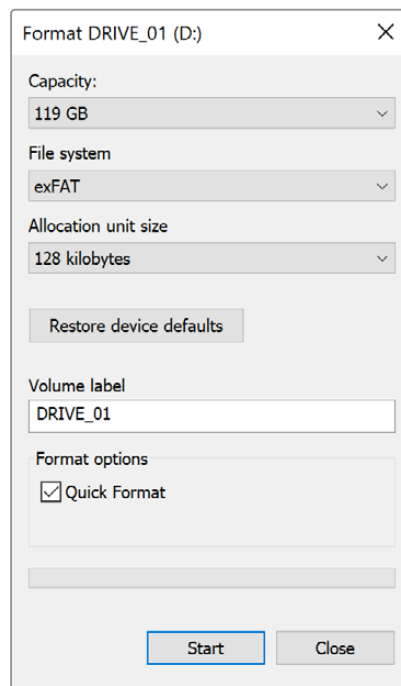
- 1 外付けドックまたはケーブルアダプターで、USBフラッシュディスクをコンピューターに接続します。SSDをTime Machineバックアップに使用するというメッセージは拒否します。SDカードは、外付けカードリーダーを介してコンピューターに接続します。
- 2 Applications/Utilityへ行き、Disk Utilityを起動します。
- 3 使用するSDカードまたはUSBフラッシュディスクのディスクアイコンをクリックし、「Erase」タブをクリックします。
- 4 「Format」を「Mac OS Extended (Journaled)」または「exFAT」に設定します。
- 5 ボリューム名を入力し、「Erase」をクリックします。メディアがフォーマットされ、HyperDeckで使用できる状態になります。



Windowsコンピューターでメディアをフォーマット

Windowsでは、FormatダイアログボックスでドライブをexFATでフォーマットできます。SSDやSDカードをフォーマットするとすべての情報が消去されるため、重要な情報は必ずバックアップしてください。

- 1 外付けドックやケーブルアダプターを使用して、USBフラッシュディスクとコンピューターを接続します。SDカードは、外付けカードリーダーを介してコンピューターに接続します。
- 2 「Start」メニューまたは「Start」画面を開き、コンピューターを選択します。使用するUSBフラッシュディスクまたはSDカードを右クリックします。
- 3 コンテキストメニューから「Format」を選択します。
- 4 ファイルシステムを「exFAT」に設定し、ユニットサイズ配分を128キロバイトに設定します。
- 5 ボリュームラベルを入力して、「Quick Format」を選択し、「Start」をクリックします。
- 6 メディアがフォーマットされ、HyperDeckで使用できる状態になります。



テレプロンプター機能の使用

標準のRTFファイルを使用すると、Blackmagic HyperDeck Shuttle HDはテレプロンプターとして使用できます。テキストエディットまたはワードパッドを使用して、サポートされている13言語のいずれかでファイルを作成し、リッチテキスト形式のファイルとして保存します。HyperDeck Shuttle HDで開くと、台本や原稿のフォントサイズや行間隔を調整できます。

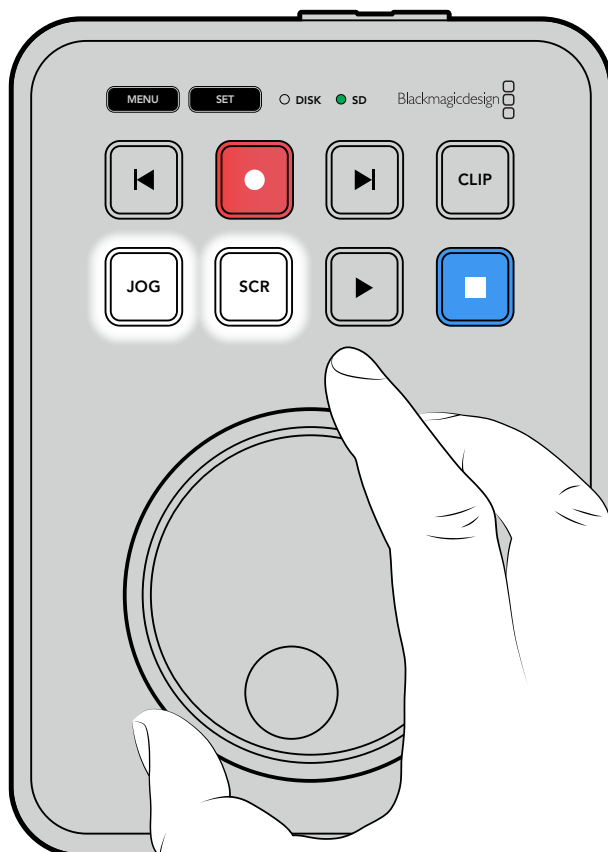
テレプロンプターとして使用する：

- 1 HyperDeck Shuttle HDのHDMI出力をHDMIディスプレイに接続します。
- 2 台本や原稿が保存されているSDカードを挿入するか、外付けUSBフラッシュディスクを接続します。
- 3 「収録」メニューの「コーデック」で、「テレプロンプター」を選択し、「SET」ボタンを押します。

ディスプレイに台本や原稿が表示されます。これにより、再生ボタンで自動的に再生を開始できます。あるいは、ダイヤルを使用することも可能です。

テレプロンプターの再生速度の調整

HyperDeck Shuttle HDのダイヤルは、テレプロンプターモードでの再生においても、メディアの再生時の操作とほぼ同じ方法で使用できます。台本や原稿をロードしたら、「JOG」と「SCR」ボタンを同時に押して、可変再生速度をオンにします。選択したら、ダイヤルを回します。ダイヤルの動きに応じて、台本や原稿が動く速度が変わります。例えば、ダイヤルを早く動かすと、台本や原稿がスクロールされる速度が上がります。



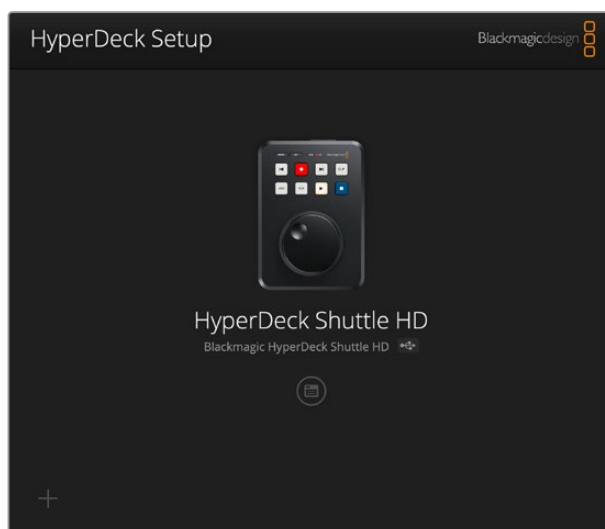
一定の速度でスクロールするには、「JOG」または「SCR」ボタンのみを使用します。いずれかを選択したら、ジョグモードでは、台本や原稿は遅い一定速度で、スクロールモードでは早い速度で動きます。

SDカードまたは外付けディスクのrtfファイル間をナビゲートするには、順方向/逆方向の頭出しボタンを使用します。

テレプロンプターは、ファイルの情報に基づき、フォントサイズ、色、ボールド体の使用を認識します。また、「モニタリング」メニューでフォントサイズ、行間隔、余白が調整でき、ビームスプリッターに映し出す際の上下左右の反転も実行できます。詳細は、前述の「メニュー設定」セクションを参照してください。

Blackmagic HyperDeck Setup

Blackmagic HyperDeck Setupソフトウェアでは、HyperDeckの設定変更やソフトウェアのアップデートが行えます。

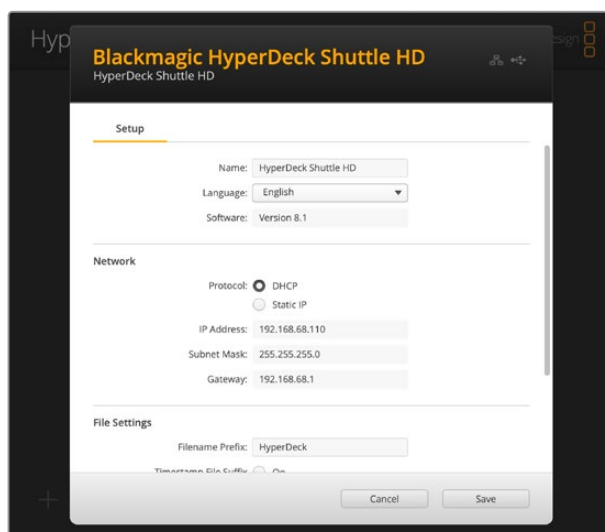


ソフトウェアのインストール:

- 1 最新のBlackmagic HyperDeck Setupインストーラーを www.blackmagicdesign.com/jp/supportからダウンロードします。
- 2 Blackmagic HyperDeck Setupインストーラーをコンピューターで起動し、画面に表示される指示に従います。
- 3 インストールが完了したら、HyperDeck Shuttle HDをリアパネルのUSB経由またはイーサネットコネクター経由でコンピューターに接続します。
- 4 Blackmagic HyperDeck Setupを起動し、スクリーンの指示に従って内部ソフトウェアをアップデートします。内部ソフトウェアが最新で何もする必要がない場合、指示は表示されません。

HyperDeckのイメージまたは設定アイコンをクリックして、設定メニューを開きます。

ホームスクリーンに、HyperDeck Shuttle HDとユニット名が表示されます。この名前は、複数のHyperDeckがコンピューターに接続されている場合に、特定のユニットを識別する際に役立ちます。ユニット名は、ユーティリティの「Setup」メニューで設定できます。



Network (ネットワーク)

Network

Protocol: DHCP
 Static IP

IP Address: 192.168.68.110

Subnet Mask: 255.255.255.0

Gateway: 192.168.68.1

Protocol (プロトコル)

HyperDeck Shuttle HDをATEMスイッチャーから操作したり、HyperDeck Ethernet Protocolを介してリモートコントロールする場合は、HyperDeck Shuttle HDを他の機器と同じネットワークに接続する必要があります。これは、DHCPを使用するか、固定IPアドレスをマニュアルで追加して実行できます。

DHCP	HyperDeck Shuttle HDの出荷時のデフォルト設定はDHCPです。DHCP (ダイナミック・ホスト・コンフィギュレーション・プロトコル) は、ネットワークサーバー上のサービスで、HyperDeckディスクレコーダーを自動的に検出してIPアドレスを割り当てます。DHCPは、イーサネット経由で機材を簡単に接続でき、IPアドレスの競合が生じないようにできる非常に優れたサービスです。ほとんどのコンピューターやネットワークスイッチャーは、DHCPに対応しています。
静的IPアドレス	ネットワークの詳細をマニュアルで入力する場合は「Static IP (静的IPアドレス)」を選択します。すべてのユニットの通信を可能にするためにIPアドレスを設定する際、全ユニットが同一のサブネットマスクとゲートウェイ設定を共有している必要があります。さらに、パネルのIPアドレスの最初の3つのフィールドの数値が一致している必要があります。

ネットワーク上に、IPアドレスの識別番号が同じデバイスが存在する場合、競合が生じるためユニットは接続されません。競合が生じた場合は、ユニットのIPアドレスの識別番号を変更してください。

File Settings (ファイル設定)

File Settings

Filename Prefix:

Timestamp File Suffix On
 Off

HyperDeck Shuttle HDを最初にセットアップすると、プレフィックスとして「HyperDeck」がファイル名に付加されて、クリップがSDカードまたはUSBフラッシュディスクに保存されます。プレフィックスを変更するには、新しいファイル名を打ち込みます。

ファイル名に追加されるタイムスタンプは、デフォルトではオフに設定されています。ファイル名に日付と時間を追加したい場合は、オンに変更します。ファイル名のプレフィックスおよびタイムスタンプの設定は、HyperDeck Shuttle HDのオンスクリーンメニューからも変更できます。

ネットワークでファイルを転送

HyperDeckディスクレコーダーは、FTP (ファイル転送プロトコル) を介してファイルを転送できます。この機能により、ネットワークを介してコンピューターからHyperDeckに、ローカルネットワークの速度でファイルを直接コピーできます。例えば、デジタルサイネージに使用するために、別の場所に設置されているHyperDeckに新しいファイルをコピーできます。

HyperDeck Shuttle HDの接続

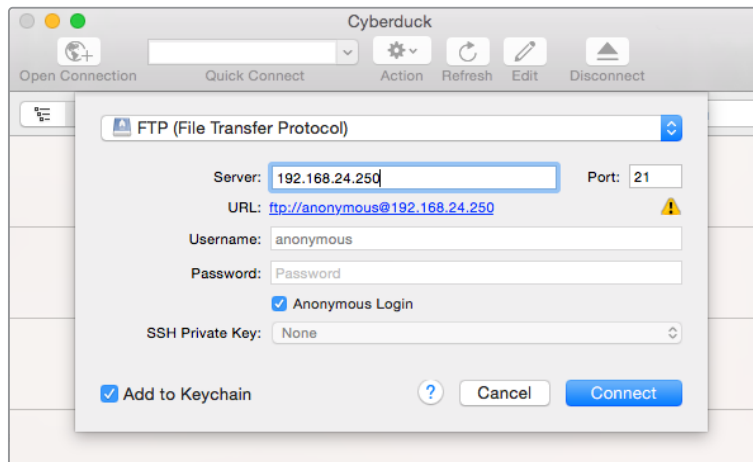
コンピューターとHyperDeck Shuttle HDを同じネットワークに接続した状態で転送を行うために必要なのは、FTPクライアントとHyperDeck Shuttle HDのIPアドレスだけです。

- 1 HyperDeckに接続するコンピューターに、FTPクライアントをダウンロードし、インストールします。推奨アプリケーションは、Cyberduck、FileZilla、Transmitですが、ほとんどのFTPクライアントが使用できます。CyberduckとFileZillaは無償です。
- 2 HyperDeck Shuttle HDをイーサネットケーブルでネットワークに接続して、HyperDeckのIPアドレスをメモします。IPアドレスを確認するには、「MENU」ボタンを押して、サーチダイヤルを回転させて、「ネットワーク」画面に進みます。画面の下にHyperDeckのIPアドレスが表示されます。

ネットワーク	
プロトコル	静的IPアドレス
IPアドレス	192.168.24.100
サブネット	255.255.255.0
ゲートウェイ	192.168.24.1

HyperDeck Shuttle HDのIPアドレスは「セットアップ」メニューの「ネットワーク」セクションで確認できます。

- 3 HyperDeckのIPアドレスをTCPアプリケーションの接続ダイアログに入力します。このダイアログボックスの名前や位置はアプリケーションにより異なりますが、通常は「サーバー」や「ホスト」という名称が使われています。使用するFTPプログラムに「匿名ログイン」のチェックボックスがある場合は必ずチェックを入れてください。



HyperDeck Shuttle HDの接続には、ユーザー名やパスワードは必要ありません。FTPアプリケーションの「サーバー」や「ホスト」のフィールドにIPアドレスを入力し、「匿名ログイン」のチェックボックスがある場合はチェックを入れるだけです。

ファイルの転送

HyperDeckを接続したら、通常のFTPプログラムでのファイル転送と同様に作業が行えます。FTPアプリケーションの多くは、インターフェースでドラッグ&ドロップが使えますが、使用しているアプリケーションに対して適切な方法を確認することを推奨します。

HyperDeckでは、あらゆるファイルの送受信が可能ですが、HyperDeck Shuttle HDでファイルを再生するには、HyperDeckが対応しているコーデックと解像度である必要があります。

作業のこつ HyperDeckで収録中でもネットワークでファイルの転送が可能です。収録に影響を与えないように、HyperDeckは自動的に転送速度を調整します。

Developer Information

Blackmagic HyperDeck Ethernet Protocol

The Blackmagic HyperDeck Ethernet Protocol is a text based protocol accessed by connecting to TCP port 9993 on HyperDeck models that have a built in Ethernet connection. If you are a software developer, you can use the protocol to construct devices that integrate with our products. Here at Blackmagic Design our approach is to open up our protocols and we eagerly look forward to seeing what you come up with!

Protocol Commands

Command	Command Description
help or ?	Provides help text on all commands and parameters
commands	return commands in XML format
device info	return device information
disk list	query clip list on active disk
disk list: slot id: {n}	query clip list on disk in slot {n}
quit	disconnect ethernet control
ping	check device is responding
preview: enable: {true/false}	switch to preview or output
play	play from current timecode
play: speed: {-5000 to 5000}	play at specific speed
play: loop: {true/false}	play in loops or stop-at-end
play: single clip: {true/false}	play current clip or all clips
playrange	query playrange setting
playrange set: clip id: {n}	set play range to play clip {n} only
playrange set: clip id: {n} count: {m}	set play range to {m} clips starting from clip {n}
playrange set: in: {inT} out: {outT}	set play range to play between: - timecode {inT} and timecode {outT}
playrange set: timeline in: {in} timeline out: {out}	set play range in units of frames between: - timeline position {in} and position {out} clear/reset play range setting
playrange clear	clear/reset play range setting
play on startup	query unit play on startup state
play on startup: enable: {true/false}	enable or disable play on startup
play on startup: single clip: {true/false}	play single clip or all clips on startup
play option	query play options
play option: stop mode: {lastframe/nextframe/black}	set output frame when playback stops
record	record from current input
record: name: {name}	record named clip
record spill	spill current recording to next slot

Command	Command Description
record: spill: slot id: {n}	spill current recording to specified slot use current id to spill to same slot
stop	stop playback or recording
clips count	query number of clips on timeline
clips get	query all timeline clips
clips get: clip id: {n}	query a timeline clip info
clips get: clip id: {n} count: {m}	query m clips starting from n
clips get: version: {1/2}	query clip info using specified output version: version 1: id: name startT duration version 2: id: startT duration inT outT name
clips add: name: {name}	append a clip to timeline
clips add: clip id: {n} name: {name}	insert clip before existing clip {n}
clips add: in: {inT} out: {outT} name: {name}	append the {inT} to {outT} portion of clip
clips remove: clip id: {n}	remove clip {n} from the timeline (invalidates clip ids following clip {n})
clips clear	empty timeline clip list
transport info	query current activity
slot info	query active slot
slot info: slot id: {n}	query slot {n}
slot select: slot id: {n}	switch to specified slot
slot select: video format: {format}	load clips of specified format
slot unblock	unblock active slot
slot unblock: slot id: {n}	unblock slot {n}
cache info	query cache status
dynamic range	query dynamic range settings
dynamic range: playback override: {off/Rec709/Rec2020_SDR/HLG/ ST2084_300/ST2084_500/ ST2084_800/ST2084_1000/ ST2084_2000/ST2084_4000/ST2084}	set playback dynamic range override
dynamic range: record override: {off/Rec709/Rec2020_SDR/HLG/ ST2084_300/ST2084_500/ ST2084_800/ST2084_1000/ ST2084_2000/ST2084_4000/ST2048}	set record dynamic range override
notify	query notification status
notify: remote: {true/false}	set remote notifications
notify: transport: {true/false}	set transport notifications
notify: slot: {true/false}	set slot notifications
notify: configuration: {true/false}	set configuration notifications
notify: dropped frames: {true/false}	set dropped frames notifications

Command	Command Description
notify: display timecode: {true/false}	set display timecode notifications
notify: timeline position: {true/false}	set playback timeline position notifications
notify: playrange: {true/false}	set playrange notifications
notify: cache: {true/false}	set cache notifications
notify: dynamic range: {true/false}	set dynamic range settings notifications
notify: slate: {true/false}	set digital slate notifications
notify: clips: {true/false}	set timeline clips notifications where two types of changes can occur: add: partial update with list of clips and insert positions snapshot: complete update of all clips on timeline
notify: disk: {true/false}	set disk clips notifications where two types of changes can occur: add: partial update with list of clips and insert positions snapshot: complete update of all clips on timeline
goto: clip id: {start/end}	goto first clip or last clip
goto: clip id: {n}	goto clip id {n}
goto: clip id: +{n}	go forward {n} clips
goto: clip id: -{n}	go backward {n} clips
goto: clip: {n}	goto frame position {n} within current clip
goto: clip: +{n}	go forward {n} frames within current clip
goto: clip: -{n}	go backward {n} frames within current clip
goto: clip: {start/end}	goto start or end of clip
goto: timeline: {n}	goto frame position {n} within timeline
goto: timeline: +{n}	o forward {n} frames within timeline
goto: timeline: -{n}	go backward {n} frames within timeline
goto: timeline: {start/end}	goto start or end of timeline
goto: timecode: {timecode}	goto specified timecode
goto: timecode: +{timecode}	go forward {timecode} duration
goto: timecode: -{timecode}	go backward {timecode} duration
goto: slot id: {n}	goto slot id {n}
jog: timecode: {timecode}	jog to timecode
jog: timecode: +{timecode}	jog forward {timecode} duration
jog: timecode: -{timecode}	jog backward {timecode} duration
shuttle: speed: {-5000 to 5000}	shuttle with speed
remote	query unit remote control state
remote: enable: {true/false}	enable or disable remote control
remote: override: {true/false}	session override remote control
configuration	query configuration settings
configuration: video input: SDI	switch to SDI input
configuration: video input: HDMI	switch to HDMI input

Command	Command Description
configuration: video input: component	switch to component input
configuration: audio input: embedded	capture embedded audio
configuration: audio input: XLR	capture XLR audio
configuration: audio input: RCA	capture RCA audio
configuration: file format: {format}	switch to specific file format
configuration: audio codec: PCM	switch to PCM audio
configuration: audio codec: AAC	switch to AAC audio
configuration: timecode input: {external/embedded/internal/preset/clip}	change the timecode input
configuration: timecode output: {clip/timeline}	change the timecode output
configuration: timecode preference: {default/dropframe/nondropframe}	whether or not to use drop frame timecodes when not otherwise specified
configuration: timecode preset: {timecode}	set the timecode preset
configuration: audio input channels: {n}	set the number of audio channels recorded to {n}
configuration: record trigger: {none/recordbit/timecoderun}	change the record trigger
configuration: record prefix: {name}	set the record prefix name (supports UTF-8 name)
configuration: append timestamp: {true/false}	append timestamp to recorded filename
configuration: xlr input id: {n} xlr type: {line/mic}	configure xlr input type multiple xlr inputs can be configured in a single command
configuration: genlock input resync: {true/false}	enable or disable genlock input resync
uptime	return time since last boot
format: slot id: {n} prepare: {exFAT/HFS+} name: {name}	prepare a disk formatting operation to filesystem {format}
format: confirm: {token}	perform a pre-prepared formatting operation using token
identify: enable: {true/false}	identify the device
watchdog: period: {period in seconds}	client connection timeout
reboot	reboot device
slate clips	slate clips information
slate project	slate project information
slate lens	slate lens information

Multiline commands:	Command Description
slate clips↵	set slate clips information:
reel: {n}	slate reel number, where {n} is in [1, 999]
scene id: {id}	slate scene id value, where {id} is a string
shot type: {WS/MS/BCU/MCU/ECU/none}	slate shot type

Multiline commands:	Command Description
take: {n}	slate take number, where {n} is in [1, 99]
take scenario: {PU/VFX/SER/none}	slate take scenario
take auto inc: {true/false}	slate take auto increment
good take: {true/false}	slate good take
environment: {interior/exterior}	slate environment
day night: {day/night}	slate day or night
slate project:↵	set slate project information:
project name: {name}	project name (can be empty, supports UTF-8)
camera: {index}	set camera index e.g. A
director: {name}	director (can be empty, supports UTF-8)
camera operator: {name}	camera operator (can be empty, supports UTF-8)
slate lens:↵	set lens information:
lens type: {type}	lens type (can be empty, supports UTF-8)
iris: {type}	camera iris (can be empty, supports UTF-8)
focal length: {length}	focal length (can be empty, supports UTF-8)
distance: {distance}	lens distance (can be empty, supports UTF-8)
filter: {filter}	lens filter (can be empty, supports UTF-8)

Command Combinations

You can combine the parameters into a single command, for example:

```
play: speed: 200 loop: true single clip: true
```

Or for configuration:

```
configuration: video input: SDI audio input: XLR
```

Or to switch to the second disk, but only play NTSC clips:

```
slot select: slot id: 2 video format: NTSC
```

Protocol Details

Connection

The HyperDeck Ethernet server listens on TCP port 9993.

Basic syntax

The HyperDeck protocol is a line oriented text protocol. Lines from the server will be separated by an ascii CR LF sequence. Messages from the client may be separated by LF or CR LF.

New lines are represented in this document as a "↵" symbol.

Single line command syntax

Command parameters are usually optional. A command with no parameters is terminated with a new line:

```
{Command name}↵
```

If parameters are specified, the command name is followed by a colon, then pairs of parameter names and values. Each parameter name is terminated with a colon character:

```
{Command name}: {Parameter}: {Value} {Parameter}: {Value} ...↵
```

Multiline command syntax

The HyperDeck protocol also supports an equivalent multiline syntax where each parameter-value pair is entered on a new line. E.g.

```
{Command name}:↵
{Parameter}: {Value}↵
{Parameter}: {Value}↵
↵
```

Response syntax

Simple responses from the server consist of a three digit response code and descriptive text terminated by a new line:

```
{Response code} {Response text}↵
```

If a response carries parameters, the response text is terminated with a colon, and parameter name and value pairs follow on subsequent lines until a blank line is returned:

```
{Response code} {Response text}:↵
{Parameter}: {Value}↵
{Parameter}: {Value}↵
...
↵
```

Successful response codes

A simple acknowledgement of a command is indicated with a response code of 200:

```
200 ok↵
```

Other successful responses carry parameters and are indicated with response codes in the range of 201 to 299.

Failure response codes

Failure responses to commands are indicated with response codes in the range of 100 to 199:

```
100 syntax error
101 unsupported parameter
102 invalid value
103 unsupported
104 disk full
105 no disk
106 disk error
107 timeline empty
108 internal error
109 out of range
110 no input
111 remote control disabled
112 clip not found
120 connection rejected
150 invalid state
151 invalid codec
160 invalid format
161 invalid token
162 format not prepared
163 parameterized single line command not supported
```

Asynchronous response codes

The server may return asynchronous messages at any time. These responses are indicated with response codes in the range of 500 to 599:

```
5xx {Response Text}:↵
{Parameter}: {Value}↵
{Parameter}: {Value}↵
↵
```

Connection response

On connection, an asynchronous message will be delivered:

```
500 connection info:↵
protocol version: {Version}↵
model: {Model Name}↵
↵
```

Timecode syntax

Timecodes are expressed as non-drop-frame timecode in the format:

```
HH:MM:SS:FF
```

Handling of deck "remote" state

The "remote" command may be used to enable or disable the remote control of the deck. Any attempt to change the deck state over ethernet while remote access is disabled will generate an error:

```
111 remote control disabled↵
```

To enable or disable remote control:

```
remote: enable: {"true", "false"} ↵
```

The current remote control state may be overridden allowing remote access over ethernet irrespective of the current remote control state:

```
remote: override: {"true", "false"} ↵
```

The override state is only valid for the currently connected ethernet client and only while the connection remains open.

The "remote" command may be used to query the remote control state of the deck by specifying no parameters:

```
remote↵
```

The deck will return the current remote control state:

```
210 remote info:↵  
enabled: {"true", "false"}↵  
override: {"true", "false"}↵  
↵
```

Asynchronous remote control information change notification is disabled by default and may be configured with the "notify" command. When enabled, changes in remote state will generate a "510 remote info:" asynchronous message with the same parameters as the "210 remote info:" message.

Closing connection

The "quit" command instructs the server to cleanly shut down the connection:

```
quit↵
```

Checking connection status

The "ping" command has no function other than to determine if the server is responding:

```
ping↵
```

Getting help

The "help" or "?" commands return human readable help text describing all available commands and parameters:

```
help↵
```

Or:

```
?↵
```

The server will respond with a list of all supported commands:

```
201 help:↵  
{Help Text}↵  
{Help Text}↵  
↵
```

Switching to preview mode

The "preview" command instructs the deck to switch between preview mode and output mode:

```
preview: enable: {"true", "false"}↵
```

Playback will be stopped when the deck is switched to preview mode. Capturing will be stopped when the deck is switched to output mode.

Controlling device playback

The "play" command instructs the deck to start playing:

```
play↵
```

The play command accepts a number of parameters which may be used together in most combinations.

By default, the deck will play all remaining clips on the timeline then stop.

The "single clip" parameter may be used to override this behavior:

```
play: single clip: {"true", "false"}↵
```

By default, the deck will play at normal (100%) speed. An alternate speed may be specified in percentage between -5000 to 5000:

```
play: speed: {% normal speed}↵
```

By default, the deck will stop playing when it reaches to the end of the timeline. The "loop" parameter may be used to override this behavior:

```
play: loop: {"true", "false"}↵
```

The "playrange" command instructs the deck to play all the clips. To override this behavior: and select a particular clip:

```
playrange set: clip id: {Clip ID}↵
```

To only play a certain timecode range:

```
playrange set: in: {in timecode} out: {out timecode}↵
```

To clear a set playrange and return to the default value:

```
playrange clear↵
```

The "play on startup" command instructs the deck on what action to take on startup. By default, the deck will not play. Use the "enable" command to start playback after each power up.

```
play on startup: enable {"true", "false"}↵
```

By default, the unit will play back all clips on startup. Use the "single clip" command to override.

```
play on startup: single clip: {"true", "false"}↵
```

Stopping deck operation

The "stop" command instructs the deck to stop the current playback or capture:

```
stop↵
```

Changing timeline position

The "goto" command instructs the deck to switch to playback mode and change its position within the timeline.

To go to the start of a specific clip:

```
goto: clip id: {Clip ID}↵
```

To move forward/back {count} clips from the current clip on the current timeline:

```
goto: clip id: +/-{count}↵
```

Note that if the resultant clip id goes beyond the first or last clip on timeline, it will be clamp at the first or last clip.

To go to the start or end of the current clip:

```
goto: clip: {"start", "end"}↵
```

To go to the start of the first clip or the end of the last clip:

```
goto: timeline: {"start", "end"}↵
```

To go to a specified timecode:

```
goto: timecode: {timecode}↵
```

To move forward or back a specified duration in timecode:

```
goto: timecode: {"+", "-"}{duration in timecode}↵
```

To specify between slot 1 and slot 2:

```
goto: slot id: {Slot ID}↵
```

Note that only one parameter/value pair is allowed for each goto command.

Enumerating supported commands and parameters

The "commands" command returns the supported commands:

```
commands↵
```

The command list is returned in a computer readable XML format:

```
212 commands:  
<commands>↵  
  <command name="..."><parameter name="..."/>...</command>↵  
  <command name="..."><parameter name="..."/>...</command>↵  
  ...  
</commands>↵  
↵
```

Controlling asynchronous notifications

The "notify" command may be used to enable or disable asynchronous notifications from the server.

To enable or disable transport notifications:

```
notify: transport: {"true", "false"}↵
```

To enable or disable slot notifications:

```
notify: slot: {"true", "false"}↵
```

To enable or disable remote notifications:

```
notify: remote: {"true", "false"}↵
```

To enable or disable configuration notifications:

```
notify: configuration: {"true", "false"}↵
```

Multiple parameters may be specified. If no parameters are specified, the server returns the current state of all notifications:

```
209 notify:↵
transport: {"true", "false"}↵
slot: {"true", "false"}↵
remote: {"true", "false"}↵
configuration: {"true", "false"}↵
dropped frames: {"true", "false"}↵
display timecode: {"true", "false"}↵
timeline position: {"true", "false"}↵
playrange: {"true", "false"}↵
cache: {"true", "false"}↵
dynamic range: {"true", "false"}↵
slate: {"true", "false"}↵
clips: {"true", "false"}↵
disk: {"true", "false"}↵
↵
```

Retrieving device information

The "device info" command returns information about the connected deck device:

```
device info↵
```

The server will respond with:

```
204 device info:↵
protocol version: {Version}↵
model: {Model Name}↵
unique id: {unique alphanumeric identifier}↵
slot count: {number of storage slots}↵
software version: {software version}↵
↵
```


Retrieving slot information

The "slot info" command returns information about a slot. Without parameters, the command returns information for the currently selected slot:

```
slot info↵
```

If a slot id is specified, that slot will be queried:

```
slot info: slot id: {Slot ID}↵
```

The server will respond with slot specific information:

```
202 slot info:↵
slot id: {Slot ID}↵
status: {"empty", "mounting", "error", "mounted"}↵
volume name: {Volume name}↵
recording time: {recording time available in seconds}↵
video format: {disk's default video format}↵
blocked: {"true", "false"}↵
↵
```

Asynchronous slot information change notification is disabled by default and may be configured with the "notify" command. When enabled, changes in slot state will generate a "502 slot info:" asynchronous message with the same parameters as the "202 slot info:" message.

Retrieving clip information

The "disk list" command returns the information for each playable clip on a given disk. Without parameters, the command returns information for the current active disk:

```
disk list↵
```

If a slot id is specified, the disk in that slot will be queried:

```
disk list: slot id: {Slot ID}↵
```

The server responds with the list of all playable clips on the disk in the format of: Index, name, formats, and duration in timecode:

```
206 disk list:↵
slot id: {Slot ID}↵
{clip index}: {name} {file format} {video format} {Duration
timecode}↵
{clip index}: {name} {file format} {video format} {Duration
timecode}↵
...
↵
```

Note that the *clip index* starts from 1.

Retrieving clip count

The "clips count" command returns the number of clips on the current timeline:

```
clips count ↵
```

The server responds with the number of clips:

```
214 clips count: ↵
clip count: {Count}↵
```

Retrieving timeline information

The "clips get" command returns information for each available clip on the current timeline. Without parameters, the command returns information for all clips on timeline:

```
clips get↵
```

The server responds with a list of clip IDs, names and timecodes:

```
205 clips info:↵  
clip count: {Count}↵  
{Clip ID}: {Start timecode} {Duration timecode} {In timecode}  
{Out timecode} {Name}↵  
{Clip ID}: {Start timecode} {Duration timecode} {In timecode}  
{Out timecode} {Name}↵  
...  
↵
```

Retrieving transport information

The "transport info" command returns the state of the transport:

```
transport info ↵
```

The server responds with transport specific information:

```
208 transport info:  
status: {"preview", "stopped", "play", "forward", "rewind",  
"jog", "shuttle","record"}↵  
speed: {Play speed between -5000 and 5000 %}↵  
slot id: {Slot ID or "none"}↵  
clip id: {Clip ID or "none"}↵  
single clip: {"true", "false"}↵  
display timecode: {timecode}↵  
timecode: {timecode}↵  
video format: {Video format}↵  
loop: {"true", "false"}↵  
timeline: {n}↵  
input video format: {Video format}↵  
dynamic range: {"off", "Rec709", "Rec2020_SDR", "HLG",  
"ST2084_300", "ST2084_500", "ST2084_800", "ST2084_1000",  
"ST2084_2000", "ST2084_4000", "ST2048" or "none"}↵  
↵
```

The "timecode" value is the timecode within the current timeline for playback or the clip for record. The "display timecode" is the timecode displayed on the front of the deck. The two timecodes will differ in some deck modes.

Asynchronous transport information change notification is disabled by default and may be configured with the "notify" command. When enabled, changes in transport state will generate a "508 transport info:" asynchronous message with the same parameters as the "208 transport info:" message.

Video Formats

The following video formats are currently supported on HyperDeck Shuttle:

720p50, 720p5994, 720p60

1080p23976, 1080p24, 1080p25, 1080p2997, 1080p30, 1080p60

1080i50, 1080i5994, 1080i60

Video format support may vary between models and software releases.

File Formats

All HyperDeck models currently support the following file formats:

H.264High

H.264Medium

H.264Low

QuickTimeProResHQ

QuickTimeProRes

QuickTimeProResLT

QuickTimeProResProxy

QuickTimeDNxHD220x

DNxHD220x

QuickTimeDNxHD145

DNxHD145

QuickTimeDNxHD45

DNxHD45

Supported file formats may vary between models and software releases.

Querying and updating configuration information

The "configuration" command may be used to query the current configuration of the deck:

```
configuration↵
```

The server returns the configuration of the deck:

```
211 configuration:↵
audio input: {"embedded", "XLR", "RCA"}↵
audio mapping: {n}↵
video input: {"SDI", "HDMI", "component", "composite"}↵
file format: {format}↵
audio codec: {"PCM", "AAC"}↵
timecode input: {"external", "embedded", "preset", "clip"}↵
timecode output: {"clip", "timeline"}↵
timecode preference: {"default", "dropframe", "nondropframe"}↵
timecode preset: {timecode}↵
audio input channels: {n}↵
record trigger: {"none", "recordbit", "timecoderun"}↵
record prefix: {name}↵
append timestamp: {"true", "false"}↵
genlock input resync: {"true", "false"}↵
↵
```

One or more configuration parameters may be specified to change the configuration of the deck.

To change the current video input:

```
configuration: video input: {"SDI", "HDMI", "component"}↵
```

Valid video inputs may vary between models. To configure the current audio input:

```
configuration: audio input: {"embedded", "XLR", "RCA"}↵
```

Valid audio inputs may vary between models.

To configure the current file format:

```
configuration: file format: {File format}↵
```

Note that changes to the file format may require the deck to reset, which will cause the client connection to be closed. In such case, response code 213 will be returned (instead of 200) before the client connection is closed:

```
"213 deck rebooting"
```

Asynchronous configuration information change notification is disabled by default and may be configured with the "notify" command. When enabled, changes in configuration will generate a "511 configuration:" asynchronous message with the same parameters as the "211 configuration:" message.

Selecting active slot and video format

The "slot select" command instructs the deck to switch to a specified slot, or/and to select a specified output video format.

To switch to a specified slot:

```
slot select: slot id: {slot ID}↵
```

To select the output video format:

```
slot select: video format: {video format}↵
```

Either or all slot select parameters may be specified. Note that selecting video format will result in a rescan of the disk to reconstruct the timeline with all clips of the specified video format.

Clearing the current timeline

The "clips clear" command instructs the deck to empty the current timeline:

```
clips clear↵
```

The server responds with

```
200 ok↵
```

Adding a clip to the current timeline

The "clips add:" command instructs the deck to add a clip to the current timeline:

```
clips add: name: {clip name}↵
```

The server responds with

```
200 ok↵
```

or in case of error

```
lxx {error description}↵
```

Configuring the watchdog

The "watchdog" command instructs the deck to monitor the connected client and terminate the connection if the client is inactive for at least a specified period of time.

To configure the watchdog:

```
watchdog: period: {period in seconds}↵
```

To avoid disconnection, the client must send a command to the server at least every {period} seconds. Note that if the period is set to 0 or less than 0, connection monitoring will be disabled.

ヘルプ

ヘルプライン

すぐに情報が必要な方は、Blackmagic Designオンラインサポートページで、Blackmagic HyperDeck ディスクレコーダーの最新サポート情報を確認できます。

Blackmagic Designオンラインサポートページ

最新のマニュアル、ソフトウェア、サポートノートは、www.blackmagicdesign.com/jp/supportのBlackmagic Designサポートセンターで確認できます。

Blackmagic Designフォーラム

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Blackmagic Designサポートへの連絡

サポートページやフォーラムで必要な情報を得られなかった場合は、サポートページの「メールを送信」ボタンを使用して、サポートのリクエストをメール送信してください。あるいは、サポートページの「お住まいの地域のサポートオフィス」をクリックして、お住まいの地域のBlackmagic Designサポートオフィスに電話でお問い合わせください。

現在インストールされているソフトウェアのバージョンを確認

コンピューターにインストールされているBlackmagic HyperDeck Utilityソフトウェアのバージョンを確認するには、「About Blackmagic HyperDeck Setup」ウィンドウを開きます。

- Mac OSでは、アプリケーションフォルダーから「Blackmagic HyperDeck Setup」を開きます。アプリケーションメニューから「About Blackmagic HyperDeck Setup」を選択し、バージョンを確認します。
- Windowsでは、スタートメニューまたはスタート画面から「Blackmagic HyperDeck Setup」ユーティリティを開きます。ヘルプメニューをクリックして「About Blackmagic HyperDeck Setup」を選択し、バージョンを確認します。

最新のソフトウェアアップデートを入手する

コンピューターにインストールされているBlackmagic HyperDeck Setupのバージョンを確認した後、Blackmagicサポートセンター (www.blackmagicdesign.com/jp/support) で最新のソフトウェアアップデートを確認してください。常に最新のソフトウェアを使用することを推奨しますが、重要なプロジェクトの実行中は、ソフトウェアのアップデートは行わない方がよいでしょう。

規制に関する警告

欧州連合内での電気機器および電子機器の廃棄処分



製品に記載されている記号は、当該の機器を他の廃棄物と共に処分してはならないことを示しています。機器を廃棄するには、必ずリサイクルのために指定の回収場所に引き渡してください。機器の廃棄において個別回収とリサイクルが行われることで、天然資源の保護につながり、健康と環境を守る方法でリサイクルが確実に行われるようになります。廃棄する機器のリサイクルのための回収場所に関しては、お住まいの地方自治体のリサイクル部門、または製品を購入した販売業者にご連絡ください。



この機器は、FCC規定の第15部に準拠し、クラスAデジタル機器の制限に適合していることが確認されています。これらの制限は、商用環境で機器を使用している場合に有害な干渉に対する妥当な保護を提供するためのものです。この機器は無線周波エネルギーを生成、使用、放出する可能性があります。また、指示に従ってインストールおよび使用しない場合、無線通信に有害な干渉を引き起こす恐れがあります。住宅地域で当製品を使用すると有害な干渉を引き起こす可能性があり、その場合はユーザーが自己責任で干渉に対処する必要があります。

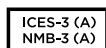
動作は次の2つを条件とします：

- 1 本機は、有害な干渉を起こさない。
- 2 本機は希望しない動作を発生しかねない干渉を含む、いかなる受信干渉も受け入れる必要がある。



R-R-BMD-20211410001

ISED Canadaステートメント



本機は、カナダのクラスAデジタル機器の規格に準拠しています。

本機のいかなる改造、あるいは目的の用途以外での使用は、これらの規格への順守を無効にすることがあります。

HDMIインターフェースへの接続は、必ず高品質のシールドHDMIケーブルを使用する必要があります。

本機は、商用環境で目的の用途に順守した使用においてテストを行なっています。非商用環境で使用された場合、無線妨害を引き起こす可能性があります。

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海拔2000m以上では使用しないでください。

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Avril 2022

Manuel d'installation et d'utilisation

Blackmagicdesign 

HyperDeck Shuttle HD



HyperDeck Shuttle HD



Bienvenue

Nous vous remercions d'avoir fait l'acquisition d'un enregistreur à disque Blackmagic HyperDeck Shuttle HD.

Lorsque nous avons conçu les premiers enregistreurs à disque originaux, nous souhaitons faciliter l'enregistrement et la lecture vidéo via des SSD rapides. Aujourd'hui, nous sommes fiers de vous présenter l'HyperDeck Shuttle HD !

L'HyperDeck Shuttle HD est un enregistreur vidéo HDMI petit et portable, conçu pour votre bureau. Sa grande molette et ses commandes de transport familières vous permettent de l'opérer d'une seule main. L'HyperDeck Shuttle HD est le compagnon idéal des productions live avec un mélangeur ATEM Mini. Vous pouvez même l'utiliser en tant que prompteur !

L'HyperDeck Shuttle HD enregistre sur des cartes SD ou des disques flash externes en ProRes, DNxHD ou H.264 pour un enregistrement et une lecture ultra rapides.

N'oubliez pas de consulter notre page d'assistance sur www.blackmagicdesign.com/fr pour obtenir la dernière version de ce manuel et les mises à jour du logiciel de l'HyperDeck. Nous vous recommandons de mettre le logiciel à jour régulièrement afin de travailler avec les fonctions les plus récentes. Veuillez entrer vos coordonnées lorsque vous téléchargerez le logiciel afin d'être informé des mises à jour. Nous travaillons constamment sur de nouvelles fonctionnalités et nous efforçons d'améliorer nos services en permanence : c'est pourquoi nous aimerions avoir votre avis !

A stylized, handwritten signature in black ink that reads "Grant Petty".

Grant Petty PDG de Blackmagic Design

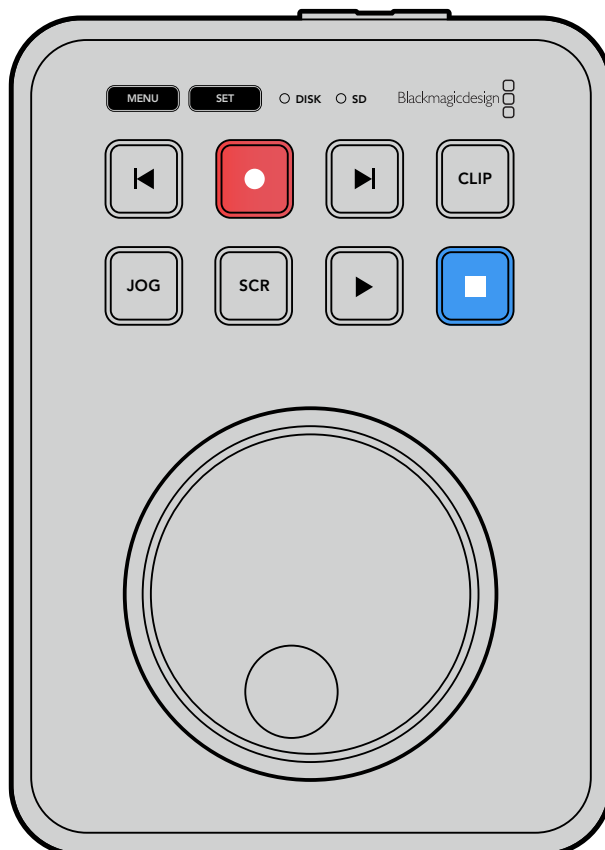
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Mise en route

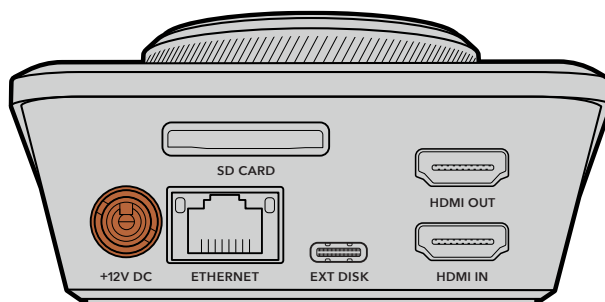
Pour utiliser votre HyperDeck Shuttle HD, il suffit de connecter l'alimentation, de brancher une source vidéo HDMI, d'insérer une carte SD ou un support externe, puis d'appuyer sur le bouton d'enregistrement !

Cette section du manuel est dédiée à la mise en route de l'HyperDeck Shuttle HD.



Brancher l'alimentation

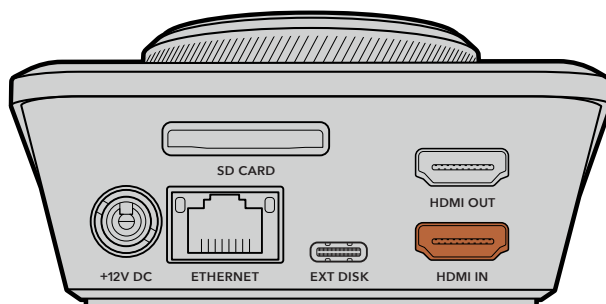
Pour alimenter votre HyperDeck Shuttle HD, branchez l'adaptateur fourni à l'entrée d'alimentation située à l'arrière de l'appareil. Serrer la bague de blocage permet d'éviter les déconnexions accidentelles du câble d'alimentation.



Branchez l'adaptateur à l'entrée d'alimentation de l'HyperDeck Shuttle HD

Connecter une source vidéo et audio

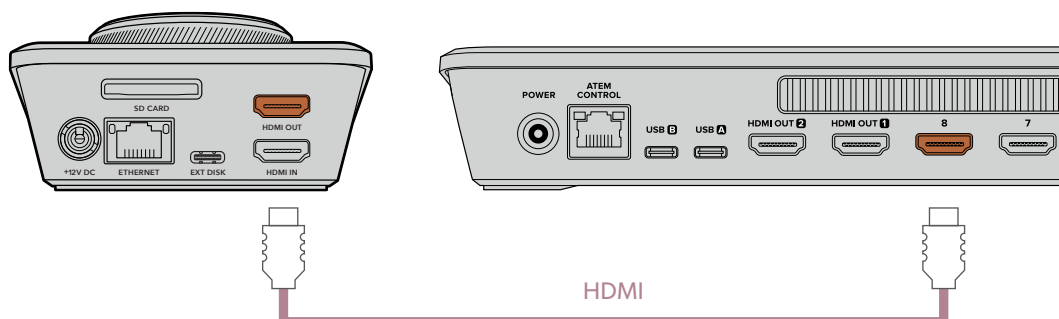
Pour connecter une vidéo à votre HyperDeck Shuttle HD, branchez une source vidéo HDMI à l'entrée HDMI située à l'arrière de l'appareil.



Connectez votre équipement de destination à la sortie HDMI. Par exemple, un mélangeur ATEM Mini ou un téléviseur HDMI.

La sortie HDMI permet également de visualiser le menu de paramétrage lorsque vous modifiez des réglages pour votre HyperDeck. En effet, le menu de paramétrage est visualisable en superposition vidéo sur la sortie HDMI. Pour plus d'informations concernant le menu de paramétrage, consultez la section « Modifier les paramètres » de ce manuel.

CONSEIL Si vous n'arrivez pas à voir votre source vidéo sur l'écran connecté, c'est peut-être car vous êtes en mode de lecture. Appuyez sur le bouton d'enregistrement pour lancer le mode d'enregistrement.



Branchez la sortie HDMI à votre équipement de destination, tel qu'un téléviseur HDMI ou un mélangeur ATEM Mini.

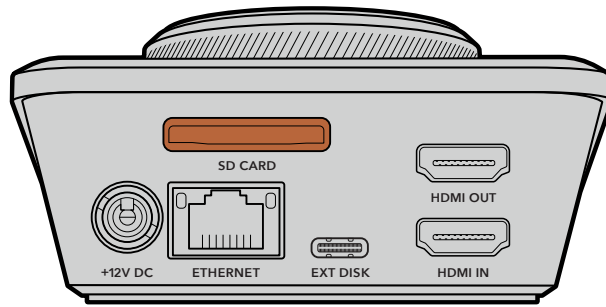
Brancher un support

Tous les enregistreurs à disque HyperDeck Shuttle HD peuvent être utilisés sans devoir configurer les paramètres. Vous avez simplement besoin d'une carte SD ou d'un disque externe formatés.

Il est facile de formater un support via les paramètres du menu. Vous pouvez également le formater sur un ordinateur. Pour plus d'informations, consultez la section « Formater les supports » de ce manuel. Vous y trouverez également des informations sur les types de supports les plus adaptés à l'enregistrement vidéo et une liste de cartes SD et de disques externes recommandés.

Brancher une carte SD :

- 1 Orientez les contacts dorés de la carte SD vers le haut et alignez-la avec le logement pour carte SD. Poussez délicatement la carte dans le logement jusqu'à ce qu'elle soit en place.



- 2 L'HyperDeck vérifie la carte SD. Le voyant SD en haut de l'HyperDeck Shuttle HD s'allume en vert. Une fois vérifiée, le voyant s'éteint.



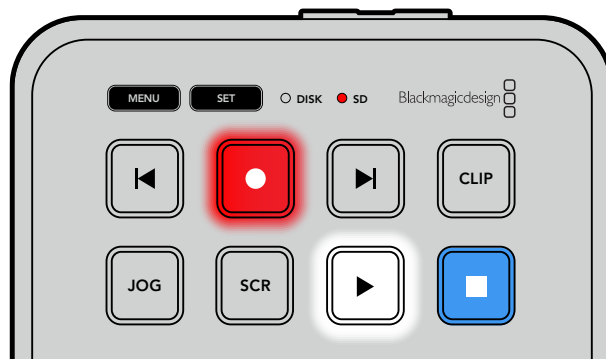
Votre HyperDeck Shuttle HD est désormais prêt pour l'enregistrement et la lecture !

Continuez à lire ce manuel pour des informations plus détaillées concernant l'enregistrement et la lecture des clips, la modification des paramètres, et bien plus.

Enregistrer de la vidéo

Une fois que votre source vidéo s'affiche sur l'équipement de destination HDMI, vous pouvez commencer à enregistrer.

Appuyez sur le bouton d'enregistrement pour démarrer l'enregistrement. Lorsque vous enregistrez sur une carte SD, le voyant SD s'allume en vert. Les boutons d'enregistrement et de lecture s'allument aussi. Lorsque vous enregistrez sur un disque externe, le voyant du disque s'allume en rouge.



Pour arrêter l'enregistrement, appuyez sur le bouton d'arrêt.

Lire

Appuyez sur le bouton de lecture pour lire les clips. Pendant la lecture, le bouton de lecture s'allume et les voyants **Disk** et **SD** s'allument en vert.

Si plusieurs clips ont été enregistrés, vous pouvez les passer rapidement en revue en appuyant sur les boutons d'avance ou de retour.



Boutons d'avance et de retour

Appuyez sur le bouton de retour pour revenir au début du clip. En appuyant plusieurs fois sur ce bouton, vous reviendrez au précédent clip enregistré.

Appuyez sur le bouton d'avance pour avancer dans vos clips.



Utilisez les boutons d'avance et de retour pour repérer le début de chaque clip

CONSEIL Pour lire des fichiers vidéo sur votre HyperDeck, vous devrez régler le codec pour qu'il corresponde au codec utilisé pour enregistrer les fichiers. Vous pouvez le faire depuis le menu. Pour plus d'informations, consultez la section « Modifier les paramètres » de ce manuel.

Lire des clips en boucle

Si vous appuyez une seconde fois sur le bouton de lecture pendant la lecture, votre HyperDeck Shuttle HD lira tous les clips en boucle jusqu'à ce que vous appuyiez sur le bouton d'arrêt.

Si vous souhaitez lire un seul clip en boucle, réglez votre HyperDeck sur le mode **Clip**, puis appuyez une fois sur le bouton de lecture pour le lire, et une seconde fois pour le lire en boucle.

Lire tous les clips en boucle

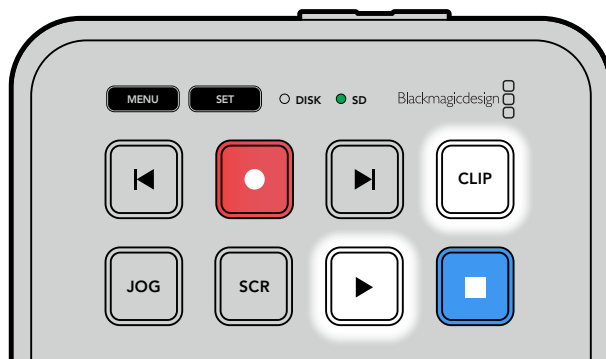
Pendant la lecture, appuyez sur le bouton de lecture une seconde fois pour lire en boucle tous les clips enregistrés

Lire le clip en boucle

Lorsque vous êtes en mode **Clip**, appuyez une seconde fois sur le bouton de lecture pour lire en boucle le clip en cours

Mode Clip

Le mode Clip vous permet de limiter la lecture à un seul clip. Par exemple, lorsque le mode Clip est activé, vous pouvez aller sur un clip et appuyer sur lecture tout en sachant que cette dernière s'arrêtera à la fin du clip.






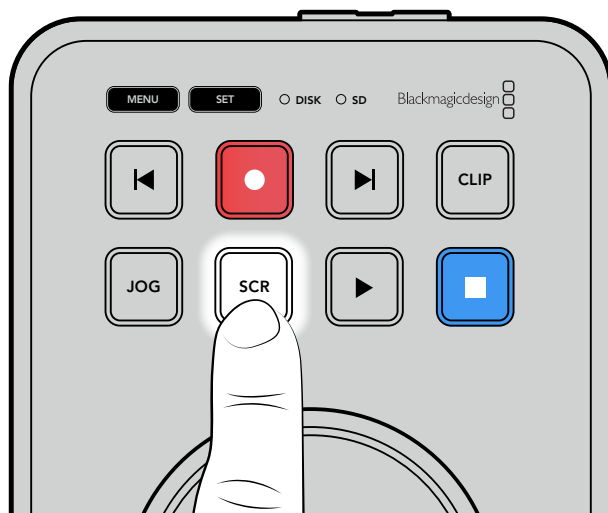
Lorsque le mode Clip est sélectionné, appuyer une seconde fois sur le bouton de lecture permet de lire en boucle le clip en cours

Utiliser la molette

La molette vous permet de parcourir rapidement vos clips et de sélectionner des moments spécifiques à lire, ou de les revoir image par image. C'est pratique si vous devez localiser un moment précis en contrôlant visuellement le clip lorsque vous tournez la molette. C'est aussi utile pour positionner la tête de lecture sur un repère précis pour que le clip puisse être diffusé pendant un événement en direct, par exemple.

Les modes de recherche incluent Jog, Scroll et Shuttle.

	Jog	Lit le clip image par image pour un contrôle précis.
	Scroll	Le mode Scroll vous permet d'avancer et de reculer à travers tous les médias enregistrés. Lorsque vous tournez la molette, le scroll est verrouillé à votre mouvement. Ainsi, vous avez un contrôle complet de l'emplacement de la lecture.
	Shuttle	Appuyez sur les boutons [Jog] et [Scr] simultanément pour activer le mode Shuttle. Une fois que vous êtes en mode Shuttle, vous pouvez reculer ou avancer rapidement à travers vos médias en tournant la molette vers la gauche ou vers la droite. Au fur et à mesure que vous tournez la molette, le défilement sera de plus en plus rapide jusqu'à ce que vous atteigniez la vitesse maximale de x50. Pour arrêter le défilement, tournez la molette jusqu'à ce que vous atteigniez votre position de départ. Pour vous arrêter à un emplacement précis, appuyez sur le bouton stop, ou appuyez sur lecture pour reprendre la lecture à l'emplacement actuel. Il est important de noter que la vitesse de défilement maximale peut être réduite à l'aide du menu Réglages. Pour plus d'informations, consultez la section « Paramètres » de ce manuel.



Appuyez sur les boutons **Jog** ou **Scr** pour sélectionner les modes Jog ou Shuttle

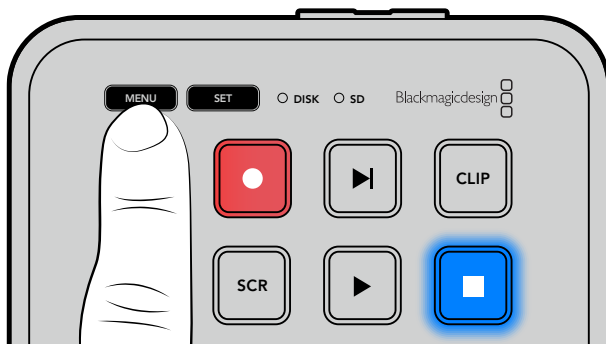


Une fois qu'un mode de recherche est sélectionné, tournez la molette

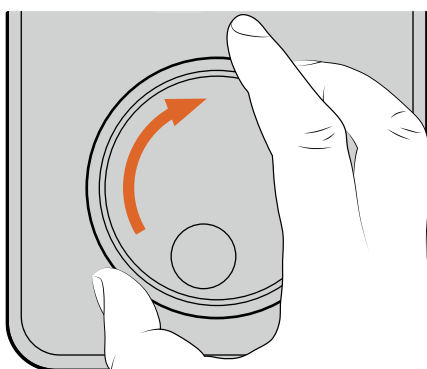
CONSEIL Pour revenir à une lecture normale, appuyez sur le bouton de lecture ou d'arrêt.

Modifier les paramètres

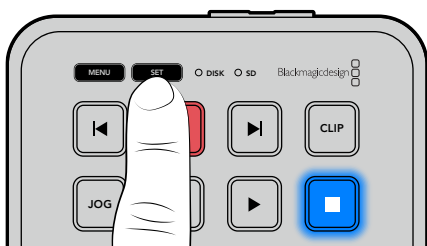
Appuyer sur le bouton **Menu** permet d'ouvrir les paramètres du menu, qui apparaîtront en superposition de la vidéo dans le coin gauche de votre écran HDMI connecté.



Appuyez sur le bouton **Menu** pour afficher l'écran de paramétrage



Utilisez la molette pour naviguer vers un sous-menu ou un paramètre



Appuyez sur le bouton **Set** pour sélectionner le sous-menu ou le paramètre



Ajustez les paramètres à l'aide de la molette ou des boutons d'avance et de retour. Confirmez la sélection en appuyant sur le bouton **Set**.

Pour sortir du menu, appuyez sur le bouton **Menu** afin de revenir en arrière et d'accéder à l'écran d'accueil.

CONSEIL Vous pouvez positionner le menu dans n'importe quel des quatre coins de votre écran via le menu de paramétrage. Nous vous recommandons de désactiver le menu une fois vos paramètres modifiés, pour vous assurer que la sortie HDMI est un clean feed lorsqu'elle est connectée à un mélangeur HDMI, tel qu'un ATEM Mini Extreme.

Paramètres

Le menu de paramétrage est classé en 5 catégories distinctes : Enregistrement, Moniteur, Audio, Stockage et Réglages. Chaque sous-menu contient des paramètres dédiés qui sont pour la plupart ajustables via le panneau de contrôle HyperDeck Shuttle HD. Certains paramètres sont en affichage seul et apparaîtront grisés, comme le préfixe du fichier par exemple. Dans ce cas, le paramètre peut être ajusté via l'utilitaire HyperDeck Setup.

Menu Enregistrement

Enregistrement	
Entrée	HDMI
Codec	H.264 Élevé
Déclenchement Rec.	Aucun

Entrée

Affiche l'entrée HDMI de l'HyperDeck Shuttle HD.

Codec

L'HyperDeck Shuttle HD peut enregistrer de la vidéo compressée à l'aide des codecs H.264, Apple ProRes et DNxHD. Pour utiliser la fonction du prompteur, sélectionnez **Prompteur**.

Lancer Rec.

Il existe deux modes de déclenchement de l'enregistrement : Vidéo marche/arrêt, et Timecode Run.

Certaines caméras, comme la Blackmagic Pocket Cinema Camera 4K, envoient un signal via HDMI pour démarrer ou arrêter l'enregistrement sur les enregistreurs externes. Lorsque vous sélectionnez **Vidéo marche/arrêt**, l'HyperDeck démarrera ou arrêtera l'enregistrement lorsque le bouton d'enregistrement sera pressé sur la caméra.

Utilisez l'option **T/C Run** pour que l'appareil déclenche l'enregistrement lorsqu'il reçoit un signal de timecode valide via les entrées. L'enregistrement s'interrompt lorsque le signal s'arrête. Désactivez le déclenchement de l'enregistrement en sélectionnant l'option **Aucun**.

REMARQUE Lorsque vous enregistrez avec une caméra HDMI, veillez à ce que les informations à l'écran soient désactivées sur le signal de sortie, car les informations présentes sur la vidéo provenant de la caméra sont enregistrées avec l'image.

Menu Moniteur

Moniteur	
Disposition du prompteur	
Taille de la police	450%
Interligne	120%
Marge latérale	10%
Retourner horizontalement	Off
Retourner verticalement	Off

Disposition du prompteur

Le menu Moniteur contient tous les paramètres pour l'utilisation de l'HyperDeck Shuttle HD en prompteur.

Taille de la police

Ajustez la taille du texte en sélectionnant la taille de la police, puis en appuyant sur **Set**. Tournez la molette dans le sens des aiguilles d'une montre pour augmenter la taille, ou dans le sens inverse pour la diminuer.

Interligne

Tournez la molette pour augmenter ou diminuer l'interligne.

Marge latérale

Ajustez la largeur des marges latérales de chaque côté de l'affichage du prompteur.

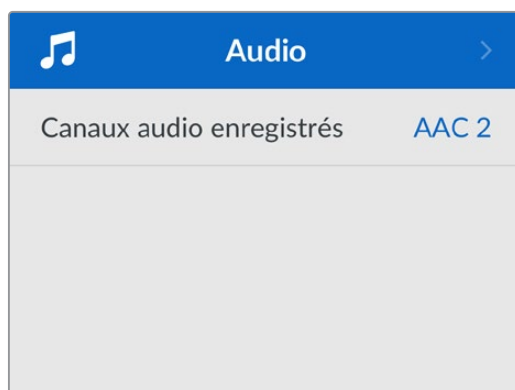
Retourner

Si le moniteur de votre prompteur est réglé pour être réfléchi sur un miroir, par exemple lorsque le présentateur est devant une caméra ou sur un podium, il faudra utiliser les paramètres Retourner pour qu'il puisse lire le texte. Deux modes de retournement sont disponibles :

Retourner horizontalement - Utilisez ce paramètre lorsque le bas du moniteur de votre prompteur est monté près de la base du miroir.

Retourner verticalement - Utilisez ce paramètre lorsque le bas du moniteur de votre prompteur est monté loin de la base du miroir.

Menu Audio

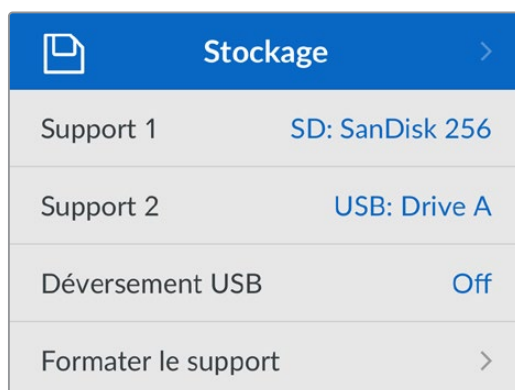


Canaux audio enregistrés

L'HyperDeck Shuttle HD peut enregistrer simultanément jusqu'à 8 canaux audio PCM. Pour sélectionner le nombre de canaux à enregistrer, agrandissez la liste des canaux audio enregistrés et sélectionnez 2, 4 ou 8 canaux.

Si le codec est réglé sur H.264, vous pouvez sélectionner 2 canaux d'audio AAC afin de mettre vos enregistrements directement sur YouTube.

Menu Stockage



Les supports connectés apparaîtront dans les paramètres de stockage. **Support 1** affiche le nom de la carte SD connectée et **Support 2** affiche n'importe quel disque flash USB branché au connecteur **Ext disk**. Lorsque vous utilisez un hub USB, tel qu'un Blackmagic MultiDock 10G, le disque actif est affiché.

Déversement USB

Si vous utilisez un Blackmagic MultiDock 10G ou un appareil similaire pour connecter plus d'un disque via la connexion USB **Ext disk**, vous pouvez activer cette option pour que l'enregistrement d'un disque externe se déverse sur le prochain.

Formater le support

Les cartes SD et les supports connectés via le port **Ext disk** à l'arrière peuvent être formatés directement sur l'appareil ou via un ordinateur Mac ou Windows.

Préparer les supports sur l'HyperDeck Shuttle HD :

- 1 À l'aide de la molette et du bouton **Set**, sélectionnez **Formater le support**.
- 2 Dans la liste, sélectionnez le support à formater et appuyez sur **Set**.
- 3 Choisissez le format et appuyez sur **Set**.

- 4 Un message de confirmation apparaîtra indiquant la carte qui sera formatée et le format sélectionné.
- 5 Une fenêtre de formatage apparaîtra une fois le processus terminé. Sélectionnez Ok.

Nous conseillons d'utiliser le format HFS+, également connu sous le nom de Mac OS X Extended, car il prend en charge la journalisation. Les données stockées sur un support journalisé ont plus de chance d'être récupérées si le support est endommagé. Le format HFS+ est pris en charge nativement par Mac. Le format exFAT est pris en charge nativement par Mac et Windows. Il n'est donc pas nécessaire d'utiliser de logiciel tiers, mais la journalisation n'est pas prise en charge.

Pour formater un support sur un ordinateur Mac ou Windows, consultez la section « Formater un support » de ce manuel.

Menu Réglages

Ce menu contient les réglages pour la sélection de la langue, des normes par défaut, ainsi que des options pour l'affichage du menu, les paramètres réseau et le timecode.

Réglages	
Nom	HyperDeck Shuttle HD
Langue	Français
Date	16 mai 2022
Heure	14:32
Zone	UTC±11:00
Logiciel	8.1
Caméra	A
Format par défaut	1080p30
Vitesse max. Shuttle	x50

Nom

Lorsqu'il y a plusieurs HyperDeck Shuttle HD sur le réseau, il peut être utile de leur donner chacun un nom pour mieux les identifier. Pour ce faire, utilisez le Blackmagic HyperDeck Setup ou le Blackmagic HyperDeck Ethernet Protocol et un émulateur de terminal. Le nom apparaîtra dans le menu Réglages.

Langue

L'HyperDeck Shuttle HD prend en charge 13 langues dont l'anglais, le chinois, le japonais, le coréen, l'espagnol, l'allemand, le français, le russe, l'italien, le portugais, le turc, l'ukrainien et le polonais.

Pour sélectionner la langue :

- 1 Une fois le menu **Réglages** sélectionné, appuyez sur **Set**.
- 2 À l'aide de la molette, faites défiler pour sélectionner la langue et appuyez sur **Set**.

- 3 Utilisez la molette pour sélectionner la langue et appuyez sur **Set**. Une fois la langue sélectionnée, vous retournerez automatiquement au menu **Réglages**.

Date

Pour ajuster la date, sélectionnez le champ de date et appuyez sur **Set**. Vous pouvez sélectionner le jour, le mois et l'année à l'aide de la molette. Cela générera le suffixe horodaté.

Heure

Pour ajuster l'heure, sélectionnez ce paramètre et appuyez sur **Set**. Utilisez la molette pour régler les heures et les minutes. L'heure de l'HyperDeck Shuttle HD est configurée au format 24 heures.

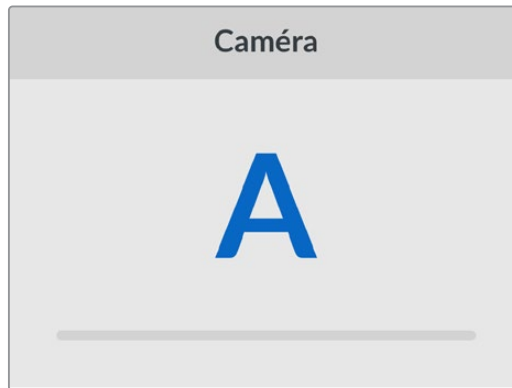
Logiciel

Affiche la version actuelle du logiciel.

Caméra

Ce paramètre est utile lorsque vous utilisez l'HyperDeck pour enregistrer des fichiers ISO depuis plusieurs caméras et les montez sur une timeline multicaméra dans DaVinci Resolve.

La lettre d'identification de chaque caméra apparaîtra dans les métadonnées du fichier, permettant ainsi à DaVinci Resolve d'identifier facilement chaque angle avec la fonctionnalité Sync bin.



Assignez les caractères A-Z ou 1-9 à votre caméra

Norme par défaut

Parfois, l'HyperDeck Shuttle HD ne sait pas quelle norme vidéo vous voulez utiliser. Ce paramètre indiquera à l'HyperDeck la norme vidéo que vous souhaitez utiliser majoritairement.

Par exemple, si un HyperDeck Shuttle HD est allumé, qu'aucune entrée vidéo n'est connectée et que vous insérez un disque contenant des fichiers avec 2 normes vidéo, quelle norme l'HyperDeck doit-il lire ? La norme vidéo par défaut indique la norme vidéo que vous préférez. L'appareil sélectionne ainsi ce format et lit ces fichiers.

La norme vidéo par défaut est aussi utile quand vous allumez un HyperDeck Shuttle HD pour la première fois et qu'il n'a aucune entrée vidéo et qu'aucun disque n'a été inséré. Dans ce cas, l'HyperDeck ne sait pas quelle norme vidéo utiliser pour la sortie de monitoring. La norme vidéo par défaut lui servira de guide.

En revanche, elle n'est qu'un simple guide. Elle n'écrasera rien. Ainsi, si vous avez un disque avec un seul type de fichier vidéo et que vous lancez la lecture, l'enregistreur à disque HyperDeck basculera sur cette norme vidéo et la lira. Il ignorera la norme vidéo par défaut, car il est évident que vous souhaitez uniquement lire les fichiers sur le disque.

L'enregistrement fonctionne de façon similaire. Si vous lancez l'enregistrement, l'HyperDeck enregistrera la norme vidéo connectée à l'entrée vidéo. Une fois l'enregistrement terminé, l'HyperDeck Shuttle HD lira les fichiers avec cette norme vidéo, même si le disque contient d'autres fichiers qui correspondent à la norme vidéo par défaut. Il est entendu qu'on veut généralement lire

la norme vidéo qu'on vient d'enregistrer. Si vous débranchez et rebranchez le disque, alors la norme vidéo par défaut sera utilisée pour choisir le type de fichier à lire.

La norme vidéo par défaut n'est qu'un guide pour aider l'HyperDeck Shuttle HD à prendre des décisions en cas de doute. Elle ne force pas l'enregistreur à réagir de façon particulière.

Vitesse max. Shuttle

La vitesse de défilement maximale sur l'HyperDeck Shuttle HD est de x50. Pour réduire cette vitesse, vous pouvez choisir parmi la liste des vitesses prééglées.

Menu

Via ce menu des réglages, vous pouvez ajuster la position, ainsi que le mode d'apparence du menu sur l'écran HDMI connecté.

Menu	
Mode	Clair
Opacité	100%
Position	En bas à gauche

Mode

Réglez l'écran de l'HyperDeck en mode sombre ou clair. Le mode clair offrira davantage de contraste lorsque les médias sont sombres, ou lorsque vous êtes en mode prompteur.

Menu	
Mode	Clair
Opacité	100%
Position	En bas à gauche

Menu	
Mode	Sombre
Opacité	100%
Position	En bas à gauche

Opacité

Ajustez les niveaux pour réduire l'opacité de l'affichage du menu sur l'écran connecté de 100% (par défaut) à 20%.

Position

Par défaut, le menu apparaîtra superposé en bas à gauche de l'écran. Pour déplacer ce menu, sélectionnez ce paramètre et appuyez sur le bouton **Set**. Ensuite, vous pouvez choisir de positionner le menu en haut à gauche, en haut à droite, en bas à gauche ou en bas à droite de l'écran.

Réseau

Réseau	
Protocole	IP statique
Adresse IP	192.168.24.100
Masque subnet	255.255.255.0
Passerelle	192.168.24.1

Protocole

Le Blackmagic HyperDeck est réglé sur DHCP. Une fois connecté, le serveur de votre réseau assignera automatiquement une adresse IP et aucun autre paramètre réseau n'aura besoin d'être ajusté. Si vous avez besoin d'une adresse manuelle, vous pouvez vous connecter via une IP statique.

Une fois **Protocole** sélectionné, appuyez sur le bouton **Set** pour accéder au menu. Puis, faites défiler jusqu'à **IP statique** et appuyez sur **Set**.

Adresse IP, Masque de sous-réseau, Passerelle, DNS primaire et DNS secondaire

Une fois l'IP statique sélectionnée, vous pouvez saisir les informations du réseau manuellement.

Pour changer l'adresse IP :

- 1 Utilisez la molette pour mettre **Adresse IP** en surbrillance et appuyez sur le bouton **Set** sur le panneau de contrôle de votre HyperDeck.
- 2 À l'aide de la molette, ajustez l'adresse IP et appuyez sur **Set** pour confirmer avant d'ajuster la série de valeurs suivante.
- 3 Appuyez sur **Set** pour confirmer le changement et passer à la valeur suivante.

Quand vous avez fini de saisir l'adresse IP, vous pouvez répéter ces étapes pour ajuster le masque de sous-réseau et la passerelle. Une fois terminé, appuyez sur le bouton **Menu** pour retourner à l'écran d'accueil.

Paramètres du timecode

Réglez les options d'entrée et de sortie du timecode. Vous pouvez par exemple choisir d'enregistrer le timecode source, le timecode sous forme de code horaire ou encore régler le timecode manuellement.

Timecode	
Entrée	Entrée vidéo
Perte d'images	Par défaut
Préréglage	00:00:00:00
Sortie	Timeline

Entrée

Lors de l'enregistrement, vous disposez de quatre options pour l'entrée du timecode.

Entrée vidéo	Sélectionne le timecode intégré aux sources HDMI comportant des métadonnées SMPTE RP 188. Grâce à cette opération, la source HDMI et le fichier enregistré sur l'HyperDeck Shuttle HD restent synchronisés.
Interne	Utilisez cette option pour enregistrer le timecode sous forme de code horaire via le générateur de timecode intégré.
Regen dernier clip	Lorsque vous sélectionnez Regen dernier clip pour l'entrée du timecode, chaque fichier démarre juste après la dernière image du clip précédent. Par exemple, si le premier clip se termine à 10:28:30:10, le timecode du clip suivant commencera à 10:28:30:11.
Préréglage	Pour régler un timecode manuellement, sélectionnez l'option Préréglage. Les clips enregistrés commenceront au timecode réglé via le paramètre Préréglage comme indiqué plus loin dans cette section.

Perte d'images

Pour les sources NTSC ayant une fréquence d'images de 29.97 ou de 59.94, vous pouvez choisir entre un timecode avec ou sans perte d'images. Si la source est inconnue, sélectionnez **Par défaut**. La norme de l'entrée sera conservée, ou s'il n'y a pas de timecode valide, elle se réglera par défaut sur Perte d'images.

Préréglage

Vous pouvez régler votre timecode manuellement en appuyant sur **Set** et en saisissant le timecode à l'aide de la molette et du bouton **Set**. Vérifiez que l'option **Préréglage** est correctement sélectionnée dans le menu **Entrée**.

Sortie

Choisissez les options du timecode pour les sorties.

Timeline	Pour acheminer un timecode continu pour tous les clips enregistrés sur une carte ou sur un disque, sélectionnez Timeline.
Clip	Sélectionnez Clip pour acheminer le timecode de chaque clip.

Paramètres du fichier

Paramètres du fichier	
Préfixe du fichier	HyperDeck
Suffixe horodaté	Off

Préfixe du fichier

Par défaut, l'HyperDeck Shuttle HD enregistre les clips sur votre carte SD ou disque flash USB à l'aide de la convention de dénomination des fichiers suivante :

HyperDeck_0001

HyperDeck_0001

Préfixe

HyperDeck_**0001**

Numéro de clip

Vous pouvez modifier le préfixe du fichier via l'utilitaire HyperDeck Setup. Pour plus d'informations, consultez la section « Blackmagic HyperDeck Setup » de ce manuel.

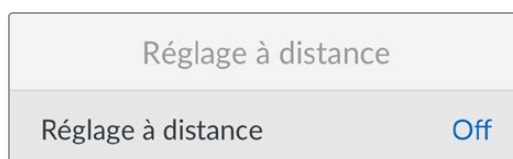
Suffixe horodaté

Par défaut, ce paramètre est désactivé. Si vous souhaitez utiliser la date et l'heure enregistrées dans votre nom de fichier, activez cette option.

HyperDeck_2201061438_0001	
HyperDeck_2201061438_0001	Préfixe du fichier
HyperDeck_ 22 01061438_0001	Année
HyperDeck_22 01 061438_0001	Mois
HyperDeck_2201 06 1438_0001	Jour
HyperDeck_220106 14 38_0001	Heure
HyperDeck_22010614 38 _0001	Minute
HyperDeck_2201061438_ 0001	Numéro de clip

Paramètres du réglage à distance

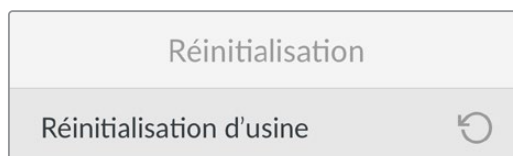
Le paramètre **Réglage à distance** permet de contrôler l'HyperDeck à distance depuis d'autres équipements vidéo comme le mélangeur ATEM Mini Extreme.



Réglage à distance

Sélectionnez **Réglage à distance** pour contrôler l'appareil à distance via Ethernet. Désélectionnez ce paramètre pour contrôler l'appareil localement.

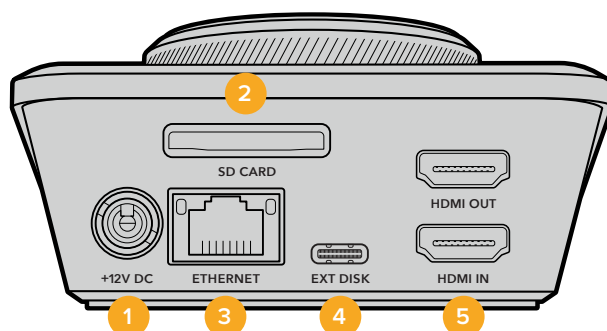
Paramètres de réinitialisation



Réinitialisation d'usine

Mettez **Réinitialisation d'usine** en surbrillance dans le menu **Réglages** pour restaurer l'HyperDeck sur les paramètres par défaut. Une fois que vous aurez appuyé sur **Set**, on vous demandera de confirmer votre sélection.

Face arrière



1 Alimentation

L'HyperDeck Shuttle HD est alimenté via un adaptateur AC. Le câble d'alimentation fourni comprend un connecteur sécurisé afin d'éviter toute déconnexion. Vous pouvez toutefois utiliser n'importe quel câble d'alimentation 12V 36W pour alimenter l'HyperDeck Shuttle HD.

2 Carte SD

Insérez des cartes SD dans le logement pour l'enregistrement et la lecture.

3 Ethernet

Le port Ethernet permet de vous connecter au réseau pour des transferts FTP rapides ou pour contrôler l'appareil à distance via l'HyperDeck Ethernet Protocol. Pour plus d'informations concernant le transfert des fichiers via un client FTP, consultez la section « Transférer des fichiers sur un réseau » de ce manuel.

Lorsqu'il est connecté au même réseau qu'un mélangeur ATEM, votre HyperDeck peut également être contrôlé à l'aide de ce dernier ou d'un panneau matériel ATEM.

4 Ext Disk

Connectez un disque flash au connecteur USB-C pour enregistrer sur des disques externes jusqu'à 5Gb/s. Vous pouvez également connecter l'appareil à des hubs USB-C multiports, ou à un Blackmagic MultiDock 10G pour utiliser un ou plusieurs SSD.

5 HDMI

Connectez la sortie HDMI à des télévisions ou à des moniteurs HDMI, mais aussi à des mélangeurs, tels que l'ATEM Mini Extreme. La sortie HDMI permet également d'afficher le menu en surimpression.

Supports de stockage

Carte SD

Pour un enregistrement HD, nous vous recommandons d'utiliser des cartes SD haut débit UHS-I. Pour enregistrer de l'Ultra HD 2160p60, ces cartes doivent avoir un débit d'écriture minimum de 220 Mb/s.

Toutefois, si vous enregistrez à des débits plus bas et une compression plus élevée, il est également possible d'utiliser des cartes moins rapides. Les cartes les plus rapides sont en général plus performantes.

N'hésitez pas à vérifier les dernières versions du manuel pour obtenir les informations les plus récentes. Il peut être téléchargé sur le site Internet de Blackmagic Design www.blackmagicdesign.com/fr/support.

Quelles cartes SD dois-je utiliser avec l'HyperDeck Shuttle HD ?

Les cartes SD suivantes sont recommandées pour le 1080p jusqu'à 60 im/s:

Brand	Model	Capacity
Angelbird	AV PRO SD UHS-II 300MB/s V90 SDXC	256GB
Angelbird	AV PRO SD UHS-II 260MB/s V60 SDXC	128GB
Angelbird	AV PRO SD UHS-II 260MB/s V60 SDXC	64GB
SanDisk	Extreme Pro UHS-I 95MB/s SDXC	64GB
Wise	SD2-64U3 UHS-II 285MB/s SDXC	64GB
Lexar	Professional 1000x UHS-II 150MB/s SDXC	128GB
SONY	Tough SF-G128T	128GB
Kingston	CANVAS GO! Plus 170MB/s V30	64GB
Kingston	CANVAS GO! Plus 170MB/s V30	128GB
Kingston	CANVAS GO! Plus 170MB/s V30	512GB
ProGrade Digital	SDXC UHS-II V90 300R	64GB
ProGrade Digital	SDXC UHS-II V90 300R	128GB
SONY	Tough SF-G64T UHS-II SDXC	64GB
Delkin Devices	Black UHS-II V90 SDXC	256GB
Delkin Devices	Power UHS-II V90 SDXC	128GB
Delkin Devices	Power UHS-II V90 SDXC	256GB
Delkin Devices	Black UHS-II V90 SDXC	128GB
Exascend	Essential SDXC UHS-II V90 R 300MB/s	64GB
Exascend	Essential SDXC UHS-II V90 R 300MB/s	128GB
Exascend	Catalyst SDXC UHS-II V90 R 300MB/s	64GB

Disque externe

Tous les modèles HyperDeck peuvent enregistrer directement sur des disques flash USB-C. Grâce à ces disques rapides et à leur capacité de stockage élevée, vous pouvez enregistrer sur de longues périodes. Il suffit de connecter le disque flash à votre ordinateur et de monter directement sur celui-ci !

Pour des capacités de stockage encore plus élevées, vous pouvez également connecter une station d'accueil USB-C ou un disque dur externe. Pour connecter le Blackmagic MultiDock 10G ou un disque flash USB-C, reliez un câble de l'appareil USB-C connecté au port **Ext disk** situé à l'arrière de l'HyperDeck.

Quels disques USB-C dois-je utiliser avec l'HyperDeck Shuttle HD ?

Les disques USB-C suivants sont recommandés pour le format ProRes HQ en 1080p jusqu'à 60 im/s:

Marque	Modèle	Capacité
Wise	PTS-256 Portable SSD 4K	256GB
OWC	Envoy Pro Ex	240GB
BUFFALO	SSD-PHE500U3-BA	500GB

Les disques USB-C suivants sont recommandés pour le format DNxHR HQX en 1080p jusqu'à 60 im/s:

Marque	Modèle	Capacité
OWC	Envoy Pro Ex	240GB

Les disques USB-C suivants sont recommandés pour le format H.264 en 1080p jusqu'à 60 im/s:

Marque	Modèle	Capacité
OWC	Envoy Pro Ex	240GB

Formater les supports

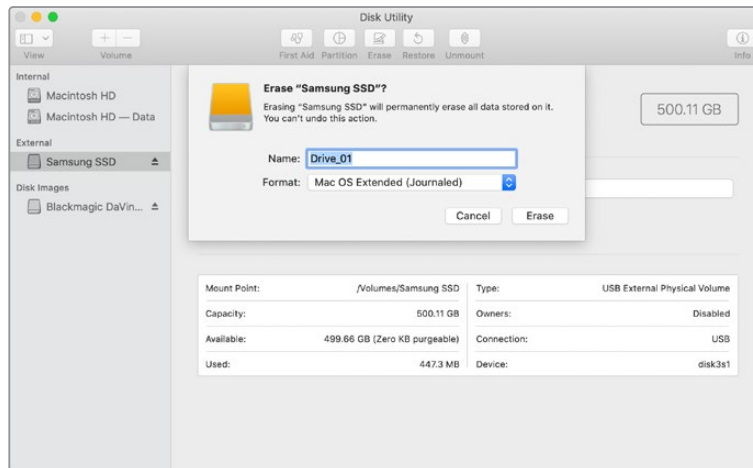
Préparer le support sur un ordinateur

Formater un support sur un ordinateur Mac

Utilisez l'utilitaire de disque de Mac pour formater un support au format HFS+ ou exFAT.

N'oubliez pas de sauvegarder les informations importantes contenues sur votre support car toutes les données seront perdues lors du formatage.

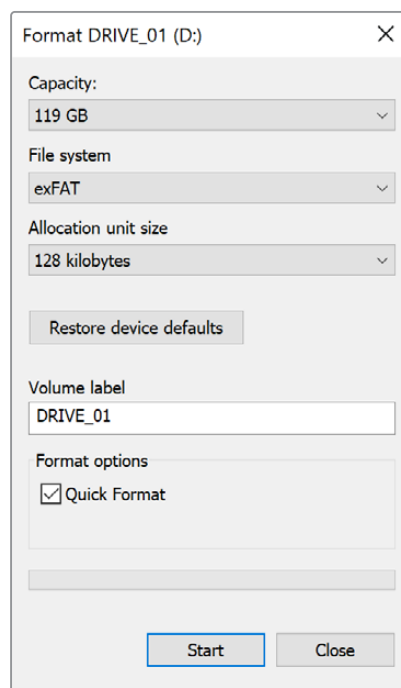
- 1 Connectez un disque flash USB à votre ordinateur à l'aide d'un dock externe ou d'un câble. Ignorez les messages proposant d'utiliser le SSD pour sauvegarder vos données à l'aide de Time Machine. Connectez les cartes SD à votre ordinateur via un lecteur de cartes externe.
- 2 Allez dans le menu Applications/Utilitaires et lancez l'utilitaire de disque.
- 3 Cliquez sur l'icône représentant votre carte SD ou disque flash USB, puis cliquez sur l'onglet Effacer.
- 4 Choisissez le format Mac OS étendu (journalisé) ou exFAT.
- 5 Saisissez le nom du nouveau volume, puis cliquez sur **Effacer**. Le support est alors rapidement formaté et prêt à être utilisé avec l'HyperDeck.



Formater un support sur un ordinateur Windows

La boîte de dialogue **Formater** permet de formater un support en exFAT sur un ordinateur Windows. N'oubliez pas de sauvegarder les informations importantes contenues sur votre support, car toutes les données seront perdues lors du formatage.

- 1 Connectez un disque flash USB à votre ordinateur à l'aide d'une baie d'accueil externe ou d'un adaptateur de câble. Connectez les cartes SD à votre ordinateur via un lecteur de cartes externe.
- 2 Ouvrez le menu Démarrer ou l'écran d'accueil et choisissez l'option Ordinateur. Faites un clic droit sur votre disque flash USB ou carte SD.
- 3 Cliquez sur **Formater** à partir du menu contextuel.
- 4 Configurez le système de gestion des fichiers sur exFAT et la taille d'unité d'allocation sur 128 Kb.
- 5 Saisissez un nom de volume, sélectionnez l'option **Formatage rapide** puis cliquez sur **Démarrer**.
- 6 Le support est alors rapidement formaté et prêt à être utilisé avec l'HyperDeck.



Utiliser la fonction Prompteur

À l'aide d'un fichier RTF standard, vous pouvez utiliser le Blackmagic HyperDeck Shuttle HD comme prompteur. Créez votre fichier dans TextEdit ou WordPad et sauvegardez-le en fichier RTF dans l'une des 13 langues supportées. Une fois le fichier ouvert avec l'HyperDeck Shuttle HD, vous pourrez ajuster la taille de la police et l'interligne de votre script.

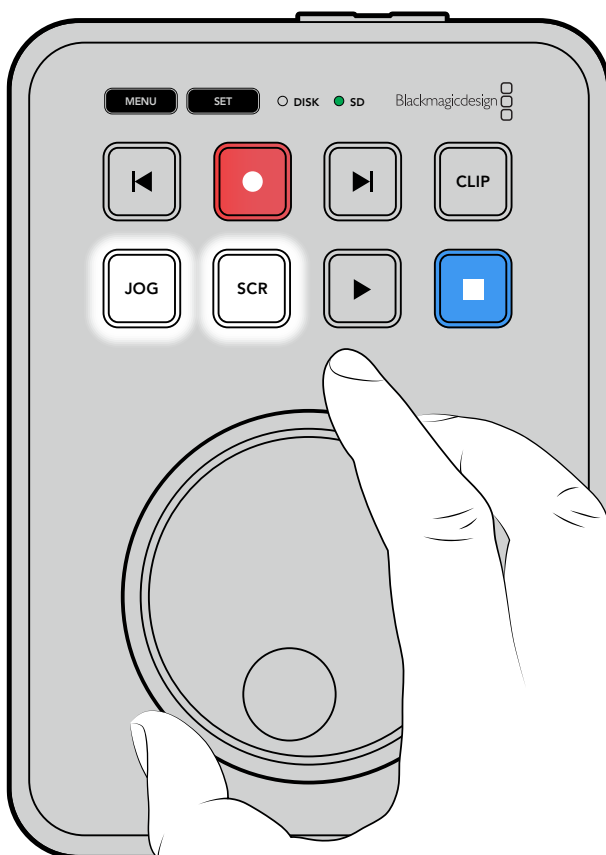
Pour utiliser le prompteur :

- 1 Connectez la sortie HDMI de l'HyperDeck Shuttle HD à l'écran HDMI que vous souhaitez utiliser.
- 2 Insérez une carte SD ou connectez un disque flash USB externe contenant votre script.
- 3 Sélectionnez le codec dans le menu Enregistrement. Allez sur le paramètre **Prompteur** et appuyez sur **Set**.

Le script apparaîtra sur votre écran. Vous pouvez maintenant commencer la lecture automatiquement à l'aide du bouton de lecture, ou pour un contrôle plus poussé, utilisez la molette.

Contrôler la vitesse de lecture du prompteur

La grande molette de l'HyperDeck Shuttle HD peut être utilisée pour contrôler la lecture en mode prompteur de la même façon que pour la lecture des médias. Une fois le script chargé, appuyez simultanément sur les boutons **Jog** et **Scr** pour activer la lecture à vitesse variable. Une fois sélectionnée, tournez la molette. Le script se déplacera selon la vitesse à laquelle vous tournerez la molette. Ainsi, plus vous la tournerez rapidement, plus la vitesse de défilement du script augmentera.



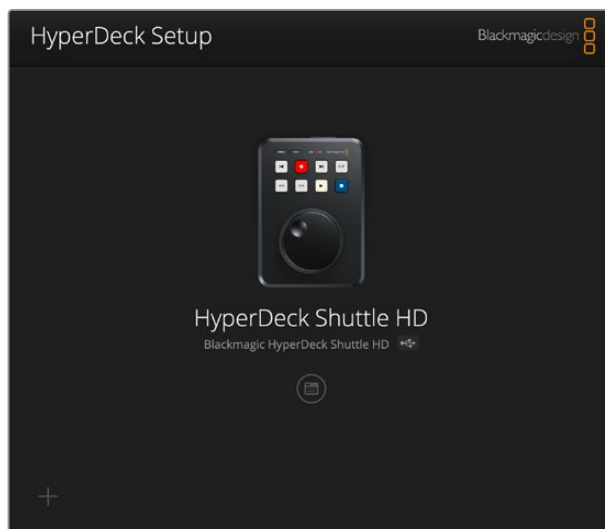
Pour une vitesse constante, utilisez les boutons Jog et Scr individuellement. Une fois le bouton sélectionné, tourner la molette fera défiler le script à une vitesse lente constante en mode Jog, ou à une vitesse plus rapide en mode Scroll.

Pour naviguer entre les fichiers rtf sur votre carte SD ou disque externe, appuyez sur les touches avance ou retour.

Le prompteur reconnaîtra la taille et la couleur de la police, mais aussi si cette dernière est réglée sur gras à partir du fichier. De plus, vous pouvez ajuster la taille de la police, l'interligne, et les marges, ou encore retourner l'écran horizontalement ou verticalement lorsque vous projetez l'écran sur un miroir semi-transparent à l'aide du menu Moniteur. Pour plus d'informations, consultez la section « Paramètres » de ce manuel.

Blackmagic HyperDeck Setup

L'utilitaire Blackmagic HyperDeck Setup vous permet de modifier les paramètres et de mettre à jour le logiciel interne de votre HyperDeck.

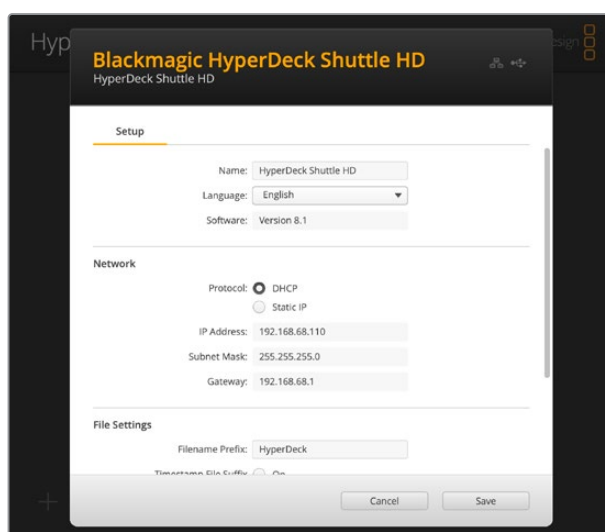


Pour installer le logiciel :

- 1 Téléchargez le nouveau programme d'installation Blackmagic HyperDeck Setup sur www.blackmagicdesign.com/fr/support.
- 2 Ouvrez le Blackmagic HyperDeck Setup sur votre ordinateur et suivez les instructions à l'écran.
- 3 Une fois l'installation terminée, connectez votre HyperDeck Shuttle HD à l'ordinateur via le port USB ou Ethernet situé sur le panneau arrière.
- 4 Lancez le Blackmagic HyperDeck Setup et suivez les instructions affichées à l'écran pour mettre à jour le logiciel interne. Si aucune information n'apparaît, le logiciel interne est à jour.

Cliquez sur l'image de l'HyperDeck ou sur l'icône de paramétrage pour ouvrir le menu de configuration.

L'écran d'accueil affichera votre HyperDeck Shuttle HD et le nom de l'appareil. Ce nom est utile pour identifier l'appareil lorsque plus d'un HyperDeck est connecté à votre ordinateur. Il peut être réglé à l'aide du menu de configuration de l'utilitaire.



Network (Réseau)

Network

Protocol: DHCP
 Static IP

IP Address: 192.168.68.110

Subnet Mask: 255.255.255.0

Gateway: 192.168.68.1

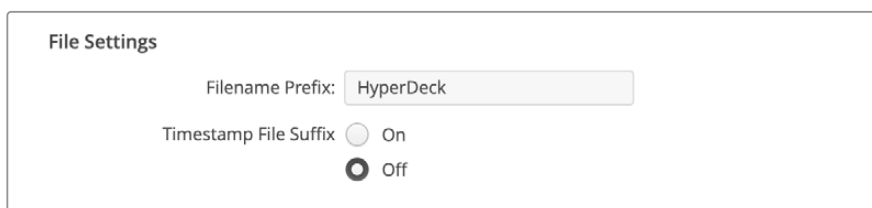
Protocol (Protocole)

Pour contrôler votre HyperDeck Shuttle HD avec les mélangeurs ATEM ou pour le contrôler à distance via l'HyperDeck Ethernet Protocol, l'HyperDeck Shuttle HD doit être configuré sur le même réseau que les autres équipements à l'aide du DHCP ou en ajoutant manuellement une adresse IP fixe.

DHCP	Les enregistreurs à disque HyperDeck Shuttle HD sont réglés sur DHCP par défaut. Le Dynamic Host Configuration Protocol, ou DHCP, est un service de serveurs réseau qui attribue automatiquement une adresse IP à l'HyperDeck. Ce service facilite la connexion des équipements via Ethernet et veille à ce que leur adresse IP ne soit pas en conflit l'une avec l'autre. La plupart des ordinateurs et des commutateurs réseau supportent le DHCP.
Static IP (IP statique)	Lorsque Static IP est sélectionné, vous pouvez saisir manuellement les informations du réseau. Lorsque vous réglez des adresses IP manuellement pour que tous les appareils puissent communiquer, ils doivent partager les mêmes paramètres de masque de sous-réseau et de passerelle. De plus, les trois premiers champs de l'adresse IP du panneau doivent coïncider.

Si d'autres appareils sur le réseau possèdent le même numéro d'identification dans leur adresse IP, il y aura un conflit et les appareils ne se connecteront pas. Le cas échéant, il suffit de modifier le numéro d'identification dans l'adresse IP de l'appareil.

File Settings (Paramètres du fichier)



File Settings

Filename Prefix:

Timestamp File Suffix On Off

Par défaut, l'HyperDeck Shuttle HD enregistre les clips sur votre carte SD ou disque flash USB avec le préfixe **HyperDeck**. Saisissez un nouveau nom de fichier pour modifier le préfixe.

Par défaut, l'horodateur ajouté au nom de fichier est désactivé. Si vous souhaitez enregistrer la date et l'heure sur votre fichier, activez-le. Les paramètres concernant le préfixe du fichier et l'horodateur sont également disponibles sur le menu à l'écran de l'HyperDeck Shuttle HD.

Transférer des fichiers sur un réseau

Votre enregistreur à disque HyperDeck supporte le transfert des fichiers via le File Transfer Protocol, ou FTP. Cette fonction permet de copier des fichiers directement de votre ordinateur à votre HyperDeck via un réseau, à la vitesse fournie par le réseau local. Vous pouvez par exemple copier de nouveaux fichiers sur un HyperDeck installé dans un endroit différent pour l'affichage numérique.

Connecter un HyperDeck Shuttle HD

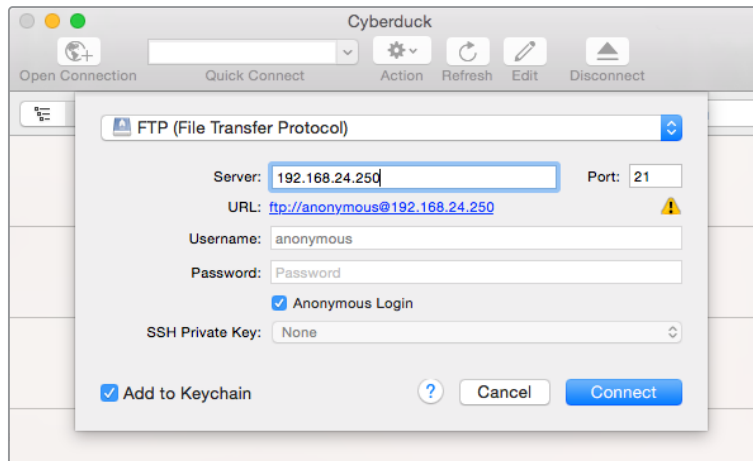
Lorsque l'ordinateur et l'HyperDeck Shuttle HD sont sur le même réseau, vous aurez besoin d'un client FTP et de l'adresse IP de l'HyperDeck Shuttle HD.

- 1 Téléchargez et installez un client FTP sur l'ordinateur auquel vous souhaitez connecter l'HyperDeck. Nous recommandons Cyberduck, FileZilla ou Transmit, mais la plupart des logiciels FTP fonctionneront également. Vous pouvez télécharger Cyberduck et FileZilla gratuitement.
- 2 Connectez l'HyperDeck Shuttle HD au réseau à l'aide d'un câble Ethernet et notez son adresse IP. Pour accéder à l'adresse IP, appuyez sur le bouton **Menu** et tournez la molette jusqu'à ce que vous arriviez sur l'écran **Réseau**. L'adresse IP de l'HyperDeck se trouve au bas de cet écran.

Réseau	
Protocole	IP statique
Adresse IP	192.168.24.100
Masque subnet	255.255.255.0
Passerelle	192.168.24.1

Vous trouverez l'adresse IP de votre HyperDeck Shuttle HD dans la section Réseau du menu Réglages.

- 3 Saisissez l'adresse IP de l'HyperDeck dans la boîte de connexion du logiciel FTP. Le nom et la position de cette boîte varient selon les logiciels, mais en général, elle s'appelle **Server** ou **Host**. Si votre logiciel FTP comprend une case de sélection intitulée **Anonymous Login**, veillez à ce qu'elle soit cochée.



Lorsque vous connectez un HyperDeck Shuttle HD, vous n'avez pas besoin de saisir de nom d'utilisateur ou de mot de passe. Il suffit de saisir l'adresse IP de l'enregistreur à disque dans le champ **Server** ou **Host** du logiciel FTP et de cocher la case **Anonymous Login** si elle est disponible.

Transférer des fichiers

Une fois l'HyperDeck connecté, vous pouvez transférer les fichiers comme sur n'importe quel logiciel FTP. La plupart d'entre eux sont dotés d'une interface glisser-déposer, toutefois, vérifiez quelle est la méthode appropriée pour le logiciel que vous utilisez.

Vous pouvez transférer n'importe quel fichier depuis et vers l'HyperDeck. Toutefois, notez que les fichiers que vous souhaitez lire avec l'HyperDeck Shuttle HD doivent être conformes aux codecs et aux résolutions pris en charge par l'HyperDeck.

CONSEIL Vous pouvez transférer des fichiers sur le réseau durant l'enregistrement avec l'HyperDeck. L'HyperDeck ajuste automatiquement la vitesse de transfert afin de ne pas affecter l'enregistrement.

Developer Information

Blackmagic HyperDeck Ethernet Protocol

The Blackmagic HyperDeck Ethernet Protocol is a text based protocol accessed by connecting to TCP port 9993 on HyperDeck models that have a built in Ethernet connection. If you are a software developer, you can use the protocol to construct devices that integrate with our products. Here at Blackmagic Design our approach is to open up our protocols and we eagerly look forward to seeing what you come up with!

Protocol Commands

Command	Command Description
help or ?	Provides help text on all commands and parameters
commands	return commands in XML format
device info	return device information
disk list	query clip list on active disk
disk list: slot id: {n}	query clip list on disk in slot {n}
quit	disconnect ethernet control
ping	check device is responding
preview: enable: {true/false}	switch to preview or output
play	play from current timecode
play: speed: {-5000 to 5000}	play at specific speed
play: loop: {true/false}	play in loops or stop-at-end
play: single clip: {true/false}	play current clip or all clips
playrange	query playrange setting
playrange set: clip id: {n}	set play range to play clip {n} only
playrange set: clip id: {n} count: {m}	set play range to {m} clips starting from clip {n}
playrange set: in: {inT} out: {outT}	set play range to play between: - timecode {inT} and timecode {outT}
playrange set: timeline in: {in} timeline out: {out}	set play range in units of frames between: - timeline position {in} and position {out} clear/reset play range setting
playrange clear	clear/reset play range setting
play on startup	query unit play on startup state
play on startup: enable: {true/false}	enable or disable play on startup
play on startup: single clip: {true/false}	play single clip or all clips on startup
play option	query play options
play option: stop mode: {lastframe/nextframe/black}	set output frame when playback stops
record	record from current input
record: name: {name}	record named clip

Command	Command Description
record spill	spill current recording to next slot
record: spill: slot id: {n}	spill current recording to specified slot use current id to spill to same slot
stop	stop playback or recording
clips count	query number of clips on timeline
clips get	query all timeline clips
clips get: clip id: {n}	query a timeline clip info
clips get: clip id: {n} count: {m}	query m clips starting from n
clips get: version: {1/2}	query clip info using specified output version: version 1: id: name startT duration version 2: id: startT duration inT outT name
clips add: name: {name}	append a clip to timeline
clips add: clip id: {n} name: {name}	insert clip before existing clip {n}
clips add: in: {inT} out: {outT} name: {name}	append the {inT} to {outT} portion of clip
clips remove: clip id: {n}	remove clip {n} from the timeline (invalidates clip ids following clip {n})
clips clear	empty timeline clip list
transport info	query current activity
slot info	query active slot
slot info: slot id: {n}	query slot {n}
slot select: slot id: {n}	switch to specified slot
slot select: video format: {format}	load clips of specified format
slot unblock	unblock active slot
slot unblock: slot id: {n}	unblock slot {n}
cache info	query cache status
dynamic range	query dynamic range settings
dynamic range: playback override: {off/Rec709/Rec2020_SDR/HLG/ ST2084_300/ST2084_500/ ST2084_800/ST2084_1000/ ST2084_2000/ST2084_4000/ST2084}	set playback dynamic range override
dynamic range: record override: {off/Rec709/Rec2020_SDR/HLG/ ST2084_300/ST2084_500/ ST2084_800/ST2084_1000/ ST2084_2000/ST2084_4000/ST2048}	set record dynamic range override
notify	query notification status
notify: remote: {true/false}	set remote notifications
notify: transport: {true/false}	set transport notifications
notify: slot: {true/false}	set slot notifications
notify: configuration: {true/false}	set configuration notifications

Command	Command Description
notify: dropped frames: {true/false}	set dropped frames notifications
notify: display timecode: {true/false}	set display timecode notifications
notify: timeline position: {true/false}	set playback timeline position notifications
notify: playrange: {true/false}	set playrange notifications
notify: cache: {true/false}	set cache notifications
notify: dynamic range: {true/false}	set dynamic range settings notifications
notify: slate: {true/false}	set digital slate notifications
notify: clips: {true/false}	set timeline clips notifications where two types of changes can occur: add: partial update with list of clips and insert positions snapshot: complete update of all clips on timeline
notify: disk: {true/false}	set disk clips notifications where two types of changes can occur: add: partial update with list of clips and insert positions snapshot: complete update of all clips on timeline
goto: clip id: {start/end}	goto first clip or last clip
goto: clip id: {n}	goto clip id {n}
goto: clip id: +{n}	go forward {n} clips
goto: clip id: -{n}	go backward {n} clips
goto: clip: {n}	goto frame position {n} within current clip
goto: clip: +{n}	go forward {n} frames within current clip
goto: clip: -{n}	go backward {n} frames within current clip
goto: clip: {start/end}	goto start or end of clip
goto: timeline: {n}	goto frame position {n} within timeline
goto: timeline: +{n}	o forward {n} frames within timeline
goto: timeline: -{n}	go backward {n} frames within timeline
goto: timeline: {start/end}	goto start or end of timeline
goto: timecode: {timecode}	goto specified timecode
goto: timecode: +{timecode}	go forward {timecode} duration
goto: timecode: -{timecode}	go backward {timecode} duration
goto: slot id: {n}	goto slot id {n}
jog: timecode: {timecode}	jog to timecode
jog: timecode: +{timecode}	jog forward {timecode} duration
jog: timecode: -{timecode}	jog backward {timecode} duration
shuttle: speed: {-5000 to 5000}	shuttle with speed
remote	query unit remote control state
remote: enable: {true/false}	enable or disable remote control
remote: override: {true/false}	session override remote control
configuration	query configuration settings
configuration: video input: SDI	switch to SDI input

Command	Command Description
configuration: video input: HDMI	switch to HDMI input
configuration: video input: component	switch to component input
configuration: audio input: embedded	capture embedded audio
configuration: audio input: XLR	capture XLR audio
configuration: audio input: RCA	capture RCA audio
configuration: file format: {format}	switch to specific file format
configuration: audio codec: PCM	switch to PCM audio
configuration: audio codec: AAC	switch to AAC audio
configuration: timecode input: {external/embedded/internal/preset/clip}	change the timecode input
configuration: timecode output: {clip/timeline}	change the timecode output
configuration: timecode preference: {default/dropframe/nondropframe}	whether or not to use drop frame timecodes when not otherwise specified
configuration: timecode preset: {timecode}	set the timecode preset
configuration: audio input channels: {n}	set the number of audio channels recorded to {n}
configuration: record trigger: {none/recorderbit/timecoderun}	change the record trigger
configuration: record prefix: {name}	set the record prefix name (supports UTF-8 name)
configuration: append timestamp: {true/false}	append timestamp to recorded filename
configuration: xlr input id: {n} xlr type: {line/mic}	configure xlr input type multiple xlr inputs can be configured in a single command
configuration: genlock input resync: {true/false}	enable or disable genlock input resync
uptime	return time since last boot
format: slot id: {n} prepare: {exFAT/HFS+} name: {name}	prepare a disk formatting operation to filesystem {format}
format: confirm: {token}	perform a pre-prepared formatting operation using token
identify: enable: {true/false}	identify the device
watchdog: period: {period in seconds}	client connection timeout
reboot	reboot device
slate clips	slate clips information
slate project	slate project information
slate lens	slate lens information

Multiline commands:	Command Description
slate clips↵	set slate clips information:
reel: {n}	slate reel number, where {n} is in [1, 999]
scene id: {id}	slate scene id value, where {id} is a string
shot type: {WS/MS/BCU/MCU/ECU/none}	slate shot type
take: {n}	slate take number, where {n} is in [1, 99]
take scenario: {PU/VFX/SER/none}	slate take scenario
take auto inc: {true/false}	slate take auto increment
good take: {true/false}	slate good take
environment: {interior/exterior}	slate environment
day night: {day/night}	slate day or night
slate project:↵	set slate project information:
project name: {name}	project name (can be empty, supports UTF-8)
camera: {index}	set camera index e.g. A
director: {name}	director (can be empty, supports UTF-8)
camera operator: {name}	camera operator (can be empty, supports UTF-8)
slate lens:↵	set lens information:
lens type: {type}	lens type (can be empty, supports UTF-8)
iris: {type}	camera iris (can be empty, supports UTF-8)
focal length: {length}	focal length (can be empty, supports UTF-8)
distance: {distance}	lens distance (can be empty, supports UTF-8)
filter: {filter}	lens filter (can be empty, supports UTF-8)

Command Combinations

You can combine the parameters into a single command, for example:

```
play: speed: 200 loop: true single clip: true
```

Or for configuration:

```
configuration: video input: SDI audio input: XLR
```

Or to switch to the second disk, but only play NTSC clips:

```
slot select: slot id: 2 video format: NTSC
```

Protocol Details

Connection

The HyperDeck Ethernet server listens on TCP port 9993.

Basic syntax

The HyperDeck protocol is a line oriented text protocol. Lines from the server will be separated by an ascii CR LF sequence. Messages from the client may be separated by LF or CR LF.

New lines are represented in this document as a "↵" symbol.

Single line command syntax

Command parameters are usually optional. A command with no parameters is terminated with a new line:

```
{Command name}↵
```

If parameters are specified, the command name is followed by a colon, then pairs of parameter names and values. Each parameter name is terminated with a colon character:

```
{Command name}: {Parameter}: {Value} {Parameter}: {Value} ...↵
```

Multiline command syntax

The HyperDeck protocol also supports an equivalent multiline syntax where each parameter-value pair is entered on a new line. E.g.

```
{Command name}:↵  
{Parameter}: {Value}↵  
{Parameter}: {Value}↵  
↵
```

Response syntax

Simple responses from the server consist of a three digit response code and descriptive text terminated by a new line:

```
{Response code} {Response text}↵
```

If a response carries parameters, the response text is terminated with a colon, and parameter name and value pairs follow on subsequent lines until a blank line is returned:

```
{Response code} {Response text}:↵  
{Parameter}: {Value}↵  
{Parameter}: {Value}↵  
...  
↵
```

Successful response codes

A simple acknowledgement of a command is indicated with a response code of 200:

```
200 ok↵
```

Other successful responses carry parameters and are indicated with response codes in the range of 201 to 299.

Failure response codes

Failure responses to commands are indicated with response codes in the range of 100 to 199:

```
100 syntax error
101 unsupported parameter
102 invalid value
103 unsupported
104 disk full
105 no disk
106 disk error
107 timeline empty
108 internal error
109 out of range
110 no input
111 remote control disabled
112 clip not found
120 connection rejected
150 invalid state
151 invalid codec
160 invalid format
161 invalid token
162 format not prepared
163 parameterized single line command not supported
```

Asynchronous response codes

The server may return asynchronous messages at any time. These responses are indicated with response codes in the range of 500 to 599:

```
5xx {Response Text}:↵
{Parameter}: {Value}↵
{Parameter}: {Value}↵
↵
```

Connection response

On connection, an asynchronous message will be delivered:

```
500 connection info:↵
protocol version: {Version}↵
model: {Model Name}↵
↵
```

Timecode syntax

Timecodes are expressed as non-drop-frame timecode in the format:

```
HH:MM:SS:FF
```

Handling of deck "remote" state

The "remote" command may be used to enable or disable the remote control of the deck. Any attempt to change the deck state over ethernet while remote access is disabled will generate an error:

```
111 remote control disabled↵
```

To enable or disable remote control:

```
remote: enable: {"true", "false"} ↵
```

The current remote control state may be overridden allowing remote access over ethernet irrespective of the current remote control state:

```
remote: override: {"true", "false"} ↵
```

The override state is only valid for the currently connected ethernet client and only while the connection remains open.

The "remote" command may be used to query the remote control state of the deck by specifying no parameters:

```
remote↵
```

The deck will return the current remote control state:

```
210 remote info:↵  
enabled: {"true", "false"}↵  
override: {"true", "false"}↵  
↵
```

Asynchronous remote control information change notification is disabled by default and may be configured with the "notify" command. When enabled, changes in remote state will generate a "510 remote info:" asynchronous message with the same parameters as the "210 remote info:" message.

Closing connection

The "quit" command instructs the server to cleanly shut down the connection:

```
quit↵
```

Checking connection status

The "ping" command has no function other than to determine if the server is responding:

```
ping↵
```

Getting help

The "help" or "?" commands return human readable help text describing all available commands and parameters:

```
help↵
```

Or:

```
?↵
```

The server will respond with a list of all supported commands:

```
201 help:↵  
{Help Text}↵  
{Help Text}↵  
↵
```

Switching to preview mode

The "preview" command instructs the deck to switch between preview mode and output mode:

```
preview: enable: {"true", "false"}↵
```

Playback will be stopped when the deck is switched to preview mode. Capturing will be stopped when the deck is switched to output mode.

Controlling device playback

The "play" command instructs the deck to start playing:

```
play↵
```

The play command accepts a number of parameters which may be used together in most combinations.

By default, the deck will play all remaining clips on the timeline then stop.

The "single clip" parameter may be used to override this behavior:

```
play: single clip: {"true", "false"}↵
```

By default, the deck will play at normal (100%) speed. An alternate speed may be specified in percentage between -5000 to 5000:

```
play: speed: {% normal speed}↵
```

By default, the deck will stop playing when it reaches to the end of the timeline. The "loop" parameter may be used to override this behavior:

```
play: loop: {"true", "false"}↵
```

The "playrange" command instructs the deck to play all the clips. To override this behavior: and select a particular clip:

```
playrange set: clip id: {Clip ID}↵
```

To only play a certain timecode range:

```
playrange set: in: {in timecode} out: {out timecode}↵
```

To clear a set playrange and return to the default value:

```
playrange clear↵
```

The "play on startup" command instructs the deck on what action to take on startup. By default, the deck will not play. Use the "enable" command to start playback after each power up.

```
play on startup: enable {"true", "false"}↵
```

By default, the unit will play back all clips on startup. Use the "single clip" command to override.

```
play on startup: single clip: {"true", "false"}↵
```

Stopping deck operation

The "stop" command instructs the deck to stop the current playback or capture:

```
stop↵
```

Changing timeline position

The "goto" command instructs the deck to switch to playback mode and change its position within the timeline.

To go to the start of a specific clip:

```
goto: clip id: {Clip ID}↵
```

To move forward/back {count} clips from the current clip on the current timeline:

```
goto: clip id: +/-{count}↵
```

Note that if the resultant clip id goes beyond the first or last clip on timeline, it will be clamp at the first or last clip.

To go to the start or end of the current clip:

```
goto: clip: {"start", "end"}↵
```

To go to the start of the first clip or the end of the last clip:

```
goto: timeline: {"start", "end"}↵
```

To go to a specified timecode:

```
goto: timecode: {timecode}↵
```

To move forward or back a specified duration in timecode:

```
goto: timecode: {"+", "-"}{duration in timecode}↵
```

To specify between slot 1 and slot 2:

```
goto: slot id: {Slot ID}↵
```

Note that only one parameter/value pair is allowed for each goto command.

Enumerating supported commands and parameters

The "commands" command returns the supported commands:

```
commands↵
```

The command list is returned in a computer readable XML format:

```
212 commands:
<commands>↵
  <command name="..."><parameter name="..."/>...</command>↵
  <command name="..."><parameter name="..."/>...</command>↵
  ...
</commands>↵
↵
```

Controlling asynchronous notifications

The "notify" command may be used to enable or disable asynchronous notifications from the server.

To enable or disable transport notifications:

```
notify: transport: {"true", "false"}↵
```

To enable or disable slot notifications:

```
notify: slot: {"true", "false"}↵
```

To enable or disable remote notifications:

```
notify: remote: {"true", "false"}↵
```

To enable or disable configuration notifications:

```
notify: configuration: {"true", "false"}↵
```

Multiple parameters may be specified. If no parameters are specified, the server returns the current state of all notifications:

```
209 notify:↵
transport: {"true", "false"}↵
slot: {"true", "false"}↵
remote: {"true", "false"}↵
configuration: {"true", "false"}↵
dropped frames: {"true", "false"}↵
display timecode: {"true", "false"}↵
timeline position: {"true", "false"}↵
playrange: {"true", "false"}↵
cache: {"true", "false"}↵
dynamic range: {"true", "false"}↵
slate: {"true", "false"}↵
clips: {"true", "false"}↵
disk: {"true", "false"}↵
↵
```

Retrieving device information

The "device info" command returns information about the connected deck device:

```
device info↵
```

The server will respond with:

```
204 device info:↵
protocol version: {Version}↵
model: {Model Name}↵
unique id: {unique alphanumeric identifier}↵
slot count: {number of storage slots}↵
software version: {software version}↵
↵
```


Retrieving slot information

The "slot info" command returns information about a slot. Without parameters, the command returns information for the currently selected slot:

```
slot info↵
```

If a slot id is specified, that slot will be queried:

```
slot info: slot id: {Slot ID}↵
```

The server will respond with slot specific information:

```
202 slot info:↵
slot id: {Slot ID}↵
status: {"empty", "mounting", "error", "mounted"}↵
volume name: {Volume name}↵
recording time: {recording time available in seconds}↵
video format: {disk's default video format}↵
blocked: {"true", "false"}↵
↵
```

Asynchronous slot information change notification is disabled by default and may be configured with the "notify" command. When enabled, changes in slot state will generate a "502 slot info:" asynchronous message with the same parameters as the "202 slot info:" message.

Retrieving clip information

The "disk list" command returns the information for each playable clip on a given disk. Without parameters, the command returns information for the current active disk:

```
disk list↵
```

If a slot id is specified, the disk in that slot will be queried:

```
disk list: slot id: {Slot ID}↵
```

The server responds with the list of all playable clips on the disk in the format of: Index, name, formats, and duration in timecode:

```
206 disk list:↵
slot id: {Slot ID}↵
{clip index}: {name} {file format} {video format} {Duration
timecode}↵
{clip index}: {name} {file format} {video format} {Duration
timecode}↵
...
↵
```

Note that the *clip index* starts from 1.

Retrieving clip count

The "clips count" command returns the number of clips on the current timeline:

```
clips count ↵
```

The server responds with the number of clips:

```
214 clips count: ↵
clip count: {Count}↵
```

Retrieving timeline information

The "clips get" command returns information for each available clip on the current timeline. Without parameters, the command returns information for all clips on timeline:

```
clips get↵
```

The server responds with a list of clip IDs, names and timecodes:

```
205 clips info:↵  
clip count: {Count}↵  
  
{Clip ID}: {Start timecode} {Duration timecode} {In timecode}  
{Out timecode} {Name}↵  
  
{Clip ID}: {Start timecode} {Duration timecode} {In timecode}  
{Out timecode} {Name}↵  
  
...  
↵
```

Retrieving transport information

The "transport info" command returns the state of the transport:

```
transport info ↵
```

The server responds with transport specific information:

```
208 transport info:  
  
status: {"preview", "stopped", "play", "forward", "rewind",  
"jog", "shuttle","record"}↵  
  
speed: {Play speed between -5000 and 5000 %}↵  
  
slot id: {Slot ID or "none"}↵  
  
clip id: {Clip ID or "none"}↵  
  
single clip: {"true", "false"}↵  
  
display timecode: {timecode}↵  
  
timecode: {timecode}↵  
  
video format: {Video format}↵  
  
loop: {"true", "false"}↵  
  
timeline: {n}↵  
  
input video format: {Video format}↵  
  
dynamic range: {"off", "Rec709", "Rec2020_SDR", "HLG",  
"ST2084_300", "ST2084_500", "ST2084_800", "ST2084_1000",  
"ST2084_2000", "ST2084_4000", "ST2048" or "none"}↵  
  
↵
```

The "timecode" value is the timecode within the current timeline for playback or the clip for record. The "display timecode" is the timecode displayed on the front of the deck. The two timecodes will differ in some deck modes.

Asynchronous transport information change notification is disabled by default and may be configured with the "notify" command. When enabled, changes in transport state will generate a "508 transport info:" asynchronous message with the same parameters as the "208 transport info:" message.

Video Formats

The following video formats are currently supported on HyperDeck Shuttle:

720p50, 720p5994, 720p60

1080p23976, 1080p24, 1080p25, 1080p2997, 1080p30, 1080p60

1080i50, 1080i5994, 1080i60

Video format support may vary between models and software releases.

File Formats

All HyperDeck models currently support the following file formats:

H.264High

H.264Medium

H.264Low

QuickTimeProResHQ

QuickTimeProRes

QuickTimeProResLT

QuickTimeProResProxy

QuickTimeDNxHD220x

DNxHD220x

QuickTimeDNxHD145

DNxHD145

QuickTimeDNxHD45

DNxHD45

Supported file formats may vary between models and software releases.

Querying and updating configuration information

The "configuration" command may be used to query the current configuration of the deck:

```
configuration↵
```

The server returns the configuration of the deck:

```
211 configuration:↵
audio input: {"embedded", "XLR", "RCA"}↵
audio mapping: {n}↵
video input: {"SDI", "HDMI", "component", "composite"}↵
file format: {format}↵
audio codec: {"PCM", "AAC"}↵
timecode input: {"external", "embedded", "preset", "clip"}↵
timecode output: {"clip", "timeline"}↵
timecode preference: {"default", "dropframe", "nondropframe"}↵
timecode preset: {timecode}↵
audio input channels: {n}↵
record trigger: {"none", "recordbit", "timecoderun"}↵
record prefix: {name}↵
append timestamp: {"true", "false"}↵
genlock input resync: {"true", "false"}↵
↵
```

One or more configuration parameters may be specified to change the configuration of the deck.

To change the current video input:

```
configuration: video input: {"SDI", "HDMI", "component"}↵
```

Valid video inputs may vary between models. To configure the current audio input:

```
configuration: audio input: {"embedded", "XLR", "RCA"}↵
```

Valid audio inputs may vary between models.

To configure the current file format:

```
configuration: file format: {File format}↵
```

Note that changes to the file format may require the deck to reset, which will cause the client connection to be closed. In such case, response code 213 will be returned (instead of 200) before the client connection is closed:

```
"213 deck rebooting"
```

Asynchronous configuration information change notification is disabled by default and may be configured with the "notify" command. When enabled, changes in configuration will generate a "511 configuration:" asynchronous message with the same parameters as the "211 configuration:" message.

Selecting active slot and video format

The "slot select" command instructs the deck to switch to a specified slot, or/and to select a specified output video format.

To switch to a specified slot:

```
slot select: slot id: {slot ID}↵
```

To select the output video format:

```
slot select: video format: {video format}↵
```

Either or all slot select parameters may be specified. Note that selecting video format will result in a rescan of the disk to reconstruct the timeline with all clips of the specified video format.

Clearing the current timeline

The "clips clear" command instructs the deck to empty the current timeline:

```
clips clear↵
```

The server responds with

```
200 ok↵
```

Adding a clip to the current timeline

The "clips add:" command instructs the deck to add a clip to the current timeline:

```
clips add: name: {clip name}↵
```

The server responds with

```
200 ok↵
```

or in case of error

```
lxx {error description}↵
```

Configuring the watchdog

The "watchdog" command instructs the deck to monitor the connected client and terminate the connection if the client is inactive for at least a specified period of time.

To configure the watchdog:

```
watchdog: period: {period in seconds}↵
```

To avoid disconnection, the client must send a command to the server at least every {period} seconds. Note that if the period is set to 0 or less than 0, connection monitoring will be disabled.

Assistance

Obtenir de l'assistance

Le moyen le plus rapide d'obtenir de l'aide est d'accéder aux pages d'assistance en ligne de Blackmagic Design et de consulter les dernières informations de support concernant votre enregistreur à disque HyperDeck de Blackmagic.

Pages d'assistance en ligne de Blackmagic Design

Les dernières versions du manuel, du logiciel et des notes d'assistance peuvent être consultées sur la page d'assistance technique de Blackmagic Design : www.blackmagicdesign.com/fr/support.

Forum Blackmagic Design

Le forum Blackmagic Design est une source d'information utile qui offre des idées innovantes pour vos productions. Cette plateforme d'aide vous permettra également d'obtenir des réponses rapides à vos questions, car un grand nombre de sujets peuvent avoir déjà été abordés par d'autres utilisateurs. Pour vous rendre sur le forum : <http://forum.blackmagicdesign.com>

Contactez le service d'assistance de Blackmagic Design

Si vous ne parvenez pas à trouver l'aide dont vous avez besoin dans les pages d'assistance ou sur notre forum, veuillez utiliser l'option « Envoyez-nous un email », accessible sur la page d'assistance pour envoyer une demande d'aide par email. Vous pouvez également cliquer sur le bouton « Trouver un support technique » situé sur la page d'assistance et ainsi contacter le centre d'assistance technique Blackmagic Design le plus proche de chez vous.

Vérification du logiciel actuel

Pour vérifier quelle version du logiciel Blackmagic HyperDeck est installée sur votre ordinateur, ouvrez la fenêtre intitulée About Blackmagic HyperDeck Setup.

- Sur Mac OS, ouvrez le logiciel Blackmagic HyperDeck Setup dans le dossier Applications. Sélectionnez About Blackmagic HyperDeck Setup dans le menu d'application pour connaître le numéro de version.
- Sur Windows, ouvrez l'utilitaire Blackmagic HyperDeck Setup dans votre menu de Démarrage ou sur l'écran de Démarrage. Cliquez sur le menu Aide et sélectionnez About Blackmagic HyperDeck Setup pour connaître le numéro de version.

Comment obtenir les dernières mises à jour du logiciel

Après avoir vérifié quelle version du logiciel Blackmagic HyperDeck Setup est installée sur votre ordinateur, veuillez vous rendre au centre de support technique Blackmagic Design à l'adresse suivante : www.blackmagicdesign.com/fr/support pour vérifier les dernières mises à jour. Même s'il est généralement conseillé d'exécuter les dernières mises à jour, il est prudent d'éviter d'effectuer une mise à jour logicielle au milieu d'un projet important.

Avertissements

Élimination des déchets d'équipements électriques et électroniques au sein de l'Union européenne.



Le symbole imprimé sur ce produit indique qu'il ne doit pas être jeté avec les autres déchets. Cet appareil doit être déposé dans un point de collecte agréé pour être recyclé. La collecte individuelle et le recyclage de votre équipement permettra de préserver les ressources naturelles et garantit un recyclage approprié afin d'éviter la contamination de l'environnement par des substances dangereuses pour la santé. Pour obtenir plus d'informations sur les points de collecte pour recycler votre appareil, veuillez contacter l'organisme responsable du recyclage dans votre région ou le revendeur du produit.



Cet équipement a été testé et déclaré conforme aux limites imposées aux appareils numériques de classe A, en vertu du chapitre 15 des règles de la FCC. Ces limites ont pour objectif d'assurer une protection suffisante contre les interférences nuisibles lorsque l'équipement est utilisé dans un environnement commercial. Cet équipement génère, utilise et peut dégager de l'énergie de radiofréquence et, s'il n'est pas installé et utilisé conformément au manuel d'utilisation, peut provoquer un brouillage préjudiciable aux communications radio. L'utilisation de cet équipement en zone résidentielle est susceptible de provoquer des interférences nuisibles, auquel cas il sera demandé à l'utilisateur de corriger ces interférences à ses frais.

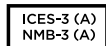
L'utilisation de cet appareil est soumise aux deux conditions suivantes :

- 1 Cet appareil ne doit pas causer d'interférences nuisibles.
- 2 Cet appareil doit accepter toute interférence reçue, notamment celles pouvant entraîner un dysfonctionnement.



R-R-BMD-20211410001

Déclaration de ISDE Canada



Cet appareil est conforme aux normes canadiennes relatives aux appareils numériques de Classe A.

Toute modification ou utilisation de ce produit en dehors de son utilisation prévue peut annuler la conformité avec ces normes.

Les connexions aux interfaces HDMI doivent être effectuées avec des câbles HDMI blindés d'excellente qualité.

Cet équipement a été testé pour être en conformité avec une utilisation prévue dans un environnement commercial. Si cet équipement est utilisé dans un environnement domestique, il peut provoquer des interférences radio.

Informations de sécurité

Ce produit peut être utilisé dans un climat tropical lorsque la température ambiante n'excède pas 40°C.

Veillez à ce que l'espace autour du produit soit suffisant afin de ne pas compromettre la ventilation.

Les pièces de cet appareil ne sont pas réparables par l'opérateur. Toute opération d'entretien doit être effectuée par un centre de service Blackmagic Design.



Cet appareil ne peut être utilisé qu'à une altitude inférieure à 2000 mètres.

Déclaration de l'État de Californie

Ce produit est susceptible de vous exposer à des produits chimiques, dont des traces de polybromobiphényle dans les parties en plastique, reconnu par l'État de Californie comme étant responsable de cancers, d'anomalies congénitales ou d'autres effets nocifs sur la reproduction.

Pour de plus amples informations, veuillez vous rendre sur www.P65Warnings.ca.gov.

Garantie

Garantie limitée à 12 mois

Par la présente, Blackmagic Design garantit que ce produit sera exempt de défauts matériels et de fabrication pendant une durée d'un an à compter de la date d'achat. Si un produit s'avère défectueux pendant la période de garantie, Blackmagic Design peut, à sa seule discrétion, réparer le produit défectueux sans frais pour les pièces et la main-d'œuvre, ou le remplacer.

Pour se prévaloir du service offert en vertu de la présente garantie, il vous incombe d'informer Blackmagic Design de l'existence du défaut avant expiration de la période de garantie, et de prendre les mesures nécessaires pour l'exécution des dispositions de ce service. Le consommateur a la responsabilité de s'occuper de l'emballage et de l'expédition du produit défectueux au centre de service nommé désigné par Blackmagic Design, en frais de port prépayé. Il incombe au Consommateur de payer tous les frais de transport, d'assurance, droits de douane et taxes et toutes autres charges relatives aux produits qui nous auront été retournés et ce, quelle que soit la raison.

La présente garantie ne saurait en aucun cas s'appliquer à des défauts, pannes ou dommages causés par une utilisation inappropriée ou un entretien inadéquat ou incorrect. Blackmagic Design n'a en aucun cas l'obligation de fournir un service en vertu de la présente garantie : a) pour réparer les dommages résultant de tentatives de réparations, d'installations ou tous services effectués par du personnel non qualifié par Blackmagic Design, b) pour réparer tout dommage résultant d'une utilisation inadéquate ou d'une connexion à du matériel incompatible, c) pour réparer tout dommage ou dysfonctionnement causé par l'utilisation de pièces ou de fournitures n'appartenant pas à la marque de Blackmagic Design, d) pour examiner un produit qui a été modifié ou intégré à d'autres produits quand l'impact d'une telle modification ou intégration augmente les délais ou la difficulté d'examiner ce produit. CETTE GARANTIE REMPLACE TOUTE GARANTIE EXPLICITE OU IMPLICITE. BLACKMAGIC DESIGN ET SES REVENDEURS DÉCLINENT EXPRESSÉMENT TOUTE GARANTIE IMPLICITE DE COMMERCIALISATION OU D'ADAPTATION QUEL QU'EN SOIT LE BUT. LA RESPONSABILITÉ DE BLACKMAGIC DESIGN POUR RÉPARER OU REMPLACER UN PRODUIT S'AVÉRANT DÉFECTUEUX CONSTITUE LA TOTALITÉ ET LE SEUL RECOURS EXCLUSIF PRÉVU ET FOURNI AU CONSOMMATEUR POUR TOUT DOMMAGE INDIRECT, SPÉCIFIQUE, ACCIDENTEL OU CONSÉCUTIF, PEU IMPORTE QUE BLACKMAGIC DESIGN OU SES REVENDEURS AIENT ÉTÉ INFORMÉS OU SE SOIENT RENDUS COMPTE AU PRÉALABLE DE L'ÉVENTUALITÉ DE CES DOMMAGES. BLACKMAGIC DESIGN NE PEUT ÊTRE TENU POUR RESPONSABLE DE TOUTE UTILISATION ILLICITE OU ABUSIVE DU MATÉRIEL PAR LE CONSOMMATEUR. BLACKMAGIC DESIGN N'EST PAS RESPONSABLE DES DOMMAGES RÉSULTANT DE L'UTILISATION DE CE PRODUIT. LE CONSOMMATEUR MANIPULE CE PRODUIT À SES SEULS RISQUES.

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April 2022

Installations- und Bedienungsanleitung

Blackmagicdesign 

HyperDeck Shuttle HD



HyperDeck Shuttle HD



Willkommen

Vielen Dank, dass Sie sich zum Kauf eines Blackmagic HyperDeck Shuttle HD Rekorders entschieden haben.

Mit der Entwicklung der originalen Blackmagic HyperDeck Rekorder wollten wir die Aufzeichnung und Wiedergabe von Video mithilfe von SSD-Speichern vereinfachen. Heute freuen wir uns, Ihnen den HyperDeck Shuttle HD vorzustellen.

Der HyperDeck Shuttle HD ist ein kleiner, portabler HDMI-Videorekorder für den Einsatz auf Ihrem Schreibtisch. Ein großer Suchlaufregler und vertraute Transportsteuerelemente gestatten Ihnen die Bedienung mit einer Hand. Darum ist der HyperDeck Shuttle HD der ideale Gefährte für Liveproduktionen mit einem ATEM Mini Mischer. Sie können den HyperDeck Shuttle HD sogar als Teleprompter verwenden.

Der HyperDeck Shuttle HD zeichnet in ProRes-, DNxHD- oder H.264-Codecs auf SD-Karten oder externe Flash-Laufwerke auf und unterstützt damit die Aufzeichnung und Wiedergabe in Blitzgeschwindigkeit.

Bitte sehen Sie auf der Support-Seite unter www.blackmagicdesign.com/de nach der aktuellsten Version dieser Bedienungsanleitung sowie nach Updates für die HyperDeck Software. Halten Sie Ihre Produktsoftware stets auf dem aktuellsten Stand und sichern Sie sich so Zugang zu den neuesten Features. Bitte registrieren Sie sich beim Herunterladen der Software mit Ihren Kontaktdaten, damit wir Sie über neu veröffentlichte Versionen informieren können. Wir arbeiten ständig an neuen Features und Verbesserungen und würden uns über eine Rückmeldung von Ihnen freuen.

A handwritten signature in black ink that reads "Grant Petty". The signature is written in a cursive, flowing style.

Grant Petty CEO Blackmagic Design

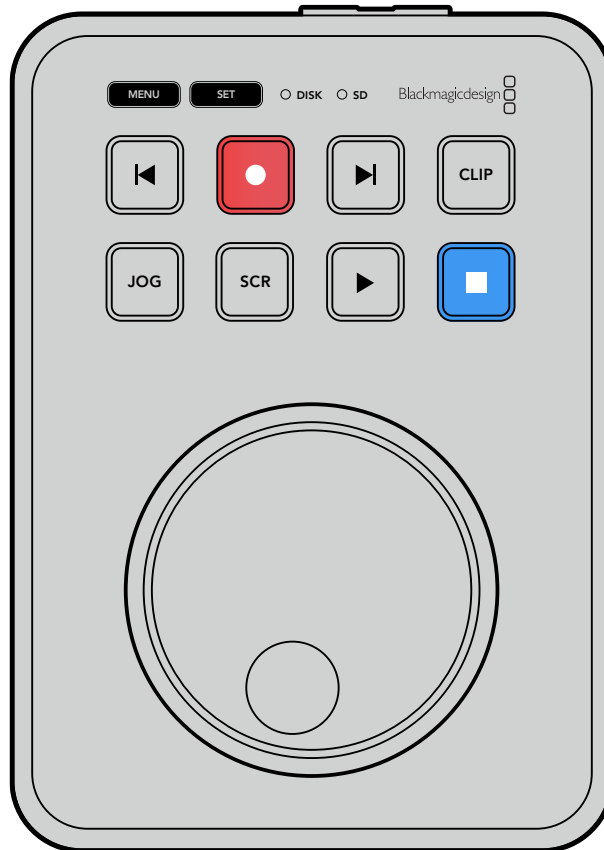
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Erste Schritte

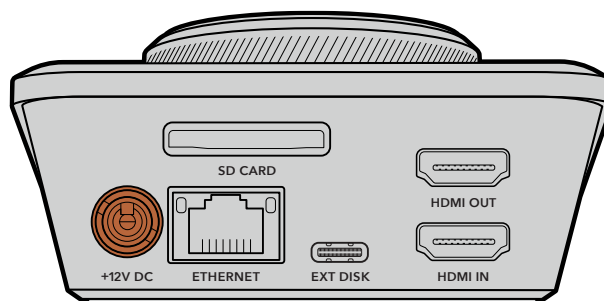
Die ersten Schritte mit Ihrem HyperDeck Shuttle HD sind einfach: Strom anschließen, eine HDMI-Videoquelle verbinden, eine SD-Karte einführen oder einen externen Datenträger anschließen und die Aufnahmetaste drücken.

Dieser Abschnitt des Handbuchs erklärt, wie Sie Ihren HyperDeck Shuttle HD in Betrieb nehmen.



Anschließen an das Stromnetz

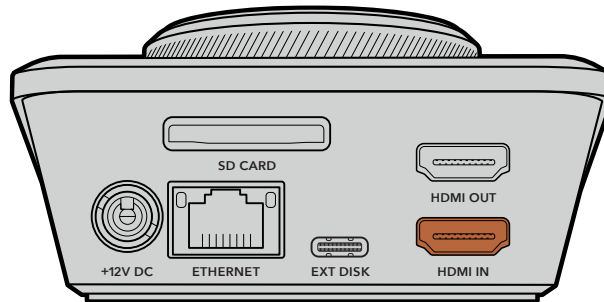
Um Ihren HyperDeck Shuttle HD mit Strom zu versorgen, stecken Sie das mitgelieferte Netzteil in die Strombuchse an der Rückseite. Festziehen der Verriegelung sichert das Kabel, um versehentliche Stromunterbrechungen zu verhindern.



Sichern Sie das Netzteil an der Strombuchse des HyperDeck Shuttle HD

Anschließen von Video- und Audiogeräten

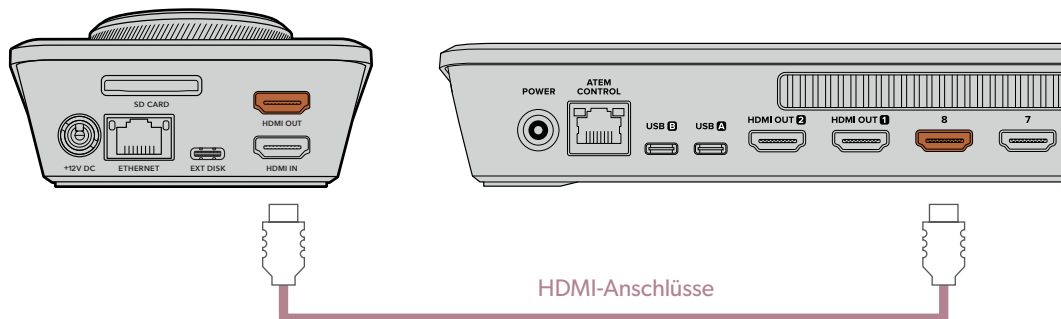
Um ein Videogerät mit Ihrem HyperDeck Shuttle HD zu verbinden, schließen Sie die HDMI-Videoquelle an den HDMI-Eingang an der Rückseite an.



Schließen Sie Ihr Ausgabegerät an den HDMI-Ausgang an. Dies könnte bspw. ein ATEM Mini Mischer oder ein HDMI-Fernseher sein.

Der HDMI-Ausgang dient auch zum Sichten des Einstellungsmenüs beim Ändern von Einstellungen für Ihren HyperDeck. Das Einstellungs Menü wird über die HDMI-Ausgabe als Video-Overlay eingeblendet. Weitere Informationen zu den Menü-Einstellungen finden Sie im Abschnitt „Ändern von Einstellungen“ weiter hinten in diesem Handbuch.

TIPP Sollte Ihre Videoeingabe nicht auf dem angeschlossenen Bildschirm erscheinen, kann es sein, dass sich das Gerät im Wiedergabemodus befindet. Drücken Sie die Aufnahmetaste, um den Aufzeichnungsmodus zu aktivieren.



Verbinden Sie den HDMI-Ausgang mit Ihrem Ausgabegerät, wie einem HDMI-Fernseher oder ATEM Mini Mischer

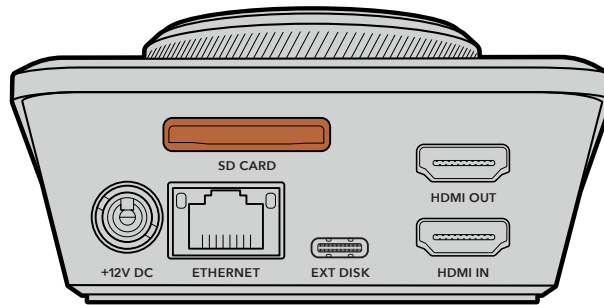
Anschließen von Datenträgern

Alle HyperDeck Shuttle HD Rekorder werden einsatzbereit ausgeliefert und erfordern keine vorherige Konfiguration. Sie benötigen lediglich eine formatierte SD-Karte oder ein externes Laufwerk.

Datenträger lassen sich mühelos über die Menü-Einstellungen formatieren. Sie können dies aber auch auf Ihrem Computer tun. Einzelheiten finden Sie im Abschnitt „Formatieren von Datenträgern“ in diesem Handbuch. Das Handbuch enthält auch Empfehlungen zu den für Videoaufzeichnungen bestgeeigneten Datenträgertypen sowie eine Liste mit empfohlenen SD-Karten und externen Laufwerken.

So führen Sie eine SD-Karte ein:

- 1 Halten Sie die SD-Karte mit den goldfarbenen Kontakten auf den SD-Kartenschacht ausgerichtet. Schieben Sie die Karte vorsichtig in den Schacht, bis sie in der richtigen Position einrastet.



- 2 Ihre SD-Karte wird nun vom HyperDeck geprüft. Ein grüner SD-Indikator oben am HyperDeck Shuttle HD zeigt dies an. Nach der Überprüfung erlischt der Indikator.



Das ist schon alles, was für die Inbetriebnahme Ihres HyperDeck Shuttle HD erforderlich ist. Er ist nun aufzeichnungs- und wiedergabebereit.

Näheres zur Aufzeichnung und Wiedergabe von Clips, zum Ändern von Einstellungen und ähnlichem erhalten Sie im weiteren Verlauf des Handbuchs.

Aufzeichnen von Video

Nachdem Sie sich vergewissert haben, dass Ihre Videoquelle auf dem HDMI-Ausgabegerät angezeigt wird, können Sie sofort aufzeichnen.

Starten Sie die Aufzeichnung durch Drücken der Aufnahmetaste. Beim Aufzeichnen auf eine SD-Karte leuchtet der SD-Indikator rot und die Aufnahme- und Wiedergabetasten leuchten ebenfalls. Beim Aufzeichnen auf ein externes Laufwerk leuchtet der DISK-Indikator rot.



Beenden Sie die Aufzeichnung durch Drücken der Stoptaste.

Wiedergabe

Drücken Sie die Wiedergabetaste, um Video abzuspielen. Während der Wiedergabe leuchtet die Aufnahmetaste. Zudem leuchtet der DISK- oder der SD-Medienschachtindikator grün.

Wenn mehrere Clips aufgezeichnet wurden, können Sie mit den Vor- und Rücklaftasten zügig durch die Clips navigieren.



Verwenden der Vor- und Rücklaftasten

Drücken Sie die Rücklaftaste, um zum Anfang des Clips zu cuen. Durch mehrmaliges Drücken navigieren Sie rückwärts durch zuvor aufgezeichnete Clips.

Drücken Sie die Vorlaftaste, um vorwärts durch Ihre Clips zu navigieren.



Mit den Vor- und Rücklaftasten cuen Sie an den Anfang von Clips

TIPP Um Videodateien auf Ihrem HyperDeck abzuspielen, wählen Sie den Codec, in dem die Dateien aufgezeichnet wurden. Das geht über das Menü. Näheres finden Sie im Abschnitt „Ändern von Einstellungen“ in diesem Handbuch.

Loopen von Clips

Erneutes Drücken der Wiedergabetaste während der Wiedergabe loopt alle Clips auf dem HyperDeck Shuttle HD, bis Sie die Stopptaste drücken.

Wenn Sie einen einzelnen Clip in Schleife abspielen möchten, stellen Sie Ihren HyperDeck auf den Clipmodus ein. Drücken Sie die Wiedergabetaste zum Abspielen eines Clips einmal, und erneut, um ihn zu loopen.

Alle Clips loopen	Drücken Sie die Wiedergabetaste während der Wiedergabe ein zweites Mal, um alle aufgezeichneten Clips in Schleife abzuspielen.
Aktuellen Clip loopen	Drücken Sie die Wiedergabetaste im Clipmodus ein zweites Mal, um den aktuellen Clip in Schleife abzuspielen.

Clipmodus

Im Clipmodus beschränkt sich die Wiedergabe auf einen einzelnen Clip. Ist der Clipmodus aktiviert, können Sie bspw. spulen oder zu einem anderen Clip springen, und wenn Sie dann die Wiedergabetaste drücken, stoppt die Wiedergabe am Ende des Clips.






Erneutes Drücken der Wiedergabetaste im Clipmodus spielt den aktuellen Clip in Schleife ab

Verwenden des Suchlaufreglers

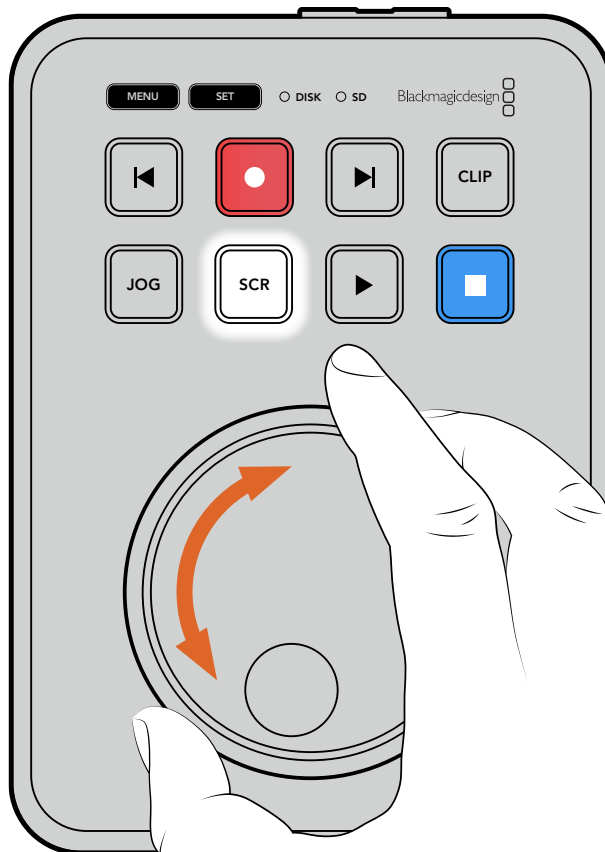
Der Suchlaufregler ermöglicht es Ihnen, während der Wiedergabe schnell durch Ihre Clips zu navigieren und bestimmte Stellen zur Wiedergabe auszuwählen oder diese frameweise zu sichten. Dies ist von Vorteil, wenn Sie eine bestimmte Stelle in einem Clip zur visuellen Kontrolle durch Drehen des Reglers finden müssen. Das ist auch nützlich, um den Abspielkopf an einen bestimmten Cue-Punkt zu setzen, bspw. um den Clip in eine Live-Sendung einzuspielen.

Die Modi des Suchreglers sind Jog, Scroll und Shuttle.

	Jog	Spielt Clips frameweise ab und gestattet die präzise Steuerung.
	Scroll	Im Scrollmodus navigieren Sie zügig vor- und rückwärts durch Ihr gesamtes aufgezeichnetes Material. Der Scrollmodus reagiert darauf, wie schnell und in welche Richtung Sie den Suchlaufregler drehen. So haben Sie bei der Wiedergabe die volle Kontrolle über die Abspielposition.
	Shuttle	Um in den Shuttlemodus zu wechseln, drücken Sie die JOG- und SCR-Tasten gleichzeitig. Ist der Shuttlemodus aktiviert, spulen Sie durch Drehen des Reglers nach links oder rechts durch Ihr Material. Beim Betätigen des Reglers wird das Spulen auf eine bis zu 50-fache Höchstgeschwindigkeit beschleunigt. Um das Shuttletempo zu verringern und anzuhalten, drehen Sie den Regler zur Ausgangsposition zurück. Um beim Shuttle an einer bestimmten Stelle anzuhalten, drücken Sie die Stoptaste. Oder drücken Sie die Wiedergabetaste, um die Wiedergabe von der aktuellen Position fortzusetzen. Es sei erwähnt, dass man die maximale Shuttlegeschwindigkeit im Setup-Menü reduzieren kann. Näheres dazu finden Sie unter „Einstellungen“ weiter hinten im Handbuch.



Drücken Sie die dedizierte JOG- oder SCR-Taste, um den Jog- bzw. Scroll-Suchmodus auszuwählen



Ist der Suchmodus gewählt, drehen Sie den Regler

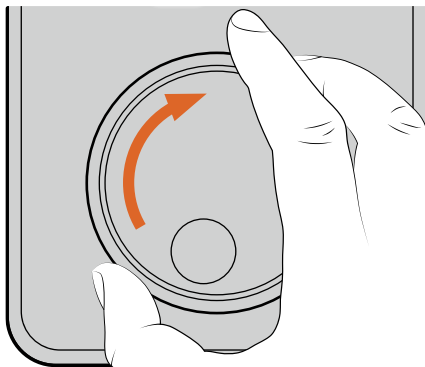
TIPP Um zur normalen Wiedergabe zurückzukehren, drücken Sie die Wiedergabe- oder die Stoptaste.

Ändern von Einstellungen

Drücken der MENU-Taste ruft das Einstellungs­menü auf. Auf Ihrem angeschlossenen HDMI-Bildschirm wird das Menü als Video-Overlay in der unteren linken Ecke eingeblendet.

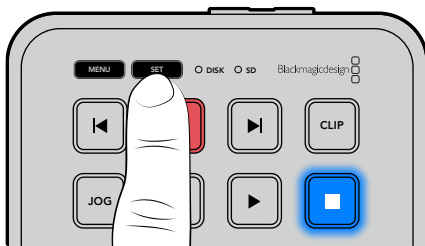


Drücken Sie die MENU-Taste, um das Einstellungs­menü aufzurufen



	Aufzeichnung	>
Eingabe	HDMI	
Codec	H.264 Hoch	
Trigger-Aufz.	Keine	

Navigieren Sie mit dem Suchlaufregler zum Untermenü oder der jeweiligen Einstellung



	Aufzeichnung	>
Eingabe	HDMI	
Codec	H.264 Hoch	
Trigger-Aufz.	Keine	

Drücken Sie die SET-Taste, um das Untermenü oder die Einstellung auszuwählen

Passen Sie Einstellungen mithilfe des Suchlaufreglers oder der Vor- und Rücklauf­ta­sten an. Bestätigen Sie die Auswahl durch Drücken der SET-Taste.

Sie verlassen das Menü, indem Sie die MENU-Taste drücken, um zu den Optionen auf der Ebene darüber und schließlich zur Startseite zurückzukehren.

TIPP Über das Einstellungs­menü können Sie das Menü in einer der vier Ecken Ihres Bildschirms positionieren. Wir empfehlen, das Menü nach dem Ändern von Einstellungen auszuschalten. Damit gewährleisten Sie, dass die HDMI-Ausgabe an einen HDMI-Mischer wie den ATEM Mini Extreme als Cleanfeed erfolgt.

Einstellungen

Das Einstellungs Menü ist in 5 verschiedene Kategorien unterteilt: Aufzeichnung, Monitor, Audio, Datenträger und Setup. Jedes dieser Untermenüs enthält relevante Einstellungen, von denen die meisten über das HyperDeck Shuttle HD Bedienfeld angepasst werden können. Einige Einstellungen betreffen nur den Bildschirm und werden ausgegraut, so z. B. Dateinamen-Präfix. Diese lassen sich über das HyperDeck Setup Dienstprogramm ändern.

Menü „Aufzeichnung“

Aufzeichnung	
Eingabe	HDMI
Codec	H.264 Hoch
Trigger-Aufz.	Keine

Eingabe

Zeigt die HDMI-Eingabequelle für den HyperDeck Shuttle HD.

Codec

Der HyperDeck Shuttle HD kann komprimiertes Video in den Codecs H.264, Apple ProRes und DNxHD aufzeichnen. Um die Teleprompterfunktion zu verwenden, wählen Sie „Teleprompter“.

Trigger-Aufzeichnung

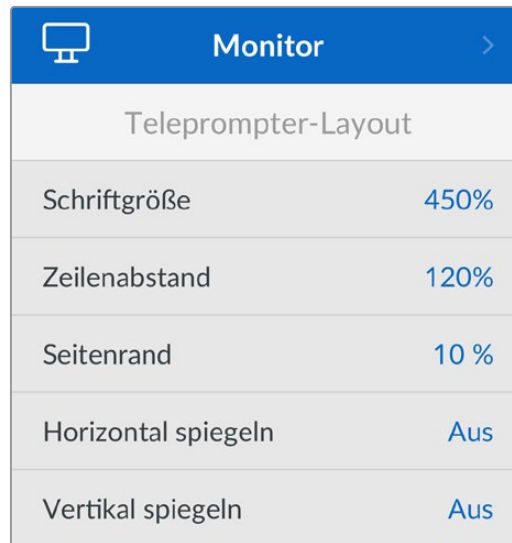
Es sind zwei Modi für die Trigger-Aufzeichnung verfügbar: „Video Start/Stop“ und „Timecode Run“.

Manche Kameras wie die Blackmagic Pocket Cinema Camera 4K senden zum Starten und Stoppen der Aufnahme auf externen Rekordern ein Signal über HDMI. Die Auswahl von „Video Start/Stop“ löst die Aufzeichnung auf einem HyperDeck aus oder stoppt sie, sobald die Aufnahmetaste an der Kamera gedrückt wird.

Verwenden Sie die Option „Timecode Run“, um die Aufzeichnung auszulösen, sobald das Gerät über die Eingänge ein gültiges Timecode-Signal empfängt. Bei Abbruch des Signals stoppt auch die Aufzeichnung. Deaktivieren Sie die Trigger-Aufzeichnung durch Auswählen der Option „Keine“.

HINWEIS Vergewissern Sie sich bei der Aufzeichnung von einer HDMI-Kamera, dass die Ausgabe sauber und frei von Overlays ist. Andernfalls werden diese in der Videoausgabe Ihrer Kamera enthaltenen Einblendungen zusammen mit dem Bild aufgezeichnet.

Menü „Monitor“



Monitor	
Teleprompter-Layout	
Schriftgröße	450%
Zeilenabstand	120%
Seitenrand	10 %
Horizontal spiegeln	Aus
Vertikal spiegeln	Aus

Teleprompter-Layout

Das Monitor-Menü enthält alle Einstellungen für den Einsatz des HyperDeck Shuttle HD als Teleprompter.

Schriftgröße

Passen Sie die Größe des Textes an, indem Sie die Option „Schriftgröße“ auswählen und die SET-Taste drücken. Durch Drehen des Reglers im Uhrzeigersinn vergrößern Sie die Schriftgröße, gegen den Uhrzeigersinn reduzieren Sie sie.

Zeilenabstand

Drehen Sie den Regler, um den Zeilenabstand zu vergrößern oder zu reduzieren.

Seitenrand

Mit dieser Einstellung passen Sie die Breite der Seitenränder auf beiden Seiten des Teleprompter-Displays an.

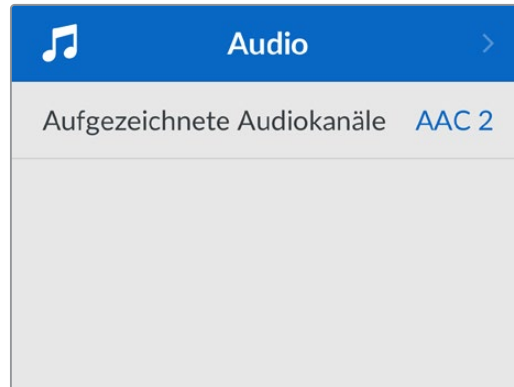
Spiegeln

Verwenden Sie diese Einstellungen, wenn Ihr Teleprompter-Monitor auf Glas vor der Kameraoptik oder an einem Rednerpult gespiegelt wird, damit der Text für den Redner lesbar ist. Es sind zwei Modi zum Spiegeln verfügbar:

Horizontal spiegeln – Nutzen Sie diese Einstellung, wenn der Teleprompter-Monitor sehr nah am Boden des Glases angebracht ist.

Vertikal spiegeln – Nutzen Sie diese Einstellung, wenn der Teleprompter-Monitor abseits des Glases angebracht ist.

Menü „Audio“

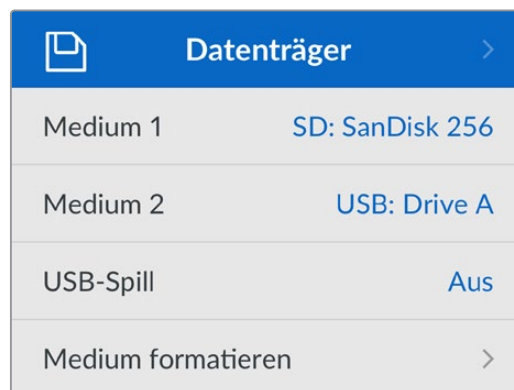


Aufgezeichnete Audiokanäle

Der HyperDeck Shuttle HD kann bis zu 8 Kanäle PCM-Audio gleichzeitig aufzeichnen. Um die Anzahl der aufzuzeichnenden Audiokanäle vorzugeben, gehen Sie ins Untermenü. Wählen Sie aus der Liste mit den Audiokanälen 2, 4 oder 8 Kanäle.

Wenn als Codec H.264 ausgewählt ist, können Sie auch 2 Kanäle AAC-Audio vorgeben. Diese Aufnahmen können Sie dann direkt auf YouTube hochladen.

Menü „Datenträger“



Verbundene Datenträger erscheinen in den Datenträgereinstellungen. Medium 1 zeigt den Namen der eingeführten SD-Karte an und Medium 2 sämtliche an den USB-Port angeschlossene externe Flash-Laufwerke. Bei Einsatz eines USB-Hubs wie der Blackmagic MultiDock 10G wird das aktive Laufwerk angezeigt.

USB-Spill

Aktivieren Sie bei Einsatz einer Blackmagic MultiDock 10G oder ähnlichem die Option „USB-Spill“. Bei Verwendung von mehr als einem Laufwerk über den mit „EXT DISK“ beschrifteten USB-Anschluss stellen Sie so sicher, dass die Aufzeichnung von einem externen Laufwerk auf das nächste übergeht.

Medium formatieren

SD-Karten und an den rückwärtigen „EXT DISK“-Port angeschlossene Laufwerke können direkt mit dem Rekorder oder mit einem Mac- oder Windows-Computer formatiert werden.

So bereiten Sie Datenträger auf dem HyperDeck Shuttle HD vor:

- 1 Wählen Sie mit dem Suchlaufregler und der SET-Taste die Option „Medium formatieren“.
- 2 Wählen Sie den zu formatierenden Datenträger aus der Liste und drücken Sie die SET-Taste.

- 3 Wählen Sie das Format und drücken Sie die SET-Taste.
- 4 Der nun erscheinende Bildschirm zeigt, welcher Datenträger in welchem Format formatiert wird. Wählen Sie „Formatieren“.
- 5 Nach abgeschlossenem Vorgang erscheint eine Bestätigungsmeldung. Wählen Sie OK.

HFS+ wird auch als „Mac OS X Extended“ bezeichnet und ist das empfohlene Format, da es „Journaling“ unterstützt. Auf Datenträgern mit Journaling gespeicherte Daten lassen sich im seltenen Fall einer Beschädigung Ihres Datenträgers mit höherer Wahrscheinlichkeit wiederherstellen. HFS+ wird nativ von Mac unterstützt. ExFAT wird von Mac und Windows nativ ohne Verwendung zusätzlicher Software unterstützt. Es unterstützt jedoch kein Journaling.

Einzelheiten zur Datenträgerformatierung finden Sie am Abschnitt „Formatieren von Datenträgern“.

Menü „Setup“

Das Menü „Setup“ enthält Einstellungen für die Sprachauswahl und das Standardformat sowie für das Bildschirm-Menü, Netzwerkeinstellungen und Timecode-Optionen.

Setup	
Name	HyperDeck Shuttle HD
Sprache	Deutsch
Datum	16. Mai 2022
Uhrzeit	14:32
Zeitzone	UTC±11:00
Software	8.1
Kamera	A
Standardformat	1080p/30
Max. Geschwindigkeit	x50

Name

Wenn mehr als ein HyperDeck Shuttle HD in ein Netzwerk eingebunden ist, empfiehlt es sich, die Rekorder zur Erkennung der einzelnen Geräte individuell zu benennen. Das geht über Blackmagic HyperDeck Setup oder das Blackmagic HyperDeck Ethernet Protocol mithilfe eines Terminalprogramms. Der Name wird im Setup-Menü angezeigt.

Sprache

Der HyperDeck Shuttle HD unterstützt 13 Sprachen. Neben Deutsch und Englisch sind das Chinesisch, Französisch, Italienisch, Japanisch, Koreanisch, Polnisch, Portugiesisch, Russisch, Spanisch, Türkisch und Ukrainisch.

So wählen Sie die Sprache aus:

- 1 Gehen Sie zum Setup-Menü und drücken Sie die SET-Taste.
- 2 Scrollen Sie mit dem Suchlaufregler zur gewünschten Sprache und drücken Sie die SET-Taste.

- 3 Scrollen Sie mit dem Suchlaufregler zur gewünschten Sprache und drücken Sie die SET-Taste. Ist die Sprache ausgewählt, kehren Sie automatisch zurück ins Setup-Menü.

Datum

Um das Datum vorzugeben, wählen Sie die Option „Datum“ und drücken Sie die SET-Taste. Anhand des Suchlaufreglers können Sie nun den Tag, Monat und die Uhrzeit vorgeben. Ist die Option „Zeitstempel“ ausgewählt, wird aus diesen Angaben der Dateisuffix für den Zeitstempel gebildet.

Uhrzeit

Um die Uhrzeit vorzugeben, wählen Sie diese und drücken Sie die SET-Taste. Geben Sie die Stunden und Minuten anhand des Suchreglers vor. Die interne Uhr des HyperDeck Shuttle HD verwendet das 24-Stunden-Format.

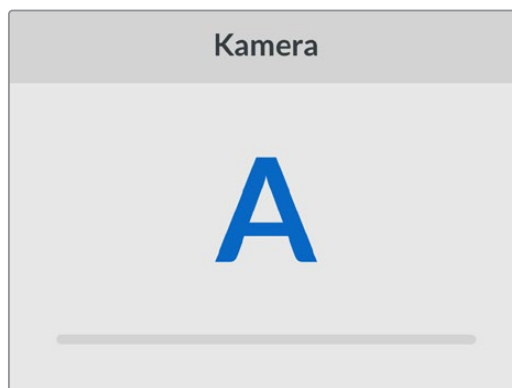
Software

Zeigt die aktuelle Version der Produktsoftware an.

Kamera

Diese praktische Einstellung ermöglicht es, die Feeds von mehreren Kameras getrennt als ISO-Dateien aufzuzeichnen. In DaVinci Resolve kann man diese Dateien in einer Multicam-Timeline nachbearbeiten.

Der Kennbuchstabe einzelner Kameras wird in den Metadaten der Datei festgehalten, anhand dessen DaVinci Resolve bei Einsatz der „Sync Bin“-Funktion unterschiedliche Kamerawinkel problemlos erkennt.



Ordnen Sie Kameras Buchstaben von A–Z oder Ziffern von 1–9 zu

Standardformat

Es kann vorkommen, dass der HyperDeck Shuttle HD die gewünschte Videonorm nicht sofort erkennt. Diese Einstellung gibt dem HyperDeck die Videonorm vor, die Sie als Standard verwenden möchten.

Beispiel: Sie haben einen HyperDeck Shuttle HD eingeschaltet, an den keine Videoquelle angeschlossen ist. Dann verbinden Sie den Rekorder mit einem Datenträger, der Dateien in zwei verschiedenen Videonormen enthält. In welchem Videoformat soll der HyperDeck diese nun abspielen? Das Standard-Videoformat gibt Aufschluss darüber, welche Videonorm Sie bevorzugen, und spielt die Dateien in diesem Format ab.

Das Standard-Videoformat ist auch beim ersten Einschalten eines HyperDeck Shuttle HD nützlich, wenn keine Videoquellen oder Datenträger verbunden sind. In diesem Fall ist nämlich nicht klar, welches Videoformat der HyperDeck für die Monitorausgabe verwenden soll. Das Standardformat liefert Hinweise, was zu tun ist.

Dennoch ist das Standardformat nur ein Leitwert. Es überschreibt keine Parameter. Haben Sie einen Datenträger mit nur einer Art von Videodateien und drücken die Wiedergabetaste, wechselt der

HyperDeck Rekorder für die Wiedergabe zu diesem Videoformat. Das Standard-Videoformat wird ignoriert, weil offensichtlich ist, dass Sie nur die Dateien von diesem Datenträger abspielen wollen.

Mit der Aufzeichnung verhält es sich ähnlich. Drücken Sie die Aufnahmetaste, wird im Videoformat der angeschlossenen Videoquelle aufgezeichnet. Nach abgeschlossener Aufzeichnung spielt der HyperDeck Shuttle HD die Dateien auf dem Datenträger in derselben Videonorm ab. Dies gilt auch, wenn andere Dateien auf dem Datenträger dem Standard-Videoformat entsprechen. Es wird angenommen, dass Sie Dateien im gleichen Videoformat abspielen wollen, in dem sie aufgezeichnet wurden. Erst wenn Sie den Datenträger trennen und wieder verbinden, dient das Standard-Videoformat zur Auswahl von Dateien in einer bestimmten Videonorm.

Das Standard-Videoformat bietet lediglich Hinweise, um dem HyperDeck Shuttle HD im Zweifelsfall zu kommunizieren, was er tun soll. Es werden keine Parameter überschrieben oder das Verhalten des Decks auf eine bestimmte Weise erzwungen.

Max. Geschwindigkeit

Die maximale Shuttlegeschwindigkeit auf dem HyperDeck Shuttle HD ist 50-fach beschleunigt. Um diese Geschwindigkeit zu reduzieren, stehen weitere Geschwindigkeits-Presets zur Wahl.

Menü-Einstellungen

Mithilfe der Menü-Einstellungen passen Sie die Platzierung und das Erscheinungsbild des Menüs auf dem angeschlossenen HDMI-Bildschirm an.

Menü	
Oberfläche	Hell
Deckkraft	100 %
Position	Unten links

Oberfläche

Stellen Sie das Onscreen-Menü Ihres HyperDecks auf den hellen oder dunklen Modus ein. Der helle Modus bietet mehr Kontrast, wenn Sie mit dunklem Material oder im Telepromptermodus arbeiten.

Menü	
Oberfläche	Hell
Deckkraft	100 %
Position	Unten links

Menü	
Oberfläche	Dunkel
Deckkraft	100 %
Position	Unten links

Deckkraft

Passen Sie die Intensität an, um den Standardwert von 100 % für die Deckkraft der Menü-Overlays auf dem angeschlossenen Bildschirm auf 20 % zu reduzieren.

Position

Das Menü-Overlay wird standardmäßig in der unteren linken Ecke des Bildschirms angezeigt. Um das Menü an eine andere Stelle zu verschieben, wählen Sie „Fensterposition“ und drücken Sie die SET-Taste. Nun können Sie „oben links“, „oben rechts“, „unten links“ oder „unten rechts“ auf dem Bildschirm auswählen.

Netzwerk-Einstellungen

Netzwerk	
Protokoll	Statische IP
IP-Adresse	192.168.24.100
Subnetzmaske	255.255.255.0
Gateway	192.168.24.1

Protokoll

Blackmagic HyperDecks werden auf DHCP voreingestellt ausgeliefert. Wird Ihr Rekorder in ein Netzwerk eingebunden, bekommt er vom Netzwerkservers automatisch eine IP-Adresse zugewiesen. Es müssen keine weiteren Netzwerkeinstellungen angepasst werden. Wenn Sie eine Adresse manuell einrichten müssen, können Sie die Verbindung über eine statische IP erstellen.

Um auf das Menü zuzugreifen, wählen Sie „Protokoll“ und drücken Sie die SET-Taste. Scrollen Sie zu „Statische IP“ und drücken Sie die SET-Taste.

IP-Adresse, Subnetzmaske, Gateway, Primärer DNS und Sekundärer DNS

Nach Auswahl von „Statische IP“ können Sie Ihre Netzwerkinformationen manuell eingeben.

So ändern Sie die IP-Adresse:

- 1 Navigieren Sie mit dem Suchlaufregler zur Option „IP-Adresse“ und drücken Sie am Bedienfeld Ihres HyperDecks die SET-Taste.
- 2 Drehen Sie den Suchregler, um die IP-Adresse anzupassen und drücken Sie zur Bestätigung die SET-Taste, ehe Sie den nächsten Zahlenblock anpassen.
- 3 Drücken Sie zur Bestätigung der Änderung die SET-Taste und machen Sie mit dem nächsten Zahlenblock weiter.

Wenn die Eingabe Ihrer IP-Adresse abgeschlossen ist, wiederholen Sie diese Schritte, um die Subnetzmaske und das Gateway anzupassen. Wenn Sie fertig sind, drücken Sie die MENU-Taste, um zur Startseite zurückzukehren.

Timecode

Geben Sie die Optionen für die Timecode-Ein- und -Ausgabe vor. Sie haben die Wahl, den Timecode nach Referenzquelle, Uhrzeit oder manueller Vorgabe aufzuzeichnen.

Timecode	
Eingabe	Videoeingabe
Frames auslassen	Standard
Preset	00:00:00:00
Ausgabe	Timeline

Eingabe

Es stehen vier Timecode-Eingabeoptionen für die Aufzeichnung zur Verfügung.

Videoeingabe	Diese Option übernimmt den in die HDMI-Signale eingebetteten Timecode mit SMPTE RP-188 Metadaten. Das sorgt für die Synchronisierung Ihrer HDMI-Quellen mit der auf dem HyperDeck Shuttle HD aufgezeichneten Datei.
Intern	Verwenden Sie diese Option für Uhrzeit-Timecode vom internen Timecode-Generator.
Ende letzter Clip	Mit dieser Auswahl für die Timecode-Eingabe beginnt jede Aufzeichnung einen Frame nach dem letzten Frame des vorherigen Clips. Endet Ihr erster Clip bspw. bei 10:28:30:10, beginnt der Timecode des nächsten Clips bei 10:28:30:11.
Preset	Wählen Sie die „Preset“-Option, um Timecode manuell vorzugeben. Aufgezeichnete Clips beginnen mit dem über die „Preset“-Einstellung vorgegebenen Timecode. Diese Option wird im nachstehenden Abschnitt erklärt.

Timecode-Voreinstellung

Für NTSC-Quellen mit Bildwechselfrequenzen von 29,97 oder 59,94 können Sie für Timecode die Option „Frames auslassen“ oder „Keine Frames auslassen“ wählen. Ist die Quelle unbekannt, wählen Sie „Standard“. Damit wird die Norm der Eingabe beibehalten oder es werden standardmäßig Frames ausgelassen, wenn kein gültiger Timecode erkannt wird.

Preset

Sie können den Timecode manuell vorgeben, indem Sie die SET-Taste drücken und den Start-Timecode per Suchlaufregler und SET-Taste vorgeben. Vergewissern Sie sich, dass unter „Eingabe“ die Option „Preset“ vorgegeben ist.

Timecode-Ausgabe

Wählen Sie die Timecode-Optionen für Ihre Ausgaben.

Timeline	Um alle auf einen Datenträger aufgezeichneten Clips mit fortlaufendem Timecode auszugeben, wählen Sie die Option „Timeline“.
Clip	Ist die Option „Clip“ aktiviert, wird der Timecode für jeden Clip einzeln ausgegeben.

Dateieinstellungen

Dateieinstellungen	
Dateinamen-Präfix	HyperDeck
Zeitstempel-Dateisuffix	Aus

Dateinamen-Präfix

Beim ersten Einsatz zeichnet Ihr HyperDeck Shuttle HD Clips auf Ihre SD-Karte oder Ihr USB-Flash-Laufwerk nach der folgenden Namenskonvention auf:

HyperDeck_0001

HyperDeck_0001

Präfix

HyperDeck_**0001**

Clip-Nummer

Den Dateinamen-Präfix können Sie über das HyperDeck Setup Dienstprogramm ändern. Näheres finden Sie im Abschnitt „Blackmagic Hyperdeck Setup“ weiter hinten im Handbuch.

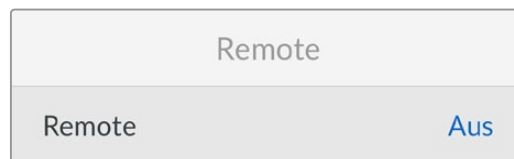
Zeitstempel-Dateisuffix

Standardmäßig ist das Hinzufügen des Zeitstempels zum Dateinamen ausgeschaltet. Schalten Sie diese Option ein, wenn Sie mit Ihrem Dateinamen das Datum und die Uhrzeit speichern möchten.

HyperDeck_2201061438_0001	
HyperDeck_2201061438_0001	Dateinamen-Präfix
HyperDeck_ 22 01061438_0001	Jahr
HyperDeck_22 01 061438_0001	Monat
HyperDeck_2201 06 1438_0001	Tag
HyperDeck_220106 14 38_0001	Stunde
HyperDeck_22010614 38 _0001	Minute
HyperDeck_2201061438_ 0001	Clip-Nummer

Remote

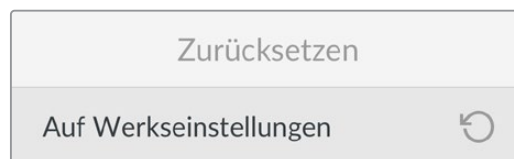
Die Remote-Einstellung ermöglicht die Fernsteuerung des HyperDeck über andere Videogeräte wie bspw. einen ATEM Mini Extreme Mischer.



Remote

Mit „Remote“ aktivieren Sie die Fernsteuerung per Ethernet. Um den Rekorder lokal zu steuern, deaktivieren Sie „Remote“.

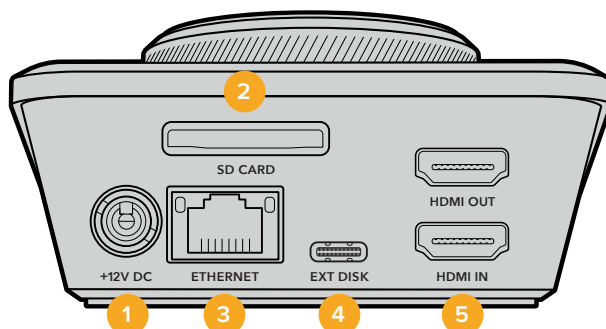
Zurücksetzen



Auf Werkseinstellungen zurücksetzen

Um Ihren HyperDeck auf seine Werkseinstellungen zurückzusetzen, wählen Sie im „Setup“-Menü die Option „Auf Werkseinstellungen“. Nach Drücken der SET-Taste werden Sie aufgefordert, Ihre Auswahl zu bestätigen.

Hintere Anschlüsse



1 Strombuchse

Der HyperDeck Shuttle HD wird über ein AC-Steckernetzteil mit Strom versorgt. Das mit Ihrem HyperDeck Shuttle HD mitgelieferte Stromkabel ist mit einem Sperrmechanismus ausgestattet, um Unterbrechungen zu vermeiden. Zur Stromversorgung des HyperDeck können Sie jedoch jedes beliebige 36W-12V-Stromkabel verwenden.

2 SD-Karte

Führen Sie zum Aufzeichnen und Abspielen eine SD-Karte in den mit „SD CARD“ beschrifteten Schacht ein.

3 Ethernet

Der ETHERNET-Port dient zum Einbinden Ihres Rekorders in Ihr Netzwerk, für schnelle FTP-Übertragungen und zum Fernsteuern des Rekorders per HyperDeck Ethernet Protocol. Einzelheiten zur Übertragung von Dateien über einen FTP-Client siehe Abschnitt „Übertragen von Dateien per Netzwerk“ weiter hinten im Handbuch.

Wenn Ihr HyperDeck in ein Netzwerk mit einem ATEM Mischer eingebunden ist, können Sie den Rekorder auch unter Einsatz eines ATEM Mixers oder eines ATEM Hardware-Bedienpults steuern.

4 Externes Laufwerk

Schließen Sie ein externes Flash-Laufwerk an den USB-C-Port an, um mit einer Datengeschwindigkeit von bis zu 5 Gbit/s darauf aufzuzeichnen. Sie können HyperDecks auch an USB-C-Hubs mit mehreren Ports oder zur Verwendung einer oder mehrerer SSDs an eine Blackmagic MultiDock 10G anschließen.

5 HDMI-Anschlüsse

Verbinden Sie den HDMI-Ausgang mit HDMI-Fernsehern, -Monitoren oder sogar einem Mischer wie dem ATEM Mini Extreme. Die HDMI-Ausgabe dient auch zur Anzeige des Menü-Overlays.

Datenträger

SD-Karte

Für hochqualitative HD-Aufzeichnungen empfehlen wir Hochgeschwindigkeits-SD-Karten mit UHS-I. Um in Ultra-HD-Formaten bis 2160p/60 aufzunehmen, müssen die Karten Schreibgeschwindigkeiten über 220 MB/s meistern.

Wenn Sie bei niedrigeren Bitraten mit geringerer Kompression aufnehmen, reichen ggf. auch langsamere Karten. Grundsätzlich gilt: Je schneller die Karte, desto besser.

Sehen Sie in der aktuellsten Ausgabe dieses Handbuchs regelmäßig nach den neuesten Infos. Sie steht jederzeit zum Download auf unserer Firmenwebsite www.blackmagicdesign.com/de/support bereit.

Welche SD-Karten sollte ich mit dem HyperDeck Shuttle HD verwenden?

Für Aufzeichnungen in 1080p mit bis zu 60 fps werden folgende SD-Karten empfohlen:

Brand	Model	Capacity
Angelbird	AV PRO SD UHS-II 300MB/s V90 SDXC	256GB
Angelbird	AV PRO SD UHS-II 260MB/s V60 SDXC	128GB
Angelbird	AV PRO SD UHS-II 260MB/s V60 SDXC	64GB
SanDisk	Extreme Pro UHS-I 95MB/s SDXC	64GB
Wise	SD2-64U3 UHS-II 285MB/s SDXC	64GB
Lexar	Professional 1000x UHS-II 150MB/s SDXC	128GB
SONY	Tough SF-G128T	128GB
Kingston	CANVAS GO! Plus 170MB/s V30	64GB
Kingston	CANVAS GO! Plus 170MB/s V30	128GB
Kingston	CANVAS GO! Plus 170MB/s V30	512GB
ProGrade Digital	SDXC UHS-II V90 300R	64GB
ProGrade Digital	SDXC UHS-II V90 300R	128GB
SONY	Tough SF-G64T UHS-II SDXC	64GB
Delkin Devices	Black UHS-II V90 SDXC	256GB
Delkin Devices	Power UHS-II V90 SDXC	128GB
Delkin Devices	Power UHS-II V90 SDXC	256GB
Delkin Devices	Black UHS-II V90 SDXC	128GB
Exascend	Essential SDXC UHS-II V90 R 300MB/s	64GB
Exascend	Essential SDXC UHS-II V90 R 300MB/s	128GB
Exascend	Catalyst SDXC UHS-II V90 R 300MB/s	64GB

Externe Laufwerke

Alle HyperDeck Modelle können direkt auf USB-C-Flash-Laufwerke aufzeichnen. Diese schnellen leistungsfähigen Laufwerke ermöglichen Ihnen Langzeit-Videoaufzeichnungen. Anschließend können Sie die Laufwerke an Ihren Computer anschließen und direkt darauf schneiden.

Noch mehr Speicherkapazität bieten Ihnen USB-C-Dockingstations oder externe Festplatten. Verbinden Sie Ihre Blackmagic MultiDock 10G oder Ihr USB-C-Flash-Laufwerk über ein Kabel mit dem „EXT DISK“-Port an der Rückseite Ihres HyperDecks.

Welche USB-C-Laufwerke sollte ich mit dem HyperDeck Shuttle HD verwenden?

Für Aufzeichnungen in 1080p ProRes HQ mit bis zu 60 fps werden folgende USB-C-Laufwerke empfohlen:

Brand	Model	Capacity
Wise	PTS-256 Portable SSD 4K	256 GB
OWC	Envoy Pro Ex	240 GB
BUFFALO	SSD-PHE500U3-BA	500 GB

Für Aufzeichnungen in 1080p DNxHR HQX mit bis zu 60 fps werden folgende USB-C-Laufwerke empfohlen:

Brand	Model	Capacity
OWC	Envoy Pro Ex	240 GB

Für Aufzeichnungen in 1080p H.264 mit bis zu 60 fps werden folgende USB-C-Laufwerke empfohlen:

Brand	Model	Capacity
OWC	Envoy Pro Ex	240 GB

Formatieren von Datenträgern

Vorbereiten von Datenträgern auf einem Computer

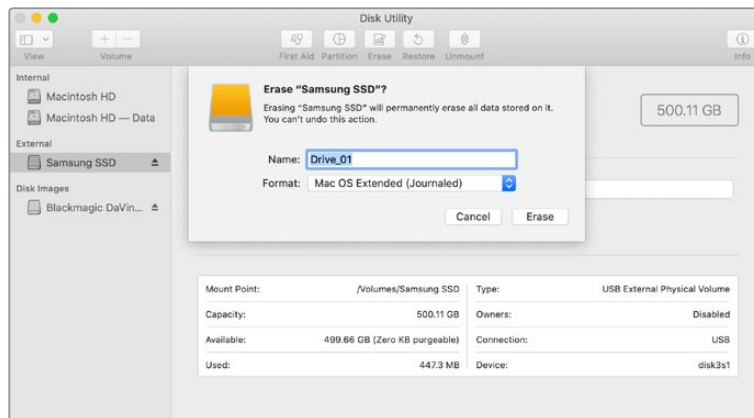
Datenträger auf einem Mac-Computer formatieren

Mithilfe des im Betriebssystem Ihres Macs enthaltenen Festplattendienstprogramms lässt sich Ihr Datenträger in HFS+ oder exFAT formatieren.

Fertigen Sie unbedingt Sicherungskopien von allen wichtigen Daten auf Ihrem Speichermedium an, da beim Formatieren alle Inhalte gelöscht werden.

- 1 Schließen Sie ein USB-Flash-Laufwerk über eine externe Dockingstation oder einen Kabeladapter an Ihren Computer an. Ignorieren Sie jegliche Meldungen, die den Gebrauch Ihrer SSD für Time Machine Backups anbieten. Schließen Sie eine SD-Karte über ein externes Kartenlesegerät an Ihren Computer an.
- 2 Gehen Sie zu „Programme“ > „Dienstprogramme“ und starten Sie das Festplattendienstprogramm.
- 3 Klicken Sie auf das Speicherträgersymbol für Ihre SD-Karte oder Ihr USB-Flash-Laufwerk und dann auf „Löschen“.

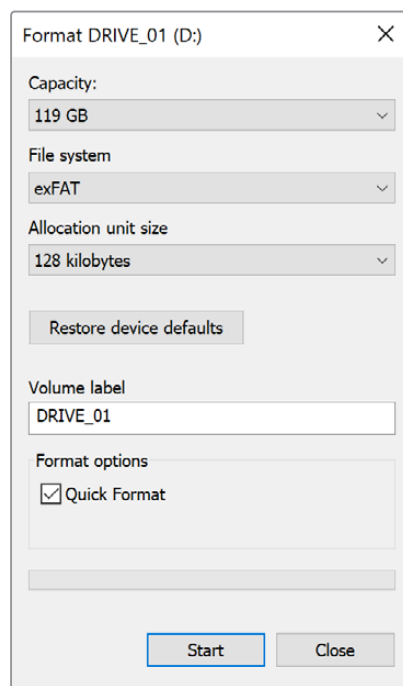
- 4 Geben Sie als Format „Mac OS Extended (Journaled)“ oder „exFAT“ vor.
- 5 Geben Sie einen Namen für das neue Volumen ein und klicken Sie auf „Löschen“. Ihr Datenträger wird schnell formatiert und ist dann mit einem HyperDeck einsatzbereit.



Datenträger auf einem Windows-Computer formatieren

Auf einem Windows-PC erfolgt die Formatierung eines Datenträgers in exFAT über das „Formatieren“-Fenster. Fertigen Sie auf jeden Fall Sicherungskopien von allen wichtigen Daten auf Ihrer SSD oder SD-Karte an, da während der Formatierung alle Inhalte gelöscht werden.

- 1 Schließen Sie ein USB-Flash-Laufwerk über eine externe Dockingstation oder einen Kabeladapter an Ihren Computer an. Schließen Sie eine SD-Karte über ein externes Kartenlesegerät an Ihren Computer an.
- 2 Öffnen Sie das Startmenü oder den Startbildschirm und wählen Sie „Dieser PC“. Rechtsklicken Sie auf Ihrem USB-Flash-Laufwerk oder Ihrer SD-Karte.
- 3 Wählen Sie im Kontextmenü „Formatieren“.
- 4 Stellen Sie das Dateisystem auf „exFAT“ und die Größe der Zuordnungseinheiten auf „128 Kilobytes“ ein.
- 5 Geben Sie eine Volumenbezeichnung ein, setzen Sie ein Häkchen bei „Schnellformatierung“ und klicken Sie auf „Starten“.
- 6 Ihr Datenträger wird schnell formatiert und ist dann mit einem HyperDeck einsatzbereit.



Verwenden der Teleprompterfunktion

Mithilfe einer regulären RTF-Datei lässt sich der Blackmagic HyperDeck Shuttle HD als Teleprompter einsetzen. Erstellen Sie Ihre Datei in TextEdit oder WordPad und speichern Sie sie in einer der 13 unterstützten Sprachen im Rich-Text-Format. Nach Öffnen der Datei mit dem HyperDeck Shuttle HD können Sie die Schriftgröße und den Zeilenabstand Ihres Skripts anpassen.

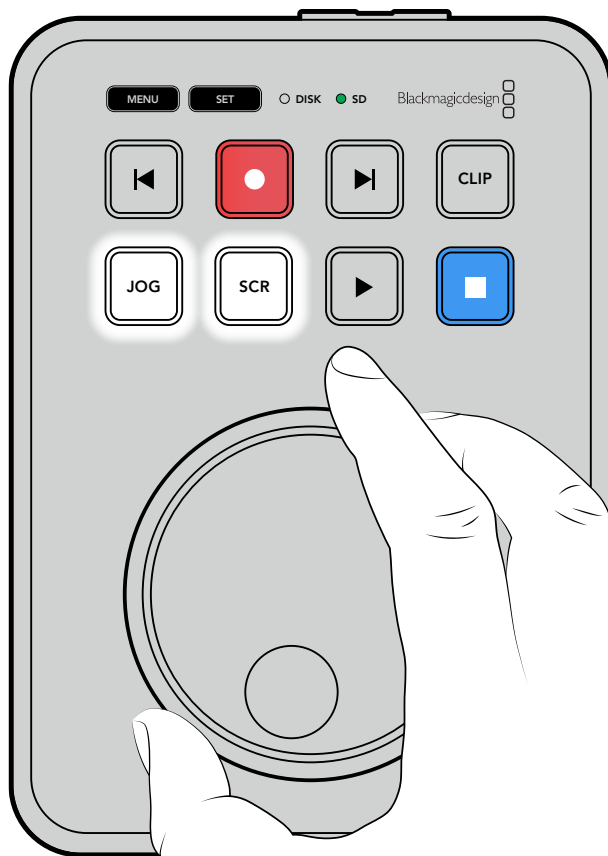
So verwenden Sie die Teleprompterfunktion:

- 1 Verbinden Sie den HDMI-Ausgang des HyperDeck Shuttle HD mit dem gewünschten HDMI-Bildschirm.
- 2 Führen Sie die SD-Karte ein, auf der das Skript gespeichert ist, oder schließen Sie das entsprechende externe USB-Flash-Laufwerk an.
- 3 Wählen Sie im Aufzeichnungs-Menü die gewünschte Codec-Option aus. Navigieren Sie zur Einstellung „Teleprompter“ und drücken Sie die SET-Taste.

Das Skript wird auf Ihrem Bildschirm eingeblendet. Mit der Wiedergabetaste starten Sie die Wiedergabe darauf automatisch, und der Regler bietet weitere Steuerungsoptionen.

Steuern der Wiedergabegeschwindigkeit auf dem Teleprompter

Im Telepromptermodus dient der große Regler am HyperDeck Shuttle HD wie beim Abspielen von Medien zum Steuern der Wiedergabe. Wenn das Skript geladen ist, drücken Sie die JOG- und SCR-Tasten gleichzeitig, um variable Wiedergabegeschwindigkeit zu aktivieren. Ist variable Geschwindigkeit gewählt, drehen Sie den Regler. Die Betätigung des Reglers bestimmt, wie schnell das Skript läuft. Je schneller Sie den Regler drehen, desto schneller scrollt das Skript.



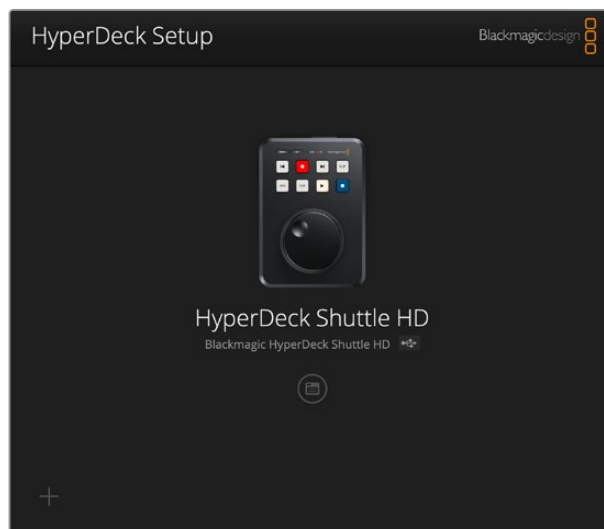
Für gleichmäßige Geschwindigkeit verwenden Sie entweder die JOG-Taste oder die SCR-Taste. Ist gleichmäßige Geschwindigkeit ausgewählt, läuft das Skript im Jog-Modus bei konstant niedriger Geschwindigkeit bzw. im Scroll-Modus schneller.

Um auf Ihrer SD-Karte oder Ihrem externen Laufwerk zwischen RTF-Dateien hin und her zu navigieren, drücken Sie die Vor- bzw. Rücklauf-taste.

Der Teleprompter erkennt die Schriftgröße, -farbe und ob der Text aus der Datei fettgedruckt ist oder nicht. Darüber hinaus können Sie Schriftgröße, Zeilenabstand und Seitenränder anpassen oder den Text horizontal oder vertikal spiegeln, wenn Sie ihn über das Monitor-Menü auf Strahlenteilerglas projizieren. Näheres finden Sie im Abschnitt „Menü-Einstellungen“ weiter vorne im Handbuch.

Blackmagic HyperDeck Setup

Das Blackmagic HyperDeck Setup Dienstprogramm dient zum Ändern von Einstellungen und zum Aktualisieren der Produktsoftware Ihres HyperDeck Rekorders.

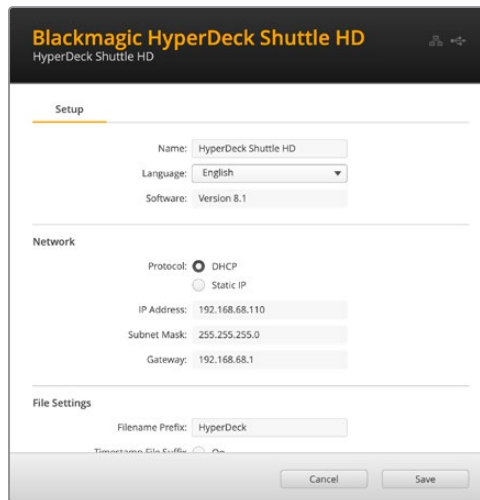


So installieren Sie die Software:

- 1 Laden Sie die neueste Version des Installationsprogramms Blackmagic HyperDeck Setup unter www.blackmagicdesign.com/de/support herunter.
- 2 Führen Sie das Installationsprogramm Blackmagic HyperDeck Setup auf Ihrem Computer aus und folgen Sie den Anweisungen auf dem Bildschirm.
- 3 Verbinden Sie Ihren HyperDeck Shuttle HD nach abgeschlossener Installation über den USB- oder Ethernet-Anschluss an der Rückseite mit dem Computer.
- 4 Starten Sie Blackmagic HyperDeck Setup und folgen Sie etwaigen Aufforderungen auf Ihrem Bildschirm, die Produktsoftware zu aktualisieren. Erscheint keine Aufforderung, so ist Ihre Produktsoftware auf dem neuesten Stand und es sind keine weiteren Aktionen Ihrerseits notwendig.

Klicken Sie auf die Abbildung des HyperDecks oder das Einstellungssymbol, um die Einstellungen öffnen.

Der Homescreen zeigt Ihnen Ihren HyperDeck Shuttle HD und den Namen des Geräts. Wenn mehr als ein HyperDeck mit Ihrem Computer verbunden ist, ist eine individuelle Bezeichnung nützlich zur Identifizierung des Geräts.



Netzwerk

Network

Protocol: DHCP
 Static IP

IP Address: 192.168.68.110

Subnet Mask: 255.255.255.0

Gateway: 192.168.68.1

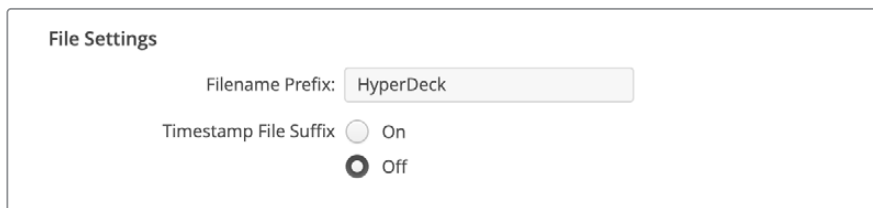
Protokoll

Um Ihren HyperDeck Shuttle HD mit ATEM Mischern zu steuern oder über das HyperDeck Ethernet Protocol fernzusteuern, muss er mithilfe des DHCP oder durch manuelles Hinzufügen einer statischen IP-Adresse im selben Netzwerk wie Ihre anderen Geräte erscheinen.

DHCP	HyperDeck Shuttle HD Rekorder sind standardmäßig auf DHCP eingestellt. Das Dynamic Host Configuration Protocol, kurz DHCP, ist ein auf Netzwerkservern verwendeter Dienst, der Ihren HyperDeck Shuttle HD automatisch auffindet und ihm eine IP-Adresse zuordnet. Das DHCP ist ein großartiger Dienst. Er vereinfacht die Einbindung von Geräten per Ethernet und sorgt dafür, dass deren IP-Adressen nicht miteinander in Konflikt geraten. Die meisten Computer und Netzwerkrouter unterstützen DHCP.
Static IP	Wenn „Static IP“ (Statische IP) eingeschaltet ist, können Sie Ihre Netzwerkdaten manuell eingeben. Achten Sie beim manuellen Einrichten von IP-Adressen zur Kommunikation zwischen allen Geräten darauf, dass sie die gleiche Subnetzmaske und die gleichen Gateway-Einstellungen haben. Die ersten drei Zahlenblöcke der IP-Adresse des Mischers und des Bedienpults müssen ebenfalls identisch sein.

Wenn andere Geräte im Netzwerk die gleiche Identifikationsnummer haben, verursacht das Probleme beim Verbinden der Geräte. Ändern Sie bei Auftreten eines solchen Konflikts einfach die Identifikationsnummer in der IP-Adresse des Geräts.

Dateieinstellungen



File Settings

Filename Prefix:

Timestamp File Suffix On Off

Beim ersten Einsatz zeichnet Ihr HyperDeck Shuttle HD Clips mit dem Präfix „HyperDeck“ auf Ihre SD-Karte oder Ihr USB-Flash-Laufwerk auf. Geben Sie einen neuen Dateinamen ein, um das Präfix zu ändern.

Standardmäßig ist das Hinzufügen des Zeitstempels zum Dateinamen ausgeschaltet. Wenn Sie das Datum und die Uhrzeit in Ihrem Dateinamen mitaufzeichnen möchten, wählen Sie für „Timestamp File Suffix“ die Option „On“. Die Einstellungen „Dateinamen-Präfix“ und „Zeitstempel“ sind auch über das Onscreen-Menü auf dem HyperDeck Shuttle HD verfügbar.

Übertragen von Dateien über ein Netzwerk

Ihr HyperDeck Rekorder unterstützt die Übertragung von Dateien über das Dateiübertragungsprotokoll FTP. Mit dieser leistungsstarken Funktion können Sie Dateien mit den schnellen Geschwindigkeiten eines lokalen Netzwerks direkt von Ihrem Computer auf Ihren HyperDeck kopieren. Kopieren Sie bspw. neue Dateien für Digital Signage auf einen ferngesteuerten HyperDeck Rekorder an einem anderen Standort.

Verbinden mit dem HyperDeck Shuttle HD

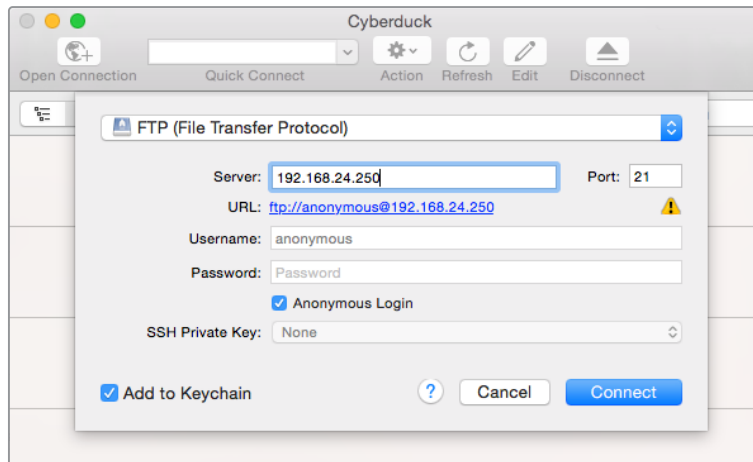
Wenn Ihr Computer und der HyperDeck Shuttle HD in dasselbe Netzwerk eingebunden sind, brauchen Sie lediglich einen FTP-Client und die IP-Adresse Ihres HyperDeck Shuttle HD, um beide Geräte miteinander zu verbinden.

- 1 Laden Sie einen FTP-Client herunter und installieren Sie ihn auf dem Computer, den Sie mit Ihrem HyperDeck verbinden möchten. Wir empfehlen die Programme Cyberduck, FileZilla oder Transmit. Es funktioniert aber mit fast allen FTP-Anwendungen. Cyberduck und FileZilla sind als kostenlose Downloads erhältlich.
- 2 Schließen Sie Ihren HyperDeck Shuttle HD mit einem Ethernet-Kabel an Ihr Netzwerk an und notieren Sie sich die IP-Adresse. Um auf die IP-Adresse zuzugreifen, drücken Sie die MENU-Taste und navigieren Sie mit dem Suchlaufregler zur Einstellung „Netzwerk“. Die IP-Adresse Ihres HyperDeck Shuttle HD wird dort am unteren Rand eingeblendet.

Netzwerk	
Protokoll	Statische IP
IP-Adresse	192.168.24.100
Subnetzmaske	255.255.255.0
Gateway	192.168.24.1

Die IP-Adresse Ihres HyperDeck Shuttle HD finden Sie im Setup-Menü unter „Netzwerk“

- 3 Geben Sie die IP-Adresse Ihres HyperDecks im TCP-Verbindungsdialogfenster ein. Name und Position dieses Textfelds variieren von Anwendung zu Anwendung. Für gewöhnlich trägt es jedoch die Bezeichnung „Server“ oder „Host“. Enthält Ihr FTP-Programm ein Kontrollkästchen namens „Anonymous Login“, aktivieren Sie dieses unbedingt.



Der Verbindungsaufbau zu Ihrem HyperDeck Shuttle HD erfolgt ohne Eingabe eines Benutzernamens oder Passworts. Geben Sie im FTP-Programmdialog einfach die IP-Adresse Ihres Rekorders in das Feld „Server“ bzw. „Host“ ein und aktivieren Sie, falls vorhanden, das Kontrollkästchen für einen anonymen Login

Dateien übertragen

Haben Sie Ihren Computer an den HyperDeck angeschlossen, können Sie die Dateiübertragung ganz normal wie mit einem FTP-Programm vornehmen. Ein Großteil der FTP-Anwendungen verfügt über eine Bedienoberfläche mit Drag-and-drop-Optionen. Sie sollten jedoch prüfen, welche Methode für Ihre Anwendung verfügbar ist.

Sie können den Datenaustausch mit Ihrem HyperDeck in beliebigen Formaten vornehmen. Beachten Sie jedoch, dass von Ihrem HyperDeck Shuttle HD abgespielte Dateien mit den von Ihrem HyperDeck unterstützten Codecs und Auflösungen kompatibel sein müssen.

TIPP Sie können Dateien über ein Netzwerk übertragen, während Ihr HyperDeck aufzeichnet. Der HyperDeck passt Übertragungsgeschwindigkeiten automatisch an, um die Aufzeichnung nicht zu beeinträchtigen.

Developer Information

Blackmagic HyperDeck Ethernet Protocol

The Blackmagic HyperDeck Ethernet Protocol is a text based protocol accessed by connecting to TCP port 9993 on HyperDeck models that have a built in Ethernet connection. If you are a software developer, you can use the protocol to construct devices that integrate with our products. Here at Blackmagic Design our approach is to open up our protocols and we eagerly look forward to seeing what you come up with!

Protocol Commands

Command	Command Description
help or ?	Provides help text on all commands and parameters
commands	return commands in XML format
device info	return device information
disk list	query clip list on active disk
disk list: slot id: {n}	query clip list on disk in slot {n}
quit	disconnect ethernet control
ping	check device is responding
preview: enable: {true/false}	switch to preview or output
play	play from current timecode
play: speed: {-5000 to 5000}	play at specific speed
play: loop: {true/false}	play in loops or stop-at-end
play: single clip: {true/false}	play current clip or all clips
playrange	query playrange setting
playrange set: clip id: {n}	set play range to play clip {n} only
playrange set: clip id: {n} count: {m}	set play range to {m} clips starting from clip {n}
playrange set: in: {inT} out: {outT}	set play range to play between: - timecode {inT} and timecode {outT}
playrange set: timeline in: {in} timeline out: {out}	set play range in units of frames between: - timeline position {in} and position {out} clear/reset play range setting
playrange clear	clear/reset play range setting
play on startup	query unit play on startup state
play on startup: enable: {true/false}	enable or disable play on startup
play on startup: single clip: {true/false}	play single clip or all clips on startup
play option	query play options
play option: stop mode: {lastframe/nextframe/black}	set output frame when playback stops
record	record from current input
record: name: {name}	record named clip

Command	Command Description
record spill	spill current recording to next slot
record: spill: slot id: {n}	spill current recording to specified slot use current id to spill to same slot
stop	stop playback or recording
clips count	query number of clips on timeline
clips get	query all timeline clips
clips get: clip id: {n}	query a timeline clip info
clips get: clip id: {n} count: {m}	query m clips starting from n
clips get: version: {1/2}	query clip info using specified output version: version 1: id: name startT duration version 2: id: startT duration inT outT name
clips add: name: {name}	append a clip to timeline
clips add: clip id: {n} name: {name}	insert clip before existing clip {n}
clips add: in: {inT} out: {outT} name: {name}	append the {inT} to {outT} portion of clip
clips remove: clip id: {n}	remove clip {n} from the timeline (invalidates clip ids following clip {n})
clips clear	empty timeline clip list
transport info	query current activity
slot info	query active slot
slot info: slot id: {n}	query slot {n}
slot select: slot id: {n}	switch to specified slot
slot select: video format: {format}	load clips of specified format
slot unblock	unblock active slot
slot unblock: slot id: {n}	unblock slot {n}
cache info	query cache status
dynamic range	query dynamic range settings
dynamic range: playback override: {off/Rec709/Rec2020_SDR/HLG/ ST2084_300/ST2084_500/ ST2084_800/ST2084_1000/ ST2084_2000/ST2084_4000/ST2084}	set playback dynamic range override
dynamic range: record override: {off/Rec709/Rec2020_SDR/HLG/ ST2084_300/ST2084_500/ ST2084_800/ST2084_1000/ ST2084_2000/ST2084_4000/ST2048}	set record dynamic range override
notify	query notification status
notify: remote: {true/false}	set remote notifications
notify: transport: {true/false}	set transport notifications
notify: slot: {true/false}	set slot notifications
notify: configuration: {true/false}	set configuration notifications

Command	Command Description
notify: dropped frames: {true/false}	set dropped frames notifications
notify: display timecode: {true/false}	set display timecode notifications
notify: timeline position: {true/false}	set playback timeline position notifications
notify: playrange: {true/false}	set playrange notifications
notify: cache: {true/false}	set cache notifications
notify: dynamic range: {true/false}	set dynamic range settings notifications
notify: slate: {true/false}	set digital slate notifications
notify: clips: {true/false}	set timeline clips notifications where two types of changes can occur: add: partial update with list of clips and insert positions snapshot: complete update of all clips on timeline
notify: disk: {true/false}	set disk clips notifications where two types of changes can occur: add: partial update with list of clips and insert positions snapshot: complete update of all clips on timeline
goto: clip id: {start/end}	goto first clip or last clip
goto: clip id: {n}	goto clip id {n}
goto: clip id: +{n}	go forward {n} clips
goto: clip id: -{n}	go backward {n} clips
goto: clip: {n}	goto frame position {n} within current clip
goto: clip: +{n}	go forward {n} frames within current clip
goto: clip: -{n}	go backward {n} frames within current clip
goto: clip: {start/end}	goto start or end of clip
goto: timeline: {n}	goto frame position {n} within timeline
goto: timeline: +{n}	o forward {n} frames within timeline
goto: timeline: -{n}	go backward {n} frames within timeline
goto: timeline: {start/end}	goto start or end of timeline
goto: timecode: {timecode}	goto specified timecode
goto: timecode: +{timecode}	go forward {timecode} duration
goto: timecode: -{timecode}	go backward {timecode} duration
goto: slot id: {n}	goto slot id {n}
jog: timecode: {timecode}	jog to timecode
jog: timecode: +{timecode}	jog forward {timecode} duration
jog: timecode: -{timecode}	jog backward {timecode} duration
shuttle: speed: {-5000 to 5000}	shuttle with speed
remote	query unit remote control state
remote: enable: {true/false}	enable or disable remote control
remote: override: {true/false}	session override remote control
configuration	query configuration settings
configuration: video input: SDI	switch to SDI input

Command	Command Description
configuration: video input: HDMI	switch to HDMI input
configuration: video input: component	switch to component input
configuration: audio input: embedded	capture embedded audio
configuration: audio input: XLR	capture XLR audio
configuration: audio input: RCA	capture RCA audio
configuration: file format: {format}	switch to specific file format
configuration: audio codec: PCM	switch to PCM audio
configuration: audio codec: AAC	switch to AAC audio
configuration: timecode input: {external/embedded/internal/preset/clip}	change the timecode input
configuration: timecode output: {clip/timeline}	change the timecode output
configuration: timecode preference: {default/dropframe/nondropframe}	whether or not to use drop frame timecodes when not otherwise specified
configuration: timecode preset: {timecode}	set the timecode preset
configuration: audio input channels: {n}	set the number of audio channels recorded to {n}
configuration: record trigger: {none/recorderbit/timecoderun}	change the record trigger
configuration: record prefix: {name}	set the record prefix name (supports UTF-8 name)
configuration: append timestamp: {true/false}	append timestamp to recorded filename
configuration: xlr input id: {n} xlr type: {line/mic}	configure xlr input type multiple xlr inputs can be configured in a single command
configuration: genlock input resync: {true/false}	enable or disable genlock input resync
uptime	return time since last boot
format: slot id: {n} prepare: {exFAT/HFS+} name: {name}	prepare a disk formatting operation to filesystem {format}
format: confirm: {token}	perform a pre-prepared formatting operation using token
identify: enable: {true/false}	identify the device
watchdog: period: {period in seconds}	client connection timeout
reboot	reboot device
slate clips	slate clips information
slate project	slate project information
slate lens	slate lens information

Multiline commands:	Command Description
slate clips↵	set slate clips information:
reel: {n}	slate reel number, where {n} is in [1, 999]
scene id: {id}	slate scene id value, where {id} is a string
shot type: {WS/MS/BCU/MCU/ECU/none}	slate shot type
take: {n}	slate take number, where {n} is in [1, 99]
take scenario: {PU/VFX/SER/none}	slate take scenario
take auto inc: {true/false}	slate take auto increment
good take: {true/false}	slate good take
environment: {interior/exterior}	slate environment
day night: {day/night}	slate day or night
slate project:↵	set slate project information:
project name: {name}	project name (can be empty, supports UTF-8)
camera: {index}	set camera index e.g. A
director: {name}	director (can be empty, supports UTF-8)
camera operator: {name}	camera operator (can be empty, supports UTF-8)
slate lens:↵	set lens information:
lens type: {type}	lens type (can be empty, supports UTF-8)
iris: {type}	camera iris (can be empty, supports UTF-8)
focal length: {length}	focal length (can be empty, supports UTF-8)
distance: {distance}	lens distance (can be empty, supports UTF-8)
filter: {filter}	lens filter (can be empty, supports UTF-8)

Command Combinations

You can combine the parameters into a single command, for example:

```
play: speed: 200 loop: true single clip: true
```

Or for configuration:

```
configuration: video input: SDI audio input: XLR
```

Or to switch to the second disk, but only play NTSC clips:

```
slot select: slot id: 2 video format: NTSC
```

Protocol Details

Connection

The HyperDeck Ethernet server listens on TCP port 9993.

Basic syntax

The HyperDeck protocol is a line oriented text protocol. Lines from the server will be separated by an ascii CR LF sequence. Messages from the client may be separated by LF or CR LF.

New lines are represented in this document as a "↵" symbol.

Single line command syntax

Command parameters are usually optional. A command with no parameters is terminated with a new line:

```
{Command name}↵
```

If parameters are specified, the command name is followed by a colon, then pairs of parameter names and values. Each parameter name is terminated with a colon character:

```
{Command name}: {Parameter}: {Value} {Parameter}: {Value} ...↵
```

Multiline command syntax

The HyperDeck protocol also supports an equivalent multiline syntax where each parameter-value pair is entered on a new line. E.g.

```
{Command name}:↵  
{Parameter}: {Value}↵  
{Parameter}: {Value}↵  
↵
```

Response syntax

Simple responses from the server consist of a three digit response code and descriptive text terminated by a new line:

```
{Response code} {Response text}↵
```

If a response carries parameters, the response text is terminated with a colon, and parameter name and value pairs follow on subsequent lines until a blank line is returned:

```
{Response code} {Response text}:↵  
{Parameter}: {Value}↵  
{Parameter}: {Value}↵  
...  
↵
```

Successful response codes

A simple acknowledgement of a command is indicated with a response code of 200:

```
200 ok↵
```

Other successful responses carry parameters and are indicated with response codes in the range of 201 to 299.

Failure response codes

Failure responses to commands are indicated with response codes in the range of 100 to 199:

```
100 syntax error
101 unsupported parameter
102 invalid value
103 unsupported
104 disk full
105 no disk
106 disk error
107 timeline empty
108 internal error
109 out of range
110 no input
111 remote control disabled
112 clip not found
120 connection rejected
150 invalid state
151 invalid codec
160 invalid format
161 invalid token
162 format not prepared
163 parameterized single line command not supported
```

Asynchronous response codes

The server may return asynchronous messages at any time. These responses are indicated with response codes in the range of 500 to 599:

```
5xx {Response Text}:↵
{Parameter}: {Value}↵
{Parameter}: {Value}↵
↵
```

Connection response

On connection, an asynchronous message will be delivered:

```
500 connection info:↵
protocol version: {Version}↵
model: {Model Name}↵
↵
```

Timecode syntax

Timecodes are expressed as non-drop-frame timecode in the format:

```
HH:MM:SS:FF
```

Handling of deck "remote" state

The "remote" command may be used to enable or disable the remote control of the deck. Any attempt to change the deck state over ethernet while remote access is disabled will generate an error:

```
111 remote control disabled↵
```

To enable or disable remote control:

```
remote: enable: {"true", "false"} ↵
```

The current remote control state may be overridden allowing remote access over ethernet irrespective of the current remote control state:

```
remote: override: {"true", "false"} ↵
```

The override state is only valid for the currently connected ethernet client and only while the connection remains open.

The "remote" command may be used to query the remote control state of the deck by specifying no parameters:

```
remote↵
```

The deck will return the current remote control state:

```
210 remote info:↵  
enabled: {"true", "false"}↵  
override: {"true", "false"}↵  
↵
```

Asynchronous remote control information change notification is disabled by default and may be configured with the "notify" command. When enabled, changes in remote state will generate a "510 remote info:" asynchronous message with the same parameters as the "210 remote info:" message.

Closing connection

The "quit" command instructs the server to cleanly shut down the connection:

```
quit↵
```

Checking connection status

The "ping" command has no function other than to determine if the server is responding:

```
ping↵
```

Getting help

The "help" or "?" commands return human readable help text describing all available commands and parameters:

```
help↵
```

Or:

```
?↵
```

The server will respond with a list of all supported commands:

```
201 help:↵  
{Help Text}↵  
{Help Text}↵  
↵
```

Switching to preview mode

The "preview" command instructs the deck to switch between preview mode and output mode:

```
preview: enable: {"true", "false"}↵
```

Playback will be stopped when the deck is switched to preview mode. Capturing will be stopped when the deck is switched to output mode.

Controlling device playback

The "play" command instructs the deck to start playing:

```
play↵
```

The play command accepts a number of parameters which may be used together in most combinations.

By default, the deck will play all remaining clips on the timeline then stop.

The "single clip" parameter may be used to override this behavior:

```
play: single clip: {"true", "false"}↵
```

By default, the deck will play at normal (100%) speed. An alternate speed may be specified in percentage between -5000 to 5000:

```
play: speed: {% normal speed}↵
```

By default, the deck will stop playing when it reaches to the end of the timeline. The "loop" parameter may be used to override this behavior:

```
play: loop: {"true", "false"}↵
```

The "playrange" command instructs the deck to play all the clips. To override this behavior: and select a particular clip:

```
playrange set: clip id: {Clip ID}↵
```

To only play a certain timecode range:

```
playrange set: in: {in timecode} out: {out timecode}↵
```

To clear a set playrange and return to the default value:

```
playrange clear↵
```

The "play on startup" command instructs the deck on what action to take on startup. By default, the deck will not play. Use the "enable" command to start playback after each power up.

```
play on startup: enable {"true", "false"}↵
```

By default, the unit will play back all clips on startup. Use the "single clip" command to override.

```
play on startup: single clip: {"true", "false"}↵
```

Stopping deck operation

The "stop" command instructs the deck to stop the current playback or capture:

```
stop↵
```

Changing timeline position

The "goto" command instructs the deck to switch to playback mode and change its position within the timeline.

To go to the start of a specific clip:

```
goto: clip id: {Clip ID}↵
```

To move forward/back {count} clips from the current clip on the current timeline:

```
goto: clip id: +/-{count}↵
```

Note that if the resultant clip id goes beyond the first or last clip on timeline, it will be clamp at the first or last clip.

To go to the start or end of the current clip:

```
goto: clip: {"start", "end"}↵
```

To go to the start of the first clip or the end of the last clip:

```
goto: timeline: {"start", "end"}↵
```

To go to a specified timecode:

```
goto: timecode: {timecode}↵
```

To move forward or back a specified duration in timecode:

```
goto: timecode: {"+", "-"}{duration in timecode}↵
```

To specify between slot 1 and slot 2:

```
goto: slot id: {Slot ID}↵
```

Note that only one parameter/value pair is allowed for each goto command.

Enumerating supported commands and parameters

The "commands" command returns the supported commands:

```
commands↵
```

The command list is returned in a computer readable XML format:

```
212 commands:
<commands>↵
  <command name="..."><parameter name="..."/>...</command>↵
  <command name="..."><parameter name="..."/>...</command>↵
  ...
</commands>↵
↵
```

Controlling asynchronous notifications

The "notify" command may be used to enable or disable asynchronous notifications from the server.

To enable or disable transport notifications:

```
notify: transport: {"true", "false"}↵
```

To enable or disable slot notifications:

```
notify: slot: {"true", "false"}↵
```

To enable or disable remote notifications:

```
notify: remote: {"true", "false"}↵
```

To enable or disable configuration notifications:

```
notify: configuration: {"true", "false"}↵
```

Multiple parameters may be specified. If no parameters are specified, the server returns the current state of all notifications:

```
209 notify:↵
transport: {"true", "false"}↵
slot: {"true", "false"}↵
remote: {"true", "false"}↵
configuration: {"true", "false"}↵
dropped frames: {"true", "false"}↵
display timecode: {"true", "false"}↵
timeline position: {"true", "false"}↵
playrange: {"true", "false"}↵
cache: {"true", "false"}↵
dynamic range: {"true", "false"}↵
slate: {"true", "false"}↵
clips: {"true", "false"}↵
disk: {"true", "false"}↵
↵
```

Retrieving device information

The "device info" command returns information about the connected deck device:

```
device info↵
```

The server will respond with:

```
204 device info:↵
protocol version: {Version}↵
model: {Model Name}↵
unique id: {unique alphanumeric identifier}↵
slot count: {number of storage slots}↵
software version: {software version}↵
↵
```


Retrieving slot information

The "slot info" command returns information about a slot. Without parameters, the command returns information for the currently selected slot:

```
slot info↵
```

If a slot id is specified, that slot will be queried:

```
slot info: slot id: {Slot ID}↵
```

The server will respond with slot specific information:

```
202 slot info:↵
slot id: {Slot ID}↵
status: {"empty", "mounting", "error", "mounted"}↵
volume name: {Volume name}↵
recording time: {recording time available in seconds}↵
video format: {disk's default video format}↵
blocked: {"true", "false"}↵
↵
```

Asynchronous slot information change notification is disabled by default and may be configured with the "notify" command. When enabled, changes in slot state will generate a "502 slot info:" asynchronous message with the same parameters as the "202 slot info:" message.

Retrieving clip information

The "disk list" command returns the information for each playable clip on a given disk. Without parameters, the command returns information for the current active disk:

```
disk list↵
```

If a slot id is specified, the disk in that slot will be queried:

```
disk list: slot id: {Slot ID}↵
```

The server responds with the list of all playable clips on the disk in the format of: Index, name, formats, and duration in timecode:

```
206 disk list:↵
slot id: {Slot ID}↵
{clip index}: {name} {file format} {video format} {Duration
timecode}↵
{clip index}: {name} {file format} {video format} {Duration
timecode}↵
...
↵
```

Note that the *clip index* starts from 1.

Retrieving clip count

The "clips count" command returns the number of clips on the current timeline:

```
clips count ↵
```

The server responds with the number of clips:

```
214 clips count: ↵
clip count: {Count}↵
```

Retrieving timeline information

The "clips get" command returns information for each available clip on the current timeline. Without parameters, the command returns information for all clips on timeline:

```
clips get↵
```

The server responds with a list of clip IDs, names and timecodes:

```
205 clips info:↵  
clip count: {Count}↵  
{Clip ID}: {Start timecode} {Duration timecode} {In timecode}  
{Out timecode} {Name}↵  
{Clip ID}: {Start timecode} {Duration timecode} {In timecode}  
{Out timecode} {Name}↵  
...  
↵
```

Retrieving transport information

The "transport info" command returns the state of the transport:

```
transport info ↵
```

The server responds with transport specific information:

```
208 transport info:  
status: {"preview", "stopped", "play", "forward", "rewind",  
"jog", "shuttle","record"}↵  
speed: {Play speed between -5000 and 5000 %}↵  
slot id: {Slot ID or "none"}↵  
clip id: {Clip ID or "none"}↵  
single clip: {"true", "false"}↵  
display timecode: {timecode}↵  
timecode: {timecode}↵  
video format: {Video format}↵  
loop: {"true", "false"}↵  
timeline: {n}↵  
input video format: {Video format}↵  
dynamic range: {"off", "Rec709", "Rec2020_SDR", "HLG",  
"ST2084_300", "ST2084_500", "ST2084_800", "ST2084_1000",  
"ST2084_2000", "ST2084_4000", "ST2048" or "none"}↵  
↵
```

The "timecode" value is the timecode within the current timeline for playback or the clip for record. The "display timecode" is the timecode displayed on the front of the deck. The two timecodes will differ in some deck modes.

Asynchronous transport information change notification is disabled by default and may be configured with the "notify" command. When enabled, changes in transport state will generate a "508 transport info:" asynchronous message with the same parameters as the "208 transport info:" message.

Video Formats

The following video formats are currently supported on HyperDeck Shuttle:

720p50, 720p5994, 720p60

1080p23976, 1080p24, 1080p25, 1080p2997, 1080p30, 1080p60

1080i50, 1080i5994, 1080i60

Video format support may vary between models and software releases.

File Formats

All HyperDeck models currently support the following file formats:

H.264High

H.264Medium

H.264Low

QuickTimeProResHQ

QuickTimeProRes

QuickTimeProResLT

QuickTimeProResProxy

QuickTimeDNxHD220x

DNxHD220x

QuickTimeDNxHD145

DNxHD145

QuickTimeDNxHD45

DNxHD45

Supported file formats may vary between models and software releases.

Querying and updating configuration information

The "configuration" command may be used to query the current configuration of the deck:

```
configuration↵
```

The server returns the configuration of the deck:

```
211 configuration:↵
audio input: {"embedded", "XLR", "RCA"}↵
audio mapping: {n}↵
video input: {"SDI", "HDMI", "component", "composite"}↵
file format: {format}↵
audio codec: {"PCM", "AAC"}↵
timecode input: {"external", "embedded", "preset", "clip"}↵
timecode output: {"clip", "timeline"}↵
timecode preference: {"default", "dropframe", "nondropframe"}↵
timecode preset: {timecode}↵
audio input channels: {n}↵
record trigger: {"none", "recordbit", "timecoderun"}↵
record prefix: {name}↵
append timestamp: {"true", "false"}↵
genlock input resync: {"true", "false"}↵
↵
```

One or more configuration parameters may be specified to change the configuration of the deck.

To change the current video input:

```
configuration: video input: {"SDI", "HDMI", "component"}↵
```

Valid video inputs may vary between models. To configure the current audio input:

```
configuration: audio input: {"embedded", "XLR", "RCA"}↵
```

Valid audio inputs may vary between models.

To configure the current file format:

```
configuration: file format: {File format}↵
```

Note that changes to the file format may require the deck to reset, which will cause the client connection to be closed. In such case, response code 213 will be returned (instead of 200) before the client connection is closed:

```
"213 deck rebooting"
```

Asynchronous configuration information change notification is disabled by default and may be configured with the "notify" command. When enabled, changes in configuration will generate a "511 configuration:" asynchronous message with the same parameters as the "211 configuration:" message.

Selecting active slot and video format

The "slot select" command instructs the deck to switch to a specified slot, or/and to select a specified output video format.

To switch to a specified slot:

```
slot select: slot id: {slot ID}↵
```

To select the output video format:

```
slot select: video format: {video format}↵
```

Either or all slot select parameters may be specified. Note that selecting video format will result in a rescan of the disk to reconstruct the timeline with all clips of the specified video format.

Clearing the current timeline

The "clips clear" command instructs the deck to empty the current timeline:

```
clips clear↵
```

The server responds with

```
200 ok↵
```

Adding a clip to the current timeline

The "clips add:" command instructs the deck to add a clip to the current timeline:

```
clips add: name: {clip name}↵
```

The server responds with

```
200 ok↵
```

or in case of error

```
lxx {error description}↵
```

Configuring the watchdog

The "watchdog" command instructs the deck to monitor the connected client and terminate the connection if the client is inactive for at least a specified period of time.

To configure the watchdog:

```
watchdog: period: {period in seconds}↵
```

To avoid disconnection, the client must send a command to the server at least every {period} seconds. Note that if the period is set to 0 or less than 0, connection monitoring will be disabled.

Hilfe

So erhalten Sie Hilfe

Am schnellsten erhalten Sie Hilfe über die Online-Support-Seiten auf der Blackmagic Design Website. Suchen Sie dort auch nach dem aktuellsten Support-Material für Ihren Blackmagic HyperDeck Rekorder.

Blackmagic Design Online Support Seiten

Die aktuellsten Versionen der Bedienungsanleitung, Produktsoftware und der Support-Hinweise finden Sie im Blackmagic Support Center unter www.blackmagicdesign.com/de/support.

Blackmagic Design Forum

Das Blackmagic Design Forum auf unserer Website ist eine praktische Ressource für weitere Informationen und kreative Ideen. Manchmal finden Sie dort schnellere Lösungen, da möglicherweise bereits hilfreiche Antworten auf ähnliche Fragen von anderen erfahrenen Anwendern und Blackmagic Design Mitarbeitern vorliegen. Das Forum finden Sie unter <http://forum.blackmagicdesign.com>.

Kontaktaufnahme mit Blackmagic Design Support

Wenn unser Support-Material oder das Forum Ihnen nicht wie gewünscht hilft, gehen Sie bitte auf unsere Support-Seite und schicken Sie uns Ihre Anfrage über „Senden Sie uns eine E-Mail“. Oder klicken Sie auf „Finden Sie Ihr lokales Support-Team“ und rufen Sie Ihre nächstgelegene Blackmagic Design Support Stelle an.

Überprüfen der aktuell installierten Softwareversion

Um herauszufinden, welche Version der Blackmagic HyperDeck Software momentan auf Ihrem Computer installiert ist, öffnen Sie das Fenster „About Blackmagic HyperDeck Setup“.

- Öffnen Sie Blackmagic HyperDeck Setup auf macOS über den Ordner „Programme“. Wählen Sie im Anwendungsmenü „About Blackmagic HyperDeck Setup“, um die Versionsnummer anzuzeigen.
- Öffnen Sie Blackmagic HyperDeck Setup auf Windows über das Startmenü oder den Startbildschirm. Klicken Sie auf das Menü „Help“ (Hilfe) und wählen Sie „About Blackmagic HyperDeck Setup“ aus, um die Versionsnummer anzuzeigen.

So erhalten Sie die aktuellsten Software-Updates

Prüfen Sie zunächst die Versionierung der auf Ihrem Computer installierten Blackmagic HyperDeck Setup Software. Sehen Sie dann im Blackmagic Design Support Center unter www.blackmagicdesign.com/de/support nach neueren Aktualisierungen. In der Regel empfiehlt es sich, die neuesten Updates zu laden. Vermeiden Sie Software-Updates jedoch mitten in einem wichtigen Projekt.

Gesetzliche Vorschriften

Entsorgung von elektrischen und elektronischen Geräten innerhalb der Europäischen Union.



Das auf dem Produkt abgebildete Symbol weist darauf hin, dass dieses Gerät nicht zusammen mit anderen Abfallstoffen entsorgt werden darf. Altgeräte müssen daher zur Wiederverwertung an eine dafür vorgesehene Sammelstelle übergeben werden. Mülltrennung und Wiederverwertung von Altgeräten tragen zum nachhaltigen Umgang mit natürlichen Ressourcen bei. Gleichzeitig wird sichergestellt, dass die Wiederverwertung nicht zulasten der menschlichen Gesundheit und der Umwelt geht. Weitere Informationen zur Entsorgung von Altgeräten sowie zu den Standorten der zuständigen Sammelstellen erhalten Sie von Ihren örtlichen Müllentsorgungsbetrieben sowie vom Händler, bei dem Sie dieses Produkt erworben haben.



Dieses Gerät wurde geprüft und entspricht den Grenzwerten für Digitalgeräte der Klasse A gemäß Abschnitt 15 der FCC-Bestimmungen für Funkstörung. Diese Grenzwerte dienen dem angemessenen Schutz gegen schädliche Störungen bei Betrieb des Geräts in einer gewerblichen Umgebung. Geräte dieser Art erzeugen und verwenden Hochfrequenzen und können diese auch ausstrahlen. Bei Nichteinhaltung der Installations- und Gebrauchsvorschriften können sie zu Störungen beim Rundfunkempfang führen. Der Betrieb solcher Geräte im Wohnbereich führt mit großer Wahrscheinlichkeit zu Funkstörungen. In diesem Fall kann vom Betreiber verlangt werden, selbst für die Beseitigung solcher Störungen aufzukommen.

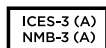
Der Betrieb unterliegt den folgenden zwei Bedingungen:

- 1 Dieses Gerät darf keine schädigenden Störungen hervorrufen.
- 2 Das Gerät muss unanfällig gegenüber beliebigen empfangenen Störungen sein, einschließlich solcher, die einen unerwünschten Betrieb verursachen.



R-R-BMD-20211410001

ISED-Zertifizierung für den kanadischen Markt



Dieses Gerät erfüllt die kanadischen Vorschriften für digitale Geräte der Klasse A.

Jedwede an diesem Produkt vorgenommene Änderung oder unsachgemäße Verwendung kann die Konformitätserklärung zum Erlöschen bringen.

Verbindungen zu HDMI-Schnittstellen müssen über abgeschirmte HDMI-Kabel hergestellt werden.

Die Ausstattung wurde unter Einhaltung der beabsichtigten Nutzung in einer gewerblichen Umgebung getestet. Bei Verwendung in häuslichen Umgebungen können Funkstörungen auftreten.

Sicherheitshinweise

Das Produkt eignet sich für den Einsatz in tropischen Gebieten mit einer Umgebungstemperatur von bis zu 40 °C.

Sorgen Sie rund um das Gerät für eine angemessene und unbehinderte Luftzufuhr.

Im Inneren des Produkts befinden sich keine durch den Anwender zu wartenden Teile. Wenden Sie sich für die Wartung an ein Blackmagic Design Service-Center in Ihrer Nähe.



Nicht in Höhen von über 2000 m über dem Meeresspiegel einsetzen

California Proposition 65

Plastikteile dieses Produkts können Spuren von polybromierten Biphenylen enthalten. Im US-amerikanischen Bundesstaat Kalifornien werden diese Chemikalien mit Krebs, Geburtsfehlern und anderen Schäden der Fortpflanzungsfähigkeit in Verbindung gebracht.

Weitere Informationen finden Sie unter www.P65Warnings.ca.gov.

Garantie

12 Monate eingeschränkte Garantie

Für dieses Produkt gewährt die Firma Blackmagic Design eine Garantie auf Material- und Verarbeitungsfehler von 12 Monaten ab Kaufdatum. Sollte sich ein Produkt innerhalb dieser Garantiezeit als fehlerhaft erweisen, wird die Firma Blackmagic Design nach ihrem Ermessen das defekte Produkt entweder ohne Kostenerhebung für Teile und Arbeitszeit reparieren oder Ihnen das defekte Produkt ersetzen.

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Abril 2022

Manual de instalación y funcionamiento

Blackmagicdesign 

HyperDeck **Shuttle HD**



HyperDeck Shuttle HD



Bienvenido

Gracias por haber adquirido este producto.

Cuando diseñamos los equipos HyperDeck originales, nuestro objetivo era facilitar la grabación y la reproducción de material audiovisual en unidades de estado sólido de gran velocidad. Ahora nos complace presentar el nuevo HyperDeck Shuttle HD.

Se trata de un modelo compacto, fácil de transportar y compatible con equipos informáticos. Este dispositivo presenta un mando de búsqueda cómodo y los clásicos controles de reproducción que permiten manejarlo con una sola mano y convierten a este equipo en el complemento ideal para realizar producciones en directo con mezcladores ATEM Mini. El grabador también puede cumplir la función de teleprónter.

Asimismo, es capaz de registrar contenidos en tarjetas SD o unidades de almacenamiento USB externas en formato ProRes, DNxHD o H.264, permitiendo así grabar y reproducir a una velocidad inigualable.

En nuestra página de soporte técnico, encontrarás la versión más reciente de este manual, así como actualizaciones para este producto. Recuerda actualizarlo con frecuencia, a fin de asegurarte de que cuentas con las últimas prestaciones disponibles. Por último, no olvides registrarte al descargar las actualizaciones para que podamos mantenerte informado sobre nuevos lanzamientos. Trabajamos constantemente para desarrollar herramientas innovadoras y superarnos, de modo que nos encantaría conocer tu opinión.

Grant Petty

Director ejecutivo de Blackmagic Design

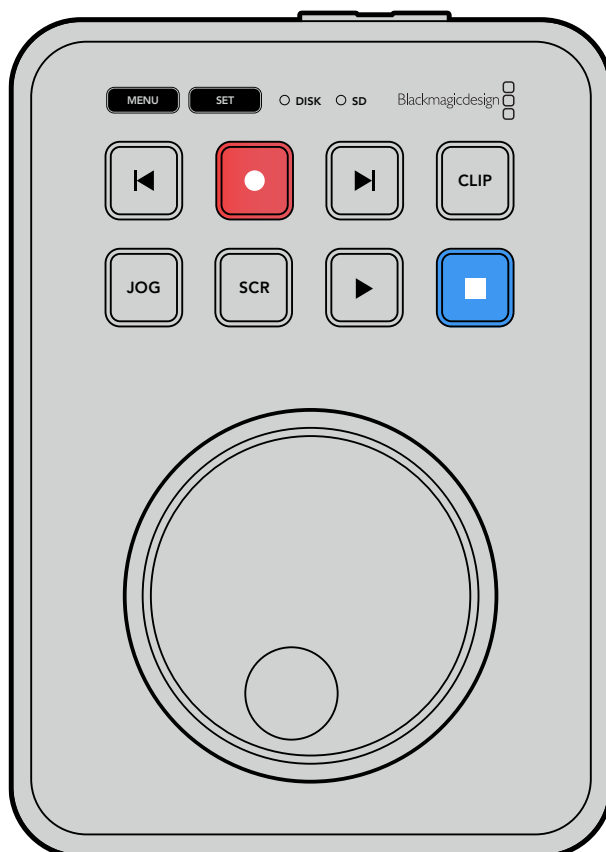
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Primeros pasos

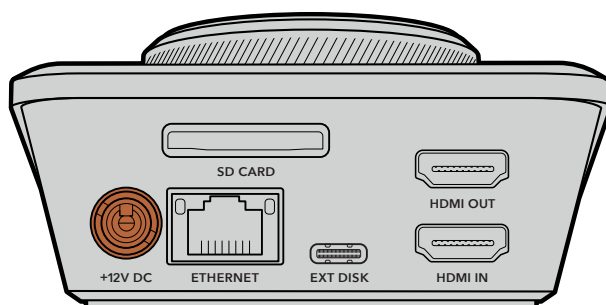
Para comenzar a utilizar el grabador, basta con enchufarlo a una red de suministro eléctrico, conectar la fuente HDMI, emplear una tarjeta SD o una unidad de almacenamiento externa e iniciar la grabación.

Este apartado del manual presenta información básica para utilizar el modelo HyperDeck Shuttle HD.



Conexión del cable de alimentación

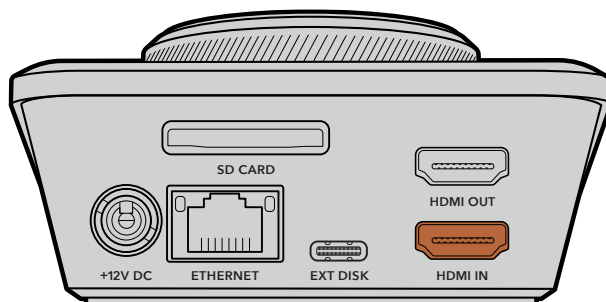
Para conectar el equipo, enchufe el transformador proporcionado a la entrada correspondiente en el panel trasero. Ajuste el aro de seguridad para sujetar el cable y evitar que se desconecte accidentalmente.



Conecte el transformador a la entrada para fuentes de alimentación.

Conexión de fuentes audiovisuales

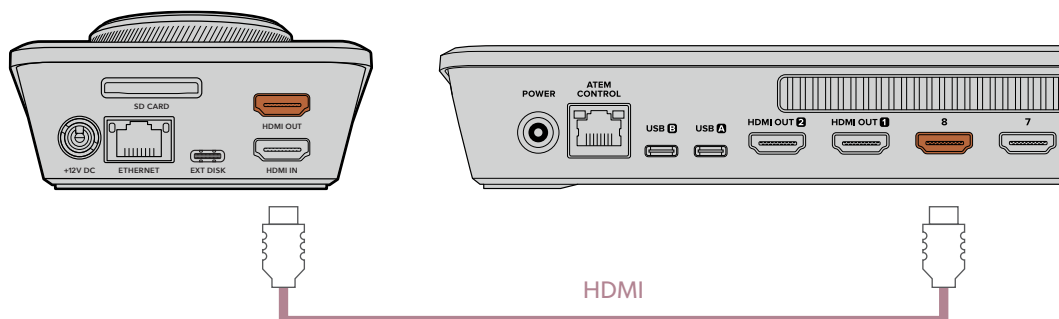
Para conectar una fuente audiovisual, enchufe el cable HDMI a la entrada correspondiente del panel trasero.



Conecte el equipo de destino a la salida HDMI, por ejemplo, un mezclador ATEM Mini o un televisor con conexión HDMI.

La salida HDMI también permite conectar un monitor para acceder al menú de ajustes del grabador, que aparecerá superpuesto a la imagen en la pantalla. Consulte el apartado *Modificar ajustes* para obtener más información sobre las opciones de configuración disponibles.

SUGERENCIA: Si la señal audiovisual no aparece en la pantalla conectada, es posible que esté seleccionado el modo de reproducción. Presione el botón de grabación para habilitar esta función.



Conecte el equipo de destino, tal como un televisor o un mezclador ATEM Mini, a la salida HDMI.

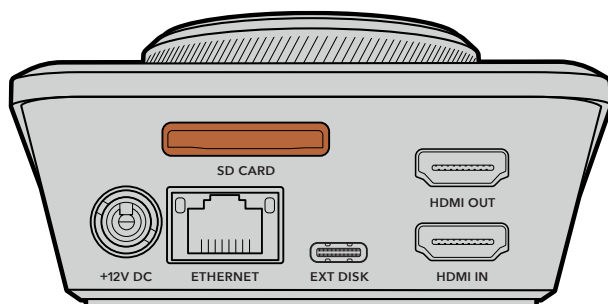
Conexión de soportes de grabación

Todos los equipos HyperDeck Shuttle HD pueden comenzar a grabar contenidos en forma inmediata sin necesidad de modificar ningún tipo de ajuste o configuración. Para ello, solo es necesario contar con una tarjeta SD o un soporte de almacenamiento externo formateado.

Los soportes de grabación pueden formatearse fácilmente mediante las opciones del menú. Cabe destacar que, además, este procedimiento puede realizarse en cualquier equipo informático. Consulte el apartado *Formatear soportes de almacenamiento* para obtener información sobre las unidades más adecuadas. Además, se proporciona una lista de los modelos recomendados.

Para insertar una tarjeta SD:

- 1 Sostenga la tarjeta SD con los contactos dorados orientados hacia arriba, de forma que coincida con la respectiva ranura en el dispositivo. Insértela y empújela con cuidado hasta que calce en su lugar.



- 2 A continuación, el dispositivo verificará la tarjeta. El indicador correspondiente se encenderá de color verde mientras este procedimiento se lleva a cabo. Una vez concluida la comprobación, la luz indicadora se apagará.



Esto es todo lo que se necesita saber para comenzar a grabar y reproducir contenidos con el modelo HyperDeck Shuttle HD.

Continúe leyendo este manual para obtener más información sobre cómo grabar y reproducir secuencias de imágenes y modificar los ajustes de la unidad.

Grabación

Después de confirmar que la fuente aparece en el monitor conectado, podrá comenzar a grabar inmediatamente.

Presione el botón de grabación para comenzar a grabar. Si se utiliza una tarjeta SD, el indicador sobre la ranura se encenderá de rojo junto con los botones de grabación y reproducción. De igual modo, al usar una unidad de almacenamiento externa, el indicador correspondiente se encenderá de rojo.

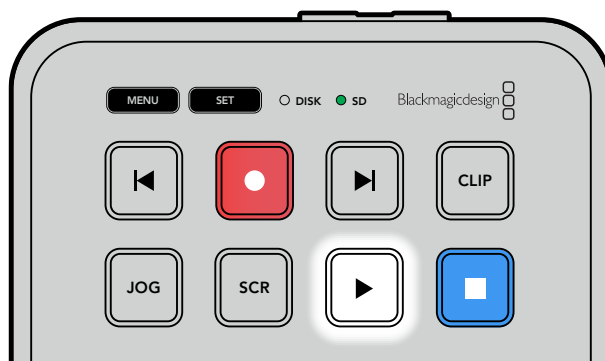


Para finalizar la grabación, presione el botón de detención.

Reproducción

Presione el botón de reproducción para ver la secuencia. Durante este proceso, el botón de reproducción se encenderá, y el indicador del soporte de grabación o de la tarjeta SD se iluminará de verde.

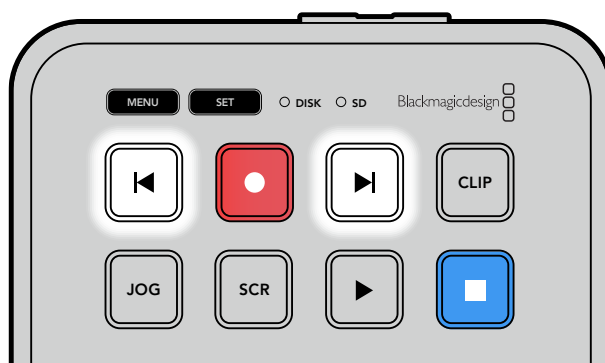
En caso de haber grabado más de un clip, utilice los botones de avance y retroceso para seleccionar el material deseado.



Botones de avance y retroceso

Presione el botón de retroceso una vez para regresar al inicio del clip. Vuelva a presionar el botón para regresar a los clips anteriores.

Presione el botón de avance para ver los clips posteriores.



Utilice los botones de avance o retroceso para ir al comienzo de cada secuencia.

SUGERENCIA: Para reproducir una secuencia en el dispositivo, es necesario configurar el códec mediante el menú en pantalla, a fin de que coincida con el empleado durante la grabación. Consulte el apartado *Modificar ajustes* para obtener más información al respecto.

Repetición de una misma secuencia

Al presionar el botón de reproducción nuevamente mientras la secuencia está en curso, el dispositivo reproducirá todos los clips disponibles continuamente hasta que se presione el botón de detención.

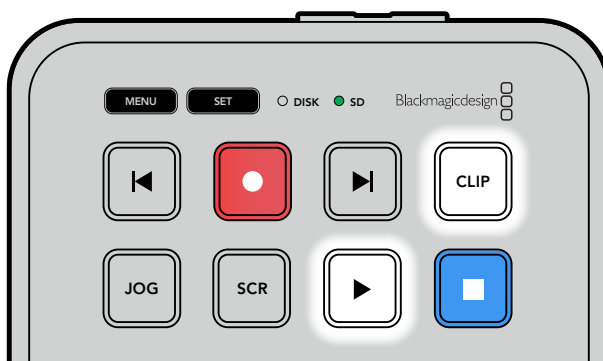
Si se desea repetir un único clip en forma constante, seleccione el modo de clip y presione el botón de reproducción una vez para dar inicio, y luego otra vez para activar la repetición.

Repetir todos los clips	Para repetir todos los clips, vuelva a presionar el botón de reproducción mientras esta se encuentra en curso.
Repetir el clip en curso	Una vez en el modo de clip, presione el botón de reproducción por segunda vez para repetir el clip actualmente en curso.

En el siguiente apartado, se describe cómo utilizar este modo.

Modo de clip

Al habilitar este modo, la reproducción estará limitada a un único clip. Por ejemplo, es posible avanzar, retroceder o saltar una secuencia, sabiendo que, al presionar el botón de reproducción, esta se detendrá al finalizar el clip.



Una vez en el modo de clip, presione el botón de reproducción por segunda vez para repetir la secuencia en curso.

Mando de búsqueda

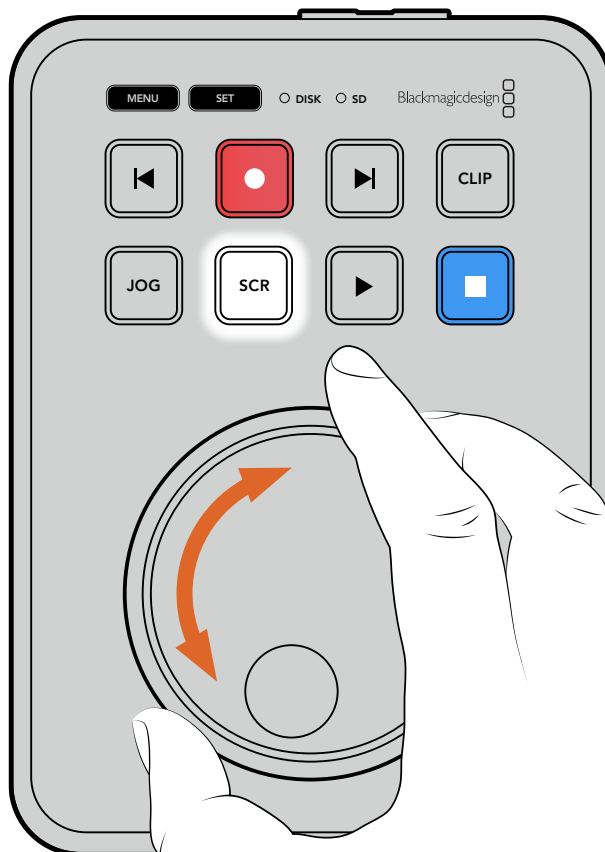
El mando de búsqueda permite encontrar rápidamente una parte específica de un clip y reproducirla o ver las imágenes fotograma por fotograma. Esto reviste gran importancia cuando es necesario encontrar una sección particular de la secuencia mirando las imágenes mientras gira el mando. También es útil cuando es preciso colocar el cabezal de reproducción en un punto específico del clip para emitirlo al aire durante una producción en directo.

Los modos de búsqueda disponibles son los siguientes:

	Desplazamiento	El modo de desplazamiento permite reproducir la secuencia fotograma por fotograma para lograr una mayor precisión.
	Avance y retroceso rápido	Este modo permite avanzar o retroceder rápidamente el material grabado. Esta función está ligada al mando de búsqueda, por lo que brinda pleno control sobre el punto en el que se desea reanudar la reproducción.
	Avance y retroceso	Presione los botones JOG y SCROLL simultáneamente para activar el modo de avance y retroceso. Posteriormente, podrá retroceder o avanzar a velocidad rápida por las secuencias con el mando de búsqueda. Al girarlo, la velocidad de avance irá aumentando hasta alcanzar el valor máximo de x50. Para detenerse, gire el mando a la posición inicial. Para detenerse en un punto específico durante la búsqueda, presione el botón de detención. Por el contrario, presione el botón de reproducción para reanudar la secuencia a partir de la posición actual. Cabe destacar que es posible reducir la velocidad máxima de avance y retroceso desde el menú de Ajustes. Consulte el apartado <i>Ajustes</i> para obtener más información al respecto.



Presione los botones **JOG** o **SCR** para acceder a los distintos modos de búsqueda.

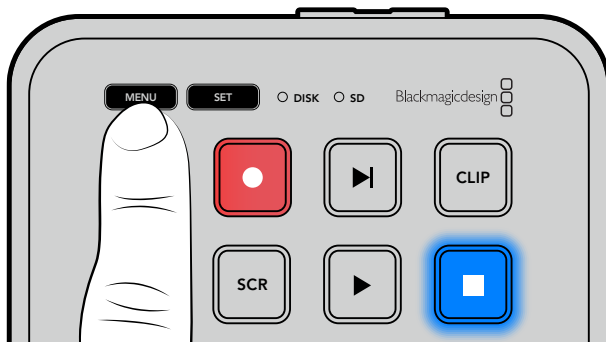


Una vez seleccionado el modo de búsqueda, gire el mando.

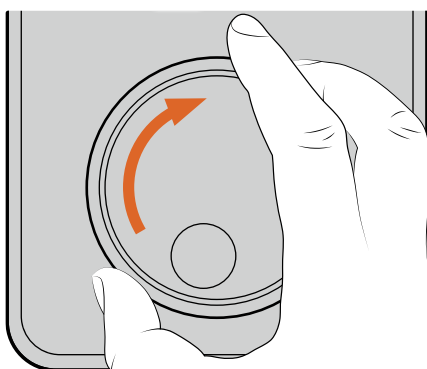
SUGERENCIA: Para reproducir la secuencia de manera habitual, presione el botón de reproducción o detención.

Modificar ajustes

Al presionar el botón **MENU**, se desplegarán los ajustes disponibles como una ventana flotante en la esquina inferior izquierda del monitor HDMI conectado.

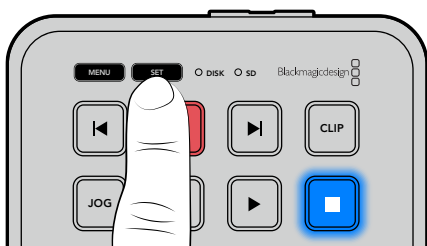


Presione el botón **MENU** para acceder a los ajustes disponibles.



Grabación	
Fuente	HDMI
Códec	H.264 (alta)
Inicio automático	No

Utilice el mando de búsqueda para acceder al menú deseado o a las opciones de configuración.



Grabación	
Fuente	HDMI
Códec	H.264 (alta)
Inicio automático	No

Presione el botón **SET** a fin de seleccionar el menú deseado o realizar cambios.

Para realizar cambios en los ajustes, utilice el mando de búsqueda o los botones de avance y retroceso. Presione **SET** para confirmar.

Presione el botón **MENU** para salir y regresar a la pantalla principal.

SUGERENCIA: Es posible ubicar el menú en cualquiera de las cuatro esquinas de la pantalla a través de las opciones de ajustes. Una vez finalizada la configuración, se recomienda salir del menú para asegurarse de transmitir una señal limpia al conectar la salida HDMI a un mezclador, tal como un equipo ATEM Mini Extreme.

Ajustes

Los ajustes están divididos en cinco categorías: grabación, monitor, audio, almacenamiento y configuración. Al acceder a cada uno de estos menús, podrá modificar los ajustes pertinentes a través del panel de control del grabador. Algunos ajustes, como el prefijo del nombre de archivo, no se pueden modificar desde este menú y, por lo tanto, aparecerán en gris. No obstante, en este caso, es posible cambiarlos mediante el programa utilitario.

Menú Grabación

Grabación	
Fuente	HDMI
Códec	H.264 (alta)
Inicio automático	No

Fuente

Muestra la señal recibida a través de la entrada HDMI del grabador.

Códec

El modelo HyperDeck Shuttle HD permite grabar con compresión en formato H.264, ProRes y DNxHD. Para acceder a la función de teleprónter, seleccione dicha opción.

Inicio automático

Hay dos modos disponibles para iniciar la grabación automáticamente: **Cámara** y **CT** (código de tiempo).

Algunas cámaras, tales como el modelo Blackmagic Pocket Cinema Camera 4K, transmiten una señal a través de la conexión HDMI para comenzar o detener la grabación en equipos externos. Mediante la opción **Cámara**, el dispositivo comienza o detiene la grabación cuando se presiona el botón correspondiente en la cámara.

Por su parte, la opción **CT** permite que el dispositivo inicie la grabación al recibir un código de tiempo válido a través de la entrada HDMI. Cuando este se detiene, la grabación finaliza. Seleccione la opción **No** para desactivar esta función.

NOTA: Al grabar imágenes captadas por cámaras HDMI, compruebe que la señal no contenga ningún tipo de información superpuesta, ya que, de lo contrario, esta quedará registrada en el material grabado.

Menú Monitor

Monitor	
Teleprónter	
Tamaño	450%
Interlineado	120%
Margen	10 %
Invertir horizontalmente	No
Invertir verticalmente	No

Teleprónter

En el menú **Monitor** podrá seleccionar los ajustes adecuados para utilizar el grabador a modo de teleprónter.

Tamaño de texto

Para modificar el tamaño del texto, seleccione la opción correspondiente y presione **SET**. Para aumentarlo o disminuirlo, gire el mando hacia la derecha o la izquierda, respectivamente.

Interlineado

Gire el mando hacia la derecha o la izquierda para modificar el interlineado.

Margen

Es posible ajustar los márgenes del teleprónter.

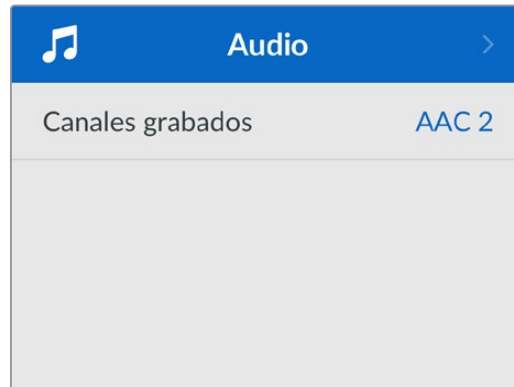
Invertir

Si el monitor empleado a modo de teleprónter está configurado para reflejar la imagen en un interferómetro, por ejemplo, delante de una cámara o un teleprónter de podio, será necesario invertir el texto de manera que el presentador pueda leerlo. Existen dos modos disponibles.

Invertir horizontalmente – Utilice este modo cuando la parte inferior del monitor conectado esté montada lo más cerca posible del pie del interferómetro.

Invertir verticalmente – Utilice este modo cuando la parte inferior del monitor conectado esté montada lejos del pie del interferómetro.

Menú Audio



Canales grabados

El modelo HyperDeck Shuttle HD permite grabar hasta ocho canales de audio PCM simultáneamente. Para ello, seleccione la cantidad deseada en la lista desplegable de este menú.

Al usar el códec H.264, también es posible elegir dos canales de audio AAC, a fin de compartir la grabación directamente por YouTube.

Menú Almacenamiento



Los soportes de almacenamiento conectados aparecerán en el menú de ajustes correspondiente. **Unidad 1** refleja la presencia de una tarjeta SD, mientras que **Unidad 2** se refiere a una unidad USB externa conectada. En caso de haber varias conectadas mediante un dispositivo como el modelo Blackmagic MultiDock 10G, se indica la unidad activa.

Vertido USB

Al activar esta opción, cuando se alcance el límite de capacidad, el dispositivo continuará grabando en otra unidad de almacenamiento externa que se encuentre conectada.

Formatear soportes de almacenamiento

Las tarjetas SD y los discos externos conectados a través del puerto en el panel trasero del grabador pueden formatearse directamente en la unidad o mediante equipos Mac y Windows.

Preparación de unidades de almacenamiento:

- 1 Gire el mando de búsqueda para seleccionar el menú **Formatear unidad**.
- 2 Elija la unidad deseada y presione el botón **SET**.
- 3 Escoja un formato y presione el botón **SET**.

- 4 Aparecerá un mensaje de confirmación con el nombre de la unidad y el formato seleccionado.
- 5 Una vez completado el procedimiento, seleccione **Aceptar**.

El formato HFS+ (también conocido como Mac OS X Extended) es el más recomendado, ya que permite registrar la transferencia de los datos a medida que esta se lleva a cabo. De este modo, es más probable que la información pueda recuperarse en caso de un mal funcionamiento del soporte de grabación. Por su parte, el formato exFAT puede emplearse en sistemas operativos macOS y Windows sin necesidad de adquirir programas adicionales, pero no brinda la posibilidad de registrar la transferencia de datos.

Consulte el apartado correspondiente para obtener más información al respecto.

Menú Ajustes

Aquí encontrará diversas opciones y podrá seleccionar el idioma de la interfaz, el formato predeterminado, la configuración de red y las opciones del código de tiempo.

Ajustes	
Nombre	HyperDeck Shuttle HD
Idioma	Español
Fecha	16 may 2022
Hora	14:32
Zona horaria	UTC±11:00
Software	8.1
Cámara	A
Formato	1080p30
Velocidad máxima	x50

Nombre

Al contar con varias unidades HyperDeck Shuttle HD en una misma red, es posible asignarles distintos nombres para diferenciarlas mediante el programa Blackmagic HyperDeck Setup o el protocolo de Ethernet para estos grabadores, a través de una terminal. El nombre asignado aparecerá en el menú de ajustes.

Idioma

La interfaz está disponible en 13 idiomas: español, alemán, chino, coreano, francés, inglés, italiano, japonés, polaco, portugués, ruso, turco y ucraniano.

Para determinar el idioma:

- 1 Seleccione el menú **Ajustes** y presione **SET**.
- 2 Gire el mando de búsqueda para seleccionar la opción **Idioma** y presione **SET**.

- 3 Gire el mando de búsqueda para seleccionar el idioma y presione **SET**. A continuación, la pantalla mostrará nuevamente el menú **Ajustes**.

Fecha

Para ajustar la fecha, seleccione la opción **Fecha** y presione **SET**. Gire el mando de búsqueda para modificar el día, el mes y el año. Estos datos se usarán para la marca de tiempo que se agrega como sufijo al nombre de los archivos.

Hora

Para ajustar la hora, seleccione la opción **Hora** y presione **SET**. Gire el mando de búsqueda para modificar la hora y los minutos. Nótese que estos dispositivos utilizan el formato de 24 horas.

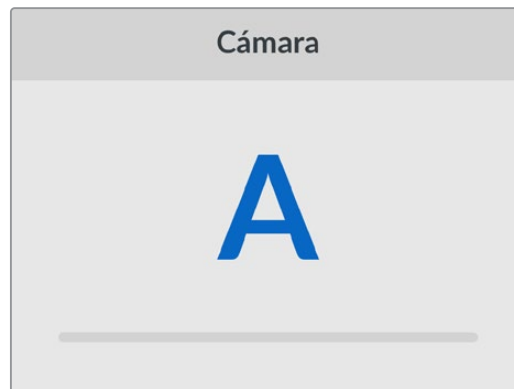
Software

Esta opción muestra la versión del sistema operativo instalado en el dispositivo.

Cámara

Este ajuste es útil al emplear el dispositivo para grabar imágenes aisladas provenientes de distintas cámaras y editarlas conjuntamente en DaVinci Resolve.

La letra correspondiente a cada unidad aparecerá en los metadatos de los archivos, permitiendo así que el programa identifique los ángulos correctamente al utilizar la bandeja de sincronización.



Asigne una letra o un número del 1 al 9 a la cámara.

Formato predeterminado

En ocasiones, el grabador no detecta automáticamente el formato que se desea utilizar, por lo que esta función permite seleccionar el formato que se empleará la mayor parte del tiempo.

Por ejemplo, si se cuenta con un modelo HyperDeck Shuttle HD sin un equipo conectado a la entrada y se inserta un disco con archivos en dos formatos distintos, ¿qué formato debe reproducir el grabador? El formato predeterminado permite que el dispositivo conozca las preferencias del usuario.

Asimismo, esta opción es útil cuando se enciende por primera vez el grabador y no hay otros equipos conectados o un disco insertado. En este caso, el dispositivo no reconoce cual es el formato adecuado para la transmisión de la señal, por lo que esta función sirve de guía.

Cabe destacar que esta función no cancela otros ajustes. Si se cuenta con un soporte de almacenamiento que contiene archivos en un único formato y se presiona el botón de reproducción, el grabador los reproducirá, indistintamente del formato predeterminado.

Al grabar, sucede algo similar. Cuando se presiona el botón de grabación, el dispositivo registrará el contenido en el formato del equipo conectado a él. Cabe destacar que, una vez finalizada la grabación, el dispositivo reproducirá las imágenes con el mismo formato de almacenamiento, independientemente de si hay otros archivos en el soporte donde se han guardado. En otras

palabras, se reproducirá el material con el mismo formato que el de grabación. Solo si se retira y se vuelve a introducir el soporte de almacenamiento, el grabador empleará el formato predeterminado.

El formato predeterminado es únicamente una guía para el grabador, a fin de facilitar su automatización ante la ausencia de pautas específicas, y no anula otros ajustes.

Velocidad de obturación

La velocidad de obturación máxima en este dispositivo es de x50. Esta se puede disminuir seleccionando otra de las opciones disponibles.

Ajustes

En esta sección es posible modificar la ubicación y la apariencia del menú que puede verse en el monitor conectado a la salida HDMI.

Menú	
Apariencia	Claro
Opacidad	100 %
Posición	Inferior izquierda

Apariencia

Es posible elegir entre una interfaz clara u oscura. La primera ofrece un mayor contraste si las imágenes son oscuras o cuando se está utilizando el modo de teleprónter.

Menú	
Apariencia	Claro
Opacidad	100 %
Posición	Inferior izquierda

Menú	
Apariencia	Oscuro
Opacidad	100 %
Posición	Inferior izquierda

Opacidad

Permite reducir la opacidad del menú superpuesto a la imagen en el monitor de 100 % (valor predeterminado) a 20 %.

Posición

Por defecto, el menú se muestra en la esquina inferior izquierda de la pantalla. Para mover el menú a otro sitio, seleccione **Posición** y presione el botón **SET**. Ahora podrá elegir cualquiera de las cuatro esquinas.

Ajustes de red

Red	
Protocolo	IP estática
Dirección IP	192.168.24.100
Subred	255.255.255.0
Puerta de enlace	192.168.24.1

Protocolo

Los grabadores HyperDeck utilizan el protocolo DHCP de forma predeterminada, por lo cual, al conectarlos, el servidor de la red les asignará una dirección IP automáticamente y no será necesario configurar otros ajustes. Para introducir una dirección particular, seleccione **Protocolo**, presione el botón **SET**, elija la opción **IP estática** y oprima **SET** nuevamente.

Dirección IP, máscara de subred, puerta de enlace y DNS primario y secundario.

Al seleccionar la opción **IP estática**, es posible introducir los datos de la red.

Para cambiar la dirección IP:

- 1 Gire el mando de búsqueda para seleccionar la opción **Dirección IP** y presione el botón **SET** en el panel frontal del dispositivo.
- 2 Gire el mando de búsqueda para ajustar cada valor y presione el botón **SET** para confirmar antes de continuar con el siguiente.
- 3 Presione **SET** para confirmar los cambios.

Una vez introducida la dirección IP, siga los mismos pasos para configurar la máscara de subred y la puerta de enlace. Al finalizar, presione el botón **MENU** para salir y regresar a la pantalla principal.

Ajustes del código de tiempo

Es posible seleccionar el tipo de código de tiempo que el dispositivo recibe y transmite, por ejemplo, el de la fuente, la hora real o el que se determine manualmente.

Código de tiempo	
Origen	Señal
Omitir fotogramas	Predeterminado
Valor	00:00:00:00
Mostrar	Línea de tiempo

Fuente

Hay cuatro opciones de código de tiempo disponibles al grabar.

Señal	Al seleccionar esta opción, se utiliza el código de tiempo de la señal HDMI con los metadatos SMPTE RP 188. Esto permite mantener la sincronización entre la fuente HDMI y el material grabado con el dispositivo.
Interno	Seleccione esta opción para grabar el código de tiempo (hora del día) generado internamente.
Continuo	Al seleccionar esta opción, la grabación de cada secuencia se inicia un fotograma después de la anterior. Por ejemplo, si el primer clip finaliza en 10:28:30:10, el siguiente comenzará en 10:28:30:11.
Predeterminado	Seleccione esta opción a fin de indicar un código de tiempo particular para la grabación.

Tipo

Seleccione cualquiera de los modos disponibles en esta opción para fuentes NTSC con una frecuencia de imagen de 29.97 o 59.94 f/s. Si la fuente es desconocida, elija la opción **Predeterminado**. Esto permitirá que se mantenga el formato. Si no se detecta un código de tiempo válido, la opción seleccionada por defecto será **Omitir fotogramas**.

Predeterminado

Es posible indicar un código de tiempo particular presionando el botón **SET** y girando el mando de búsqueda para introducir el valor inicial. Para ello, seleccione la opción **Predeterminado** en el menú **Fuente**.

Salida

Seleccione las opciones para las señales transmitidas.

Línea de tiempo	Seleccione esta opción a fin de ver un código de tiempo continuo para todos los clips grabados.
Clip	Seleccione esta opción para ver el código de tiempo de cada clip.

Archivos

Archivos	
Prefijo	HyperDeck
Sufijo con fecha	No

Prefijo

Al configurar el dispositivo por primera vez, este grabará las imágenes en una tarjeta SD o un disco USB siguiendo la nomenclatura convencional para los nombres de archivo.

HyperDeck_0001

HyperDeck_0001

Prefijo

HyperDeck_**0001**

Número de clip

Es posible modificar el nombre del archivo a través del programa utilitario. Consulte el apartado correspondiente para obtener más información al respecto.

Sufijo con fecha

Por defecto, la opción de añadir el código de tiempo al nombre del archivo se encuentra desactivada. Para añadir la fecha y la hora al nombre del archivo grabado, active la opción **Sufijo con fecha**.

HyperDeck_2201061438_0001	
HyperDeck_2201061438_0001	Prefijo
HyperDeck_ 22 01061438_0001	Año
HyperDeck_ 22 01061438_0001	Mes
HyperDeck_2201 06 1438_0001	Día
HyperDeck_220106 14 38_0001	Hora
HyperDeck_22010614 38 _0001	Minuto
HyperDeck_2201061438_ 0001	Número de clip

Ajustes de control remoto

Aquí podrá establecer las opciones de configuración para controlar el grabador a distancia mediante otros equipos, por ejemplo, un mezclador ATEM Mini Extreme.

Control remoto	
Control remoto	No

Control remoto

Seleccione la opción **Control remoto** para activar el control a distancia mediante una conexión a una red Ethernet. Desactive esta opción para controlar el grabador de manera local.

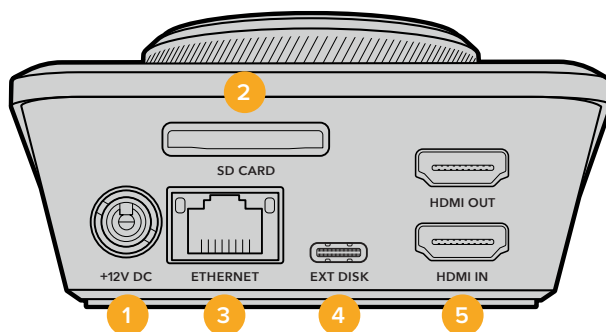
Restablecer ajustes originales

Restablecer	
Restablecer ajustes	

Restablecer ajustes

Seleccione esta opción para restablecer los ajustes de fábrica. Al presionar el botón **SET**, el dispositivo le solicitará que confirme la opción seleccionada.

Panel trasero



1 Alimentación

El grabador se conecta a la red de suministro eléctrico mediante un adaptador para corriente alterna. El cable de alimentación provisto incluye un conector de seguridad que impide que se desconecte accidentalmente, aunque también es posible utilizar cualquier cable de 12 V 36 W.

2 Tarjeta SD

Inserte una tarjeta SD en la ranura para grabar y reproducir contenidos.

3 Ethernet

El puerto Ethernet permite utilizar este tipo de redes para transferir archivos mediante un cliente FTP o controlar la unidad a distancia a través del protocolo para dispositivos HyperDeck. Consulte el apartado *Transferencia de archivos a través de una red* para obtener más información al respecto.

Es posible controlar los grabadores desde mezcladores y paneles ATEM si los dispositivos están conectados a una misma red.

4 Discos externos

Conecte un disco externo al puerto USB-C para grabar a una velocidad máxima de 5 Gb/s. Asimismo, es posible conectar un adaptador con varios puertos USB o un dispositivo Blackmagic MultiDock 10G, a fin de emplear varias unidades SSD.

5 HDMI

Este puerto permite conectar un televisor, un monitor o incluso un mezclador, tal como el modelo ATEM Mini Extreme. Al conectar una pantalla, también podrá ver el menú superpuesto.

Soportes de grabación

Tarjeta SD

Se recomienda utilizar tarjetas SD UHS-I a fin de grabar en HD. Estas ofrecen una velocidad de escritura de 220 MB/s y, por lo tanto, resultan adecuadas para almacenar secuencias en formato 2160p60.

Por el contrario, para grabar con mayor compresión o a una velocidad de bits más baja, es posible emplear tarjetas más lentas. Generalmente, los modelos más rápidos ofrecen un mejor rendimiento.

No obstante, es aconsejable consultar la versión más reciente de este manual en nuestra página de soporte técnico para obtener información actualizada al respecto.

¿Qué tarjetas SD son compatibles con el modelo HyperDeck Shuttle HD?

The following SD Cards are recommended for 1080p up to 60 fps.

Marca	Modelo	Capacidad
Angelbird	AV PRO SD UHS-II 300 MB/s V90 SDXC	256 GB
Angelbird	AV PRO SD UHS-II 260 MB/s V60 SDXC	128 GB
Angelbird	AV PRO SD UHS-II 260 MB/s V60 SDXC	64 GB
SanDisk	Extreme Pro UHS-I 95 MB/s SDXC	64 GB
Wise	SD2-64U3 UHS-II 285 MB/s SDXC	64 GB
Lexar	Professional 1000x UHS-II SDXC 150 MB/s	128 GB
Sony	Tough SF-G128T	128 GB
Kingston	CANVAS GO! Plus 170 MB/s V30	64 GB
Kingston	CANVAS GO! Plus 170 MB/s V30	128 GB
Kingston	CANVAS GO! Plus 170 MB/s V30	512 GB
ProGrade Digital	SDXC UHS-II V90 300 R	64 GB
ProGrade Digital	SDXC UHS-II V90 300 R	128 GB
Sony	Tough SF-G64T UHS-II SDXC	64 GB
Delkin Devices	Black UHS-II V90 SDXC	256 GB
Delkin Devices	Power UHS-II V90 SDXC	128 GB
Delkin Devices	Power UHS-II V90 SDXC	256 GB
Delkin Devices	Black UHS-II V90 SDXC	128 GB
Exascend	Essential SDXC UHS-II V90 R 300 MB/s	64 GB
Exascend	Essential SDXC UHS-II V90 R 300 MB/s	128 GB
Exascend	Catalyst SDXC UHS-II V90 R 300 MB/s	64 GB

Discos externos

Todos los modelos HyperDeck permiten guardar el material digitalizado directamente en discos USB-C. Estas unidades de gran capacidad son rápidas y brindan la posibilidad de grabar durante períodos prolongados. Además, facilitan la edición de los contenidos al instante, al conectarlas a un equipo informático.

También es posible emplear varias unidades simultáneamente para aumentar la capacidad de almacenamiento. A tales efectos, conecte un dispositivo Blackmagic MultiDock 10G al puerto EXT DISK en la parte trasera del grabador, mediante un cable USB-C.

¿Qué unidades USB-C son compatibles con el modelo HyperDeck Shuttle HD?

Se recomiendan las siguientes unidades para grabar en formato ProRes HQ a una resolución de 1080p y una frecuencia máxima de 60 f/s:

Marca	Modelo	Capacidad
Wise	PTS-256 Portable SSD 4K	256 GB
OWC	Envoy Pro Ex	240 GB
BUFFALO	SSD-PHE500U3-BA	500 GB

Se recomiendan las siguientes unidades para grabar en formato DNxHR HQX a una resolución de 1080p y una frecuencia máxima de 60 f/s:

Marca	Modelo	Capacidad
OWC	Envoy Pro Ex	240 GB

Se recomiendan las siguientes unidades para grabar en formato H.264 a una resolución de 1080p y una frecuencia máxima de 60 f/s:

Marca	Modelo	Capacidad
OWC	Envoy Pro Ex	240 GB

Formatear soportes de almacenamiento

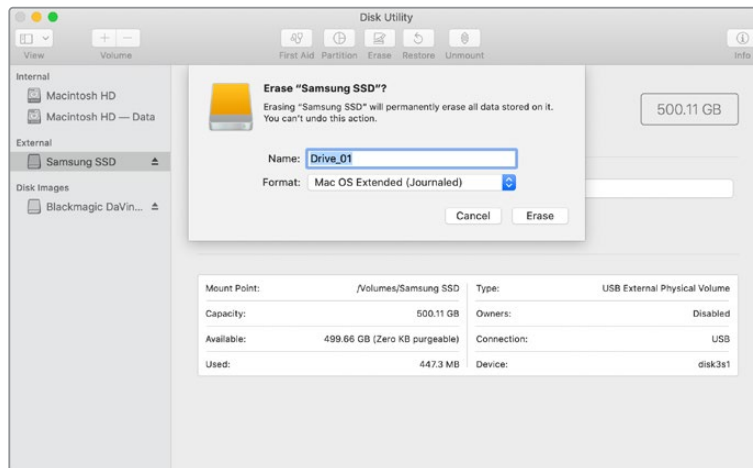
Preparación de soportes en equipos informáticos

Preparación de soportes en Mac

La aplicación **Utilidad de Discos**, incluida en el sistema operativo macOS, permite formatear unidades de almacenamiento mediante el sistema HFS+ o exFAT.

Asegúrese de hacer una copia de seguridad de cualquier información importante que contenga el soporte de grabación, puesto que, al iniciar este procedimiento, se borrarán todos los datos.

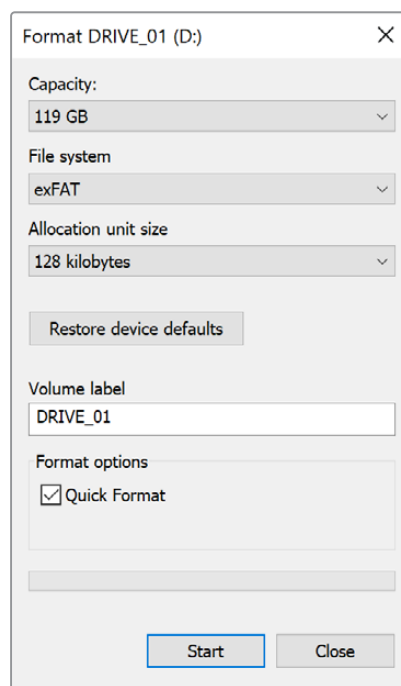
- 1 Conecte la unidad USB al equipo informático mediante un cable o una base externa e ignore cualquier mensaje relativo a su uso para copias de seguridad con Time Machine. En el caso de las tarjetas SD, utilice un lector externo para este tipo de soportes.
- 2 Haga clic en **Aplicaciones** y luego seleccione **Utilidades**. A continuación, ejecute la aplicación **Utilidad de Discos**.
- 3 Haga clic en el ícono de la unidad de almacenamiento y luego en la pestaña **Borrar**.
- 4 Seleccione la opción **Mac OS Extended (con registro)** o **exFAT**.
- 5 Ingrese un nombre para la unidad y luego haga clic en **Borrar**. Se dará formato a la unidad rápidamente y quedará lista para ser utilizada.



Preparación de soportes en Windows

El cuadro de diálogo **Formato** en el sistema operativo Windows permite formatear unidades de almacenamiento mediante el sistema exFAT. Asegúrese de hacer una copia de seguridad de cualquier información importante que contenga el soporte de grabación, puesto que, al iniciar este procedimiento, se borrarán todos los datos.

- 1 Conecte la unidad USB al equipo informático mediante un cable o un dispositivo externo. En el caso de las tarjetas SD, utilice un lector externo para este tipo de soportes.
- 2 Abra el menú **Inicio** o la **Pantalla de Inicio** y seleccione la opción **PC**. Haga clic en el soporte de almacenamiento con el botón derecho.
- 3 En el menú contextual, seleccione la opción **Formato**.
- 4 Elija la opción **exFAT** para el sistema de archivos y **128 kilobytes** para el tamaño de la unidad de asignación.
- 5 Ingrese un nombre de la unidad, marque la casilla **Formato rápido** y haga clic en **Iniciar**.
- 6 Se dará formato a la unidad rápidamente y quedará lista para ser utilizada.



Función Teleprónter

El grabador también puede emplearse a modo de teleprónter si se dispone de un archivo RTF. Cree un archivo de texto en TextEdit o WordPad en cualquiera de los 13 idiomas admitidos y guárdelo en formato de texto enriquecido. Al abrirlo con el modelo HyperDeck Shuttle HD, podrá adaptar el tamaño y el interlineado del texto.

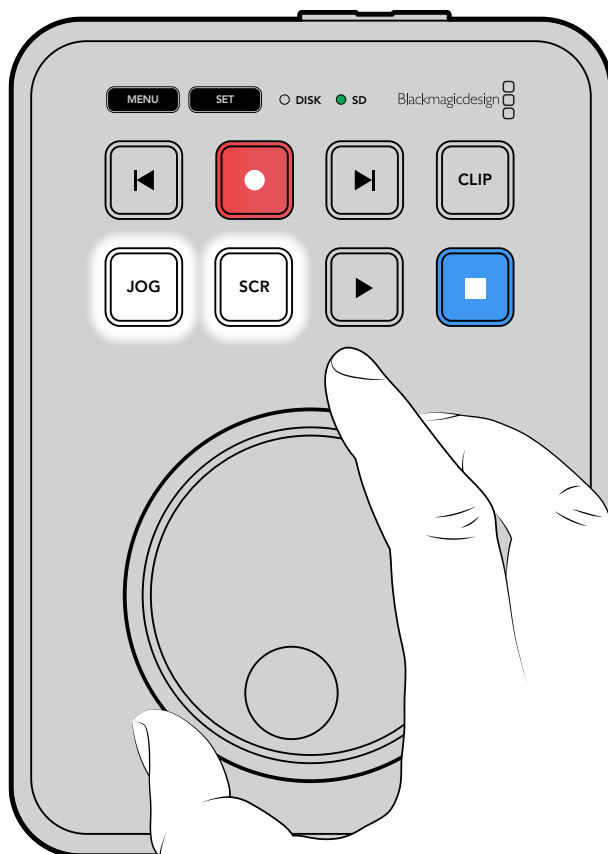
Para utilizar esta función:

- 1 Conecte el monitor que desee utilizar al puerto HDMI del grabador.
- 2 Inserte la tarjeta SD o conecte el disco externo USB que contenga el texto.
- 3 En el menú de grabación, seleccione la opción **Códec**. Luego, seleccione **Teleprónter** y oprima el botón **SET**.

El texto aparecerá en pantalla. Ahora, podrá iniciar la reproducción presionando el botón correspondiente o acceder a opciones adicionales girando el mando.

Velocidad de reproducción del teleprónter

Al igual que con las imágenes, el mando de búsqueda del grabador permite controlar la velocidad de reproducción cuando está activado el modo de teleprónter. Una vez que se haya cargado el texto, presione los botones **JOG** y **SCR** simultáneamente para poder ajustar la velocidad de reproducción. Luego, gire el mando. El texto avanzará a la par del mando de búsqueda. Por ejemplo, cuanto más rápido gire el mando, más rápido se reproducirá el texto.



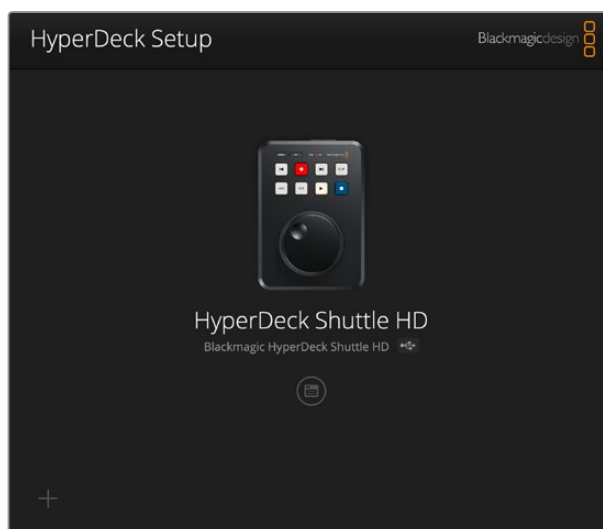
Si desea establecer una velocidad constante, utilice los botones **JOG** y **SCR** por separado. Ahora, la velocidad constante será menor en el modo de desplazamiento o mayor en el de avance y retroceso rápido.

Para alternar entre los archivos de texto disponibles en la unidad de almacenamiento, presione los botones de avance y retroceso.

Al leerlos, el teleprónter reconocerá el tamaño, el color y el estilo aplicado al texto. Asimismo, es posible modificar el tamaño de la fuente, el interlineado, los márgenes e incluso invertir el texto en sentido horizontal o vertical, por ejemplo, en los casos en que se precisa proyectarlo a un interferómetro. Consulte el apartado *Ajustes del menú* para obtener más información al respecto.

Configuración del dispositivo

El programa utilitario Blackmagic HyperDeck Setup permite configurar el dispositivo y actualizar el sistema operativo interno.

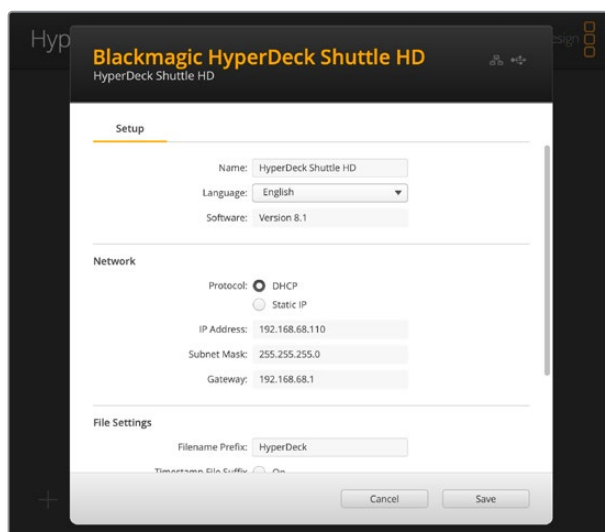


Para instalar el programa:

- 1 Descargue la última versión del instalador desde nuestra página de soporte técnico.
- 2 Abra el asistente de instalación en su equipo informático y siga las instrucciones.
- 3 Una vez que la instalación se haya completado, conecte el grabador al equipo informático mediante los puertos USB o Ethernet situados en la parte trasera.
- 4 Ejecute el programa Blackmagic HyperDeck Setup y siga las instrucciones que aparecen en la pantalla para actualizar el sistema operativo interno. Si no aparece ningún aviso, el dispositivo ya se encuentra actualizado.

Haga clic en el ícono de ajustes o en la imagen del dispositivo para acceder a la ventana de configuración.

La ventana de inicio muestra el grabador y su nombre, el cual puede determinarse mediante el menú de ajustes del programa utilitario, a fin de poder identificarlo con mayor facilidad cuando hay más de uno conectado al equipo informático.



Red

Network

Protocol: DHCP
 Static IP

IP Address: 192.168.68.110

Subnet Mask: 255.255.255.0

Gateway: 192.168.68.1

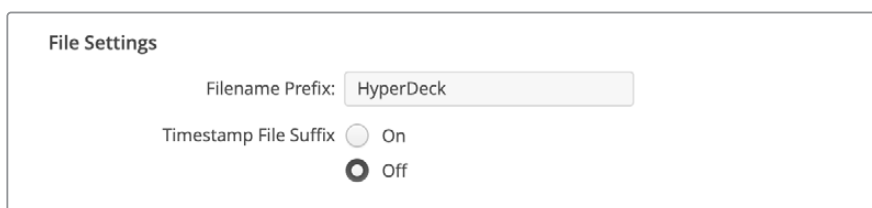
Protocolo

Para emplear el modelo HyperDeck Shuttle HD junto con mezcladores ATEM, o a fin de controlarlo a distancia a través del protocolo de Ethernet para HyperDeck, el grabador debe estar conectado a la misma red que el resto de los equipos, bien usando el protocolo DHCP o añadiendo una dirección IP fija de forma manual.

DHCP	De forma predeterminada, el grabador utiliza el protocolo DHCP, que permite a los servidores de red reconocerlo automáticamente y asignarle una dirección IP. Es un servicio estupendo que facilita la conexión de equipos mediante la tecnología Ethernet y a la vez garantiza que dichas direcciones sean compatibles entre ellas. La mayoría de los equipos informáticos y conmutadores de red aceptan el protocolo DHCP.
Dirección IP estática	Cuando la opción IP estática está seleccionada, es posible introducir manualmente los datos de la red. Para configurar una dirección IP manualmente y que todos los equipos puedan comunicarse entre sí, es necesario que compartan los mismos ajustes de máscara de subred y puerta de enlace. Además, también deben coincidir los primeros tres campos de la dirección IP del panel.

En caso de que haya otros dispositivos en la red con el mismo número de identificación en la dirección IP, se producirá un conflicto y las unidades no se conectarán. Si esto sucede, basta con cambiar dicho valor en la unidad correspondiente.

Archivos



File Settings

Filename Prefix:

Timestamp File Suffix On
 Off

Al configurar el grabador por primera vez, el contenido se guardará en la unidad de almacenamiento con el prefijo «HyperDeck». Para modificar el nombre, basta con escribir uno nuevo.

Por defecto, la opción de añadir el código de tiempo al nombre del archivo se encuentra desactivada. Para añadir la fecha y la hora al nombre del archivo grabado, active la opción correspondiente. Estos ajustes también pueden modificarse mediante el menú que aparece en pantalla.

Transferencia de archivos a través de una red

Este grabador permite transferir archivos mediante el protocolo FTP. De este modo, es posible copiarlos directamente de un equipo informático al dispositivo, a través de una red local de gran velocidad. Por ejemplo, con el propósito de crear carteles digitales, es posible copiar archivos nuevos de manera remota a otra unidad HyperDeck situada en una ubicación distinta.

Conexión a un grabador HyperDeck Shuttle HD

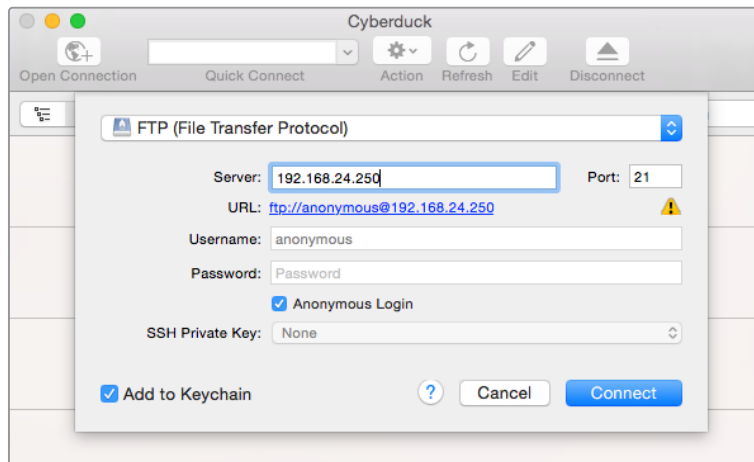
Si el dispositivo y el equipo informático se encuentran conectados a la misma red, solo es necesario conocer la dirección IP del grabador y contar con un cliente FTP.

- 1 Descargue e instale un cliente FTP en el equipo informático al cual desea conectar el grabador. En tal sentido, recomendamos programas tales como Cyberduck, FileZilla o Transmit, aunque es posible utilizar prácticamente cualquier cliente FTP. Cabe destacar que Cyberduck y FileZilla son programas gratuitos.
- 2 Conecte el grabador a la red mediante un cable Ethernet y tome nota de su dirección IP. Para ello, presione el botón **MENU** y mueva el mando giratorio para acceder al menú **Red**. La dirección IP del dispositivo aparecerá en la parte inferior de la pantalla.

Red	
Protocolo	IP estática
Dirección IP	192.168.24.100
Subred	255.255.255.0
Puerta de enlace	192.168.24.1

La dirección IP del dispositivo aparece en la sección **Red** del menú **Ajustes**.

- 3 Introduzca la dirección IP del grabador en el cuadro de diálogo del cliente TCP. El nombre y la posición de esta ventana pueden variar según la aplicación utilizada, aunque generalmente se denomina «servidor» o «host». Compruebe que la casilla **Anonymous login** esté marcada, si el programa incluye esta opción.



Al conectar una unidad HyperDeck, no es necesario introducir un nombre de usuario ni una clave. Basta con ingresar la dirección IP del dispositivo en el cliente FTP y marcar la casilla **Anonymous login**, si dicha opción está disponible.

Transferencia de archivos

Una vez conectado el grabador, es posible transferir archivos mediante el cliente FTP. Muchos programas de este tipo cuentan con una interfaz que permite arrastrar y soltar elementos. Verifique el método de transferencia compatible con el programa en particular.

Aunque es posible transferir cualquier tipo de archivos al grabador, nótese que aquellos que vayan a reproducirse desde el dispositivo deben ser compatibles con los códecs y las resoluciones que este admite.

SUGERENCIA: Es posible transferir archivos mediante la red mientras la unidad está grabando. El dispositivo ajustará automáticamente la velocidad de transferencia para que la grabación no se vea afectada.

Información para desarrolladores (en inglés)

Protocolo de Ethernet para Blackmagic HyperDeck (en inglés)

The Blackmagic HyperDeck Ethernet Protocol is a text based protocol accessed by connecting to TCP port 9993 on HyperDeck models that have a built in Ethernet connection. If you are a software developer, you can use the protocol to construct devices that integrate with our products. Here at Blackmagic Design our approach is to open up our protocols and we eagerly look forward to seeing what you come up with!

Comandos del protocolo (en inglés)

Command	Command Description
help or ?	Provides help text on all commands and parameters
commands	return commands in XML format
device info	return device information
disk list	query clip list on active disk
disk list: slot id: {n}	query clip list on disk in slot {n}
quit	disconnect ethernet control
ping	check device is responding
preview: enable: {true/false}	switch to preview or output
play	play from current timecode
play: speed: {-5000 to 5000}	play at specific speed
play: loop: {true/false}	play in loops or stop-at-end
play: single clip: {true/false}	play current clip or all clips
playrange	query playrange setting
playrange set: clip id: {n}	set play range to play clip {n} only
playrange set: clip id: {n} count: {m}	set play range to {m} clips starting from clip {n}
playrange set: in: {inT} out: {outT}	set play range to play between: - timecode {inT} and timecode {outT}
playrange set: timeline in: {in} timeline out: {out}	set play range in units of frames between: - timeline position {in} and position {out} clear/reset play range setting
playrange clear	clear/reset play range setting
play on startup	query unit play on startup state
play on startup: enable: {true/false}	enable or disable play on startup
play on startup: single clip: {true/false}	play single clip or all clips on startup
play option	query play options
play option: stop mode: {lastframe/nextframe/black}	set output frame when playback stops
record	record from current input
record: name: {name}	record named clip

Command	Command Description
record spill	spill current recording to next slot
record: spill: slot id: {n}	spill current recording to specified slot use current id to spill to same slot
stop	stop playback or recording
clips count	query number of clips on timeline
clips get	query all timeline clips
clips get: clip id: {n}	query a timeline clip info
clips get: clip id: {n} count: {m}	query m clips starting from n
clips get: version: {1/2}	query clip info using specified output version: version 1: id: name startT duration version 2: id: startT duration inT outT name
clips add: name: {name}	append a clip to timeline
clips add: clip id: {n} name: {name}	insert clip before existing clip {n}
clips add: in: {inT} out: {outT} name: {name}	append the {inT} to {outT} portion of clip
clips remove: clip id: {n}	remove clip {n} from the timeline (invalidates clip ids following clip {n})
clips clear	empty timeline clip list
transport info	query current activity
slot info	query active slot
slot info: slot id: {n}	query slot {n}
slot select: slot id: {n}	switch to specified slot
slot select: video format: {format}	load clips of specified format
slot unblock	unblock active slot
slot unblock: slot id: {n}	unblock slot {n}
cache info	query cache status
dynamic range	query dynamic range settings
dynamic range: playback override: {off/Rec709/Rec2020_SDR/HLG/ ST2084_300/ST2084_500/ ST2084_800/ST2084_1000/ ST2084_2000/ST2084_4000/ST2084}	set playback dynamic range override
dynamic range: record override: {off/Rec709/Rec2020_SDR/HLG/ ST2084_300/ST2084_500/ ST2084_800/ST2084_1000/ ST2084_2000/ST2084_4000/ST2048}	set record dynamic range override
notify	query notification status
notify: remote: {true/false}	set remote notifications
notify: transport: {true/false}	set transport notifications
notify: slot: {true/false}	set slot notifications
notify: configuration: {true/false}	set configuration notifications

Command	Command Description
notify: dropped frames: {true/false}	set dropped frames notifications
notify: display timecode: {true/false}	set display timecode notifications
notify: timeline position: {true/false}	set playback timeline position notifications
notify: playrange: {true/false}	set playrange notifications
notify: cache: {true/false}	set cache notifications
notify: dynamic range: {true/false}	set dynamic range settings notifications
notify: slate: {true/false}	set digital slate notifications
notify: clips: {true/false}	set timeline clips notifications where two types of changes can occur: add: partial update with list of clips and insert positions snapshot: complete update of all clips on timeline
notify: disk: {true/false}	set disk clips notifications where two types of changes can occur: add: partial update with list of clips and insert positions snapshot: complete update of all clips on timeline
goto: clip id: {start/end}	goto first clip or last clip
goto: clip id: {n}	goto clip id {n}
goto: clip id: +{n}	go forward {n} clips
goto: clip id: -{n}	go backward {n} clips
goto: clip: {n}	goto frame position {n} within current clip
goto: clip: +{n}	go forward {n} frames within current clip
goto: clip: -{n}	go backward {n} frames within current clip
goto: clip: {start/end}	goto start or end of clip
goto: timeline: {n}	goto frame position {n} within timeline
goto: timeline: +{n}	o forward {n} frames within timeline
goto: timeline: -{n}	go backward {n} frames within timeline
goto: timeline: {start/end}	goto start or end of timeline
goto: timecode: {timecode}	goto specified timecode
goto: timecode: +{timecode}	go forward {timecode} duration
goto: timecode: -{timecode}	go backward {timecode} duration
goto: slot id: {n}	goto slot id {n}
jog: timecode: {timecode}	jog to timecode
jog: timecode: +{timecode}	jog forward {timecode} duration
jog: timecode: -{timecode}	jog backward {timecode} duration
shuttle: speed: {-5000 to 5000}	shuttle with speed
remote	query unit remote control state
remote: enable: {true/false}	enable or disable remote control
remote: override: {true/false}	session override remote control
configuration	query configuration settings
configuration: video input: SDI	switch to SDI input

Command	Command Description
configuration: video input: HDMI	switch to HDMI input
configuration: video input: component	switch to component input
configuration: audio input: embedded	capture embedded audio
configuration: audio input: XLR	capture XLR audio
configuration: audio input: RCA	capture RCA audio
configuration: file format: {format}	switch to specific file format
configuration: audio codec: PCM	switch to PCM audio
configuration: audio codec: AAC	switch to AAC audio
configuration: timecode input: {external/embedded/internal/preset/clip}	change the timecode input
configuration: timecode output: {clip/timeline}	change the timecode output
configuration: timecode preference: {default/dropframe/nondropframe}	whether or not to use drop frame timecodes when not otherwise specified
configuration: timecode preset: {timecode}	set the timecode preset
configuration: audio input channels: {n}	set the number of audio channels recorded to {n}
configuration: record trigger: {none/recorderbit/timecoderun}	change the record trigger
configuration: record prefix: {name}	set the record prefix name (supports UTF-8 name)
configuration: append timestamp: {true/false}	append timestamp to recorded filename
configuration: xlr input id: {n} xlr type: {line/mic}	configure xlr input type multiple xlr inputs can be configured in a single command
configuration: genlock input resync: {true/false}	enable or disable genlock input resync
uptime	return time since last boot
format: slot id: {n} prepare: {exFAT/HFS+} name: {name}	prepare a disk formatting operation to filesystem {format}
format: confirm: {token}	perform a pre-prepared formatting operation using token
identify: enable: {true/false}	identify the device
watchdog: period: {period in seconds}	client connection timeout
reboot	reboot device
slate clips	slate clips information
slate project	slate project information
slate lens	slate lens information

Multiline commands:	Command Description
slate clips↵	set slate clips information:
reel: {n}	slate reel number, where {n} is in [1, 999]
scene id: {id}	slate scene id value, where {id} is a string
shot type: {WS/MS/BCU/MCU/ECU/none}	slate shot type
take: {n}	slate take number, where {n} is in [1, 99]
take scenario: {PU/VFX/SER/none}	slate take scenario
take auto inc: {true/false}	slate take auto increment
good take: {true/false}	slate good take
environment: {interior/exterior}	slate environment
day night: {day/night}	slate day or night
slate project:↵	set slate project information:
project name: {name}	project name (can be empty, supports UTF-8)
camera: {index}	set camera index e.g. A
director: {name}	director (can be empty, supports UTF-8)
camera operator: {name}	camera operator (can be empty, supports UTF-8)
slate lens:↵	set lens information:
lens type: {type}	lens type (can be empty, supports UTF-8)
iris: {type}	camera iris (can be empty, supports UTF-8)
focal length: {length}	focal length (can be empty, supports UTF-8)
distance: {distance}	lens distance (can be empty, supports UTF-8)
filter: {filter}	lens filter (can be empty, supports UTF-8)

Command Combinations

You can combine the parameters into a single command, for example:

```
play: speed: 200 loop: true single clip: true
```

Or for configuration:

```
configuration: video input: SDI audio input: XLR
```

Or to switch to the second disk, but only play NTSC clips:

```
slot select: slot id: 2 video format: NTSC
```

Detalles del protocolo (en inglés)

Connection

The HyperDeck Ethernet server listens on TCP port 9993.

Basic syntax

The HyperDeck protocol is a line oriented text protocol. Lines from the server will be separated by an ascii CR LF sequence. Messages from the client may be separated by LF or CR LF.

New lines are represented in this document as a "↵" symbol.

Single line command syntax

Command parameters are usually optional. A command with no parameters is terminated with a new line:

```
{Command name}↵
```

If parameters are specified, the command name is followed by a colon, then pairs of parameter names and values. Each parameter name is terminated with a colon character:

```
{Command name}: {Parameter}: {Value} {Parameter}: {Value} ...↵
```

Multiline command syntax

The HyperDeck protocol also supports an equivalent multiline syntax where each parameter-value pair is entered on a new line. E.g.

```
{Command name}:↵  
{Parameter}: {Value}↵  
{Parameter}: {Value}↵  
↵
```

Response syntax

Simple responses from the server consist of a three digit response code and descriptive text terminated by a new line:

```
{Response code} {Response text}↵
```

If a response carries parameters, the response text is terminated with a colon, and parameter name and value pairs follow on subsequent lines until a blank line is returned:

```
{Response code} {Response text}:↵  
{Parameter}: {Value}↵  
{Parameter}: {Value}↵  
...  
↵
```

Successful response codes

A simple acknowledgement of a command is indicated with a response code of 200:

```
200 ok↵
```

Other successful responses carry parameters and are indicated with response codes in the range of 201 to 299.

Failure response codes

Failure responses to commands are indicated with response codes in the range of 100 to 199:

```
100 syntax error
101 unsupported parameter
102 invalid value
103 unsupported
104 disk full
105 no disk
106 disk error
107 timeline empty
108 internal error
109 out of range
110 no input
111 remote control disabled
112 clip not found
120 connection rejected
150 invalid state
151 invalid codec
160 invalid format
161 invalid token
162 format not prepared
163 parameterized single line command not supported
```

Asynchronous response codes

The server may return asynchronous messages at any time. These responses are indicated with response codes in the range of 500 to 599:

```
5xx {Response Text}:↵
{Parameter}: {Value}↵
{Parameter}: {Value}↵
↵
```

Connection response

On connection, an asynchronous message will be delivered:

```
500 connection info:↵
protocol version: {Version}↵
model: {Model Name}↵
↵
```

Timecode syntax

Timecodes are expressed as non-drop-frame timecode in the format:

```
HH:MM:SS:FF
```

Handling of deck "remote" state

The "remote" command may be used to enable or disable the remote control of the deck. Any attempt to change the deck state over ethernet while remote access is disabled will generate an error:

```
111 remote control disabled↵
```

To enable or disable remote control:

```
remote: enable: {"true", "false"} ↵
```

The current remote control state may be overridden allowing remote access over ethernet irrespective of the current remote control state:

```
remote: override: {"true", "false"} ↵
```

The override state is only valid for the currently connected ethernet client and only while the connection remains open.

The "remote" command may be used to query the remote control state of the deck by specifying no parameters:

```
remote↵
```

The deck will return the current remote control state:

```
210 remote info:↵  
enabled: {"true", "false"}↵  
override: {"true", "false"}↵  
↵
```

Asynchronous remote control information change notification is disabled by default and may be configured with the "notify" command. When enabled, changes in remote state will generate a "510 remote info:" asynchronous message with the same parameters as the "210 remote info:" message.

Closing connection

The "quit" command instructs the server to cleanly shut down the connection:

```
quit↵
```

Checking connection status

The "ping" command has no function other than to determine if the server is responding:

```
ping↵
```

Getting help

The "help" or "?" commands return human readable help text describing all available commands and parameters:

```
help↵
```

Or:

```
?↵
```

The server will respond with a list of all supported commands:

```
201 help:↵  
{Help Text}↵  
{Help Text}↵  
↵
```

Switching to preview mode

The "preview" command instructs the deck to switch between preview mode and output mode:

```
preview: enable: {"true", "false"}↵
```

Playback will be stopped when the deck is switched to preview mode. Capturing will be stopped when the deck is switched to output mode.

Controlling device playback

The "play" command instructs the deck to start playing:

```
play↵
```

The play command accepts a number of parameters which may be used together in most combinations.

By default, the deck will play all remaining clips on the timeline then stop.

The "single clip" parameter may be used to override this behavior:

```
play: single clip: {"true", "false"}↵
```

By default, the deck will play at normal (100%) speed. An alternate speed may be specified in percentage between -5000 to 5000:

```
play: speed: {% normal speed}↵
```

By default, the deck will stop playing when it reaches to the end of the timeline. The "loop" parameter may be used to override this behavior:

```
play: loop: {"true", "false"}↵
```

The "playrange" command instructs the deck to play all the clips. To override this behavior: and select a particular clip:

```
playrange set: clip id: {Clip ID}↵
```

To only play a certain timecode range:

```
playrange set: in: {in timecode} out: {out timecode}↵
```

To clear a set playrange and return to the default value:

```
playrange clear↵
```

The "play on startup" command instructs the deck on what action to take on startup. By default, the deck will not play. Use the "enable" command to start playback after each power up.

```
play on startup: enable {"true", "false"}↵
```

By default, the unit will play back all clips on startup. Use the "single clip" command to override.

```
play on startup: single clip: {"true", "false"}↵
```

Stopping deck operation

The "stop" command instructs the deck to stop the current playback or capture:

```
stop↵
```

Changing timeline position

The "goto" command instructs the deck to switch to playback mode and change its position within the timeline.

To go to the start of a specific clip:

```
goto: clip id: {Clip ID}↵
```

To move forward/back {count} clips from the current clip on the current timeline:

```
goto: clip id: +/-{count}↵
```

Note that if the resultant clip id goes beyond the first or last clip on timeline, it will be clamp at the first or last clip.

To go to the start or end of the current clip:

```
goto: clip: {"start", "end"}↵
```

To go to the start of the first clip or the end of the last clip:

```
goto: timeline: {"start", "end"}↵
```

To go to a specified timecode:

```
goto: timecode: {timecode}↵
```

To move forward or back a specified duration in timecode:

```
goto: timecode: {"+", "-"}{duration in timecode}↵
```

To specify between slot 1 and slot 2:

```
goto: slot id: {Slot ID}↵
```

Note that only one parameter/value pair is allowed for each goto command.

Enumerating supported commands and parameters

The "commands" command returns the supported commands:

```
commands↵
```

The command list is returned in a computer readable XML format:

```
212 commands:
<commands>↵
  <command name="..."><parameter name="..."/>...</command>↵
  <command name="..."><parameter name="..."/>...</command>↵
  ...
</commands>↵
↵
```

Controlling asynchronous notifications

The "notify" command may be used to enable or disable asynchronous notifications from the server.

To enable or disable transport notifications:

```
notify: transport: {"true", "false"}↵
```

To enable or disable slot notifications:

```
notify: slot: {"true", "false"}↵
```

To enable or disable remote notifications:

```
notify: remote: {"true", "false"}↵
```

To enable or disable configuration notifications:

```
notify: configuration: {"true", "false"}↵
```

Multiple parameters may be specified. If no parameters are specified, the server returns the current state of all notifications:

```
209 notify:↵
transport: {"true", "false"}↵
slot: {"true", "false"}↵
remote: {"true", "false"}↵
configuration: {"true", "false"}↵
dropped frames: {"true", "false"}↵
display timecode: {"true", "false"}↵
timeline position: {"true", "false"}↵
playrange: {"true", "false"}↵
cache: {"true", "false"}↵
dynamic range: {"true", "false"}↵
slate: {"true", "false"}↵
clips: {"true", "false"}↵
disk: {"true", "false"}↵
↵
```

Retrieving device information

The "device info" command returns information about the connected deck device:

```
device info↵
```

The server will respond with:

```
204 device info:↵
protocol version: {Version}↵
model: {Model Name}↵
unique id: {unique alphanumeric identifier}↵
slot count: {number of storage slots}↵
software version: {software version}↵
↵
```


Retrieving slot information

The "slot info" command returns information about a slot. Without parameters, the command returns information for the currently selected slot:

```
slot info↵
```

If a slot id is specified, that slot will be queried:

```
slot info: slot id: {Slot ID}↵
```

The server will respond with slot specific information:

```
202 slot info:↵
slot id: {Slot ID}↵
status: {"empty", "mounting", "error", "mounted"}↵
volume name: {Volume name}↵
recording time: {recording time available in seconds}↵
video format: {disk's default video format}↵
blocked: {"true", "false"}↵
↵
```

Asynchronous slot information change notification is disabled by default and may be configured with the "notify" command. When enabled, changes in slot state will generate a "502 slot info:" asynchronous message with the same parameters as the "202 slot info:" message.

Retrieving clip information

The "disk list" command returns the information for each playable clip on a given disk. Without parameters, the command returns information for the current active disk:

```
disk list↵
```

If a slot id is specified, the disk in that slot will be queried:

```
disk list: slot id: {Slot ID}↵
```

The server responds with the list of all playable clips on the disk in the format of: Index, name, formats, and duration in timecode:

```
206 disk list:↵
slot id: {Slot ID}↵
{clip index}: {name} {file format} {video format} {Duration
timecode}↵
{clip index}: {name} {file format} {video format} {Duration
timecode}↵
...
↵
```

Note that the *clip index* starts from 1.

Retrieving clip count

The "clips count" command returns the number of clips on the current timeline:

```
clips count ↵
```

The server responds with the number of clips:

```
214 clips count: ↵
clip count: {Count}↵
```

Retrieving timeline information

The "clips get" command returns information for each available clip on the current timeline. Without parameters, the command returns information for all clips on timeline:

```
clips get↵
```

The server responds with a list of clip IDs, names and timecodes:

```
205 clips info:↵  
clip count: {Count}↵  
{Clip ID}: {Start timecode} {Duration timecode} {In timecode}  
{Out timecode} {Name}↵  
{Clip ID}: {Start timecode} {Duration timecode} {In timecode}  
{Out timecode} {Name}↵  
...  
↵
```

Retrieving transport information

The "transport info" command returns the state of the transport:

```
transport info ↵
```

The server responds with transport specific information:

```
208 transport info:  
status: {"preview", "stopped", "play", "forward", "rewind",  
"jog", "shuttle","record"}↵  
speed: {Play speed between -5000 and 5000 %}↵  
slot id: {Slot ID or "none"}↵  
clip id: {Clip ID or "none"}↵  
single clip: {"true", "false"}↵  
display timecode: {timecode}↵  
timecode: {timecode}↵  
video format: {Video format}↵  
loop: {"true", "false"}↵  
timeline: {n}↵  
input video format: {Video format}↵  
dynamic range: {"off", "Rec709", "Rec2020_SDR", "HLG",  
"ST2084_300", "ST2084_500", "ST2084_800", "ST2084_1000",  
"ST2084_2000", "ST2084_4000", "ST2048" or "none"}↵  
↵
```

The "timecode" value is the timecode within the current timeline for playback or the clip for record. The "display timecode" is the timecode displayed on the front of the deck. The two timecodes will differ in some deck modes.

Asynchronous transport information change notification is disabled by default and may be configured with the "notify" command. When enabled, changes in transport state will generate a "508 transport info:" asynchronous message with the same parameters as the "208 transport info:" message.

Video Formats

The following video formats are currently supported on HyperDeck Shuttle:

720p50, 720p5994, 720p60

1080p23976, 1080p24, 1080p25, 1080p2997, 1080p30, 1080p60

1080i50, 1080i5994, 1080i60

Video format support may vary between models and software releases.

File Formats

All HyperDeck models currently support the following file formats:

H.264High

H.264Medium

H.264Low

QuickTimeProResHQ

QuickTimeProRes

QuickTimeProResLT

QuickTimeProResProxy

QuickTimeDNxHD220x

DNxHD220x

QuickTimeDNxHD145

DNxHD145

QuickTimeDNxHD45

DNxHD45

Supported file formats may vary between models and software releases.

Querying and updating configuration information

The "configuration" command may be used to query the current configuration of the deck:

```
configuration↵
```

The server returns the configuration of the deck:

```
211 configuration:↵
audio input: {"embedded", "XLR", "RCA"}↵
audio mapping: {n}↵
video input: {"SDI", "HDMI", "component", "composite"}↵
file format: {format}↵
audio codec: {"PCM", "AAC"}↵
timecode input: {"external", "embedded", "preset", "clip"}↵
timecode output: {"clip", "timeline"}↵
timecode preference: {"default", "dropframe", "nondropframe"}↵
timecode preset: {timecode}↵
audio input channels: {n}↵
record trigger: {"none", "recordbit", "timecoderun"}↵
record prefix: {name}↵
append timestamp: {"true", "false"}↵
genlock input resync: {"true", "false"}↵
↵
```

One or more configuration parameters may be specified to change the configuration of the deck.

To change the current video input:

```
configuration: video input: {"SDI", "HDMI", "component"}↵
```

Valid video inputs may vary between models. To configure the current audio input:

```
configuration: audio input: {"embedded", "XLR", "RCA"}↵
```

Valid audio inputs may vary between models.

To configure the current file format:

```
configuration: file format: {File format}↵
```

Note that changes to the file format may require the deck to reset, which will cause the client connection to be closed. In such case, response code 213 will be returned (instead of 200) before the client connection is closed:

```
"213 deck rebooting"
```

Asynchronous configuration information change notification is disabled by default and may be configured with the "notify" command. When enabled, changes in configuration will generate a "511 configuration:" asynchronous message with the same parameters as the "211 configuration:" message.

Selecting active slot and video format

The "slot select" command instructs the deck to switch to a specified slot, or/and to select a specified output video format.

To switch to a specified slot:

```
slot select: slot id: {slot ID}↵
```

To select the output video format:

```
slot select: video format: {video format}↵
```

Either or all slot select parameters may be specified. Note that selecting video format will result in a rescan of the disk to reconstruct the timeline with all clips of the specified video format.

Clearing the current timeline

The "clips clear" command instructs the deck to empty the current timeline:

```
clips clear↵
```

The server responds with

```
200 ok↵
```

Adding a clip to the current timeline

The "clips add:" command instructs the deck to add a clip to the current timeline:

```
clips add: name: {clip name}↵
```

The server responds with

```
200 ok↵
```

or in case of error

```
lxx {error description}↵
```

Configuring the watchdog

The "watchdog" command instructs the deck to monitor the connected client and terminate the connection if the client is inactive for at least a specified period of time.

To configure the watchdog:

```
watchdog: period: {period in seconds}↵
```

To avoid disconnection, the client must send a command to the server at least every {period} seconds. Note that if the period is set to 0 or less than 0, connection monitoring will be disabled.

Ayuda

Cómo obtener ayuda

Visite nuestra página de soporte técnico para obtener ayuda rápidamente y acceder al material de apoyo más reciente para los productos descritos en este manual.

Página de soporte técnico

Las versiones más recientes de este manual, los distintos programas mencionados y el material de apoyo se encuentran disponibles en nuestra página de soporte técnico.

Foro

El foro de Blackmagic Design permite compartir ideas creativas y constituye un recurso útil para obtener más información sobre nuestros productos. Por otra parte, brinda la posibilidad de encontrar rápidamente respuestas suministradas por usuarios experimentados o por el personal de Blackmagic Design. Para acceder al foro, visite la página <https://forum.blackmagicdesign.com>.

Cómo ponerse en contacto con Blackmagic Design

Si no encuentra la ayuda que necesita, solicite asistencia mediante el botón **Enviar correo electrónico**, situado en la parte inferior de nuestra página de soporte técnico. De manera alternativa, haga clic en el botón **Soporte técnico local** para acceder al número telefónico del centro de atención más cercano.

Cómo comprobar la versión del software instalado

Para comprobar la versión del programa instalada en su equipo informático, acceda al menú **About Blackmagic HyperDeck Setup**.

- En macOS, ejecute el programa desde la carpeta de aplicaciones. Seleccione el menú **About Blackmagic HyperDeck Setup** en la barra superior de la ventana para ver el número de versión.
- En Windows, ejecute el programa Blackmagic HyperDeck Setup haciendo clic en el ícono situado en el menú **Inicio**. En el menú **Help**, seleccione la opción **About Blackmagic HyperDeck Setup** para ver el número de versión.

Cómo obtener las actualizaciones más recientes

Después de verificar la versión del programa instalado, visite nuestra página de soporte técnico para comprobar si hay actualizaciones disponibles. Aunque generalmente es recomendable instalar las versiones más recientes, evite realizar modificaciones al sistema operativo interno del dispositivo si se encuentra en medio de un proyecto importante.

Normativas

Tratamiento de residuos de equipos eléctricos y electrónicos en la Unión Europea:



Este símbolo en el producto indica que el dispositivo no debe desecharse con otros residuos domésticos. Por lo tanto, es su responsabilidad entregarlo a un centro de recolección para su posterior reciclado. Esto ayuda a preservar los recursos naturales y garantiza que dicho procedimiento se realice protegiendo la salud y el medioambiente. Para obtener más información en este sentido, comuníquese con el centro de reciclaje más cercano o el distribuidor donde adquirió el producto.



Según las pruebas realizadas, este equipo cumple con los límites indicados para dispositivos digitales Clase A, en conformidad con la sección 15 de las normas establecidas por la Comisión Federal de Comunicaciones. Esto permite proporcionar una protección razonable contra interferencias nocivas al operar el dispositivo en un entorno comercial. Este equipo usa, genera y puede irradiar energía de radiofrecuencia, y si no se instala o utiliza de acuerdo con el manual de instrucciones, podría ocasionar interferencias perjudiciales en las comunicaciones radiales. El funcionamiento de este equipo en una zona residencial podría ocasionar interferencias significativas, en cuyo caso el usuario deberá solucionar dicho inconveniente por cuenta propia.

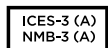
El funcionamiento de este equipo está sujeto a las siguientes condiciones:

- 1 Este dispositivo no puede causar interferencias nocivas y,
- 2 El dispositivo debe admitir cualquier interferencia recibida, incluidas aquellas que pudieran provocar un funcionamiento incorrecto del mismo.



R-R-BMD-20211410001

Declaración ISED (Canadá)



Este dispositivo cumple con las normas del gobierno de Canadá relativas a equipos digitales clase A.

Cualquier modificación o uso indebido del mismo podría acarrear un incumplimiento de dichas normas.

Las conexiones a interfaces HDMI deberán realizarse mediante cables blindados.

Este equipo cumple con las normas descritas anteriormente al emplearse en entornos comerciales. Nótese que podría ocasionar interferencia radial al utilizarlo en ambientes domésticos.

Seguridad

Este equipo puede utilizarse en climas tropicales, a una temperatura ambiente máxima de 40 °C.

Compruebe que haya suficiente ventilación en torno a la unidad.

La reparación de los componentes internos del equipo no debe ser llevada a cabo por el usuario. Comuníquese con nuestro centro de atención más cercano para obtener información al respecto.



Evite utilizar el equipo a una altura mayor de 2000 metros.

Declaración del Estado de California

Las partes plásticas de este producto pueden contener trazas de compuestos químicos, tales como polibromobifenilos (PBB), que el Estado de California reconoce como causantes de cáncer, anomalías congénitas o daños reproductivos.

Consulte el sitio www.P65Warnings.ca.gov para obtener más información al respecto.

Garantía

12 meses de garantía limitada

Blackmagic Design ofrece una garantía de 12 meses a partir de la fecha de compra de este producto por defectos relativos a los materiales o la fabricación. Si el producto resulta defectuoso durante el período de validez de la garantía, Blackmagic Design podrá optar por reemplazarlo o repararlo sin cargo alguno por concepto de piezas y/o mano de obra.

Para acceder al servicio proporcionado de acuerdo con los términos de esta garantía, el Cliente deberá dar aviso del defecto a Blackmagic Design antes del vencimiento del período de garantía y encargarse de los arreglos necesarios para la prestación del mismo. El Cliente será responsable del empaque y el envío del producto defectuoso al centro de servicio técnico designado por Blackmagic Design, y deberá abonar las tarifas postales por adelantado. El Cliente será responsable de todos los gastos de envío, seguros, aranceles, impuestos y cualquier otro importe que surja con relación a la devolución de productos por cualquier motivo.

Esta garantía carecerá de validez ante defectos o daños causados por un uso indebido del producto o por falta de cuidado y mantenimiento. Blackmagic Design no tendrá obligación de prestar el servicio estipulado en esta garantía para (a) reparar daños provocados por intentos de personal ajeno a Blackmagic Design de instalar el producto, repararlo o realizar un mantenimiento del mismo; (b) reparar daños resultantes del uso de equipos incompatibles o conexiones a los mismos; (c) reparar cualquier daño o mal funcionamiento provocado por el uso de piezas o repuestos no suministrados por Blackmagic Design; o (d) brindar servicio técnico a un producto que haya sido modificado o integrado con otros productos, cuando dicha modificación o integración tenga como resultado un aumento de la dificultad o el tiempo necesario para reparar el producto. ESTA GARANTÍA OFRECIDA POR BLACKMAGIC DESIGN REEMPLAZA CUALQUIER OTRA GARANTÍA, EXPRESA O IMPLÍCITA. POR MEDIO DE LA PRESENTE, BLACKMAGIC DESIGN Y SUS DISTRIBUIDORES RECHAZAN CUALQUIER GARANTÍA IMPLÍCITA DE COMERCIALIZACIÓN O IDONEIDAD PARA UN PROPÓSITO PARTICULAR. LA RESPONSABILIDAD DE BLACKMAGIC DESIGN EN CUANTO A LA REPARACIÓN O SUSTITUCIÓN DE PRODUCTOS DEFECTUOSOS CONSTITUYE UNA COMPENSACIÓN COMPLETA Y EXCLUSIVA PROPORCIONADA AL CLIENTE POR CUALQUIER DAÑO INDIRECTO, ESPECIAL, FORTUITO O EMERGENTE, AL MARGEN DE QUE BLACKMAGIC DESIGN O SUS DISTRIBUIDORES HAYAN SIDO ADVERTIDOS CON ANTERIORIDAD SOBRE LA POSIBILIDAD DE TALES DAÑOS. BLACKMAGIC DESIGN NO SE HACE RESPONSABLE POR EL USO ILEGAL DE EQUIPOS POR PARTE DEL CLIENTE. BLACKMAGIC DESIGN NO SE HACE RESPONSABLE POR DAÑOS CAUSADOS POR EL USO DE ESTE PRODUCTO. EL USUARIO UTILIZA EL PRODUCTO BAJO SU PROPIA RESPONSABILIDAD.

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HyperDeck Shuttle HD





欢迎辞

感谢您购买Blackmagic HyperDeck Shuttle HD硬盘录机!

早在构思原版Blackmagic HyperDeck硬盘录机时, 我们的目标就是设计出一款能使用高速SSD存储方案更快捷地记录并播放视频的产品。如今, 我们终于推出了HyperDeck Shuttle HD!

HyperDeck Shuttle HD是一款采用小巧便携设计的台式HDMI视频记录设备。它搭载大尺寸搜索旋钮和熟悉的播放控制, 能实现单手操控, 是搭配ATEM Mini切换台进行现场制作的理想搭档。此外, HyperDeck Shuttle HD还可以作为一台提词器来使用!

HyperDeck Shuttle HD能使用ProRes、DNxHD或H.264编码格式将文件记录到SD卡或外部闪存盘上, 实现非常快速的记录和播放。

请登陆公司网站www.blackmagicdesign.com/cn, 访问支持页面获取最新版操作手册以及HyperDeck软件更新。请注意定期更新您的软件以便获得最新功能。下载软件时, 请注册您的相关信息, 以便我们发布新软件时能及时通知您。我们将不断致力于产品的功能开发和性能改进, 诚挚期待您的意见和建议!

A handwritten signature in black ink that reads "Grant Petty".

Grant Petty

Blackmagic Design首席执行官

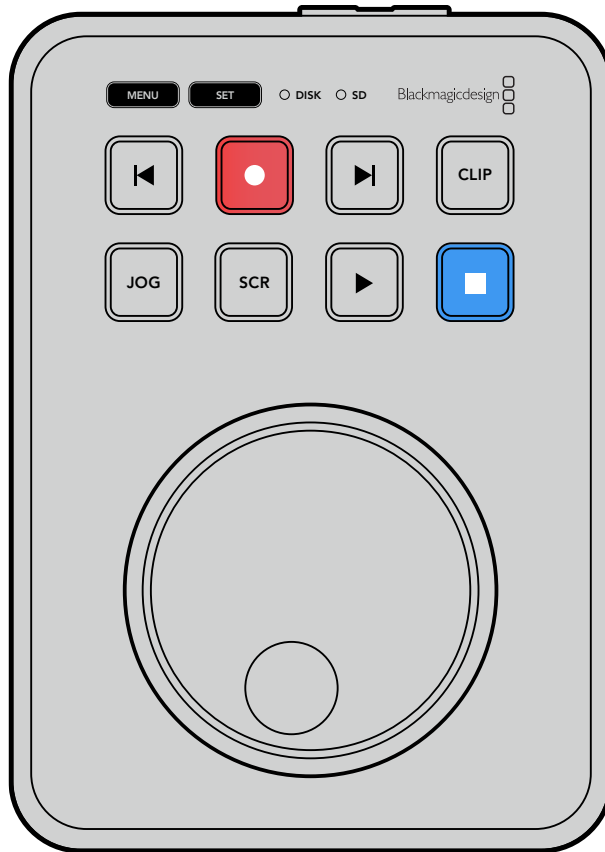
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开始使用

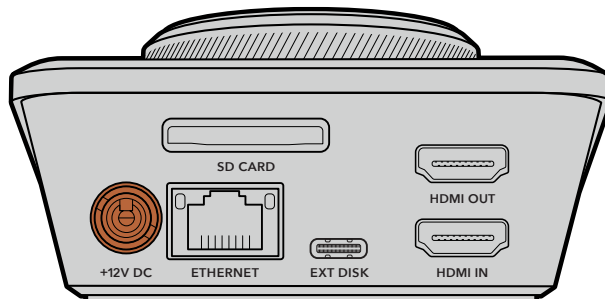
HyperDeck Shuttle HD使用前的准备工作很简单，只要连接电源，连接HDMI视频源，插入SD卡或外接存储介质，然后按下记录就可以了！

本手册的这一部分介绍了开始使用HyperDeck Shuttle HD前的准备事项。



连接电源

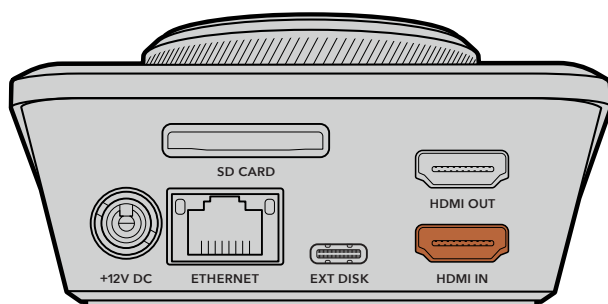
为HyperDeck Shuttle HD连接电源时，请将内附的电源适配器连接到设备后面板的电源输入接口。旋紧电源线的锁定环，防止连接意外断开。



将电源适配器妥善连接到HyperDeck Shuttle HD的电源输入接口

连接视频和音频

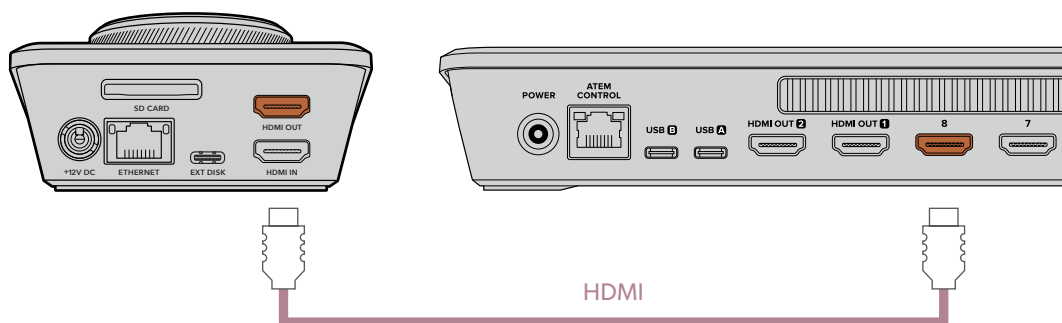
要将视频连接到HyperDeck Shuttle HD, 请将HDMI视频源连接设备后面板的HDMI输入接口。



将目标设备连接到HDMI输出接口。比如ATEM Mini切换台或HDMI电视。

HDMI输出也可用来在更改HyperDeck的设置时查看设置菜单。因为设置菜单可通过在HDMI输出上显示视频叠加进行查看。更多关于菜单设置的信息, 请阅读本手册后续在“更改设置”部分的介绍。

提示 如果您无法在所连接的显示器上看到输入视频, 这可能是因为设备处于播放模式下。按记录按钮启用记录模式。



将HDMI输出连接到目标设备, 如HDMI电视或ATEM Mini切换台

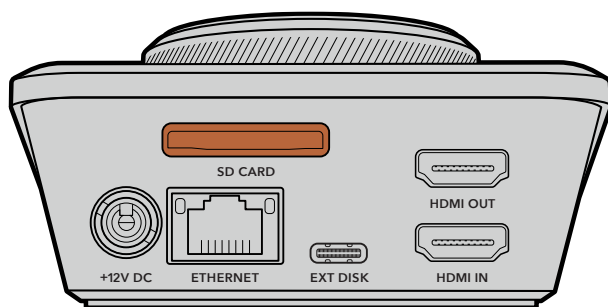
连接存储介质

所有HyperDeck Shuttle HD硬盘录机拆封后即可立即开始记录, 无需进行任何配置或设置。您需要准备的只有一个经过格式化的SD卡或外部存储盘。

存储介质可通过菜单设置轻松完成格式化, 或者使用计算机进行格式化。详情请阅读本手册中“格式化存储介质”部分的介绍。该部分还具体介绍了哪类存储介质适合用于视频记录, 以及推荐使用的SD卡和外部硬盘列表相关信息。

插入SD卡步骤如下:

- 1 手持SD卡, 将其金色接触面朝上并对准存储介质插槽。然后, 将存储卡轻轻推入卡槽, 直至插入到位。



- 您的HyperDeck将验证插入的SD卡。此时, HyperDeck Shuttle HD上方的SD卡提示灯会亮起绿色。验证完毕后, 提示灯会熄灭。



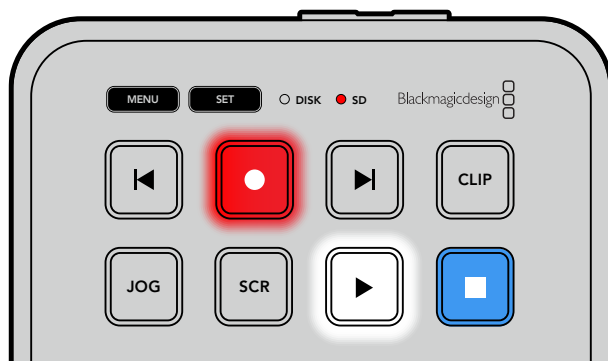
至此, HyperDeck Shuttle HD的准备工作全部完成, 您现在就可以开始记录和播放了!

请继续阅读本操作手册, 了解更多关于如何记录和播放片段、如何更改设置等方面的详细信息。

记录视频

在HDMI目标设备上确认视频源显示后, 就可以立即开始记录了!

要开始记录, 请按记录按钮。使用SD卡记录时, 设备上的SD提示灯会亮起红色, 并且记录和播放按钮也会相应亮起。使用外部存储盘记录时, 设备上的存储盘提示灯会亮起红色。



要结束记录, 请按停止按钮。

播放

按下播放按钮可开始片段播放。播放期间, 播放按钮会亮起, 并且相应的“DISK”或“SD”存储介质插槽提示灯会亮起绿色。

如果记录了多个片段, 您可以按向前和向后跳过按钮在这些片段之间快速移动。



使用跳过按钮

按向后跳过按钮可以跳转到片段开始的位置。反复按该按钮可逐个退回到之前记录的片段。

按向前跳过按钮可以逐个向前跳转片段。



使用向前或向后跳过按钮可跳转到每个片段的开始位置

提示 要在HyperDeck上播放视频文件, 需要设置相应的编解码以匹配记录文件时所使用的编解码。您可以使用菜单来完成这一操作。详情请阅读本手册后续在“更改设置”部分的介绍。

循环片段

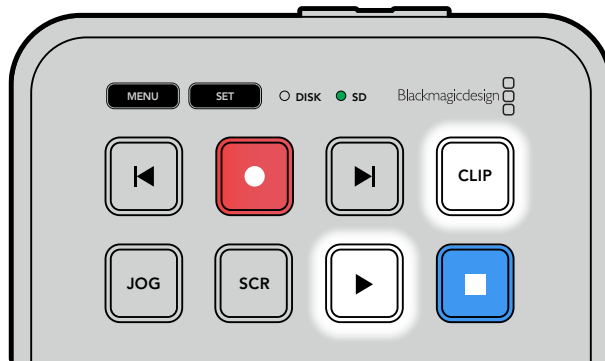
播放期间，再次按下播放按钮可将您的HyperDeck Shuttle HD设置为循环所有片段，按停止按钮可终止循环播放。

如果要循环单个片段，可将HyperDeck设置为“CLIP”（片段）模式。该模式下，按播放按钮一次可开始播放，再次按下播放按钮可循环播放。

循环所有片段	播放期间，再次按下播放按钮可循环播放所有记录片段。
循环当前片段	在片段模式下，再次按下播放按钮可循环播放当前片段。

片段模式

片段模式能将播放限制为单个片段。比如，启用片段模式后，您可以快速运行或跳到某个片段，然后按下播放键，播放将会在片段结束时停止。






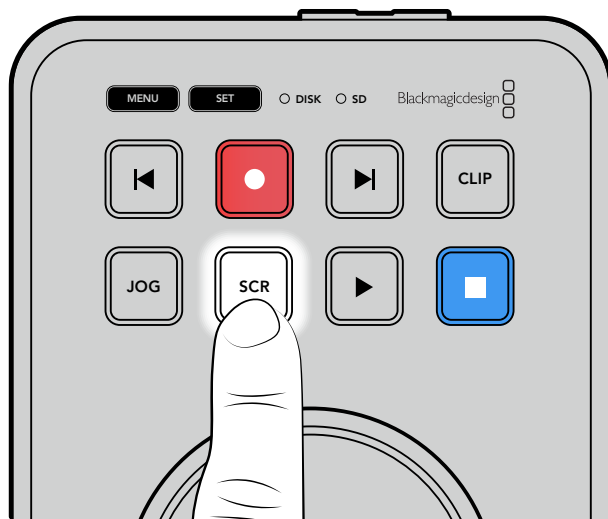
选中片段模式时，再次按下播放按钮将会循环播放当前片段。

使用搜索旋钮

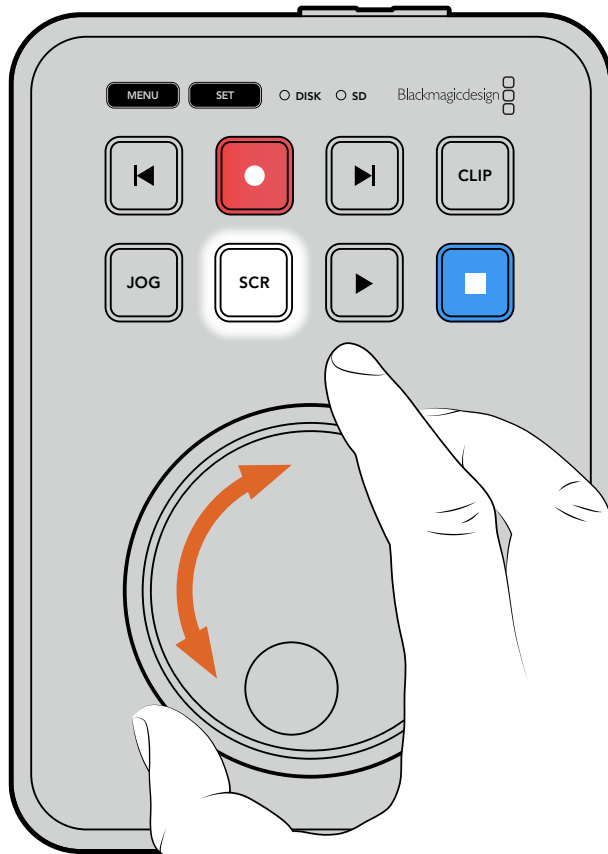
使用搜索旋钮可以在片段之间快速移动，选择某个具体部分进行播放，或者逐帧查看。这是一项重要的功能，您可以转动旋钮以直观的方式查看片段，找到某个特定位置。此外，您还可以使用它将播放头停在特定的提示点做好准备，以便在直播期间切入片段。

搜索旋钮模式包括慢速搜索、极速搜索和快速搜索。

	慢速	逐帧播放片段内容，从而实现精准控制。
	极速	极速模式能快速地在所有记录的媒体文件中向前或向后移动。在您转动搜索旋钮的时候，极速模式会与您的转动操作绑定，从而全面控制播放的位置。
	快速	同时按下“JOG”和“SCR”按钮可进入快速模式。进入快速模式后，只要向左或向右旋转旋钮，就可以在媒体文件之间快退或快进。在您转动旋钮的时候，媒体文件的速度移动会加快，直至达到x50的最大速度。要将快速运行速度降低到停止状态，可转动旋钮使其回到开始位置。快速运行期间，如果想在某个特定位置停止，可按停止按钮；按播放按钮可在当前位置重新开始播放运行。此外，使用设置菜单也可以降低最大快速运行速度。详情请参考本手册“设置”部分的内容。



按下专设的“JOG”和“SCR”按钮可相应选择慢速和极速搜索模式

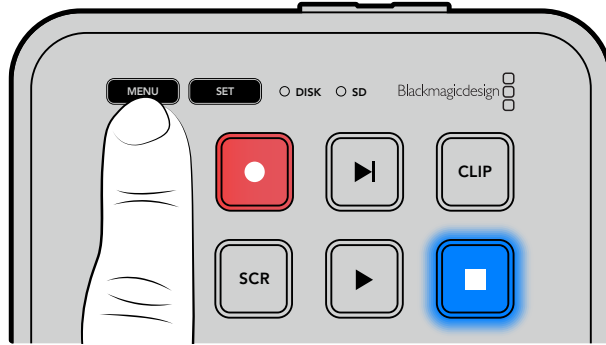


选定搜索模式后，转动旋钮进行搜索

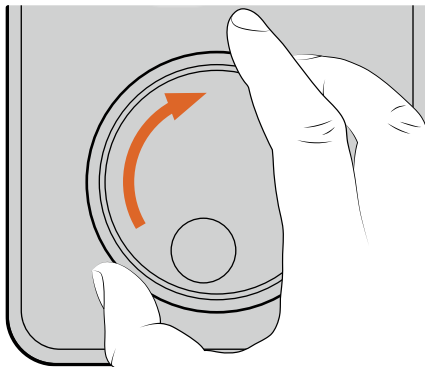
提示 要回到正常播放模式，可按播放或停止按钮。

更改设置

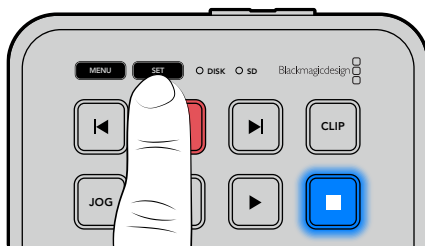
按“MENU”（菜单）按钮可打开设置菜单，该菜单会以视频叠加信息的形式显示在所连接HDMI显示器的左下角。



按“MENU”按钮打开设置菜单。



使用搜索旋钮在子菜单或各项设置之间导航



按“SET”按钮选择相应的子菜单或设置



要调整设置，可转动搜索旋钮，或者使用向前、向后跳过按钮。按“SET”按钮确认选择。

要退出菜单界面，可按“MENU”按钮逐层返回各级选项并回到主页面。

提示 您可以使用设置菜单将菜单显示放置在屏幕四角的任意一角上。建议您完成设置更改后关闭菜单显示，从而确保HDMI输出连接ATEM Mini Extreme等HDMI切换台时为干净的画面信号。

设置

设置菜单一共分为5个不同类别，具体是记录、监看、音频、存储以及设置。每个子菜单都包含相关的设置，大部分设置都能通过使用HyperDeck Shuttle HD控制面板进行调整。部分设置仅供显示，并且呈灰色字体，比如“文件名前缀”。在本例中，设置可通过HyperDeck Setup实用程序进行调整。

记录菜单



记录	
输入	HDMI
编解码	H.264 高
触发记录	无

输入

可显示HyperDeck Shuttle HD的HDMI输入。

编解码

HyperDeck Shuttle HD都可使用H.264、Apple ProRes和DNxHD编解码记录压缩视频。如要使用提词器功能，可选择“提词器”。

触发记录

共有两种触发记录模式，“视频开始/停止”和“时间码运行”。

包括Blackmagic Pocket Cinema Camera 4K在内的部分摄影机可通过HDMI向外部记录设备发送开始和停止记录的信号。选择“视频开始/停止”选项后，按摄影机上的记录按钮就可以触发HyperDeck开始或停止记录。

使用“时间码运行”选项时，只要设备通过HDMI输入接收到有效时间码信号，就会触发开始记录的动作。当信号停止时，记录也停止。选择“无”选项可禁用触发记录功能。

备注 从HDMI摄影机记录时，请确保设备输出的是无叠加信息的纯画面，因为任何显示在摄影机视频输出画面上的叠加信息都将被一同记录下来。

监看菜单

监看	
提词器布局	
字体大小	450%
行距	120%
侧边距	10%
水平翻转	关闭
垂直翻转	关闭

提词器布局

监看菜单包含将HyperDeck Shuttle HD作为提词器使用时所需的全部设置。

字体大小

选择相应的字体大小选项后，按下SET按钮，完成文本大小调整。顺时针转动旋钮可放大字体，逆时针转动可缩小字体。

行距

转动旋钮来增加或减少行距。

侧边距

调整提词器显示的两侧宽度。

翻转

如果提词器的显示器是设置为反射到玻璃上的，比如在摄影机前或演讲台上，就需要使用翻转设置，方便主持人或演讲者阅读。翻转模式共有两种：

水平翻转 – 如果提词器显示器的底部被安装固定在最靠近玻璃底部的位置，可使用这一模式。

垂直翻转 – 如果提词器显示器的底部被安装固定在远离玻璃底部的位置，可使用这一模式。

音频菜单



录音通道

HyperDeck Shuttle HD一次可记录多达8声道PCM音频。要选择记录通道的数量, 请扩展录音通道列表, 选择2、4或8声道。

如果编解码被设为H.264, 您可以选择2声道AAC音频, 以便直接将记录内容上传到YouTube。

存储菜单



连接的存储介质将会显示在存储设置中。存储介质 1会显示所连接的SD卡名称列表, 存储介质 2会显示连接到外部存储盘接口的USB硬盘。使用Blackmagic MultiDock 10G等USB集线器设备时, 当前活跃的存储盘会被显示出来。

USB溢写

如果使用Blackmagic MultiDock 10G或类似产品通过标有“EXT DISK”的USB接口连接多个存储盘, 开启“USB溢写”功能可以确保记录内容将从一个外部存储盘跳转到下一个外部存储盘。

格式化存储介质

通过“EXT DISK”接口连接的SD卡和其他存储介质可直接在设备上或通过Mac或Windows计算机格式化。

使用HyperDeck Shuttle HD格式化存储介质:

- 1 使用搜索旋钮和“SET”按钮, 选择“格式化存储介质”。
- 2 从列表中选择要格式化的存储介质, 并按“SET”按钮。
- 3 选定格式后, 按“SET”按钮。
- 4 随后会出现确认窗口, 显示即将被格式化的存储介质以及选定的格式化选项, 选择“格式化”。
- 5 格式化完毕后会弹出一个提示窗口, 选择“确定”。

HFS+也被称为Mac OS X扩展格式,因为它支持“日志功能”,所以被广为推荐。一旦发生存储介质损坏的情况,具有日志功能的存储介质更易恢复数据。HFS+受Mac系统的原生支持。exFAT则受Mac和Windows系统的支持,无需使用额外软件,但不支持日志功能。

要在Mac或Windows计算机上格式化存储介质,请参考本手册中“格式化存储介质”部分的内容。

设置菜单

设置菜单包含语言选项和默认格式,以及菜单显示、网络设置和时间码等选项。

设置	
名称	HyperDeck Shuttle HD
语言	中文
日期	2022年5月16日
时间	14:32
时区	UTC±11:00
软件	8.1
摄像机	A
默认格式	1080p30
快速运行最大速度	x50

名称

如果网络中存在多台HyperDeck Shuttle HD,您可以对它们进行命名加以区分。该操作可通过Blackmagic HyperDeck Setup或Blackmagic HyperDeck Ethernet Protocol终端程序操作完成。设备名称将会出现在设置菜单中。

语言

HyperDeck Shuttle HD支持13种语言界面,包括英语、中文、日语、韩语、西班牙语、德语、法语、俄语、意大利语、葡萄牙语、土耳其语、乌克兰语以及波兰语。

选择语言步骤如下:

- 1 当设置菜单高光显示时,按“SET”按钮。
- 2 旋转搜索旋钮向下滚动菜单,选择“语言”,按“SET”按钮。
- 3 使用搜索旋钮选择相应语言,按“SET”按钮。选定后,系统将自动返回设置菜单。

日期

要调整日期,请选择“日期”栏,然后按“SET”按钮。使用搜索旋钮选择日、月、年。选中后,该信息将作为时间戳文件后缀出现。

时间

要调整时间, 请选择“时间”, 然后按“SET”按钮。使用搜索旋钮调整小时和分钟。HyperDeck Shuttle HD的内部时钟使用24小时制。

软件

可显示当前安装的软件版本。

摄像机

当使用HyperDeck记录多台摄影机的ISO单独文件, 然后要将其在DaVinci Resolve中作为多机位时间线剪辑时, 该设置就非常有用。

每台单独的摄影机的识别性字符都将显示在文件的元数据中, 从而DaVinci Resolve在使用同步媒体夹功能时可以轻松识别每个角度。



通过A-Z或者1-9来指派摄影机

默认格式

有时, HyperDeck Shuttle HD无法判断您想要使用什么视频格式。这一设置可以让HyperDeck明确大多数情况下您想要使用的视频格式。

一个很好的例子就是, 如果您开启了HyperDeck Shuttle HD, 设备上并未连接视频输入, 此时您插入一块硬盘, 硬盘中含有两种不同视频格式的文件, 那么HyperDeck会播放哪种视频格式? 默认视频格式功能会提示设备您所偏好的视频格式, 让设备切换到这一格式来播放这些文件。

另外, 当您首次开启HyperDeck Shuttle HD, 并且没有连接任何视频输入, 也没有插入任何存储介质时, 默认视频格式功能也会很有帮助。在这类情况下, HyperDeck无法判断应该使用哪类视频格式进行监看输出。此时, 默认视频格式会引导设备进行操作。

但是, 默认视频格式只是作为指引, 它不会覆盖任何内容。因此, 如果您的存储介质中只含有一类视频文件, 当您按下播放键时, HyperDeck硬盘录机会切换到对应的视频格式进行播放。此时默认视频格式功能会被忽略, 因为很明显此时只需要播放存储介质上的文件即可。

记录期间的情况也会类似。当您按下记录键后, HyperDeck只会以连接到视频输入上的视频格式进行记录。此外, 当您记录完成后, HyperDeck Shuttle HD会以相同视频格式播放存储介质上的文件, 即使存储介质上存在其他匹配默认视频格式的文件。因为设备会认为您想要使用和刚才所记录文件相同的视频格式来进行播放。只有在您将存储介质拔出后再次插入设备的时候, 设备才会启用默认视频格式让您选择使用哪类文件播放。

默认视频格式只是作为指引, 在HyperDeck Shuttle HD不确定如何操作的情况下帮助其进行判断。该功能不属于覆盖命令, 因此不会强制录机以任何特定方式运行。

最大快速运行速度

HyperDeck Shuttle HD的最大快速运行速度为x50倍速。如果您想要降低这一速度，只要在其他速度预设选项中选择一项即可。

菜单设置

您可以使用菜单设置来调整菜单在所连接HDMI显示器上的位置和外观。

菜单	
外观	浅色
不透明度	100%
位置	左下

外观

可将HyperDeck的屏幕菜单设置为深色或浅色模式。浅色模式可提供更高的对比度，适用于较暗的媒体素材，或者搭配提词器模式使用。

菜单	
外观	浅色
不透明度	100%
位置	左下

菜单	
外观	深色
不透明度	100%
位置	左下

不透明度

可通过调整来降低所连接显示器上菜单叠加信息的不透明度，调整范围为100%（默认）到20%。

位置

菜单叠加信息的默认位置是屏幕左下角。如果要移动菜单的位置，可选择“位置”然后按“SET”按钮，就可以选择将其移动到屏幕的左上角、右上角、左下角或者右下角了。

网络设置

网络	
协议	静态IP
IP地址	192.168.24.100
子网掩码	255.255.255.0
网关	192.168.24.1

协议

Blackmagic HyperDeck出厂设置为DHCP, 因此连接后, 您的网服务器会自动指派一个IP地址, 无需调整其他网络设置。如果需要手动设置地址, 可通过静态IP连接。

选中“协议”后, 按下“SET”按钮, 滚动到菜单中的“静态IP”然后按“SET”。

IP地址、子网掩码、网关、主DNS服务器和次DNS服务器

选中“静态IP”后, 就可以手动输入网络信息了。

要更改IP地址:

- 1 通过搜索旋钮将“IP地址”高光选中, 按下HyperDeck控制面板上的“SET”按钮。
- 2 使用搜索旋钮调整IP地址: 旋转搜索旋钮更改IP地址, 按“SET”按钮确认, 然后再调整下一个数值。
- 3 按下“SET”以确认更改, 并跳至下个值。

输入完IP地址后, 重复这些步骤调整子网掩码和网关。完成后, 按“MENU”按钮退出并返回主页面。

时间码设置

设置时间码输入和输出选项, 包括在记录源时间码、当日时间码或手动设置时间码之间选择。

时间码	
输入	视频输入
丢帧	默认
预设	00:00:00:00
输出	时间线

输入

记录时, 共有四个时间码输入选项。

视频输入	选择“视频输入”将从带有SMPTE RP 188元数据的HDMI信号源提取其嵌入式时间码。该操作将保存HDMI信号源和HyperDeck Shuttle HD所记录文件之间的同步。
内部	使用此选项可记录通过内置时间码发生器所产生的当日时间码。
从上个片段生成	为时间码输入选择“从上个片段生成”选项时, 每个文件将从上一个片段尾帧的下一帧开始。例如, 如果首个片段以10:28:30:10结束, 那么下一个片段时间码将从10:28:30:11开始。
预设	如果想要手动设置时间码, 选择预设选项。记录的片段会按照“预设”中设置的时间码开始, 本章节之后会显示。

丢帧

对于29.97或59.94帧率NTSC信号源, 您可以选择“丢帧”或“无丢帧”时间码。如果是未知信号源, 选择“默认”。这样将保持输入格式, 或如果没有有效时间码默认为丢帧。

预设

如果要手动设置时间码, 可按“SET”按钮, 并使用搜索旋钮和“SET”按钮来输入起始时间码。请确保输入菜单中的“预设”选项被勾选。

输出

为您的输出选择时间码选项。

时间线	要为记录在存储卡或硬盘上的所有片段输出连续时间码, 请选择时间线。
片段	选择片段选项可输出每个单独片段的时间码。

文件设置

文件设置	
文件名前缀	HyperDeck
时间戳文件后缀	关闭

文件名前缀

首次设置时, 您的HyperDeck Shuttle HD将采用以下文件名规范将片段记录至SD卡或USB闪存盘。

HyperDeck_0001	
HyperDeck_0001	前缀
HyperDeck_0001	片段编号

您可以通过HyperDeck Setup实用程序修改文件名前缀。更多信息请参考本手册中“Blackmagic HyperDeck设置”部分的内容。

时间戳文件后缀

默认设置下, 时间戳添加至文件名是关闭状态。如果您想要将日期和时间记录到文件名中, 可将“时间戳文件后缀”选项切换至“开启”状态。

HyperDeck_2201061438_0001	
HyperDeck_2201061438_0001	文件名前缀
HyperDeck_2201061438_0001	年
HyperDeck_2201061438_0001	月
HyperDeck_2201061438_0001	日
HyperDeck_2201061438_0001	时
HyperDeck_2201061438_0001	分
HyperDeck_2201061438_0001	片段编号

远程设置

远程设置可以让HyperDeck被其他视频设备远程控制, 比如ATEM Mini Extreme切换台。



远程

选择“远程”启用以太网远程控制。取消远程控制可回到本机控制。

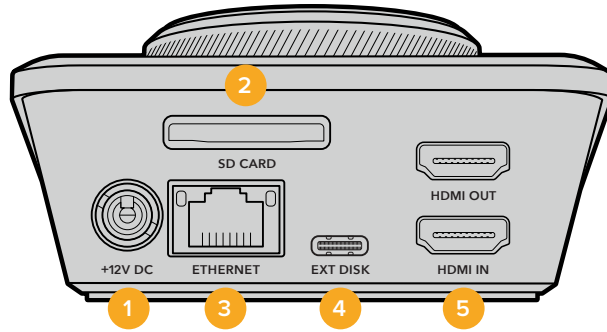
重置设置



恢复出厂设置

在设置菜单中高亮“恢复出厂设置”可将HyperDeck恢复到出厂时的设置。按下“SET”时, 设备会弹出确认信息。

后面板



1 电源

HyperDeck Shuttle HD通过一块AC适配器获得电源。提示 附带的电源线配有防止断开的带锁接口, 但您也可以使用任何36W 12V的电源线为HyperDeck Shuttle HD供电。

2 SD卡

将SD卡插入卡槽内可实现记录和播放。

3 以太网

以太网接口可让您连接到网络进行快速FTP传输或通过HyperDeck Ethernet Protocol远程协议远程控制设备。更多关于通过FTP客户端传输文件的信息, 请参考本手册后面关于“通过网络传输文件”部分的内容。

连接到ATEM切换台所在的同一个网络下时, 您还可以使用ATEM切换台或ATEM硬件控制面板来控制HyperDeck。

4 外接硬盘

将硬盘连接至USB-C接口, 您可以高达5Gb/s的速度记录至外接硬盘。您还可以连接多端口USB-C集线器或Blackmagic MultiDock 10G, 从而连接一个或多个SSD。

5 HDMI

将HDMI输出连接到HDMI电视机、监视器或者ATEM Mini Extreme等切换台。HDMI输出还可用于查看菜单叠加。

存储介质

SD卡

为获得高质量HD记录, 我们建议使用高速UHS-II型SD卡。这些卡需要具备超过220MB/s的写入速度, 可记录高达Ultra HD 2160p60的影像。

但是, 如果您以低比特率记录更高压缩格式, 那么或许能使用更低速的存储卡。通常来讲, 卡的速度越快越好。

请定期关注本操作手册是否已有更新版本, 以便获得最新信息。请到Blackmagic Design网站 www.blackmagicdesign.com/cn/support 进行下载。

HyperDeck Shuttle HD应使用哪些SD卡?

建议您使用以下几款SD卡记录最高60fps的1080p影像:

品牌	型号	容量
Angelbird	AV PRO SD UHS-II 300MB/s V90 SDXC	256GB
Angelbird	AV PRO SD UHS-II 260MB/s V60 SDXC	128GB
Angelbird	AV PRO SD UHS-II 260MB/s V60 SDXC	64GB
SanDisk	Extreme Pro UHS-I 95MB/s SDXC	64GB
Wise	SD2-64U3 UHS-II 285MB/s SDXC	64GB
Lexar	Professional 1000x UHS-II 150MB/s SDXC	128GB
SONY	Tough SF-G128T	128GB
Kingston	CANVAS GO! Plus 170MB/s V30	64GB
Kingston	CANVAS GO! Plus 170MB/s V30	128GB
Kingston	CANVAS GO! Plus 170MB/s V30	512GB
ProGrade Digital	SDXC UHS-II V90 300R	64GB
ProGrade Digital	SDXC UHS-II V90 300R	128GB
SONY	Tough SF-G64T UHS-II SDXC	64GB
Delkin Devices	Black UHS-II V90 SDXC	256GB
Delkin Devices	Power UHS-II V90 SDXC	128GB
Delkin Devices	Power UHS-II V90 SDXC	256GB
Delkin Devices	Black UHS-II V90 SDXC	128GB
Exascend	Essential SDXC UHS-II V90 R 300MB/s	64GB
Exascend	Essential SDXC UHS-II V90 R 300MB/s	128GB
Exascend	Catalyst SDXC UHS-II V90 R 300MB/s	64GB

外接硬盘

所有HyperDeck型号都可以直接记录到USB-C硬盘上。这类存储盘速度快,容量大,可进行长时间视频记录。您可以将硬盘连接到计算机,直接在硬盘上进行剪辑!

如要获得更大的存储空间,可以连接USB-C硬盘坞或外置硬盘。如要连接Blackmagic MultiDock 10G或USB-C硬盘,可使用线缆将USB-C设备连接到HyperDeck后方的“EXT DISK”端口。

HyperDeck Shuttle HD应使用哪些USB-C硬盘?

建议您使用以下几款USB-C硬盘记录最高60fps的1080p ProRes HQ影像:

品牌	型号	容量
Wise	PTS-256 Portable SSD 4K	256GB
OWC	Envoy Pro Ex	240GB
BUFFALO	SSD-PHE500U3-BA	500GB

建议您使用以下几款USB-C硬盘记录最高60fps的1080p DNxHR HQX影像:

品牌	型号	容量
OWC	Envoy Pro Ex	240GB

建议您使用以下几款USB-C硬盘记录最高60fps的1080p H.264影像:

品牌	型号	容量
OWC	Envoy Pro Ex	240GB

格式化存储介质

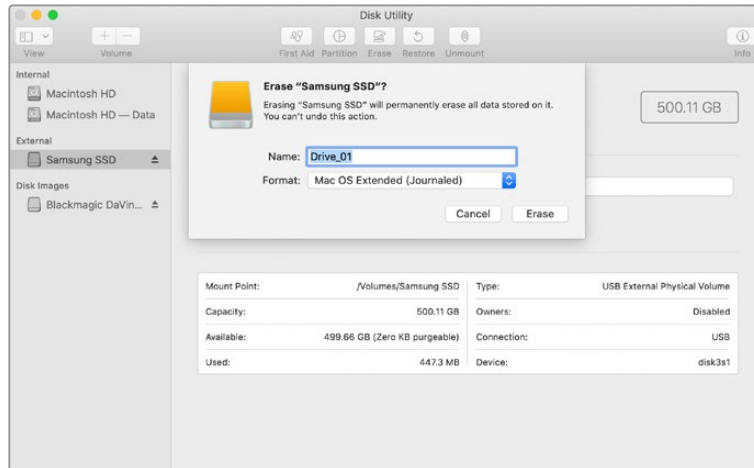
在计算机上准备存储介质

在Mac计算机上格式化存储介质

Mac系统自带的“磁盘工具”应用程序可以将硬盘格式化为HFS+或exFAT格式。

由于格式化后硬盘内所有文件都会被清除,因此请务必在格式化前备份硬盘上的所有重要文件。

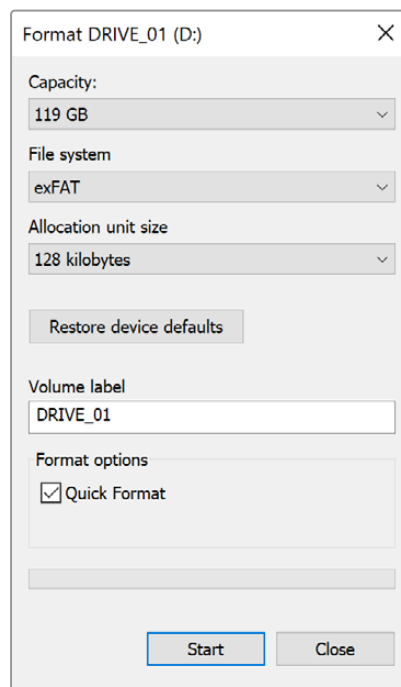
- 1 通过外部连接器或数据线将USB硬盘连接至电脑,忽略任何关于使用SSD作为Time Machine备份选择的信息。SD卡可通过外部读卡器连接到您的计算机。
- 2 进入“应用程序/实用工具”界面,运行“磁盘工具”程序。
- 3 点击SD卡或USB硬盘图标,再点击“抹掉”按钮。
- 4 将格式设置为“Mac OS扩展(日志式)”或“exFAT”。
- 5 输入新增分区的名字,点击“抹掉”。您的存储介质会迅速格式化,以备HyperDeck使用。



在Windows计算机上格式化存储介质

使用Windows PC的格式化对话框可将硬盘格式化为exFAT。由于格式化后SSD硬盘或SD卡内所有文件都会被清除，因此请务必在格式化前备份硬盘上的所有重要文件。

- 1 通过外接硬盘座或数据线将USB硬盘连接至计算机。SD卡可通过外部读卡器连接到您的计算机。
- 2 打开“开始菜单”或“开始画面”，选择“我的电脑”。右键点击USB硬盘或SD卡。
- 3 从上下文菜单中选择“格式化”。
- 4 将文件系统设置为“exFAT”，将分配单元大小设置成128kb。
- 5 输入卷标，选择“快速格式化”，点击“开始”。
- 6 您的存储介质会迅速格式化，以备HyperDeck使用。



使用提词器功能

使用标准RTF文件时, 您可以将Blackmagic HyperDeck Shuttle HD作为提词器使用。在TextEdit或WordPad中创建文件, 以13中支持语言中的任何一种保存为多信息文本格式。用HyperDeck Shuttle HD打开后, 您可以调整稿件文本的字体大小和行距。

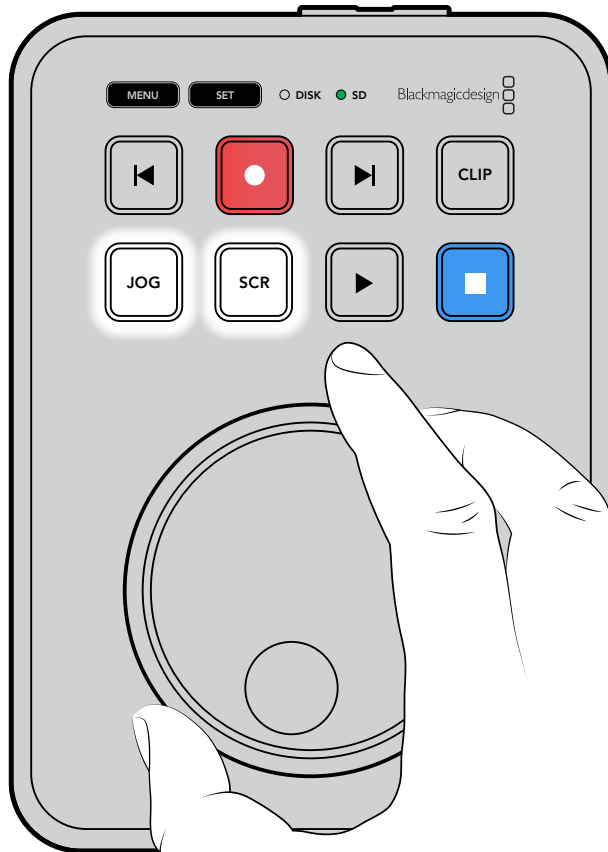
如要使用提词器功能:

- 1 将HyperDeck Shuttle HD的HDMI输出与您希望使用的HDMI显示器连接。
- 2 插入包含稿件文本的SD卡或者连接USB硬盘。
- 3 在记录菜单中选择编解码选项。前往“提词器”设置, 按下“SET”按钮。

稿件文本会出现在显示器上。然后您可以用播放按钮开始自动播放, 或者通过旋钮进行其他控制。

控制提词器播放速度

HyperDeck Shuttle HD上的大尺寸旋钮在提词器模式下可以用于控制播放, 就像播放媒体一样。加载稿件文本后, 同时按下“JOG”和“SCR”按钮可以启用变速播放。选定后转动旋钮。稿件文本的移动速度会根据旋钮的移动而变化。比如, 转动旋钮的速度越快, 稿件文本滚动的速度就会越快。



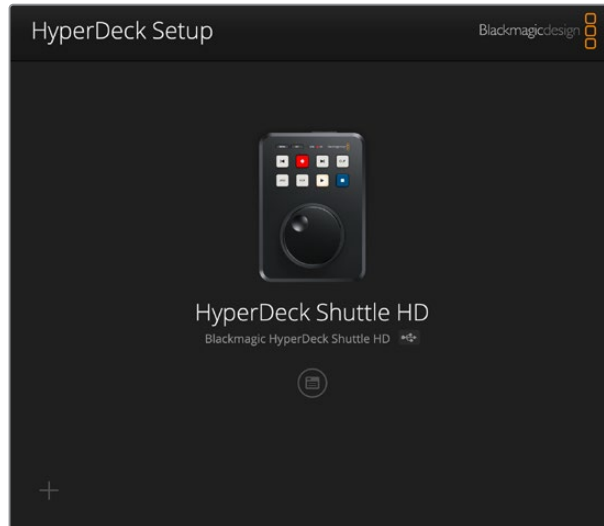
如要获得固定的速度, 您可以单独使用JOG和SCR按钮。选定后, 在慢速搜索模式下旋转旋钮, 稿件文本会按照固定的低速移动, 在极速模式下会以更快的速度移动。

如要在SD卡或外部硬盘上的RTF文件之间浏览, 可以按前进和倒退按钮。

提词器会识别到文件中的字体大小、颜色以及粗体设置。此外, 当您把显示内容投射到分光镜上时, 可以使用监看菜单调整字体大小、行距、侧边距, 还能水平或垂直翻转显示内容。详情请参考本手册前面“菜单设置”部分的内容。

Blackmagic HyperDeck Setup

Blackmagic HyperDeck Setup是一款软件实用程序,可用于更改HyperDeck的各项设置并更新其内部软件。

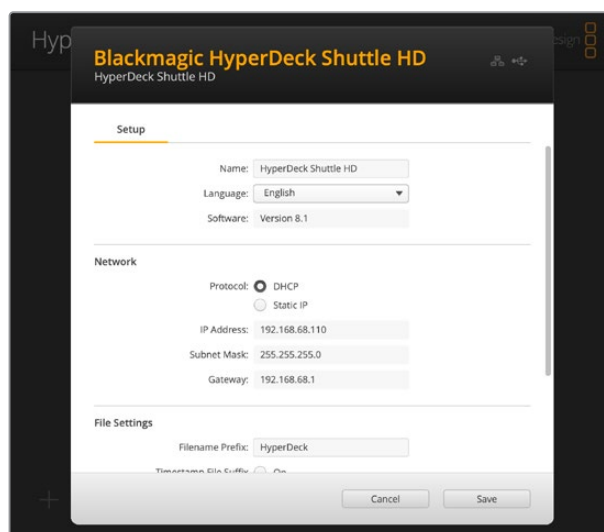


要安装软件:

- 1 登陆网址www.blackmagicdesign.com/cn/support, 下载最新Blackmagic HyperDeck Setup安装程序。
- 2 运行Blackmagic HyperDeck Setup安装程序, 根据屏幕提示完成安装。
- 3 安装完成后, 将HyperDeck Shuttle HD通过后面板的USB或以太网端口连接到计算机。
- 4 运行Blackmagic HyperDeck Setup程序, 并根据屏幕提示更新内部软件。如果系统未弹出任何提示信息, 即表示当前内部软件已是最新版本, 无需升级。

点击HyperDeck画面或者设置图标可以打开设置菜单。

屏幕主页会显示HyperDeck Shuttle HD和设备名称。当您的计算机连接了一台以上的HyperDeck时, 该名称可用于识别设备, 也可以通过实用程序中的设置菜单进行设置。



网络

Network

Protocol: DHCP
 Static IP

IP Address: 192.168.68.110

Subnet Mask: 255.255.255.0

Gateway: 192.168.68.1

协议

如果要用ATEM切换台控制HyperDeck Shuttle HD, 或者通过HyperDeck Ethernet Protocol以太网协议对设备进行远程控制, 那么HyperDeck Shuttle HD就需要和其他使用DHCP的设备位于同一网络下, 或者您也可以手动添加固定的IP地址。

DHCP	HyperDeck Shuttle HD硬盘录机默认使用DHCP设置。动态主机配置协议也叫DHCP, 这个网络服务器可以自动寻找您的HyperDeck硬盘录机并为其指派一个IP地址。DHCP方便易用, 可通过以太网连接设备, 并确保设备的IP地址相互不冲突。大部分计算机和网络交换机支持DHCP。
静态IP	选中“静态IP”选项后, 您可以手动输入具体的网络信息。当您进行手动设置IP地址以便让所有设备都能建立通信时, 这些设备必须共享同一个子网掩码和网关设置。此外, 控制面板IP地址的前三段数值也必须匹配。

如果网络上其他设备的IP地址具有相同的识别数值, 就会发生冲突, 导致设备无法连接。如果遇到冲突, 只要将该设备IP地址的识别数值进行修改即可。

文件设置

File Settings

Filename Prefix: HyperDeck

Timestamp File Suffix On
 Off

初次设置时, HyperDeck Shuttle HD将会使用“HyperDeck”前缀把片段记录在SD卡或USB硬盘上。您可以输入新的文件名修改前缀。

默认设置下, 时间戳添加至文件名是关闭状态。如果您希望在文件名中记录日期和时间, 可以将其设为“开启”状态。HyperDeck Shuttle HD的屏幕菜单中也有文件名前缀和时间戳的设置。

通过网络传输文件

HyperDeck硬盘录机支持通过文件传输协议，即“FTP”来传输文件。这个强大功能可让您通过本地网络可提供的快速网络，直接从电脑上复制文件到HyperDeck。例如，您可以将新文件复制到位于异地的HyperDeck远程设备上，用于数字标牌。

连接HyperDeck Shuttle HD

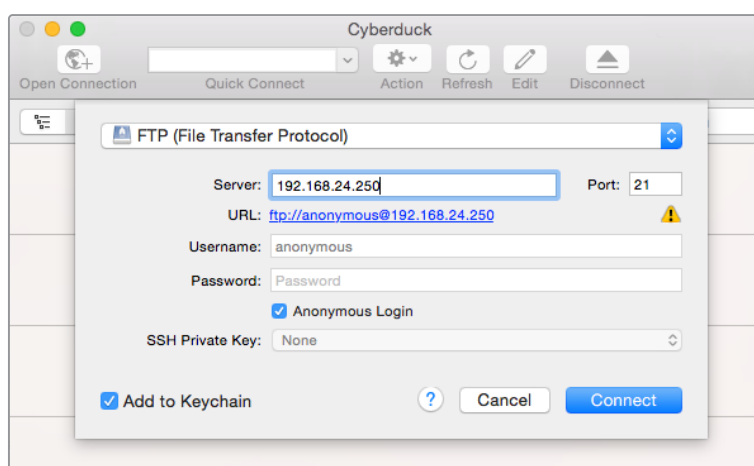
当计算机和HyperDeck Shuttle HD处于同一个网络时，您只需要一个FTP客户端和HyperDeck Shuttle HD的IP地址即可。

- 1 在用来连接HyperDeck的计算机上下载安装FTP客户端。我们推荐Cyberduck、FileZilla或Transmit，但大多数FTP应用程序都可以使用。Cyberduck与FileZilla均可免费下载。
- 2 通过以太网线将HyperDeck Shuttle HD连接到网络，并记下它的IP地址。要查询IP地址，按“菜单”按钮，旋转旋钮进入“网络”设置即可。屏幕下方会显示HyperDeck的IP地址。

网络	
协议	静态IP
IP地址	192.168.24.100
子网掩码	255.255.255.0
网关	192.168.24.1

您可以在设置菜单的“网络”选项卡中找到HyperDeck Shuttle HD的IP地址。

- 3 将HyperDeck的IP地址输入TCP应用程序的连接对话框。对话框的名字和位置会根据应用程序的不同而发生变化，但通常会标为“服务器”或“主机”。如果您的FTP程序包含“匿名登录”复选框，请务必勾选该复选框。



连接HyperDeck Shuttle HD时，不需要输入用户名或密码。只需在FTP应用程序的“服务器”或“主机”一栏输入硬盘录机的IP地址，如有“匿名登录”复选框的话同时勾选该复选框。

传输文件

连接HyperDeck后, 您可以像使用FTP程序一样传输文件。大多数FTP应用程序都具备拖放界面, 具体方式请查看您使用的应用程序。

您的HyperDeck可以发送和接收任何文件, 但请注意, 如果您需要在HyperDeck Shuttle HD上播放任何文件, 该文件必须符合HyperDeck所支持的编解码器和分辨率。

提示 您可以在HyperDeck录制的同时通过网络传输文件。HyperDeck会自动调整传输速度, 确保记录不受影响。

Developer Information

Blackmagic HyperDeck Ethernet Protocol

The Blackmagic HyperDeck Ethernet Protocol is a text based protocol accessed by connecting to TCP port 9993 on HyperDeck models that have a built in Ethernet connection. If you are a software developer, you can use the protocol to construct devices that integrate with our products. Here at Blackmagic Design our approach is to open up our protocols and we eagerly look forward to seeing what you come up with!

Protocol Commands

Command	Command Description
help or ?	Provides help text on all commands and parameters
commands	return commands in XML format
device info	return device information
disk list	query clip list on active disk
disk list: slot id: {n}	query clip list on disk in slot {n}
quit	disconnect ethernet control
ping	check device is responding
preview: enable: {true/false}	switch to preview or output
play	play from current timecode
play: speed: {-5000 to 5000}	play at specific speed
play: loop: {true/false}	play in loops or stop-at-end
play: single clip: {true/false}	play current clip or all clips
playrange	query playrange setting
playrange set: clip id: {n}	set play range to play clip {n} only
playrange set: clip id: {n} count: {m}	set play range to {m} clips starting from clip {n}
playrange set: in: {inT} out: {outT}	set play range to play between: - timecode {inT} and timecode {outT}
playrange set: timeline in: {in} timeline out: {out}	set play range in units of frames between: - timeline position {in} and position {out} clear/reset play range setting
playrange clear	clear/reset play range setting
play on startup	query unit play on startup state
play on startup: enable: {true/false}	enable or disable play on startup
play on startup: single clip: {true/false}	play single clip or all clips on startup
play option	query play options
play option: stop mode: {lastframe/nextframe/black}	set output frame when playback stops
record	record from current input
record: name: {name}	record named clip
record spill	spill current recording to next slot

Command	Command Description
record: spill: slot id: {n}	spill current recording to specified slot use current id to spill to same slot
stop	stop playback or recording
clips count	query number of clips on timeline
clips get	query all timeline clips
clips get: clip id: {n}	query a timeline clip info
clips get: clip id: {n} count: {m}	query m clips starting from n
clips get: version: {1/2}	query clip info using specified output version: version 1: id: name startT duration version 2: id: startT duration inT outT name
clips add: name: {name}	append a clip to timeline
clips add: clip id: {n} name: {name}	insert clip before existing clip {n}
clips add: in: {inT} out: {outT} name: {name}	append the {inT} to {outT} portion of clip
clips remove: clip id: {n}	remove clip {n} from the timeline (invalidates clip ids following clip {n})
clips clear	empty timeline clip list
transport info	query current activity
slot info	query active slot
slot info: slot id: {n}	query slot {n}
slot select: slot id: {n}	switch to specified slot
slot select: video format: {format}	load clips of specified format
slot unblock	unblock active slot
slot unblock: slot id: {n}	unblock slot {n}
cache info	query cache status
dynamic range	query dynamic range settings
dynamic range: playback override: {off/Rec709/Rec2020_SDR/HLG/ ST2084_300/ST2084_500/ ST2084_800/ST2084_1000/ ST2084_2000/ST2084_4000/ST2084}	set playback dynamic range override
dynamic range: record override: {off/Rec709/Rec2020_SDR/HLG/ ST2084_300/ST2084_500/ ST2084_800/ST2084_1000/ ST2084_2000/ST2084_4000/ST2048}	set record dynamic range override
notify	query notification status
notify: remote: {true/false}	set remote notifications
notify: transport: {true/false}	set transport notifications
notify: slot: {true/false}	set slot notifications
notify: configuration: {true/false}	set configuration notifications
notify: dropped frames: {true/false}	set dropped frames notifications

Command	Command Description
notify: display timecode: {true/false}	set display timecode notifications
notify: timeline position: {true/false}	set playback timeline position notifications
notify: playrange: {true/false}	set playrange notifications
notify: cache: {true/false}	set cache notifications
notify: dynamic range: {true/false}	set dynamic range settings notifications
notify: slate: {true/false}	set digital slate notifications
notify: clips: {true/false}	set timeline clips notifications where two types of changes can occur: add: partial update with list of clips and insert positions snapshot: complete update of all clips on timeline
notify: disk: {true/false}	set disk clips notifications where two types of changes can occur: add: partial update with list of clips and insert positions snapshot: complete update of all clips on timeline
goto: clip id: {start/end}	goto first clip or last clip
goto: clip id: {n}	goto clip id {n}
goto: clip id: +{n}	go forward {n} clips
goto: clip id: -{n}	go backward {n} clips
goto: clip: {n}	goto frame position {n} within current clip
goto: clip: +{n}	go forward {n} frames within current clip
goto: clip: -{n}	go backward {n} frames within current clip
goto: clip: {start/end}	goto start or end of clip
goto: timeline: {n}	goto frame position {n} within timeline
goto: timeline: +{n}	o forward {n} frames within timeline
goto: timeline: -{n}	go backward {n} frames within timeline
goto: timeline: {start/end}	goto start or end of timeline
goto: timecode: {timecode}	goto specified timecode
goto: timecode: +{timecode}	go forward {timecode} duration
goto: timecode: -{timecode}	go backward {timecode} duration
goto: slot id: {n}	goto slot id {n}
jog: timecode: {timecode}	jog to timecode
jog: timecode: +{timecode}	jog forward {timecode} duration
jog: timecode: -{timecode}	jog backward {timecode} duration
shuttle: speed: {-5000 to 5000}	shuttle with speed
remote	query unit remote control state
remote: enable: {true/false}	enable or disable remote control
remote: override: {true/false}	session override remote control
configuration	query configuration settings
configuration: video input: SDI	switch to SDI input
configuration: video input: HDMI	switch to HDMI input

Command	Command Description
configuration: video input: component	switch to component input
configuration: audio input: embedded	capture embedded audio
configuration: audio input: XLR	capture XLR audio
configuration: audio input: RCA	capture RCA audio
configuration: file format: {format}	switch to specific file format
configuration: audio codec: PCM	switch to PCM audio
configuration: audio codec: AAC	switch to AAC audio
configuration: timecode input: {external/embedded/internal/preset/clip}	change the timecode input
configuration: timecode output: {clip/timeline}	change the timecode output
configuration: timecode preference: {default/dropframe/nondropframe}	whether or not to use drop frame timecodes when not otherwise specified
configuration: timecode preset: {timecode}	set the timecode preset
configuration: audio input channels: {n}	set the number of audio channels recorded to {n}
configuration: record trigger: {none/recordbit/timecoderun}	change the record trigger
configuration: record prefix: {name}	set the record prefix name (supports UTF-8 name)
configuration: append timestamp: {true/false}	append timestamp to recorded filename
configuration: xlr input id: {n} xlr type: {line/mic}	configure xlr input type multiple xlr inputs can be configured in a single command
configuration: genlock input resync: {true/false}	enable or disable genlock input resync
uptime	return time since last boot
format: slot id: {n} prepare: {exFAT/HFS+} name: {name}	prepare a disk formatting operation to filesystem {format}
format: confirm: {token}	perform a pre-prepared formatting operation using token
identify: enable: {true/false}	identify the device
watchdog: period: {period in seconds}	client connection timeout
reboot	reboot device
slate clips	slate clips information
slate project	slate project information
slate lens	slate lens information

Multiline commands:	Command Description
slate clips↵	set slate clips information:
reel: {n}	slate reel number, where {n} is in [1, 999]
scene id: {id}	slate scene id value, where {id} is a string
shot type: {WS/MS/BCU/MCU/ECU/none}	slate shot type
take: {n}	slate take number, where {n} is in [1, 99]
take scenario: {PU/VFX/SER/none}	slate take scenario
take auto inc: {true/false}	slate take auto increment
good take: {true/false}	slate good take
environment: {interior/exterior}	slate environment
day night: {day/night}	slate day or night
slate project:↵	set slate project information:
project name: {name}	project name (can be empty, supports UTF-8)
camera: {index}	set camera index e.g. A
director: {name}	director (can be empty, supports UTF-8)
camera operator: {name}	camera operator (can be empty, supports UTF-8)
slate lens:↵	set lens information:
lens type: {type}	lens type (can be empty, supports UTF-8)
iris: {type}	camera iris (can be empty, supports UTF-8)
focal length: {length}	focal length (can be empty, supports UTF-8)
distance: {distance}	lens distance (can be empty, supports UTF-8)
filter: {filter}	lens filter (can be empty, supports UTF-8)

Command Combinations

You can combine the parameters into a single command, for example:

```
play: speed: 200 loop: true single clip: true
```

Or for configuration:

```
configuration: video input: SDI audio input: XLR
```

Or to switch to the second disk, but only play NTSC clips:

```
slot select: slot id: 2 video format: NTSC
```

Protocol Details

Connection

The HyperDeck Ethernet server listens on TCP port 9993.

Basic syntax

The HyperDeck protocol is a line oriented text protocol. Lines from the server will be separated by an ascii CR LF sequence. Messages from the client may be separated by LF or CR LF.

New lines are represented in this document as a "↵" symbol.

Single line command syntax

Command parameters are usually optional. A command with no parameters is terminated with a new line:

```
{Command name}↵
```

If parameters are specified, the command name is followed by a colon, then pairs of parameter names and values. Each parameter name is terminated with a colon character:

```
{Command name}: {Parameter}: {Value} {Parameter}: {Value} ...↵
```

Multiline command syntax

The HyperDeck protocol also supports an equivalent multiline syntax where each parameter-value pair is entered on a new line. E.g.

```
{Command name}:↵  
{Parameter}: {Value}↵  
{Parameter}: {Value}↵  
↵
```

Response syntax

Simple responses from the server consist of a three digit response code and descriptive text terminated by a new line:

```
{Response code} {Response text}↵
```

If a response carries parameters, the response text is terminated with a colon, and parameter name and value pairs follow on subsequent lines until a blank line is returned:

```
{Response code} {Response text}:↵  
{Parameter}: {Value}↵  
{Parameter}: {Value}↵  
...  
↵
```

Successful response codes

A simple acknowledgement of a command is indicated with a response code of 200:

```
200 ok↵
```

Other successful responses carry parameters and are indicated with response codes in the range of 201 to 299.

Failure response codes

Failure responses to commands are indicated with response codes in the range of 100 to 199:

```
100 syntax error
101 unsupported parameter
102 invalid value
103 unsupported
104 disk full
105 no disk
106 disk error
107 timeline empty
108 internal error
109 out of range
110 no input
111 remote control disabled
112 clip not found
120 connection rejected
150 invalid state
151 invalid codec
160 invalid format
161 invalid token
162 format not prepared
163 parameterized single line command not supported
```

Asynchronous response codes

The server may return asynchronous messages at any time. These responses are indicated with response codes in the range of 500 to 599:

```
5xx {Response Text}:↵
{Parameter}: {Value}↵
{Parameter}: {Value}↵
↵
```

Connection response

On connection, an asynchronous message will be delivered:

```
500 connection info:↵
protocol version: {Version}↵
model: {Model Name}↵
↵
```

Timecode syntax

Timecodes are expressed as non-drop-frame timecode in the format:

```
HH:MM:SS:FF
```

Handling of deck "remote" state

The "remote" command may be used to enable or disable the remote control of the deck. Any attempt to change the deck state over ethernet while remote access is disabled will generate an error:

```
111 remote control disabled↵
```

To enable or disable remote control:

```
remote: enable: {"true", "false"} ↵
```

The current remote control state may be overridden allowing remote access over ethernet irrespective of the current remote control state:

```
remote: override: {"true", "false"} ↵
```

The override state is only valid for the currently connected ethernet client and only while the connection remains open.

The "remote" command may be used to query the remote control state of the deck by specifying no parameters:

```
remote↵
```

The deck will return the current remote control state:

```
210 remote info:↵  
enabled: {"true", "false"}↵  
override: {"true", "false"}↵  
↵
```

Asynchronous remote control information change notification is disabled by default and may be configured with the "notify" command. When enabled, changes in remote state will generate a "510 remote info:" asynchronous message with the same parameters as the "210 remote info:" message.

Closing connection

The "quit" command instructs the server to cleanly shut down the connection:

```
quit↵
```

Checking connection status

The "ping" command has no function other than to determine if the server is responding:

```
ping↵
```

Getting help

The "help" or "?" commands return human readable help text describing all available commands and parameters:

```
help↵
```

Or:

```
?↵
```

The server will respond with a list of all supported commands:

```
201 help:↵  
{Help Text}↵  
{Help Text}↵  
↵
```

Switching to preview mode

The "preview" command instructs the deck to switch between preview mode and output mode:

```
preview: enable: {"true", "false"}↵
```

Playback will be stopped when the deck is switched to preview mode. Capturing will be stopped when the deck is switched to output mode.

Controlling device playback

The "play" command instructs the deck to start playing:

```
play↵
```

The play command accepts a number of parameters which may be used together in most combinations.

By default, the deck will play all remaining clips on the timeline then stop.

The "single clip" parameter may be used to override this behavior:

```
play: single clip: {"true", "false"}↵
```

By default, the deck will play at normal (100%) speed. An alternate speed may be specified in percentage between -5000 to 5000:

```
play: speed: {% normal speed}↵
```

By default, the deck will stop playing when it reaches to the end of the timeline. The "loop" parameter may be used to override this behavior:

```
play: loop: {"true", "false"}↵
```

The "playrange" command instructs the deck to play all the clips. To override this behavior: and select a particular clip:

```
playrange set: clip id: {Clip ID}↵
```

To only play a certain timecode range:

```
playrange set: in: {in timecode} out: {out timecode}↵
```

To clear a set playrange and return to the default value:

```
playrange clear↵
```

The "play on startup" command instructs the deck on what action to take on startup. By default, the deck will not play. Use the "enable" command to start playback after each power up.

```
play on startup: enable {"true", "false"}↵
```

By default, the unit will play back all clips on startup. Use the "single clip" command to override.

```
play on startup: single clip: {"true", "false"}↵
```

Stopping deck operation

The "stop" command instructs the deck to stop the current playback or capture:

```
stop↵
```

Changing timeline position

The "goto" command instructs the deck to switch to playback mode and change its position within the timeline.

To go to the start of a specific clip:

```
goto: clip id: {Clip ID}↵
```

To move forward/back {count} clips from the current clip on the current timeline:

```
goto: clip id: +/-{count}↵
```

Note that if the resultant clip id goes beyond the first or last clip on timeline, it will be clamp at the first or last clip.

To go to the start or end of the current clip:

```
goto: clip: {"start", "end"}↵
```

To go to the start of the first clip or the end of the last clip:

```
goto: timeline: {"start", "end"}↵
```

To go to a specified timecode:

```
goto: timecode: {timecode}↵
```

To move forward or back a specified duration in timecode:

```
goto: timecode: {"+", "-"}{duration in timecode}↵
```

To specify between slot 1 and slot 2:

```
goto: slot id: {Slot ID}↵
```

Note that only one parameter/value pair is allowed for each goto command.

Enumerating supported commands and parameters

The "commands" command returns the supported commands:

```
commands↵
```

The command list is returned in a computer readable XML format:

```
212 commands:
<commands>↵
  <command name="..."><parameter name="..."/>...</command>↵
  <command name="..."><parameter name="..."/>...</command>↵
  ...
</commands>↵
↵
```

Controlling asynchronous notifications

The "notify" command may be used to enable or disable asynchronous notifications from the server.

To enable or disable transport notifications:

```
notify: transport: {"true", "false"}↵
```

To enable or disable slot notifications:

```
notify: slot: {"true", "false"}↵
```

To enable or disable remote notifications:

```
notify: remote: {"true", "false"}↵
```

To enable or disable configuration notifications:

```
notify: configuration: {"true", "false"}↵
```

Multiple parameters may be specified. If no parameters are specified, the server returns the current state of all notifications:

```
209 notify:↵
transport: {"true", "false"}↵
slot: {"true", "false"}↵
remote: {"true", "false"}↵
configuration: {"true", "false"}↵
dropped frames: {"true", "false"}↵
display timecode: {"true", "false"}↵
timeline position: {"true", "false"}↵
playrange: {"true", "false"}↵
cache: {"true", "false"}↵
dynamic range: {"true", "false"}↵
slate: {"true", "false"}↵
clips: {"true", "false"}↵
disk: {"true", "false"}↵
↵
```

Retrieving device information

The "device info" command returns information about the connected deck device:

```
device info↵
```

The server will respond with:

```
204 device info:↵
protocol version: {Version}↵
model: {Model Name}↵
unique id: {unique alphanumeric identifier}↵
slot count: {number of storage slots}↵
software version: {software version}↵
↵
```


Retrieving slot information

The "slot info" command returns information about a slot. Without parameters, the command returns information for the currently selected slot:

```
slot info↵
```

If a slot id is specified, that slot will be queried:

```
slot info: slot id: {Slot ID}↵
```

The server will respond with slot specific information:

```
202 slot info:↵
slot id: {Slot ID}↵
status: {"empty", "mounting", "error", "mounted"}↵
volume name: {Volume name}↵
recording time: {recording time available in seconds}↵
video format: {disk's default video format}↵
blocked: {"true", "false"}↵
↵
```

Asynchronous slot information change notification is disabled by default and may be configured with the "notify" command. When enabled, changes in slot state will generate a "502 slot info:" asynchronous message with the same parameters as the "202 slot info:" message.

Retrieving clip information

The "disk list" command returns the information for each playable clip on a given disk. Without parameters, the command returns information for the current active disk:

```
disk list↵
```

If a slot id is specified, the disk in that slot will be queried:

```
disk list: slot id: {Slot ID}↵
```

The server responds with the list of all playable clips on the disk in the format of: Index, name, formats, and duration in timecode:

```
206 disk list:↵
slot id: {Slot ID}↵
{clip index}: {name} {file format} {video format} {Duration
timecode}↵
{clip index}: {name} {file format} {video format} {Duration
timecode}↵
...
↵
```

Note that the *clip index* starts from 1.

Retrieving clip count

The "clips count" command returns the number of clips on the current timeline:

```
clips count ↵
```

The server responds with the number of clips:

```
214 clips count: ↵
clip count: {Count}↵
```

Retrieving timeline information

The "clips get" command returns information for each available clip on the current timeline. Without parameters, the command returns information for all clips on timeline:

```
clips get↵
```

The server responds with a list of clip IDs, names and timecodes:

```
205 clips info:↵  
clip count: {Count}↵  
{Clip ID}: {Start timecode} {Duration timecode} {In timecode}  
{Out timecode} {Name}↵  
{Clip ID}: {Start timecode} {Duration timecode} {In timecode}  
{Out timecode} {Name}↵  
...  
↵
```

Retrieving transport information

The "transport info" command returns the state of the transport:

```
transport info ↵
```

The server responds with transport specific information:

```
208 transport info:  
status: {"preview", "stopped", "play", "forward", "rewind",  
"jog", "shuttle","record"}↵  
speed: {Play speed between -5000 and 5000 %}↵  
slot id: {Slot ID or "none"}↵  
clip id: {Clip ID or "none"}↵  
single clip: {"true", "false"}↵  
display timecode: {timecode}↵  
timecode: {timecode}↵  
video format: {Video format}↵  
loop: {"true", "false"}↵  
timeline: {n}↵  
input video format: {Video format}↵  
dynamic range: {"off", "Rec709", "Rec2020_SDR", "HLG",  
"ST2084_300", "ST2084_500", "ST2084_800", "ST2084_1000",  
"ST2084_2000", "ST2084_4000", "ST2048" or "none"}↵  
↵
```

The "timecode" value is the timecode within the current timeline for playback or the clip for record. The "display timecode" is the timecode displayed on the front of the deck. The two timecodes will differ in some deck modes.

Asynchronous transport information change notification is disabled by default and may be configured with the "notify" command. When enabled, changes in transport state will generate a "508 transport info:" asynchronous message with the same parameters as the "208 transport info:" message.

Video Formats

The following video formats are currently supported on HyperDeck Shuttle:

720p50, 720p5994, 720p60

1080p23976, 1080p24, 1080p25, 1080p2997, 1080p30, 1080p60

1080i50, 1080i5994, 1080i60

Video format support may vary between models and software releases.

File Formats

All HyperDeck models currently support the following file formats:

H.264High

H.264Medium

H.264Low

QuickTimeProResHQ

QuickTimeProRes

QuickTimeProResLT

QuickTimeProResProxy

QuickTimeDNxHD220x

DNxHD220x

QuickTimeDNxHD145

DNxHD145

QuickTimeDNxHD45

DNxHD45

Supported file formats may vary between models and software releases.

Querying and updating configuration information

The "configuration" command may be used to query the current configuration of the deck:

```
configuration↵
```

The server returns the configuration of the deck:

```
211 configuration:↵
audio input: {"embedded", "XLR", "RCA"}↵
audio mapping: {n}↵
video input: {"SDI", "HDMI", "component", "composite"}↵
file format: {format}↵
audio codec: {"PCM", "AAC"}↵
timecode input: {"external", "embedded", "preset", "clip"}↵
timecode output: {"clip", "timeline"}↵
timecode preference: {"default", "dropframe", "nondropframe"}↵
timecode preset: {timecode}↵
audio input channels: {n}↵
record trigger: {"none", "recordbit", "timecoderun"}↵
record prefix: {name}↵
append timestamp: {"true", "false"}↵
genlock input resync: {"true", "false"}↵
↵
```

One or more configuration parameters may be specified to change the configuration of the deck.

To change the current video input:

```
configuration: video input: {"SDI", "HDMI", "component"}↵
```

Valid video inputs may vary between models. To configure the current audio input:

```
configuration: audio input: {"embedded", "XLR", "RCA"}↵
```

Valid audio inputs may vary between models.

To configure the current file format:

```
configuration: file format: {File format}↵
```

Note that changes to the file format may require the deck to reset, which will cause the client connection to be closed. In such case, response code 213 will be returned (instead of 200) before the client connection is closed:

```
"213 deck rebooting"
```

Asynchronous configuration information change notification is disabled by default and may be configured with the "notify" command. When enabled, changes in configuration will generate a "511 configuration:" asynchronous message with the same parameters as the "211 configuration:" message.

Selecting active slot and video format

The "slot select" command instructs the deck to switch to a specified slot, or/and to select a specified output video format.

To switch to a specified slot:

```
slot select: slot id: {slot ID}↵
```

To select the output video format:

```
slot select: video format: {video format}↵
```

Either or all slot select parameters may be specified. Note that selecting video format will result in a rescan of the disk to reconstruct the timeline with all clips of the specified video format.

Clearing the current timeline

The "clips clear" command instructs the deck to empty the current timeline:

```
clips clear↵
```

The server responds with

```
200 ok↵
```

Adding a clip to the current timeline

The "clips add:" command instructs the deck to add a clip to the current timeline:

```
clips add: name: {clip name}↵
```

The server responds with

```
200 ok↵
```

or in case of error

```
lxx {error description}↵
```

Configuring the watchdog

The "watchdog" command instructs the deck to monitor the connected client and terminate the connection if the client is inactive for at least a specified period of time.

To configure the watchdog:

```
watchdog: period: {period in seconds}↵
```

To avoid disconnection, the client must send a command to the server at least every {period} seconds. Note that if the period is set to 0 or less than 0, connection monitoring will be disabled.

帮助

获得帮助

获得帮助最快捷的途径是登陆Blackmagic Design在线支持页面并浏览有关Blackmagic HyperDeck硬盘录机的最新支持信息和材料。

Blackmagic Design在线支持页面

请登陆Blackmagic Design支持中心www.blackmagicdesign.com/cn/support获得最新版操作手册、软件以及技术答疑文章。

Blackmagic Design论坛

您可以登陆我们的网站访问Blackmagic Design论坛, 获得更多信息和有用的创意资源。访问论坛也是获取帮助的一个捷径, 因为论坛中不乏经验丰富的用户和Blackmagic Design的员工, 他们都能为您答疑解惑。请登陆网址<http://forum.blackmagicdesign.com>进入论坛。

联系Blackmagic Design支持中心

如果我们提供的支持信息和论坛均无法解答您的疑问, 请到支持页面下点击“给我们发送电子邮件”按钮即可发送技术支持请求。或者, 您也可以点击支持页面下的“查找您所在地区的支持团队”按钮, 致电您所在地区的Blackmagic Design支持中心获得帮助。

查看当前安装的软件版本

要检查您计算机上的Blackmagic HyperDeck软件版本, 请打开“About Blackmagic HyperDeck Setup”窗口查看。

- 在Mac OS系统下, 请到“应用程序”文件夹下打开Blackmagic HyperDeck Setup。到程序菜单中点击“About Blackmagic HyperDeck Setup”即可查看版本号。
- 在Windows系统下, 请到开始菜单或开始界面打开Blackmagic HyperDeck Setup实用程序。点击“Help” (帮助) 菜单并选择“About Blackmagic HyperDeck Setup”即可查看版本号。

如何获得软件更新

检查完电脑上安装的Blackmagic HyperDeck Setup软件版本号之后, 请登陆网址www.blackmagicdesign.com/cn/support, 访问Blackmagic Design支持中心查看最新版本。请及时将软件升级到最新版本, 但切勿在重要项目制作过程中升级软件。

监管告知

在欧盟范围内处置电子垃圾和电子设备的注意事项。



根据产品所附的提示标志, 本设备不得与其它废弃材料共同处置。处置废弃设备时, 必须交给指定收集点进行回收。对废弃设备进行单独收集并回收能够节省自然资源, 且回收方式不会损害环境和人体健康。获取更多关于废弃设备回收点的信息, 请联系您所在城市的回收站, 或当时购买设备的经销商。



本设备经过测试, 符合FCC规则的第15部分对A类数字设备的限制。这些限制旨在为运行于商业环境中的设备提供合理保护, 使其免受有害干扰的影响。本设备可生成、使用且辐射射频能量, 如果未按照安装手册来安装和使用本设备, 则可能导致对无线电通信的有害干扰。在住宅区运行本产品可能会产生有害干扰, 在这种情况下将由用户自行承担消除干扰的费用。

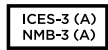
必须满足以下条件后方可操作:

- 1 设备不会造成有害干扰。
- 2 设备必须能够承受任何干扰, 包括可能导致意外操作的干扰。



R-R-BMD-20211410001

加拿大ISED认证声明



本设备符合加拿大A类数码产品的相关标准。

任何对本产品的改装或预期用途之外的使用均可能导致相关标准认证无效。

必须使用有高品质屏蔽的HDMI电缆连接HDMI接口。

本设备经检测符合商业环境使用要求。在家用环境中, 本设备可能会造成无线电干扰。

安全信息

本产品适合在环境温度低于40°C的热带地区使用。

确保设备四周留有足够的空间, 不受阻碍。

设备内部没有操作人员可维护的零件。维修服务请联系当地Blackmagic Design服务中心。



请在海拔高度2000米以下的地区使用。

加利福尼亚安全声明

该产品可能会使您暴露于微量的化学制品之下, 比如塑料部分中含有的多溴化联苯, 该物质已被加利福尼亚州列为可导致癌症、出生缺陷或其他生殖伤害。

详情请访问网址www.P65Warnings.ca.gov。

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HyperDeck Shuttle HD





환영합니다

Blackmagic HyperDeck Shuttle HD 디스크 레코더를 구매해 주셔서 감사합니다.

Blackmagic HyperDeck 디스크 레코더를 처음 개발할 당시 저희는 속도가 빠른 SSD 스토리지를 사용하여 비디오 녹화 및 재생을 쉽게 할 수 있는 제품을 만들고자 했습니다. 이제 이렇게 HyperDeck Shuttle HD를 출시하게 되어 매우 기쁩니다.

HyperDeck Shuttle HD는 책상에 두고 사용할 수 있도록 설계된 작은 크기의 휴대용 HDMI 비디오 레코더입니다. 커다란 검색 다이얼과 친숙한 트랜스포트 컨트롤을 사용해 레코더를 한 손으로 운영할 수 있기 때문에 HyperDeck Shuttle HD는 라이브 프로덕션 작업 시 ATEM Mini 스위처와 함께 사용하기 완벽한 제품입니다. HyperDeck Shuttle HD는 텔레프롬프터로도 사용 가능합니다!

HyperDeck Shuttle HD는 ProRes, DNxHD, H.264 코덱을 사용하여 SD 카드나 외장 플래시 디스크에 영상을 녹화하기 때문에 매우 빠른 녹화 및 재생 속도를 제공합니다.

또한 자사 웹사이트 www.blackmagicdesign.com/kr 고객지원 페이지에서 최신 버전의 사용 설명서와 HyperDeck 관련 업데이트를 확인하시기 바랍니다. 최신 버전의 소프트웨어로 업데이트해야 모든 신규 기능을 이용하실 수 있습니다. 소프트웨어를 다운로드할 때 사용자 정보를 등록하시면 새로운 소프트웨어가 출시될 때마다 업데이트 소식을 받아보실 수 있습니다. 저희는 새로운 기능과 제품 향상을 위해서 끊임없이 노력하고 있으며, 항상 고객 여러분의 의견을 기다립니다.

Blackmagic Design의 CEO

그랜트 패티

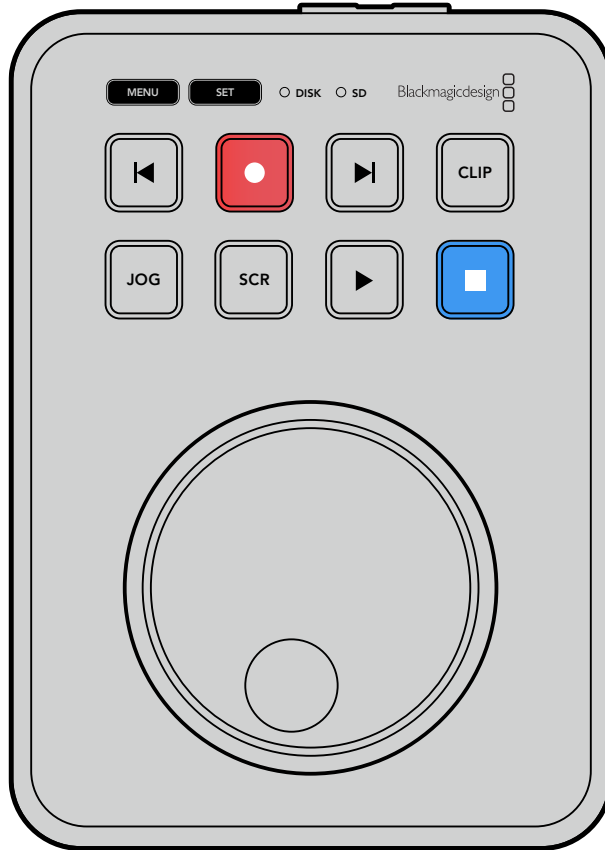
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시작하기

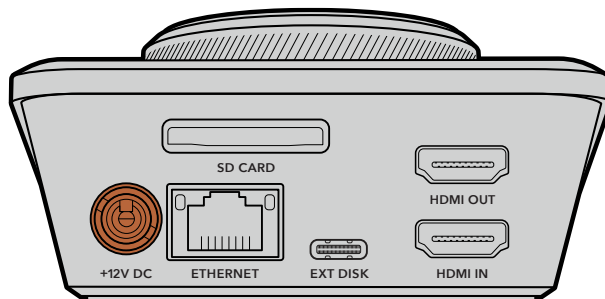
HyperDeck Shuttle HD는 간단히 전원을 연결하고 HDMI 비디오 소스에 연결한 다음 SD 카드나 외장 미디어를 연결해 녹화 버튼을 누르기만 하면 사용 준비가 완료됩니다.

여기서는 HyperDeck Shuttle HD를 사용하는 방법에 대해 설명합니다.



전원 연결하기

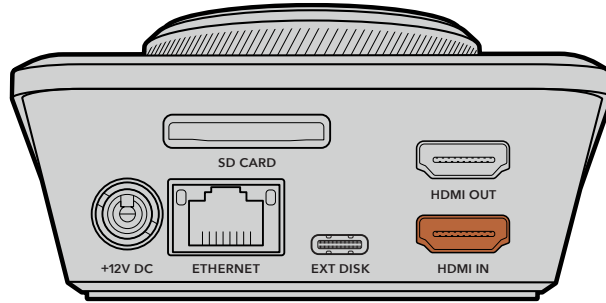
HyperDeck Shuttle HD에 전원을 연결하려면 우선 전원 어댑터를 뒷면 패널에 있는 전원 입력에 연결하세요. 전원 케이블이 실수로 빠지는 일이 없도록 잠금 링을 단단히 조이세요.



전원 어댑터를 HyperDeck Shuttle HD의 전원 입력에 연결하세요.

비디오 및 오디오 연결하기

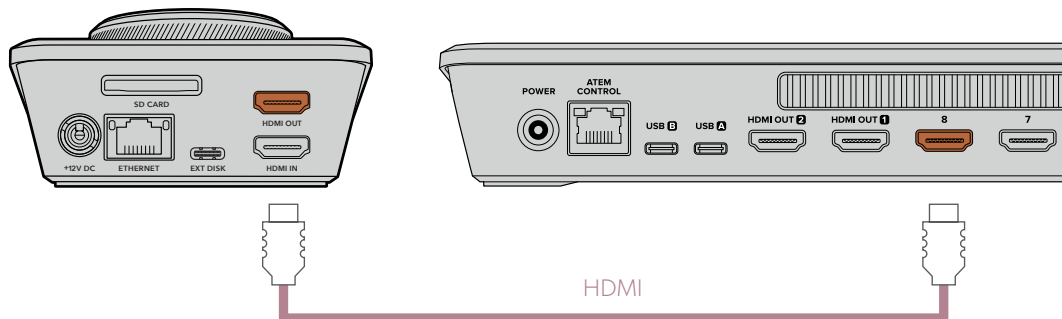
HyperDeck Shuttle HD에 비디오를 연결하려면, HDMI 비디오 소스를 뒷면 패널의 HDMI 입력 단자에 연결하세요.



HDMI 출력 단자에는 수신 장비를 연결하세요. 수신 장비로는 ATEM Mini 스위처나 HDMI TV가 있습니다.

HDMI 출력은 또한 HyperDeck의 설정 변경 시 설정 메뉴를 확인하는 용도로도 사용됩니다. 이는 설정 메뉴를 HDMI 출력의 비디오 오버레이를 통해 볼 수 있기 때문입니다. 이러한 설정 변경 방법에 대한 자세한 정보는 본 사용 설명서의 [설정 변경하기] 부분을 참고하세요.

정보 연결된 디스플레이에 입력 비디오 소스가 나타나지 않을 경우, 현재 모드가 재생 모드로 설정되어 있지 않은지 확인하세요. 녹화 버튼을 누르면 녹화 모드가 활성화됩니다.



HDMI TV나 ATEM Mini 스위처 같은 수신 장비는 HDMI 출력에 연결하세요.

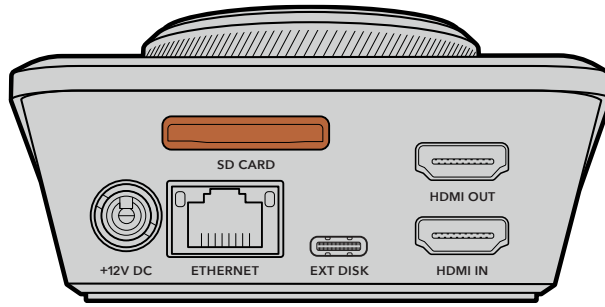
미디어 연결하기

모든 HyperDeck Shuttle HD 디스크 레코더는 설정 변경 없이 바로 녹화할 수 있는 상태로 출고됩니다. 포맷된 SD 카드 또는 외장 디스크만 있으면 바로 녹화를 시작할 수 있습니다.

메뉴 설정을 통해 미디어를 쉽게 포맷할 수 있습니다. 컴퓨터에서 미디어를 포맷할 수도 있습니다. 더 자세한 정보는 본 설명서의 [미디어 포맷하기] 부분을 참고하세요. 영상 녹화에 가장 적합한 미디어 유형과 권장 SD 카드 및 외장 디스크 목록에 대한 정보도 확인할 수 있습니다.

SD 카드 장착하기

- 1 SD 카드의 금속 접촉부가 위쪽으로 향하도록 잡고 미디어 슬롯에 잘 맞추세요. 이제 카드를 슬롯에 집어넣고 완전히 장착될 때까지 부드럽게 밀어 넣으세요.



- 이제 HyperDeck에서 SD 카드를 인식합니다. 그러면 HyperDeck Shuttle HD 상단에 있는 SD 카드 표시등에 녹색불이 들어옵니다. 확인 과정이 끝나면 표시등의 불이 꺼집니다.



이것으로 모든 준비가 완료되었습니다. 이제 HyperDeck Shuttle HD로 영상을 녹화 및 재생할 수 있습니다.

사용 설명서를 끝까지 읽고 클립 녹화 및 재생, 설정 변경 등에 대한 자세한 정보를 확인하세요.

비디오 녹화하기

비디오 소스가 HDMI 수신 장비에 나타나는 걸 확인하고 나면 녹화를 바로 시작할 수 있습니다.

녹화를 시작하려면 녹화 버튼을 누르세요. SD 카드에 녹화할 경우, SD 표시등에 빨간불이 들어오며 녹화 및 재생 버튼에도 불이 들어옵니다. 외장 디스크에 녹화할 경우엔 디스크 표시등에 빨간불이 들어옵니다.



녹화를 마치려면 정지 버튼을 누르세요.

재생

재생 버튼을 누르면 재생이 시작됩니다. 재생 중에는 재생 버튼에 불이 들어오며 DISK 또는 SD 미디어 슬롯 표시등에 녹색불이 들어옵니다.

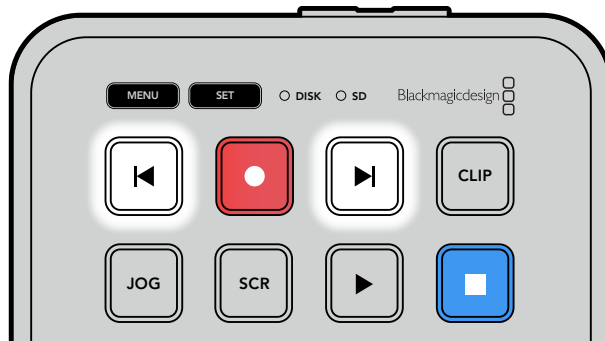
여러 개의 녹화 클립이 존재할 경우, 건너뛰기 및 뒤로 가기 버튼을 눌러 클립 간을 이동할 수 있습니다.



스킵 버튼 사용하기

뒤로 가기 버튼을 누르면 클립이 시작 부분으로 큐잉됩니다. 버튼을 한 번 이상 누르면 이전 녹화 클립으로 이동됩니다.

건너뛰기 버튼을 눌러 클립 간을 이동할 수 있습니다.



건너뛰기 및 뒤로 가기 버튼을 누르면 각 클립의 시작 지점으로 큐잉됩니다.

정보 HyperDeck에서 비디오 파일을 재생하려면, 파일 녹화에 사용된 코덱과 일치하는 코덱으로 설정해야 합니다. 이 설정은 메뉴를 통해 설정할 수 있습니다. 더 자세한 정보는 본 설명서 뒷편의 [설정 변경하기] 부분을 참고하세요.

클립 반복 재생

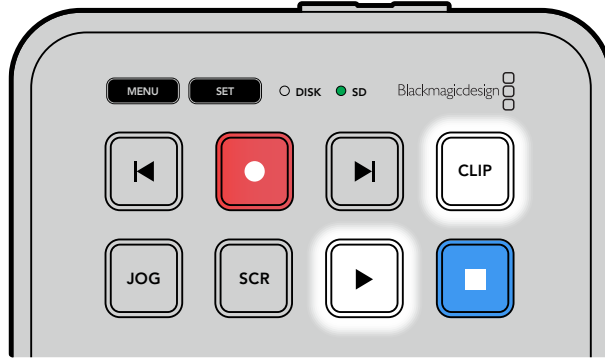
클립 재생 중에 재생 버튼을 한 번 더 누르면 HyperDeck Shuttle HD에서 정지 버튼을 누를 때까지 모든 클립을 반복 재생합니다.

클립 하나만 반복 재생하고자 할 경우, HyperDeck을 '클립' 모드로 하고 재생 버튼을 한 번 누르면 재생이, 한 번 더 누르면 반복 재생이 실행됩니다.

전체 클립 루프	클립 재생 중에 재생 버튼을 한 번 더 누르면 녹화된 모든 클립이 반복 재생됩니다.
현재 클립 루프	클립 모드에서 재생 버튼을 한 번 더 누르면 현재 클립이 반복 재생됩니다.

클립 모드

클립 모드에서는 재생이 단일 클립으로 제한됩니다. 예를 들어, 클립 모드를 활성화하면 클립을 셔틀하거나 다른 클립으로 건너뛸 수 있으며, 이후 재생 버튼을 누르면 클립이 끝나는 지점에서 재생이 종료됩니다.






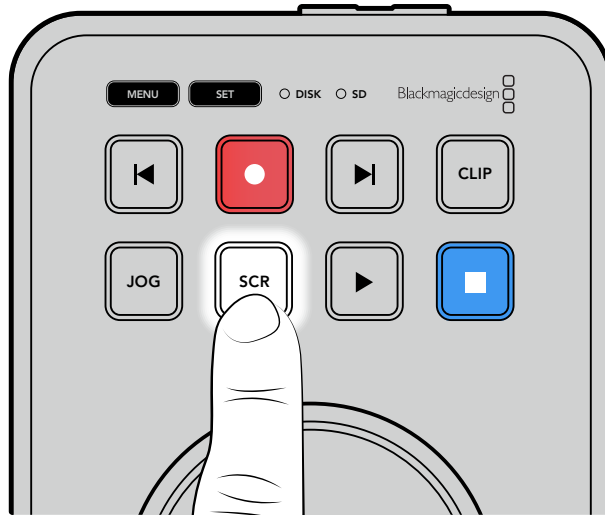
클립 모드가 선택된 상태에서 재생 버튼을 한 번 더 누르면 현재 클립이 반복 재생됩니다.

검색 다이얼 사용하기

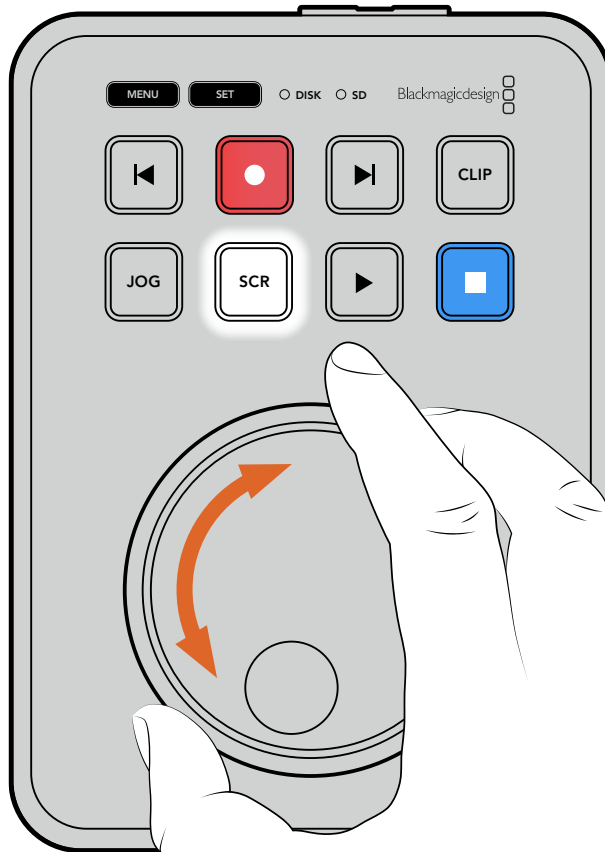
검색 다이얼을 사용해 클립 간을 신속하게 이동할 수 있으며, 특정 부분을 골라 재생하거나 프레임 단위로 검토할 수 있습니다. 이는 특정 부분을 찾을 때 중요한 기능으로, 다이얼을 돌려 클립을 시각적으로 모니터링할 수 있습니다. 또한 플레이헤드를 특정 큐 지점으로 이동시켜 생방송 도중 내보낼 클립을 준비할 때 유용한 기능입니다.

검색 다이얼 모드에는 조그, 셔틀, 스크롤이 있습니다.

	조그	클립 전체를 재생해 프레임 단위로 정확하게 컨트롤할 수 있습니다.
	스크롤	스크롤 모드에서는 신속하게 앞/뒤로 이동하면서 녹화된 모든 미디어를 검색할 수 있습니다. 검색 다이얼을 돌리면 다이얼을 돌리는 만큼 스크롤되어 재생 위치를 원하는 곳으로 완벽하게 조절할 수 있습니다.
	셔틀	JOG 및 SCR 버튼을 동시에 누르면 셔틀 모드로 전환됩니다. 셔틀 모드로 전환되면 다이얼을 좌/우로 돌려 미디어를 되감기 또는 빨리 감기 할 수 있습니다. 다이얼을 돌리면 최대 50배속에 다다를 때까지 미디어가 빠른 속도로 셔틀됩니다. 셔틀 속도를 줄여서 완전히 멈추려면, 검색 다이얼을 처음 위치로 다시 돌리세요. 셔틀 도중에 특정 지점에서 멈추려면, 정지 버튼을 누르거나 재생 버튼을 눌러 현재 위치에서 재생이 다시 시작되도록 하세요. '설정' 메뉴를 사용해 최대 셔틀 속도를 줄일 수 있다는 점을 기억하세요. 더 자세한 정보는 본 설명서 뒤편의 [설정] 부분을 참고하세요.



JOG 또는 SCR 버튼을 눌러 조그 및 스크롤 검색 모드를 선택하세요.

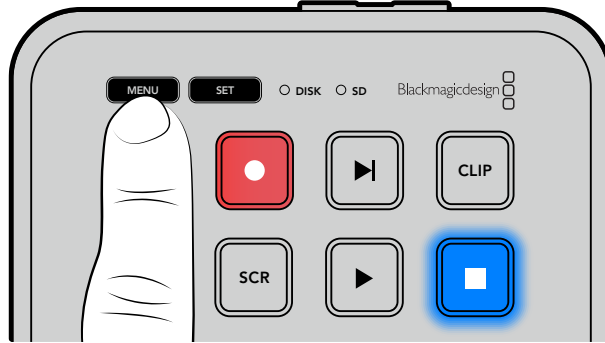


검색 모드를 선택한 다음 검색 다이얼을 돌리세요.

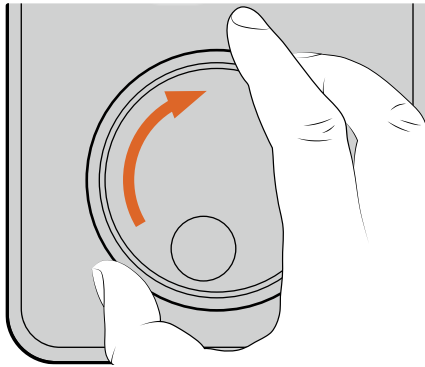
정보 일반 재생 모드로 돌아가려면 재생 또는 정지 버튼을 누르세요.

설정 변경하기

MENU 버튼을 누르면 연결된 HDMI 디스플레이의 좌측 하단에 비디오 오버레이 형태로 설정 메뉴가 나타납니다.

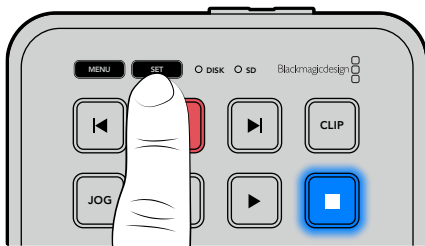


MENU 버튼을 눌러 설정 메뉴에 접속하세요.



검색 다이얼을 사용해 하위 메뉴 또는 설정 화면으로 이동하세요.

녹화	
입력	HDMI
코덱	H.264 높음
트리거 녹화	사용 안 함



SET 버튼을 눌러 하위 메뉴 또는 설정 항목을 선택하세요.

녹화	
입력	HDMI
코덱	H.264 높음
트리거 녹화	사용 안 함

검색 다이얼이나 건너뛰기 및 뒤로 가기 버튼을 사용해 설정을 조정하세요. SET 버튼을 눌러 선택을 완료하세요.

MENU 버튼을 누르면 이전 메뉴 항목으로 이동해 시작 화면으로 되돌아갑니다.

정보 설정 메뉴를 사용해 메뉴가 디스플레이의 네 모서리 중 원하는 부분에 나타나도록 할 수 있습니다. 설정 변경을 마치고 나면 해당 메뉴를 끄는 것이 좋습니다. 그래야 ATEM Mini Extreme과 같은 HDMI 스위처에 연결했을 때 HDMI 출력이 클린 피드로 출력됩니다.

설정

이 설정 메뉴는 녹화, 모니터링, 오디오, 저장 공간, 설정의 총 5개 카테고리로 구성되어 있습니다. 각 하위 메뉴에는 관련 설정이 포함되어 있으며, 대부분은 HyperDeck Shuttle HD 컨트롤 패널에서도 조절할 수 있습니다. 파일명 접두사와 같은 일부 설정은 편집이 불가능하기 때문에 회색으로 처리되어 나타납니다. 이런 경우엔 HyperDeck Setup 유틸리티에서 해당 설정을 조절할 수 있습니다.

녹화 메뉴

녹화	
입력	HDMI
코덱	H.264 높음
트리거 녹화	사용 안 함

입력

HyperDeck Shuttle HD HDMI 입력이 디스플레이됩니다.

코덱

HyperDeck Shuttle HD는 H.264, Apple ProRes 및 DNxHD 코덱을 사용해 압축 비디오로 녹화합니다. 텔레프롬프트 기능을 사용하려면 '텔레프롬프트'를 선택하세요.

트리거 녹화

'비디오 시작/정지'와 '타임코드 런'의 두 가지 모드 중 선택할 수 있습니다.

Blackmagic Pocket Cinema Camera 4K 같은 일부 카메라는 외부 녹화 장비에 녹화를 시작하거나 정지할 때 HDMI를 통해 명령을 전송합니다. '비디오 시작/정지' 모드를 선택하면 촬영 카메라에서 녹화 버튼이 눌러지는 시점에 HyperDeck이 녹화를 시작/정지합니다.

'타임코드 런' 옵션은 유효한 타임코드 신호가 HDMI 입력을 통해 전송되는 시점에 녹화를 시작하도록 합니다. 타임코드 신호 입력이 멈추면 녹화도 자동으로 멈춥니다. '사용 안 함'을 선택하면 트리거가 비활성화됩니다.

참고 HDMI 카메라 영상을 녹화할 경우, 출력에 나타나는 오버레이도 영상과 함께 녹화되므로 오버레이 기능을 끈 상태에서 클린 피드만 출력되는지 확인하세요.

모니터링 메뉴

모니터링	
텔레프롬프터 레이아웃	
폰트 크기	450%
줄 간격	120%
측면 여백	10%
가로 뒤집기	OFF
세로 뒤집기	OFF

텔레프롬프터 레이아웃

모니터링 메뉴에는 HyperDeck Shuttle HD를 텔레프롬프터로 사용할 때 필요한 모든 설정이 포함되어 있습니다.

폰트 크기

'폰트 크기' 설정을 선택한 다음 SET 버튼을 눌러 텍스트 크기를 조절하세요. 다이얼을 시계 방향으로 돌려 증가시키거나 시계 반대 방향으로 돌려 감소시킬 수 있습니다.

줄 간격

다이얼을 돌려 줄 간격을 늘리거나 줄일 수 있습니다.

측면 여백

프롬프터 디스플레이의 양쪽 측면 여백 폭을 조절합니다.

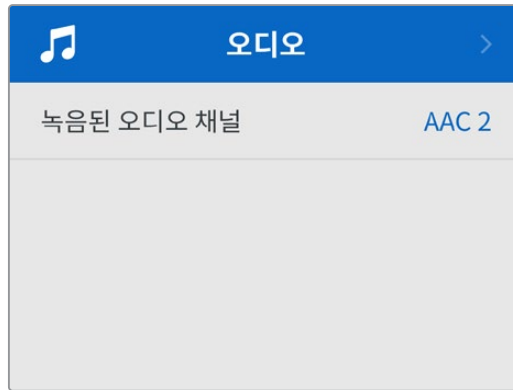
반전

카메라나 단상 앞에 텔레프롬프터 모니터가 유리에 반사되도록 설치해둔 경우, 진행자가 화면 내용을 읽을 수 있도록 반전 설정을 사용해야 합니다. 반전 모드는 두 가지 모드로 지원됩니다.

가로 뒤집기 - 텔레프롬프터 모니터가 유리의 바닥 면과 가깝게 설치된 경우에 사용하세요.

세로 뒤집기 - 텔레프롬프터 모니터가 유리의 바닥 면에서 멀리 떨어진 곳에 설치된 경우에 사용하세요.

오디오 메뉴



녹음된 오디오 채널

HyperDeck Shuttle HD를 사용하여 한 번에 최대 8개의 PCM 오디오 채널을 녹음할 수 있습니다. 녹화할 채널 수를 선택하려면, 녹음된 오디오 채널 목록을 확장한 다음 2채널 또는 8채널 중에서 선택하세요.

코덱이 H.264로 설정된 경우, 2채널의 AAC 오디오를 선택하면 유튜브에 바로 업로드할 수 있습니다.

저장 공간 메뉴



‘저장 공간’ 설정에는 연결된 미디어가 나타납니다. ‘미디어 1’에는 연결된 SD 카드명이, ‘미디어 2’에는 EXT DISK 단자에 연결된 모든 USB 플래시 디스크명이 표시됩니다. Blackmagic MultiDock 10G와 같은 USB 허브를 사용할 경우, 활성화된 디스크가 표시됩니다.

USB 연속 녹화

Blackmagic MultiDock 10G 등의 장비에 있는 EXT DISK 단자에 USB를 연결하여 하나 이상의 드라이브를 연결하고자 할 경우, ‘USB 연속 녹화’ 기능을 활성화하여 녹화가 한 외장 디스크에서 다른 디스크로 이어질 수 있도록 하세요.

미디어 포맷

SD 카드와 뒷면 EXT DISK 단자에 연결된 미디어는 장치에서 바로 포맷하거나, Mac/Windows 컴퓨터에서 포맷할 수 있습니다.

HyperDeck Shuttle HD에서 미디어 사용 준비하기

- 1 검색 다이얼과 SET 버튼으로 포맷할 미디어를 선택하세요.
- 2 해당 목록에서 포맷하려는 미디어를 선택하고 SET 버튼을 누르세요.
- 3 포맷을 선택하고 SET 버튼을 누르세요.

- 4 포맷하려는 카드와 선택된 포맷 옵션을 보여주는 확인 창이 나타납니다.
- 5 작업 완료 후, 포맷 창이 나타나면 '확인'을 선택하세요.

Mac OS X 확장 포맷으로도 알려진 HFS+는 저널링을 지원하여 사용이 권장됩니다. 사용하는 저장 미디어에 문제가 생길 경우, 저널링이 적용된 미디어 카드의 데이터는 복원될 가능성이 훨씬 높습니다. HFS+는 Mac에서 기본 지원됩니다. exFAT는 Mac과 Windows에서 기본 지원되므로 추가 소프트웨어가 필요하지 않으나, 저널링을 지원하지는 않습니다.

Mac/Windows 컴퓨터에서 미디어를 포맷하려면 본 설명서의 [미디어 포맷하기] 부분을 참고하세요.

설정 메뉴

'설정' 메뉴에는 언어 선택, 기본 표준 설정, 메뉴 디스플레이, 네트워크 설정, 타임코드 설정 옵션이 포함되어 있습니다.

설정	
이름	HyperDeck Shuttle HD
언어	한국어
날짜	2022년 5월 16일
시간	14:32
표준 시간대	UTC±11:00
소프트웨어	8.1
카메라	A
기본 포맷	1080p30
최대 셔플 속도	x50

이름

한 대 이상의 HyperDeck Shuttle HD가 네트워크에 연결된 경우, 고유의 이름을 설정하여 다른 장치를 쉽게 구분할 수 있습니다. 이는 Blackmagic HyperDeck Setup 또는 터미널 응용 프로그램을 사용하는 Blackmagic HyperDeck 이더넷 프로토콜을 통해서도 설정할 수 있습니다. 해당 이름은 '설정' 메뉴에 나타납니다.

언어

HyperDeck Shuttle HD는 한국어, 영어, 중국어, 일본어, 스페인어, 독일어, 불어, 러시아어, 이탈리아어, 포르투갈어, 터키어, 우크라이나어, 폴란드어를 포함해 총 13개 언어를 지원합니다.

언어 설정 방법

- 1 '설정' 메뉴가 하이라이트되면 SET 버튼을 누르세요.
- 2 검색 다이얼로 스크롤하여 '언어'를 선택한 뒤, SET 버튼을 누르세요.
- 3 검색 다이얼로 원하는 언어를 선택한 뒤, SET 버튼을 누르세요. 언어가 선택되면 자동으로 설정 메뉴로 되돌아갑니다.

날짜

날짜 입력란을 선택하고 SET 버튼을 누르세요. 검색 다이얼을 사용하여 년/월/일을 선택하세요. 타임스탬프 파일 접미사에 해당 날짜가 적용됩니다.

시간

시간을 설정하려면 '시간'을 선택하고 SET 버튼을 누르세요. 검색 다이얼을 사용하여 시간과 분을 조절하세요. HyperDeck Shuttle HD의 내부 시계는 24시간 형식으로 표시됩니다.

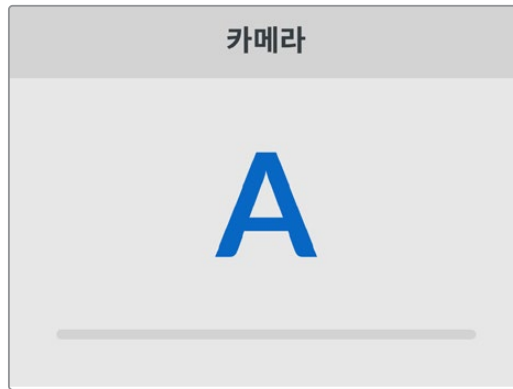
소프트웨어

현재 소프트웨어의 버전을 표시합니다.

카메라

이 설정은 HyperDeck을 사용해 여러 대의 카메라로부터 개별 카메라 파일을 녹화하여 DaVinci Resolve의 멀티카메라 타임라인으로 편집할 경우에 유용한 기능입니다.

파일 메타데이터에 개별 카메라 식별 글자가 나타나 DaVinci Resolve에서 동기화 빈 기능을 사용해 각각의 카메라 앵글을 쉽게 확인할 수 있습니다.



A~Z 또는 1~9를 사용해 카메라를 지정하세요.

기본 비디오 표준

HyperDeck Shuttle HD는 때때로 사용자가 사용하길 원하는 비디오 표준이 무엇인지 알지 못합니다. 이 설정을 통해 HyperDeck이 사용자가 가장 선호하는 비디오 표준을 알 수 있습니다.

한 가지 좋은 예는, HyperDeck Shuttle HD를 켜고 연결된 비디오 입력이 없고 삽입된 디스크에 저장된 파일들이 2개의 서로 다른 비디오 표준을 가지는 경우입니다. 이런 경우엔 HyperDeck에서 어느 비디오 표준을 사용하여 재생할까요? '기본 비디오 표준' 설정은 사용자가 선호하는 비디오 표준을 파악하여 해당 포맷으로 파일을 전환해 재생하도록 합니다.

'기본 비디오 표준'은, 처음으로 HyperDeck Shuttle HD를 켜고 연결된 비디오 및 삽입된 미디어 디스크가 없을 시에도 유용하게 사용됩니다. 이 경우, HyperDeck Shuttle HD는 모니터링 출력에 어느 비디오 표준을 사용할지 알지 못합니다. 이때 '기본 비디오 표준' 설정이 이를 알려줍니다.

하지만, '기본 비디오 표준'은 단순히 가이드 역할을 하며, 다른 어떤 설정도 덮어쓰지 않습니다. 따라서, 1개의 파일이 담긴 미디어 디스크를 재생하면 HyperDeck Shuttle HD에서 해당 파일의 비디오 표준으로 전환하여 재생을 실행합니다. 이는 단순히 디스크에 저장된 파일을 재생하려는 사용자의 의도가 명확하기 때문에 '기본 비디오 표준' 설정을 무시하게 됩니다.

녹화에도 비슷한 상황이 적용됩니다. 녹화 버튼을 누르면, HyperDeck은 비디오 입력 단자에 연결된 비디오 표준과 상관없이 그대로 녹화합니다. 또한 녹화를 마친 뒤, '기본 비디오 표준'과 일치하는 다른 파일이 디스크에 있더라도 HyperDeck Shuttle HD는 디스크에 방금 녹화한 비디오 표준 파일을 재생합니다. 이는 사용자가 방금 녹화한 비디오 표준과 동일한 비디오 표준으로 재생을 원하는 것으로

가정하기 때문입니다. 만약 미디어 디스크를 빼낸 후 다시 삽입하면 '기본 비디오 표준' 기본 설정을 사용하여 재생할 파일을 고르게 됩니다.

'기본 비디오 표준' 설정은 HyperDeck Shuttle HD가 어떤 결정을 내려야 할지 불명확할 때 오로지 가이드로써 사용됩니다. 이는 특정 방식으로 실행시키도록 우선하는 기능은 아닙니다.

최대 셔틀 속도

HyperDeck Shuttle HD의 최대 셔틀 속도는 50배속입니다. 속도를 줄이려면 다른 속도 프리셋을 선택하세요.

메뉴 설정하기

메뉴 설정을 사용하면 연결된 HDMI 디스플레이에 나타나는 메뉴의 위치와 화면 모드를 조절할 수 있습니다.

메뉴	
화면 모드	라이트
불투명도	100%
위치	좌측 하단

화면 모드

HyperDeck의 온스크린 메뉴를 다크 또는 라이트 모드로 설정할 수 있습니다. 라이트 모드는 미디어 화면이 어두울 경우나 텔레프롬프터 모드 사용 시 더욱 풍부한 콘트라스트를 제공합니다.

메뉴		메뉴	
화면 모드	라이트	화면 모드	다크
불투명도	100%	불투명도	100%
위치	좌측 하단	위치	좌측 하단

불투명도

이 레벨을 조절할 경우, 연결된 디스플레이에 나타나는 메뉴 오버레이 불투명도를 기본 설정된 100%에서 20%까지 줄일 수 있습니다.

위치

메뉴 오버레이는 화면 좌측 하단에 나타나도록 기본 설정되어 있습니다. 메뉴를 다른 위치로 옮기려면 '위치'를 선택한 다음 SET 버튼을 누르세요. 그러면 이제 메뉴 위치를 좌측 상단, 우측 상단, 좌측 하단, 우측 하단으로 설정할 수 있습니다.

네트워크 설정

네트워크	
프로토콜	고정 IP
IP 주소	192.168.24.100
서브넷 마스크	255.255.255.0
게이트웨이	192.168.24.1

프로토콜

Blackmagic HyperDeck은 DHCP로 기본 설정되어 있으므로, 장치를 연결하면 사용하는 네트워크 서버가 자동으로 IP 주소를 지정하여 다른 네트워크 설정을 변경하지 않아도 됩니다. 수동으로 IP 주소를 입력해야 하는 경우, 고정 IP 주소를 통해 연결하세요.

'프로토콜'을 선택한 상태에서 깜빡이는 SET 버튼을 눌러 메뉴에 접속한 뒤, '고정 IP'로 스크롤해 SET 버튼을 누르세요.

IP 주소, 서브넷 마스크, 게이트웨이, 프라이머리 DNS, 세컨더리 DNS

고정 IP를 선택한 후 네트워크 세부사항을 직접 입력할 수 있습니다.

IP 주소 변경하기

- 1 검색 다이얼을 사용하여 'IP address'로 맞춘 뒤, HyperDeck의 전면 패널에서 깜빡이는 'set' 버튼을 누르세요.
- 2 검색 다이얼을 사용하여 IP 주소를 조정한 다음 '설정'을 눌러 확인한 후 다음 값 설정 단계로 넘어갑니다.
- 3 SET 버튼을 눌러 변경 사항을 확인하고 다음 값으로 이동하세요.

IP 주소 입력이 끝나면 위 단계를 반복하여 서브넷 마스크 및 게이트웨이를 조정할 수 있습니다. 완료되면 깜빡이는 MENU 버튼을 눌러 종료하고 시작 화면으로 돌아갑니다.

타임코드 설정하기

소스 타임코드, 타임코드 입력 및 출력 옵션과 현재 시각 타임코드, 또는 수동 타임코드 설정 등 타임코드 입/출력 옵션을 설정하세요.

타임코드	
입력	비디오 입력
드롭 프레임	기본
프리셋	00:00:00:00
출력	타임라인

입력

녹화 시 총 4개의 타임코드 입력 중 선택하여 사용할 수 있습니다.

비디오 입력	비디오 입력을 선택하면 SMPTE RP 188 메타데이터가 있는 HDMI 소스에서 타임코드를 가져와 사용합니다. 이를 통해 HDMI 소스와 HyperDeck Studio 녹화 파일 간 동기화가 유지됩니다.
내장 타임코드	내장 타임코드 생성기를 통한 현재 시간 타임코드를 사용하고자 할 경우 이 옵션을 선택하세요.
마지막 클립 이어가기	이 옵션을 선택 시, 이전 클립 마지막 프레임의 바로 다음 프레임에 연속하여 시작합니다. 예를 들어, 첫 번째 클립이 10:28:30:10에 끝난다면 다음 클립의 타임코드는 10:28:30:11에서 시작합니다.
프리셋	타임코드를 수동으로 설정하는 경우 프리셋 옵션을 선택하세요. 녹화 클립은 프리셋 설정을 통한 특정 타임코드에서 시작합니다. 다음의 자세한 설명을 확인하세요.

드롭 프레임

29.97 혹은 59.94 프레임 레이트의 NTSC 소스로부터 타임코드를 전송받는 경우 '드롭 프레임' 또는 '논드롭 프레임' 타임코드를 선택할 수 있습니다. 소스가 불명확할 시 '기본값'을 선택하세요. 이 경우, 입력 소스의 표준을 그대로 사용하거나, 유효한 타임코드 입력이 없는 경우에는 드롭 프레임 방식으로 처리합니다.

프리셋

타임코드를 수동으로 설정하려면 SET 버튼을 누르고 검색다이얼과 SET 버튼을 사용하여 시작 시간을 입력하세요. 입력 메뉴의 하위 항목에 있는 '프리셋'을 선택해야 합니다.

출력

출력을 위한 타임코드 옵션은 다음과 같습니다.

타임라인	카드 또는 드라이브에 녹화된 모든 클립에 대해 연속 타임 코드를 출력하려면 '타임라인'을 선택하세요.
클립	'클립'을 선택하면 각 개별 클립의 타임코드가 출력됩니다.

파일 설정하기

파일 설정	
파일명 접두사	HyperDeck
타임스탬프 파일 접미사	OFF

파일명 접두사

처음 설치 시, HyperDeck Shuttle HD는 SD 카드나 USB 플래시 디스크에 녹화할 때 다음과 같은 파일명 규칙을 사용합니다.

HyperDeck_0001

HyperDeck_0001

접두사

HyperDeck_0001

클립 번호

이러한 파일명 접두사는 HyperDeck Setup 유틸리티에서 변경할 수 있습니다. 자세한 정보는 본 설명서의 뒷편의 [Blackmagic HyperDeck 셋업] 부분을 참고하세요.

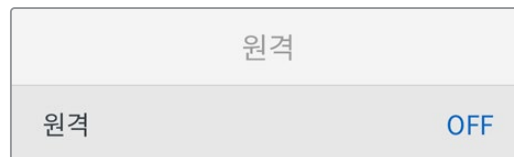
타임스탬프 파일 접미사

타임스탬프가 파일명에 포함되는 기능은 OFF로 기본 설정되어 있습니다. 파일명에 날짜와 시간을 포함하려면 '타임스탬프 파일 접미사' 기능을 On으로 변경하세요.

HyperDeck_2201061438_0001	
HyperDeck_2201061438_0001	파일명 접두사
HyperDeck_2201061438_0001	연도
HyperDeck_2201061438_0001	월
HyperDeck_2201061438_0001	일
HyperDeck_2201061438_0001	시
HyperDeck_2201061438_0001	분
HyperDeck_2201061438_0001	클립 번호

원격 기능 설정하기

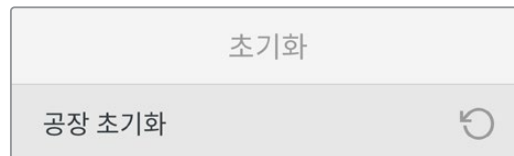
원격 기능 설정을 통해 ATEM Mini Extreme 스위처와 같은 다른 영상 장비에서 HyperDeck을 제어할 수 있습니다.



원격

'원격' 기능을 활성화하면 이더넷을 통한 원격 제어가 가능합니다. 장치를 직접 제어하려면 이 옵션을 비활성화 하세요.

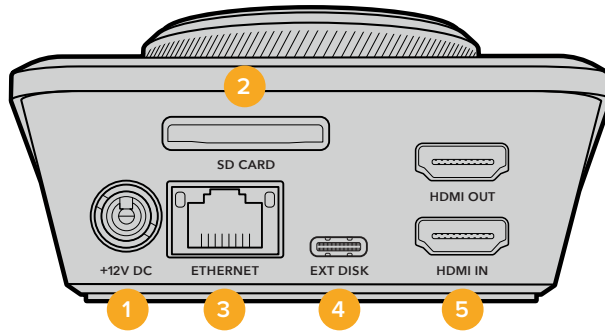
초기화 설정하기



공장 초기화

HyperDeck을 공장 초기화 설정으로 돌리려면 '설정' 메뉴의 '공장 초기화' 메뉴로 가세요. SET 버튼을 누르면 선택을 확인하는 메시지가 뜹니다.

뒷면 패널



1 전원

HyperDeck Shuttle HD는 AC 플러그 팩을 통해 전원을 공급받습니다. 함께 제공되는 전원 케이블은 안전한 연결을 위해 잠금 커넥터가 있습니다. 하지만 다른 케이블을 사용하고자 할 경우, 종류에 관계 없이 36W 12V 전원 케이블을 연결하여 HyperDeck Shuttle HD에 전원을 공급할 수 있습니다.

2 SD 카드

녹화 및 재생을 위해 SD 카드를 슬롯에 삽입하세요.

3 이더넷

이더넷 포트를 통해 네트워크에 연결하여 빠른 FTP 전송을 이용하거나 HyperDeck 이더넷 프로토콜을 사용하여 HyperDeck HD를 원격으로 제어할 수 있습니다. FTP 클라이언트를 통한 파일 전송의 자세한 내용은 본 사용 설명서 뒷편의 [네트워크를 통해 파일 전송하기] 부분을 참고하세요.

ATEM 스위처와 공유하는 네트워크에 연결하면 ATEM 스위처 또는 ATEM 하드웨어 패널을 사용하여 HyperDeck을 제어할 수 있습니다.

4 외장 디스크

USB-C 단자에 플래시 디스크를 연결하여 최대 5Gb/s의 속도로 녹화할 수 있습니다. 이 외에도 다포트 USB-C 허브를 연결하거나 Blackmagic MultiDock 10G를 연결하여 한 개 또는 여러 개의 SSD 카드를 사용할 수도 있습니다.

5 HDMI

HDMI 출력을 HDMI TV 및 모니터, ATEM Mini Extreme 스위처 등으로 연결하세요. HDMI 출력을 통해 메뉴 오버레이를 표시할 수 있습니다.

저장 미디어

SD 카드

고화질의 HD로 녹화할 경우, 초고속 UHS-I SD 카드를 사용할 것을 권장합니다. SD 카드는 최대 2160p60의 UHD 화질의 녹화 시 220MB/s 이상의 쓰기 속도를 지원해야 합니다.

하지만, 낮은 비트 전송률의 고압축 영상으로 녹화할 경우에는 이렇게 빠른 카드를 사용할 필요가 없습니다. 일반적으로 카드 속도는 빠를수록 좋습니다.

최신 버전의 설명서를 통해 주기적으로 최신 정보를 확인하는 것이 좋습니다. Blackmagic Design 웹사이트 www.blackmagicdesign.com/kr/support에서 다운로드할 수 있습니다.

HyperDeck Shuttle HD에는 어떤 SD 카드를 사용해야 하나요?

다음은 최대 60 fps의 1080p 녹화에 권장되는 SD 카드 목록입니다.

제조사	모델	용량
Angelbird	AV PRO SD UHS-II 300MB/s V90 SDXC	256GB
Angelbird	AV PRO SD UHS-II 260MB/s V60 SDXC	128GB
Angelbird	AV PRO SD UHS-II 260MB/s V60 SDXC	64GB
SanDisk	Extreme Pro UHS-I 95MB/s SDXC	64GB
Wise	SD2-64U3 UHS-II 285MB/s SDXC	64GB
Lexar	Professional 1000x UHS-II 150MB/s SDXC	128GB
SONY	Tough SF-G128T	128GB
Kingston	CANVAS GO! Plus 170MB/s V30	64GB
Kingston	CANVAS GO! Plus 170MB/s V30	128GB
Kingston	CANVAS GO! Plus 170MB/s V30	512GB
ProGrade Digital	SDXC UHS-II V90 300R	64GB
ProGrade Digital	SDXC UHS-II V90 300R	128GB
SONY	Tough SF-G64T UHS-II SDXC	64GB
Delkin Devices	Black UHS-II V90 SDXC	256GB
Delkin Devices	Power UHS-II V90 SDXC	128GB
Delkin Devices	Power UHS-II V90 SDXC	256GB
Delkin Devices	Black UHS-II V90 SDXC	128GB
Exascend	Essential SDXC UHS-II V90 R 300MB/s	64GB
Exascend	Essential SDXC UHS-II V90 R 300MB/s	128GB
Exascend	Catalyst SDXC UHS-II V90 R 300MB/s	64GB

외장 디스크

HyperDeck 전체 모델은 USB-C 플래시 디스크에 바로 녹화할 수 있습니다. 이 디스크는 속도가 빠르고 용량이 커서 장시간 녹화에 사용할 수 있습니다. 녹화 후에는 플래시 디스크를 컴퓨터에 연결하여 바로 편집 작업을 시작할 수 있습니다.

더 큰 저장 공간을 사용하고 싶다면 USB-C 도크 장비나 외장 하드 드라이브를 연결할 수 있습니다. Blackmagic MultiDock 10G 또는 USB-C 플래시 디스크를 연결하기 위해서는 해당 USB-C 장비와 HyperDeck 후면 패널의 EXT 디스크 단자를 케이블로 연결하세요.

HyperDeck Shuttle HD로 녹화 시, 어떤 USB-C 드라이브를 사용해야 하나요?

다음은 최대 60 fps의 1080p ProRes HQ 녹화에 권장되는 SD 카드 목록입니다.

제조사	모델	용량
Wise	PTS-256 Portable SSD 4K	256GB
OWC	Envoy Pro Ex	240GB
BUFFALO	SSD-PHE500U3-BA	500GB

다음은 최대 60 fps의 1080p DNxHR HQX 녹화에 권장되는 USB-C 드라이브 목록입니다.

제조사	모델	용량
OWC	Envoy Pro Ex	240GB

다음은 최대 60 fps의 1080p H.264 녹화에 권장되는 USB-C 드라이브 목록입니다.

제조사	모델	용량
OWC	Envoy Pro Ex	240GB

미디어 포맷하기

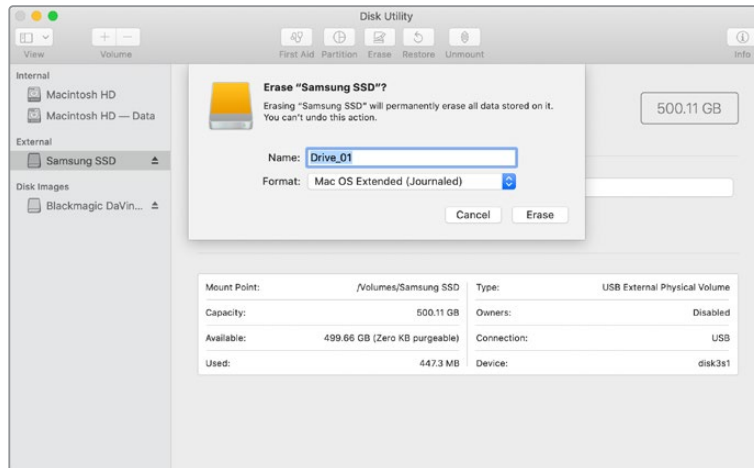
컴퓨터에서 미디어 준비하기

Mac 컴퓨터를 이용하여 미디어 포맷하기

Mac에 포함된 디스크 유틸리티를 사용하여 각 드라이브를 HFS+ 또는 exFAT 형식으로 포맷하세요.

포맷이 진행되면 디스크의 모든 정보가 삭제되므로 중요한 정보는 포맷 전에 반드시 백업해 두어야 합니다.

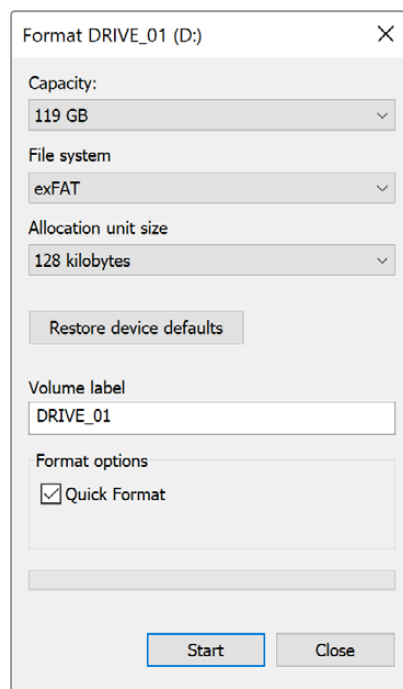
- 1 외장 도크 또는 케이블 어댑터를 사용하여 USB 플래시 디스크를 컴퓨터에 연결하세요. SSD를 타임머신 백업 용도로 사용할 것인지 묻는 메시지는 모두 거절하세요. SD 카드를 포맷하려면 외장 카드 리더기에 장착해 컴퓨터에 연결하세요.
- 2 '응용 프로그램 > 유틸리티'로 이동해 '디스크 유틸리티'를 실행하세요.
- 3 SD 카드 또는 USB 플래시 디스크 아이콘을 클릭한 뒤, '지우기' 탭을 클릭하세요.
- 4 포맷을 'Mac OS 확장(저널링)' 또는 'exFAT'로 설정하세요.
- 5 새로운 볼륨의 이름을 입력하고 '지우기'를 클릭합니다. 미디어가 신속하게 포맷되어 HyperDeck에 사용할 준비가 완료됩니다.



Windows 컴퓨터에서 미디어 포맷하기

Windows PC의 포맷 대화 상자에서 드라이브를 exFAT 형식으로 포맷할 수 있습니다. 포맷이 진행되면 SSD 또는 SD 카드의 모든 정보가 삭제되므로 중요한 정보는 포맷하기 전에 반드시 백업해 두어야 합니다.

- 1 외장 도크 또는 케이블 어댑터를 사용하여 USB 플래시 디스크를 컴퓨터에 연결하세요. SD 카드를 포맷하려면 외장 카드 리더기에 장착해 컴퓨터에 연결하세요.
- 2 '시작 메뉴' 또는 '시작 화면'을 열고 '내컴퓨터'를 선택하세요. USB 플래시 디스크 또는 SD 카드를 우클릭하세요.
- 3 나타나는 메뉴에서 '포맷'을 선택하세요.
- 4 '파일 시스템'을 'exFAT'으로 설정한 뒤, '할당 단위'를 '128킬로바이트'로 설정하세요.
- 5 볼륨 라벨을 입력하고 '빠른 포맷'을 선택한 뒤, '시작'을 클릭하세요.
- 6 미디어가 신속하게 포맷되어 HyperDeck에 사용할 준비가 완료됩니다.



텔레프롬프터 기능 사용하기

표준 RTF 파일을 사용하여 Backmagic HyperDeck Shuttle HD를 텔레프롬프터로 사용할 수 있습니다. TextEdit 또는 WordPad에서 파일을 생성한 후, 지원되는 13개 언어 중 하나로 '리치 텍스트 형식(RTF)' 파일로 저장합니다. HyperDeck Shuttle HD로 열면 스크립트의 글꼴 크기와 줄 간격을 조정할 수 있습니다.

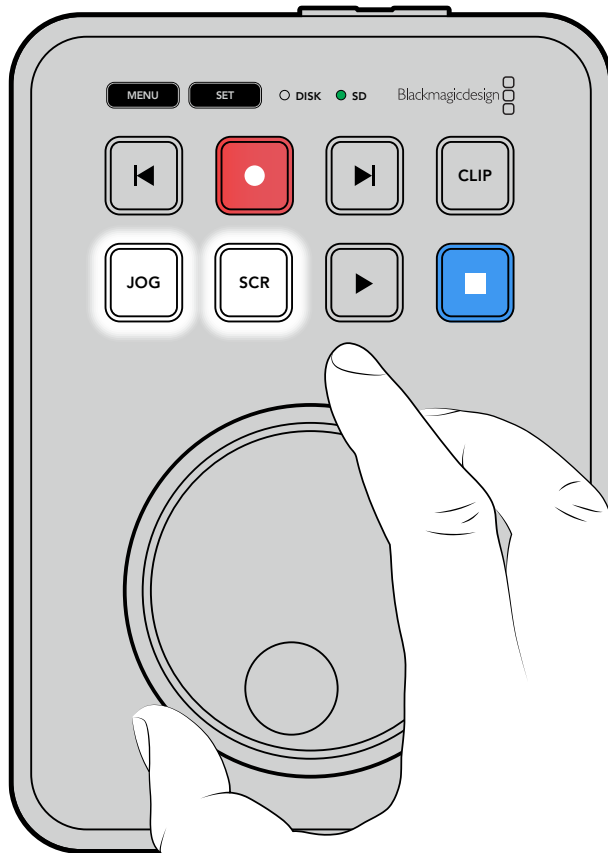
텔레프롬프터 사용하기

- 1 HyperDeck Shuttle HD의 HDMI 출력을 사용하려면 HDMI 디스플레이에 연결하세요.
- 2 SD 카드를 삽입하거나 스크립트가 저장된 외장 USB 플래시 디스크를 연결하세요.
- 3 '녹화' 메뉴에서 '코덱' 옵션을 선택하세요. '텔레프롬프터' 설정으로 이동한 후 SET 버튼을 누르세요.

스크립트가 디스플레이에 나타납니다. 여기에서 재생 버튼을 사용하여 자동으로 재생을 시작하거나 다이얼을 사용하여 이 외의 제어 기능을 사용할 수 있습니다.

텔레프롬프터 재생 속도 제어하기

HyperDeck Shuttle HD의 큰 다이얼을 사용하여 미디어를 재생하는 방식과 동일하게 텔레프롬프터 모드에서 재생을 제어할 수 있습니다. 스크립트가 로딩된 상태에서 JOG 및 SCR 버튼을 함께 눌러 가변 속도 재생 기능을 켜세요. 선택한 후 다이얼을 돌리세요. 스크립트는 다이얼이 움직이는 속도로 이동합니다. 예를 들어 다이얼을 빨리 돌릴수록 스크립트가 더 빨리 스크롤됩니다.



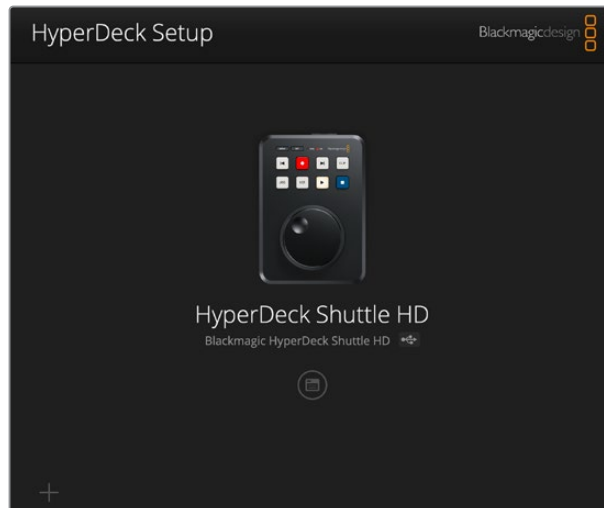
일정한 속도의 경우 조그 및 스크롤 버튼을 개별적으로 사용할 수 있습니다. 버튼을 선택 후, 다이얼을 돌리면 조그 모드에서 일정하게 낮은 속도로 스크립트를 이동하거나 스크롤 모드에서 더 빠른 속도로 스크립트를 이동시킬 수 있습니다.

SD 카드 또는 외장 디스크의 rtf 파일 간 탐색하려면 앞으로 가기 및 뒤로가기 키를 누르세요.

텔레프롬프터는 글꼴 크기, 색상 및 파일에서 볼드체로 설정되었는지 여부를 확인합니다. 또한 글꼴 크기, 줄 간격, 여백을 조정하거나, 모니터 메뉴를 사용하여 디스플레이를 빔 스플리터 글래스에 투사하는 경우를 위해 디스플레이를 수평 또는 수직으로 뒤집을 수 있습니다. 정보 더욱 자세한 정보는 본 설명서의 [메뉴 설정하기] 부분을 참고하세요.

Blackmagic HyperDeck Setup

Blackmagic HyperDeck Setup은 HyperDeck 설정을 변경하고 내부 소프트웨어를 업데이트하는 소프트웨어 유틸리티입니다.

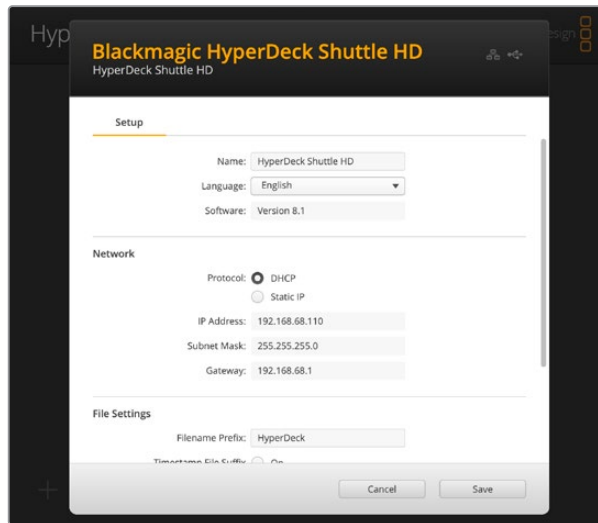


Blackmagic HyperDeck Setup 소프트웨어 설치하기

- 1 www.blackmagicdesign.com/kr/support 에서 최신 Blackmagic HyperDeck Setup 인스톨러를 다운받으세요.
- 2 컴퓨터에 설치된 Blackmagic HyperDeck Setup 설치 프로그램을 실행하고 화면에 나타나는 지시 사항을 따르세요.
- 3 설치가 완료되면 HyperDeck Shuttle HD 뒷면 패널에 있는 이더넷 단자 또는 USB를 통해 컴퓨터에 연결하세요.
- 4 Blackmagic HyperDeck Setup을 실행한 뒤, 화면에 나타나는 지시 사항에 따라 내부 소프트웨어 업데이트를 진행하세요. 내부 소프트웨어가 최신 버전일 경우 아무런 메시지가 나타나지 않으며 더 이상의 추가 작업이 필요하지 않습니다.

HyperDeck 이미지 또는 설정 아이콘을 클릭하여 설정 메뉴를 여세요.

홈 화면에 HyperDeck Shuttle HD와 기기명이 표시됩니다. 기기명은 컴퓨터에 두 대 이상의 HyperDeck이 연결되어 있을 때 장치를 식별하는 데 도움이 되며 소프트웨어의 설정 메뉴를 사용하여 설정할 수 있습니다.



네트워크

Network

Protocol: DHCP
 Static IP

IP Address: 192.168.68.110

Subnet Mask: 255.255.255.0

Gateway: 192.168.68.1

프로토콜

HyperDeck Shuttle HD와 ATEM 스위처를 함께 제어하거나, HyperDeck 이더넷 프로토콜을 통해 원격으로 제어하려는 경우, DHCP를 사용하거나, 수동으로 고정 IP 주소를 추가하는 방식으로 HyperDeck Shuttle HD를 다른 장비에서 사용하는 네트워크에 연결해야 합니다.

DHCP	HyperDeck Shuttle HD 디스크 레코더는 DHCP로 기본 설정되어 있습니다. DHCP(Dynamic Host Configuration Protocol)는 자동으로 HyperDeck 디스크 레코더를 검색하여 IP 주소를 지정하는 네트워크 서버의 서비스입니다. 또한 DHCP 는 이더넷을 통해 장비를 쉽게 연결하도록 돕고 지정된 IP 주소가 서로 충돌하지 않도록 하는 훌륭한 서비스입니다. 대부분의 컴퓨터와 네트워크 스위처는 DHCP를 지원합니다.
고정 IP	'고정 IP'를 선택하면 네트워크 정보를 수동으로 입력할 수 있습니다. 모든 장치가 통신할 수 있도록 고정 IP 주소를 수동으로 설정할 경우, 동일한 서브넷 마스크 및 게이트웨이 설정을 공유하도록 해야 합니다. 또한 패널의 IP 주소의 첫 3개 필드 숫자가 동일해야 합니다.

만약 해당 네트워크에 이미 같은 IP를 보유한 장비가 있다면, 이 설정은 충돌을 일으켜 네트워크에 제대로 연결되지 않습니다. 충돌 발생 시 IP 주소의 마지막 필드를 변경하면 문제가 해결됩니다.

파일 설정하기

File Settings

Filename Prefix:

Timestamp File Suffix On
 Off

처음 설정 시, HyperDeck Shuttle HD는 'HyperDeck'을 접두사로 사용하여 SD 카드 또는 USB 플래시 디스크에 클립을 녹화합니다. 접두사를 변경하려면 새 파일 이름을 입력하세요.

타임스탬프가 파일명에 포함되는 기능은 OFF로 기본 설정되어 있습니다. 파일명에 날짜와 시간을 기록하려면 ON으로 전환하세요. 파일명 접두어 및 타임스탬프 설정은 HyperDeck Shuttle HD의 화면 메뉴를 통해서도 사용할 수 있습니다.

네트워크를 통해 파일 전송하기

HyperDeck 디스크 레코더는 파일 전송 프로토콜(FTP)을 통한 파일 전송을 지원합니다. 이는 네트워크를 통해 컴퓨터에서 바로 HyperDeck 장비에 파일을 전송하는 강력한 기능으로, 인터넷 공급 업체에서 제공하는 최고의 속도로 전송할 수 있습니다. 예를 들어, 새로운 파일을 디지털 사이니지 구동을 위해 다른 곳에 위치한 원격 HyperDeck 장비에 복사할 수 있습니다.

HyperDeck Shuttle HD에 연결하기

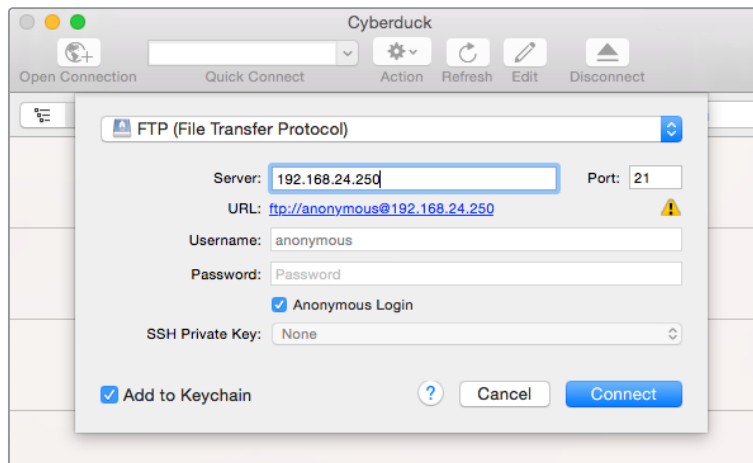
컴퓨터와 HyperDeck Shuttle HD가 동일한 네트워크에 있는 경우, FTP 클라이언트와 HyperDeck Shuttle HD의 IP 주소만 있으면 서로 연결 가능합니다.

- 1 HyperDeck에 연결하려는 컴퓨터에 FTP 클라이언트를 다운로드하여 설치하세요. Cyberduck, FileZilla, Transmit 등의 사용을 추천하지만, 대부분의 FTP 클라이언트 소프트웨어와 호환 가능합니다. Cyberduck과 FileZilla는 무료로 다운로드할 수 있습니다.
- 2 이더넷 케이블을 사용하여 HyperDeck Shuttle HD를 네트워크에 연결한 뒤, IP 주소를 적어주세요. MENU 버튼을 누른 다음 검색 다이얼을 돌려 '네트워크' 화면에 들어가면 IP 주소를 확인할 수 있습니다. HyperDeck의 IP 주소는 화면 하단에 나타납니다.

네트워크	
프로토콜	고정 IP
IP 주소	192.168.24.100
서브넷 마스크	255.255.255.0
게이트웨이	192.168.24.1

'설정' 메뉴의 네트워크 항목에서 HyperDeck Shuttle HD의 IP 주소를 확인할 수 있습니다.

- 3 FTP 프로그램에 있는 연결 대화 상자에 HyperDeck의 IP 주소를 입력하세요. 대화 상자의 이름이 프로그램마다 다를 수 있지만, 일반적으로 'Server' 또는 'Host'라고 표기되어 있습니다. FTP 프로그램에 'Anonymous Login' 확인란이 있는 경우에는 해당 확인란을 선택하세요.



HyperDeck Shuttle HD에 연결할 때는 사용자 이름이나 비밀번호를 입력할 필요가 없습니다. 간단히 디스크 레코더의 IP 주소를 FTP 프로그램의 'Server' 또는 'Host' 필드에 입력하세요. FTP 프로그램에 'Anonymous Login' 확인란이 있는 경우에는 해당 확인란을 선택하세요.

파일 전송하기

HyperDeck 에 연결하고 나면 FTP 프로그램과 같은 방식으로 파일을 전송할 수 있습니다. 대부분의 FTP 프로그램에서 드래그 & 드롭 기능을 지원하지만, 현재 사용 중인 프로그램에 맞는 사용법을 확인하세요.

HyperDeck에서 모든 파일을 주고받을 수 있지만 HyperDeck Shuttle HD에서 재생하려는 모든 파일은 HyperDeck에서 지원하는 코덱 및 해상도를 준수해야 합니다.

정보 HyperDeck에서 녹화가 진행되는 동안 네트워크를 통해 파일을 전송할 수 있습니다. HyperDeck이 자동으로 전송 속도를 조절하기 때문에 녹화에 영향을 끼치지 않습니다.

Developer Information

Blackmagic HyperDeck Ethernet Protocol

The Blackmagic HyperDeck Ethernet Protocol is a text based protocol accessed by connecting to TCP port 9993 on HyperDeck models that have a built in Ethernet connection. If you are a software developer, you can use the protocol to construct devices that integrate with our products. Here at Blackmagic Design our approach is to open up our protocols and we eagerly look forward to seeing what you come up with!

Protocol Commands

Command	Command Description
help or ?	Provides help text on all commands and parameters
commands	return commands in XML format
device info	return device information
disk list	query clip list on active disk
disk list: slot id: {n}	query clip list on disk in slot {n}
quit	disconnect ethernet control
ping	check device is responding
preview: enable: {true/false}	switch to preview or output
play	play from current timecode
play: speed: {-5000 to 5000}	play at specific speed
play: loop: {true/false}	play in loops or stop-at-end
play: single clip: {true/false}	play current clip or all clips
playrange	query playrange setting
playrange set: clip id: {n}	set play range to play clip {n} only
playrange set: clip id: {n} count: {m}	set play range to {m} clips starting from clip {n}
playrange set: in: {inT} out: {outT}	set play range to play between: - timecode {inT} and timecode {outT}
playrange set: timeline in: {in} timeline out: {out}	set play range in units of frames between: - timeline position {in} and position {out} clear/reset play range setting
playrange clear	clear/reset play range setting
play on startup	query unit play on startup state
play on startup: enable: {true/false}	enable or disable play on startup
play on startup: single clip: {true/false}	play single clip or all clips on startup
play option	query play options
play option: stop mode: {lastframe/nextframe/black}	set output frame when playback stops
record	record from current input
record: name: {name}	record named clip
record spill	spill current recording to next slot

Command	Command Description
record: spill: slot id: {n}	spill current recording to specified slot use current id to spill to same slot
stop	stop playback or recording
clips count	query number of clips on timeline
clips get	query all timeline clips
clips get: clip id: {n}	query a timeline clip info
clips get: clip id: {n} count: {m}	query m clips starting from n
clips get: version: {1/2}	query clip info using specified output version: version 1: id: name startT duration version 2: id: startT duration inT outT name
clips add: name: {name}	append a clip to timeline
clips add: clip id: {n} name: {name}	insert clip before existing clip {n}
clips add: in: {inT} out: {outT} name: {name}	append the {inT} to {outT} portion of clip
clips remove: clip id: {n}	remove clip {n} from the timeline (invalidates clip ids following clip {n})
clips clear	empty timeline clip list
transport info	query current activity
slot info	query active slot
slot info: slot id: {n}	query slot {n}
slot select: slot id: {n}	switch to specified slot
slot select: video format: {format}	load clips of specified format
slot unblock	unblock active slot
slot unblock: slot id: {n}	unblock slot {n}
cache info	query cache status
dynamic range	query dynamic range settings
dynamic range: playback override: {off/Rec709/Rec2020_SDR/HLG/ ST2084_300/ST2084_500/ ST2084_800/ST2084_1000/ ST2084_2000/ST2084_4000/ST2084}	set playback dynamic range override
dynamic range: record override: {off/Rec709/Rec2020_SDR/HLG/ ST2084_300/ST2084_500/ ST2084_800/ST2084_1000/ ST2084_2000/ST2084_4000/ST2048}	set record dynamic range override
notify	query notification status
notify: remote: {true/false}	set remote notifications
notify: transport: {true/false}	set transport notifications
notify: slot: {true/false}	set slot notifications
notify: configuration: {true/false}	set configuration notifications
notify: dropped frames: {true/false}	set dropped frames notifications
notify: display timecode: {true/false}	set display timecode notifications

Command	Command Description
notify: timeline position: {true/false}	set playback timeline position notifications
notify: playrange: {true/false}	set playrange notifications
notify: cache: {true/false}	set cache notifications
notify: dynamic range: {true/false}	set dynamic range settings notifications
notify: slate: {true/false}	set digital slate notifications
notify: clips: {true/false}	set timeline clips notifications where two types of changes can occur: add: partial update with list of clips and insert positions snapshot: complete update of all clips on timeline
notify: disk: {true/false}	set disk clips notifications where two types of changes can occur: add: partial update with list of clips and insert positions snapshot: complete update of all clips on timeline
goto: clip id: {start/end}	goto first clip or last clip
goto: clip id: {n}	goto clip id {n}
goto: clip id: +{n}	go forward {n} clips
goto: clip id: -{n}	go backward {n} clips
goto: clip: {n}	goto frame position {n} within current clip
goto: clip: +{n}	go forward {n} frames within current clip
goto: clip: -{n}	go backward {n} frames within current clip
goto: clip: {start/end}	goto start or end of clip
goto: timeline: {n}	goto frame position {n} within timeline
goto: timeline: +{n}	o forward {n} frames within timeline
goto: timeline: -{n}	go backward {n} frames within timeline
goto: timeline: {start/end}	goto start or end of timeline
goto: timecode: {timecode}	goto specified timecode
goto: timecode: +{timecode}	go forward {timecode} duration
goto: timecode: -{timecode}	go backward {timecode} duration
goto: slot id: {n}	goto slot id {n}
jog: timecode: {timecode}	jog to timecode
jog: timecode: +{timecode}	jog forward {timecode} duration
jog: timecode: -{timecode}	jog backward {timecode} duration
shuttle: speed: {-5000 to 5000}	shuttle with speed
remote	query unit remote control state
remote: enable: {true/false}	enable or disable remote control
remote: override: {true/false}	session override remote control
configuration	query configuration settings
configuration: video input: SDI	switch to SDI input
configuration: video input: HDMI	switch to HDMI input
configuration: video input: component	switch to component input

Command	Command Description
configuration: audio input: embedded	capture embedded audio
configuration: audio input: XLR	capture XLR audio
configuration: audio input: RCA	capture RCA audio
configuration: file format: {format}	switch to specific file format
configuration: audio codec: PCM	switch to PCM audio
configuration: audio codec: AAC	switch to AAC audio
configuration: timecode input: {external/embedded/internal/preset/clip}	change the timecode input
configuration: timecode output: {clip/timeline}	change the timecode output
configuration: timecode preference: {default/dropframe/nondropframe}	whether or not to use drop frame timecodes when not otherwise specified
configuration: timecode preset: {timecode}	set the timecode preset
configuration: audio input channels: {n}	set the number of audio channels recorded to {n}
configuration: record trigger: {none/recordbit/timecoderun}	change the record trigger
configuration: record prefix: {name}	set the record prefix name (supports UTF-8 name)
configuration: append timestamp: {true/false}	append timestamp to recorded filename
configuration: xlr input id: {n} xlr type: {line/mic}	configure xlr input type multiple xlr inputs can be configured in a single command
configuration: genlock input resync: {true/false}	enable or disable genlock input resync
uptime	return time since last boot
format: slot id: {n} prepare: {exFAT/HFS+} name: {name}	prepare a disk formatting operation to filesystem {format}
format: confirm: {token}	perform a pre-prepared formatting operation using token
identify: enable: {true/false}	identify the device
watchdog: period: {period in seconds}	client connection timeout
reboot	reboot device
slate clips	slate clips information
slate project	slate project information
slate lens	slate lens information

Multiline commands:	Command Description
slate clips↵	set slate clips information:
reel: {n}	slate reel number, where {n} is in [1, 999]
scene id: {id}	slate scene id value, where {id} is a string
shot type: {WS/MS/BCU/MCU/ECU/none}	slate shot type
take: {n}	slate take number, where {n} is in [1, 99]
take scenario: {PU/VFX/SER/none}	slate take scenario
take auto inc: {true/false}	slate take auto increment
good take: {true/false}	slate good take
environment: {interior/exterior}	slate environment
day night: {day/night}	slate day or night
slate project:↵	set slate project information:
project name: {name}	project name (can be empty, supports UTF-8)
camera: {index}	set camera index e.g. A
director: {name}	director (can be empty, supports UTF-8)
camera operator: {name}	camera operator (can be empty, supports UTF-8)
slate lens:↵	set lens information:
lens type: {type}	lens type (can be empty, supports UTF-8)
iris: {type}	camera iris (can be empty, supports UTF-8)
focal length: {length}	focal length (can be empty, supports UTF-8)
distance: {distance}	lens distance (can be empty, supports UTF-8)
filter: {filter}	lens filter (can be empty, supports UTF-8)

Command Combinations

You can combine the parameters into a single command, for example:

```
play: speed: 200 loop: true single clip: true
```

Or for configuration:

```
configuration: video input: SDI audio input: XLR
```

Or to switch to the second disk, but only play NTSC clips:

```
slot select: slot id: 2 video format: NTSC
```

Protocol Details

Connection

The HyperDeck Ethernet server listens on TCP port 9993.

Basic syntax

The HyperDeck protocol is a line oriented text protocol. Lines from the server will be separated by an ascii CR LF sequence. Messages from the client may be separated by LF or CR LF.

New lines are represented in this document as a "↵" symbol.

Single line command syntax

Command parameters are usually optional. A command with no parameters is terminated with a new line:

```
{Command name}↵
```

If parameters are specified, the command name is followed by a colon, then pairs of parameter names and values. Each parameter name is terminated with a colon character:

```
{Command name}: {Parameter}: {Value} {Parameter}: {Value} ...↵
```

Multiline command syntax

The HyperDeck protocol also supports an equivalent multiline syntax where each parameter-value pair is entered on a new line. E.g.

```
{Command name}:↵  
{Parameter}: {Value}↵  
{Parameter}: {Value}↵  
↵
```

Response syntax

Simple responses from the server consist of a three digit response code and descriptive text terminated by a new line:

```
{Response code} {Response text}↵
```

If a response carries parameters, the response text is terminated with a colon, and parameter name and value pairs follow on subsequent lines until a blank line is returned:

```
{Response code} {Response text}:↵  
{Parameter}: {Value}↵  
{Parameter}: {Value}↵  
...  
↵
```

Successful response codes

A simple acknowledgement of a command is indicated with a response code of 200:

```
200 ok↵
```

Other successful responses carry parameters and are indicated with response codes in the range of 201 to 299.

Failure response codes

Failure responses to commands are indicated with response codes in the range of 100 to 199:

```
100 syntax error
101 unsupported parameter
102 invalid value
103 unsupported
104 disk full
105 no disk
106 disk error
107 timeline empty
108 internal error
109 out of range
110 no input
111 remote control disabled
112 clip not found
120 connection rejected
150 invalid state
151 invalid codec
160 invalid format
161 invalid token
162 format not prepared
163 parameterized single line command not supported
```

Asynchronous response codes

The server may return asynchronous messages at any time. These responses are indicated with response codes in the range of 500 to 599:

```
5xx {Response Text}:↵
{Parameter}: {Value}↵
{Parameter}: {Value}↵
↵
```

Connection response

On connection, an asynchronous message will be delivered:

```
500 connection info:↵
protocol version: {Version}↵
model: {Model Name}↵
↵
```

Timecode syntax

Timecodes are expressed as non-drop-frame timecode in the format:

```
HH:MM:SS:FF
```

Handling of deck "remote" state

The "remote" command may be used to enable or disable the remote control of the deck. Any attempt to change the deck state over ethernet while remote access is disabled will generate an error:

```
111 remote control disabled↵
```

To enable or disable remote control:

```
remote: enable: {"true", "false"} ↵
```

The current remote control state may be overridden allowing remote access over ethernet irrespective of the current remote control state:

```
remote: override: {"true", "false"} ↵
```

The override state is only valid for the currently connected ethernet client and only while the connection remains open.

The "remote" command may be used to query the remote control state of the deck by specifying no parameters:

```
remote↵
```

The deck will return the current remote control state:

```
210 remote info:↵  
enabled: {"true", "false"}↵  
override: {"true", "false"}↵  
↵
```

Asynchronous remote control information change notification is disabled by default and may be configured with the "notify" command. When enabled, changes in remote state will generate a "510 remote info:" asynchronous message with the same parameters as the "210 remote info:" message.

Closing connection

The "quit" command instructs the server to cleanly shut down the connection:

```
quit↵
```

Checking connection status

The "ping" command has no function other than to determine if the server is responding:

```
ping↵
```

Getting help

The "help" or "?" commands return human readable help text describing all available commands and parameters:

```
help↵
```

Or:

```
?↵
```

The server will respond with a list of all supported commands:

```
201 help:↵  
{Help Text}↵  
{Help Text}↵  
↵
```

Switching to preview mode

The "preview" command instructs the deck to switch between preview mode and output mode:

```
preview: enable: {"true", "false"}↵
```

Playback will be stopped when the deck is switched to preview mode. Capturing will be stopped when the deck is switched to output mode.

Controlling device playback

The "play" command instructs the deck to start playing:

```
play↵
```

The play command accepts a number of parameters which may be used together in most combinations.

By default, the deck will play all remaining clips on the timeline then stop.

The "single clip" parameter may be used to override this behavior:

```
play: single clip: {"true", "false"}↵
```

By default, the deck will play at normal (100%) speed. An alternate speed may be specified in percentage between -5000 to 5000:

```
play: speed: {% normal speed}↵
```

By default, the deck will stop playing when it reaches to the end of the timeline. The "loop" parameter may be used to override this behavior:

```
play: loop: {"true", "false"}↵
```

The "playrange" command instructs the deck to play all the clips. To override this behavior: and select a particular clip:

```
playrange set: clip id: {Clip ID}↵
```

To only play a certain timecode range:

```
playrange set: in: {in timecode} out: {out timecode}↵
```

To clear a set playrange and return to the default value:

```
playrange clear↵
```

The "play on startup" command instructs the deck on what action to take on startup. By default, the deck will not play. Use the "enable" command to start playback after each power up.

```
play on startup: enable {"true", "false"}↵
```

By default, the unit will play back all clips on startup. Use the "single clip" command to override.

```
play on startup: single clip: {"true", "false"}↵
```

Stopping deck operation

The "stop" command instructs the deck to stop the current playback or capture:

```
stop↵
```

Changing timeline position

The "goto" command instructs the deck to switch to playback mode and change its position within the timeline.

To go to the start of a specific clip:

```
goto: clip id: {Clip ID}↵
```

To move forward/back {count} clips from the current clip on the current timeline:

```
goto: clip id: +/-{count}↵
```

Note that if the resultant clip id goes beyond the first or last clip on timeline, it will be clamp at the first or last clip.

To go to the start or end of the current clip:

```
goto: clip: {"start", "end"}↵
```

To go to the start of the first clip or the end of the last clip:

```
goto: timeline: {"start", "end"}↵
```

To go to a specified timecode:

```
goto: timecode: {timecode}↵
```

To move forward or back a specified duration in timecode:

```
goto: timecode: {"+", "-"}{duration in timecode}↵
```

To specify between slot 1 and slot 2:

```
goto: slot id: {Slot ID}↵
```

Note that only one parameter/value pair is allowed for each goto command.

Enumerating supported commands and parameters

The "commands" command returns the supported commands:

```
commands↵
```

The command list is returned in a computer readable XML format:

```
212 commands:  
<commands>↵  
  <command name="..."><parameter name="..."/>...</command>↵  
  <command name="..."><parameter name="..."/>...</command>↵  
  ...  
</commands>↵  
↵
```

Controlling asynchronous notifications

The "notify" command may be used to enable or disable asynchronous notifications from the server.

To enable or disable transport notifications:

```
notify: transport: {"true", "false"}↵
```

To enable or disable slot notifications:

```
notify: slot: {"true", "false"}↵
```

To enable or disable remote notifications:

```
notify: remote: {"true", "false"}↵
```

To enable or disable configuration notifications:

```
notify: configuration: {"true", "false"}↵
```

Multiple parameters may be specified. If no parameters are specified, the server returns the current state of all notifications:

```
209 notify:↵
transport: {"true", "false"}↵
slot: {"true", "false"}↵
remote: {"true", "false"}↵
configuration: {"true", "false"}↵
dropped frames: {"true", "false"}↵
display timecode: {"true", "false"}↵
timeline position: {"true", "false"}↵
playrange: {"true", "false"}↵
cache: {"true", "false"}↵
dynamic range: {"true", "false"}↵
slate: {"true", "false"}↵
clips: {"true", "false"}↵
disk: {"true", "false"}↵
↵
```

Retrieving device information

The "device info" command returns information about the connected deck device:

```
device info↵
```

The server will respond with:

```
204 device info:↵
protocol version: {Version}↵
model: {Model Name}↵
unique id: {unique alphanumeric identifier}↵
slot count: {number of storage slots}↵
software version: {software version}↵
↵
```


Retrieving slot information

The "slot info" command returns information about a slot. Without parameters, the command returns information for the currently selected slot:

```
slot info↵
```

If a slot id is specified, that slot will be queried:

```
slot info: slot id: {Slot ID}↵
```

The server will respond with slot specific information:

```
202 slot info:↵  
slot id: {Slot ID}↵  
status: {"empty", "mounting", "error", "mounted"}↵  
volume name: {Volume name}↵  
recording time: {recording time available in seconds}↵  
video format: {disk's default video format}↵  
blocked: {"true", "false"}↵  
↵
```

Asynchronous slot information change notification is disabled by default and may be configured with the "notify" command. When enabled, changes in slot state will generate a "502 slot info:" asynchronous message with the same parameters as the "202 slot info:" message.

Retrieving clip information

The "disk list" command returns the information for each playable clip on a given disk. Without parameters, the command returns information for the current active disk:

```
disk list↵
```

If a slot id is specified, the disk in that slot will be queried:

```
disk list: slot id: {Slot ID}↵
```

The server responds with the list of all playable clips on the disk in the format of: Index, name, formats, and duration in timecode:

```
206 disk list:↵  
slot id: {Slot ID}↵  
{clip index}: {name} {file format} {video format} {Duration  
timecode}↵  
{clip index}: {name} {file format} {video format} {Duration  
timecode}↵  
...  
↵
```

Note that the *clip index* starts from 1.

Retrieving clip count

The "clips count" command returns the number of clips on the current timeline:

```
clips count ↵
```

The server responds with the number of clips:

```
214 clips count: ↵  
clip count: {Count}↵
```

Retrieving timeline information

The "clips get" command returns information for each available clip on the current timeline. Without parameters, the command returns information for all clips on timeline:

```
clips get↵
```

The server responds with a list of clip IDs, names and timecodes:

```
205 clips info:↵  
clip count: {Count}↵  
{Clip ID}: {Start timecode} {Duration timecode} {In timecode}  
{Out timecode} {Name}↵  
{Clip ID}: {Start timecode} {Duration timecode} {In timecode}  
{Out timecode} {Name}↵  
...  
↵
```

Retrieving transport information

The "transport info" command returns the state of the transport:

```
transport info ↵
```

The server responds with transport specific information:

```
208 transport info:  
status: {"preview", "stopped", "play", "forward", "rewind",  
"jog", "shuttle","record"}↵  
speed: {Play speed between -5000 and 5000 %}↵  
slot id: {Slot ID or "none"}↵  
clip id: {Clip ID or "none"}↵  
single clip: {"true", "false"}↵  
display timecode: {timecode}↵  
timecode: {timecode}↵  
video format: {Video format}↵  
loop: {"true", "false"}↵  
timeline: {n}↵  
input video format: {Video format}↵  
dynamic range: {"off", "Rec709", "Rec2020_SDR", "HLG",  
"ST2084_300", "ST2084_500", "ST2084_800", "ST2084_1000",  
"ST2084_2000", "ST2084_4000", "ST2048" or "none"}↵  
↵
```

The "timecode" value is the timecode within the current timeline for playback or the clip for record. The "display timecode" is the timecode displayed on the front of the deck. The two timecodes will differ in some deck modes.

Asynchronous transport information change notification is disabled by default and may be configured with the "notify" command. When enabled, changes in transport state will generate a "508 transport info:" asynchronous message with the same parameters as the "208 transport info:" message.

Video Formats

The following video formats are currently supported on HyperDeck Shuttle:

720p50, 720p5994, 720p60

1080p23976, 1080p24, 1080p25, 1080p2997, 1080p30, 1080p60

1080i50, 1080i5994, 1080i60

Video format support may vary between models and software releases.

File Formats

All HyperDeck models currently support the following file formats:

H.264High

H.264Medium

H.264Low

QuickTimeProResHQ

QuickTimeProRes

QuickTimeProResLT

QuickTimeProResProxy

QuickTimeDNxHD220x

DNxHD220x

QuickTimeDNxHD145

DNxHD145

QuickTimeDNxHD45

DNxHD45

Supported file formats may vary between models and software releases.

Querying and updating configuration information

The "configuration" command may be used to query the current configuration of the deck:

```
configuration↵
```

The server returns the configuration of the deck:

```
211 configuration:↵
audio input: {"embedded", "XLR", "RCA"}↵
audio mapping: {n}↵
video input: {"SDI", "HDMI", "component", "composite"}↵
file format: {format}↵
audio codec: {"PCM", "AAC"}↵
timecode input: {"external", "embedded", "preset", "clip"}↵
timecode output: {"clip", "timeline"}↵
timecode preference: {"default", "dropframe", "nondropframe"}↵
timecode preset: {timecode}↵
audio input channels: {n}↵
record trigger: {"none", "recordbit", "timecoderun"}↵
record prefix: {name}↵
append timestamp: {"true", "false"}↵
genlock input resync: {"true", "false"}↵
↵
```

One or more configuration parameters may be specified to change the configuration of the deck.

To change the current video input:

```
configuration: video input: {"SDI", "HDMI", "component"}↵
```

Valid video inputs may vary between models. To configure the current audio input:

```
configuration: audio input: {"embedded", "XLR", "RCA"}↵
```

Valid audio inputs may vary between models.

To configure the current file format:

```
configuration: file format: {File format}↵
```

Note that changes to the file format may require the deck to reset, which will cause the client connection to be closed. In such case, response code 213 will be returned (instead of 200) before the client connection is closed:

```
"213 deck rebooting"
```

Asynchronous configuration information change notification is disabled by default and may be configured with the "notify" command. When enabled, changes in configuration will generate a "511 configuration:" asynchronous message with the same parameters as the "211 configuration:" message.

Selecting active slot and video format

The "slot select" command instructs the deck to switch to a specified slot, or/and to select a specified output video format.

To switch to a specified slot:

```
slot select: slot id: {slot ID}↵
```

To select the output video format:

```
slot select: video format: {video format}↵
```

Either or all slot select parameters may be specified. Note that selecting video format will result in a rescan of the disk to reconstruct the timeline with all clips of the specified video format.

Clearing the current timeline

The "clips clear" command instructs the deck to empty the current timeline:

```
clips clear↵
```

The server responds with

```
200 ok↵
```

Adding a clip to the current timeline

The "clips add:" command instructs the deck to add a clip to the current timeline:

```
clips add: name: {clip name}↵
```

The server responds with

```
200 ok↵
```

or in case of error

```
lxx {error description}↵
```

Configuring the watchdog

The "watchdog" command instructs the deck to monitor the connected client and terminate the connection if the client is inactive for at least a specified period of time.

To configure the watchdog:

```
watchdog: period: {period in seconds}↵
```

To avoid disconnection, the client must send a command to the server at least every {period} seconds. Note that if the period is set to 0 or less than 0, connection monitoring will be disabled.

지원

지원 받기

가장 빠르게 지원받을 수 있는 방법은 Blackmagic Design 온라인 고객지원 페이지에 접속하여 해당 Blackmagic HyperDeck 디스크 레코더 관련 최신 지원 정보를 확인하는 것입니다.

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최신 사용 설명서와 소프트웨어, 지원 노트는 Blackmagic 고객 지원 센터 (www.blackmagicdesign.com/kr/support)에서 확인하실 수 있습니다.

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저희 웹사이트에 있는 Blackmagic Design 포럼은 유용한 정보를 제공하는 곳으로, 방문을 통해 자세한 정보와 창의적인 아이디어를 얻을 수 있습니다. 또한 숙련된 사용자나 Blackmagic Design 직원들이 기존에 올려놓은 해결책을 통해 원하는 해답을 얻을 수도 있으므로 신속하게 도움을 받아 한 단계 성장할 수 있는 방법이기도 합니다. 포럼은 <http://forum.blackmagicdesign.com>을 방문해 이용할 수 있습니다

Blackmagic Design 고객 지원에 문의하기

고객 지원 페이지나 포럼에서 원하는 정보를 얻지 못한 경우에는 [이메일 보내기] 버튼을 클릭하여 지원 요청 이메일을 보내주세요. 다른 방법으로는, 고객지원 페이지의 [지역별 고객 지원팀 찾기] 버튼을 클릭하여 가장 가까운 Blackmagic Design 고객지원 사무실에 문의하세요.

현재 설치된 소프트웨어 버전 확인하기

컴퓨터에 설치된 Blackmagic HyperDeck 소프트웨어 버전을 확인하려면 [About Blackmagic HyperDeck Setup] 창을 엽니다.

- Mac OS에서는 애플리케이션 폴더에 있는 Blackmagic HyperDeck Setup을 실행합니다. 애플리케이션 메뉴에서 [About Blackmagic HyperDeck Setup]을 선택하고 버전을 확인하세요.
- 윈도우에서는 '시작' 메뉴 또는 시작 화면에서 HyperDeck Setup을 실행하세요. 도움말 메뉴를 클릭한 뒤 [About Blackmagic HyperDeck Setup]을 선택해 버전을 확인할 수 있습니다.

최신 버전 소프트웨어로 업데이트하기

컴퓨터에 설치된 Blackmagic Cloud Setup 소프트웨어 버전을 확인한 뒤, Blackmagic Design 고객 지원 센터(www.blackmagicdesign.com/kr/support)에 방문하여 최신 업데이트를 확인하세요. 최신 버전으로 업데이트하는 것을 권장하지만, 중요한 프로젝트를 실행하는 도중에는 소프트웨어 업데이트를 하지 않는 것이 좋습니다.

규제 사항

유럽 연합 국가 내의 전기전자제품 폐기물 처리 기준



제품에 부착된 기호는 해당 제품을 다른 폐기물과는 별도로 처리되어야 함을 나타냅니다. 제품을 폐기하려면 반드시 재활용 지정 수거 장소에 폐기해야 합니다. 폐기물 제품을 분리수거 및 재활용으로 처리하는 것은 자연 자원을 보전하고 인간의 건강과 환경을 보호할 수 있도록 폐기물을 재활용할 수 있는 방법입니다. 재활용을 위한 제품 폐기물 장소에 관한 자세한 정보는 해당 지역 시청의 재활용 센터 혹은 해당 제품을 구입한 상점으로 문의하십시오.



본 제품은 테스트 결과 FCC 규정 제15항에 따라 A급 디지털 기기 제한 사항을 준수하는 것으로 확인되었습니다. 해당 제한 사항은 본 제품을 상업적 환경에서 사용할 시 발생할 수 있는 유해 혼선으로부터 적절한 보호를 제공하기 위함입니다. 이 제품은 무선 주파수를 생성 및 사용, 방출할 수 있습니다. 따라서 설명서의 안내에 따라 제품을 설치 및 사용하지 않을 시, 무선 통신을 방해하는 전파 혼선을 일으킬 수 있습니다. 해당 제품을 주거 지역에서 사용할 경우 유해 전파 혼선이 발생할 가능성이 있으며, 이 경우 사용자는 자체 비용으로 전파 혼선 문제를 해결해야 합니다.

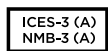
제품 작동은 다음 두 가지 조건을 전제로 합니다.

- 1 본 기기는 유해 혼신을 일으키지 않습니다.
- 2 본 기기는 원치 않는 작동을 일으킬 수 있는 혼신을 포함하여 모든 혼신을 수용합니다.



R-R-BMD-20211410001

ISED 캐나다 성명



본 기기는 캐나다 표준 A급 디지털 장치 규정을 준수합니다.

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HDMI 인터페이스 연결 시에는 반드시 고품질의 실드 HDMI 케이블을 사용해야 합니다.

이 기기는 업무용 환경에서 사용할 목적으로 적합성 평가를 거쳤습니다. 가정용 환경에서 사용하는 경우 전파간섭의 우려가 있습니다.

안전 정보

본 제품은 주위 온도가 최대 40°C인 열대 지역에서 사용하기 적합합니다.

공기가 잘 통할 수 있도록 제품을 통풍이 잘되는 곳에 둡니다.

제품 내부에는 사용자가 수리 가능한 부품이 없습니다. 제품 수리는 해당 지역 Blackmagic Design 서비스 센터에 문의하세요.



최대 작동 고도는 해수면 기준 2000m입니다.

캘리포니아주 성명

본 제품을 사용하는 사용자는 제품의 플라스틱 내 폴리브롬화 비페닐에 노출될 수 있으며 캘리포니아주에서는 해당 물질이 암, 선천적 결손증, 기타 생식기능의 손상을 유발하는 것으로 알려져 있습니다.

더욱 자세한 정보는 www.P65Warnings.ca.gov을 확인하세요.

보증

12개월 한정 보증

Blackmagic Design은 본 제품의 부품 및 제조에 어떠한 결함도 없음을 제품 구매일로부터 12개월 동안 보증합니다. 보증 기간 내에 결함이 발견될 경우, Blackmagic Design은 당사의 결정에 따라 무상 수리 또는 새로운 제품으로 교환해드립니다.

구매 고객은 반드시 보증 기간이 만료되기 전에 결함 사실을 Blackmagic Design에 통지해야 적절한 보증 서비스를 제공받을 수 있습니다. 구매 고객은 지정된 Blackmagic Design 서비스 센터로 결함 제품을 포장 및 운송할 책임이 있으며, 운송 비용은 선불로 지급되어야 합니다. 구매 고객은 또한 이유를 불문하고 제품 반송에 대한 운송료, 보험, 관세, 세금, 기타 비용을 부담해야 합니다.

이 보증은 부적절한 사용, 관리 및 취급으로 인한 파손, 고장, 결함에는 적용되지 않습니다. Blackmagic Design은 다음과 같은 경우에 보증 서비스를 제공할 의무가 없습니다. a) Blackmagic Design 판매 대리인이 아닌 개인에 의해 발생한 제품 손상. b) 부적절한 사용 및 호환하지 않는 장비와의 연결로 인한 제품 손상. c) Blackmagic Design사의 부품 및 공급품이 아닌 것을 사용하여 발생한 손상 및 고장. d) 제품을 개조하거나 다른 제품과 통합하여 제품 작동 시간 증가 및 기능 저하가 발생한 경우. BLACKMAGIC DESIGN에서 제공하는 제품 보증은 다른 모든 명시적 또는 묵시적 보증을 대신합니다. BLACKMAGIC DESIGN사와 관련 판매 회사는 상품성 및 특정 목적의 적합성과 관련된 모든 묵시적 보증을 부인합니다. 구매 고객에게 제공되는 BLACKMAGIC DESIGN의 결함 제품 수리 및 교환 관련 책임은 BLACKMAGIC DESIGN 또는 판매 회사에서 관련 위험의 가능성에 대한 사전 통보의 여부와 관계없이 모든 간접적, 특별, 우발적, 결과적 손해에 대한 유일한 배상 수단입니다. BLACKMAGIC DESIGN은 장비의 불법적 사용과 관련하여 어떤 법적 책임도 지지 않습니다. Blackmagic Design은 본 제품의 사용으로 인해 발생하는 손해에 대해서는 어떤 법적 책임도 지지 않습니다. 제품 사용으로 인해 발생할 수 있는 위험에 대한 책임은 본인에게 있습니다.

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Апрель 2022 г.

Руководство по установке и эксплуатации

Blackmagicdesign 

HyperDeck Shuttle HD



HyperDeck Shuttle HD



Уважаемый пользователь!

Благодарим вас за покупку устройства Blackmagic HyperDeck Shuttle HD.

Когда мы разрабатывали первые дисковые рекордеры HyperDeck, то стремились создать доступное для каждого решение, которое позволяет записывать и воспроизводить видео с помощью скоростных SSD-накопителей. Сейчас эта линейка пополнилась новой моделью HyperDeck Shuttle HD.

Она представляет собой небольшой портативный рекордер с HDMI-интерфейсом, предназначенный для размещения на рабочем столе. Знакомые элементы управления и удобный диск для навигации позволяют использовать его одной рукой, что делает устройство идеальным решением для создания контента в реальном времени при работе с микшером ATEM Mini. Кроме того, HyperDeck Shuttle HD может служить как телесуфлер.

Для быстрой записи и воспроизведения материала этот рекордер позволяет вести сохранение как на традиционные SD-карты, так и на внешние накопители в форматах ProRes, DNxHD и H.264.

Последнюю версию руководства и обновления ПО для HyperDeck можно найти в разделе поддержки на веб-сайте www.blackmagicdesign.com/ru. Использование актуальной версии ПО гарантирует доступ ко всем имеющимся функциям. Чтобы своевременно узнавать о выходе релизов, зарегистрируйтесь при загрузке ПО. Мы постоянно работаем над совершенствованием наших продуктов, поэтому ваши отзывы помогут нам сделать их еще лучше.

Грант Петти

Генеральный директор Blackmagic Design

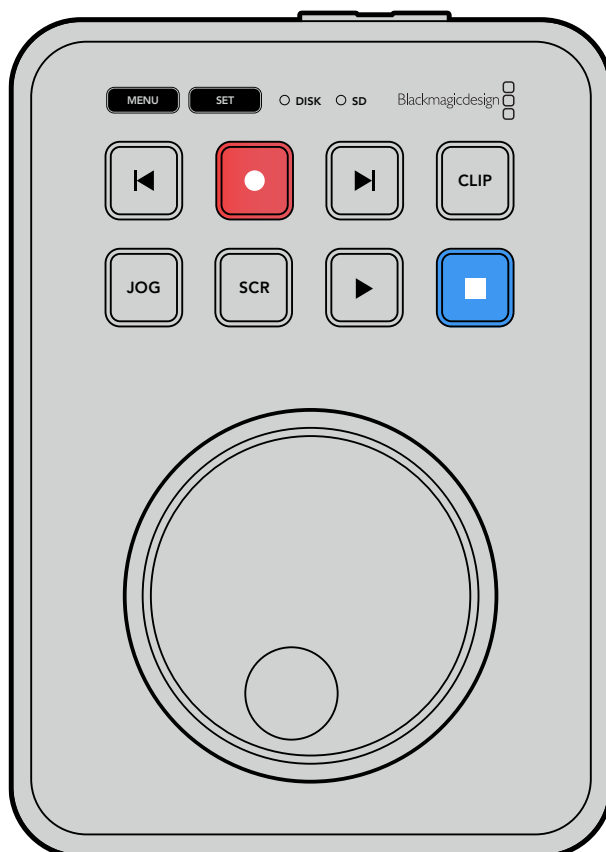
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Подготовка к работе

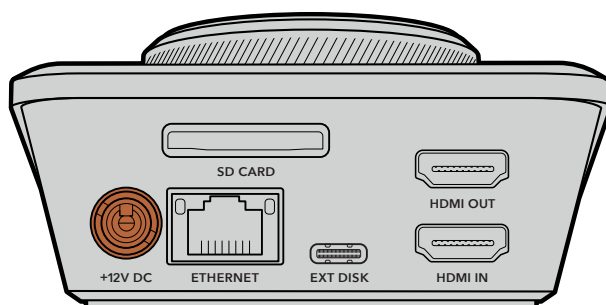
Чтобы начать работу с рекордером HyperDeck Shuttle HD, достаточно подключить питание, подсоединить источник HDMI-сигнала, установить SD-карту или внешний накопитель, а затем нажать кнопку записи.

В этом разделе описан порядок подготовки к началу работы с рекордером HyperDeck Shuttle HD.



Подключение питания

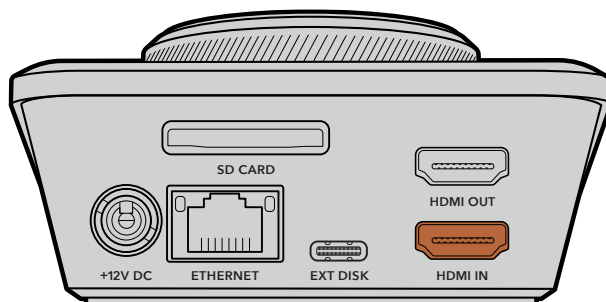
Для подачи электроэнергии подключите прилагаемый сетевой адаптер к гнезду на задней панели рекордера HyperDeck Shuttle HD. Затяните фиксирующее кольцо для предотвращения случайного отсоединения кабеля.



Подключите сетевой адаптер к силовому разъему на HyperDeck Shuttle HD

Подключение источника видео- и аудиосигнала

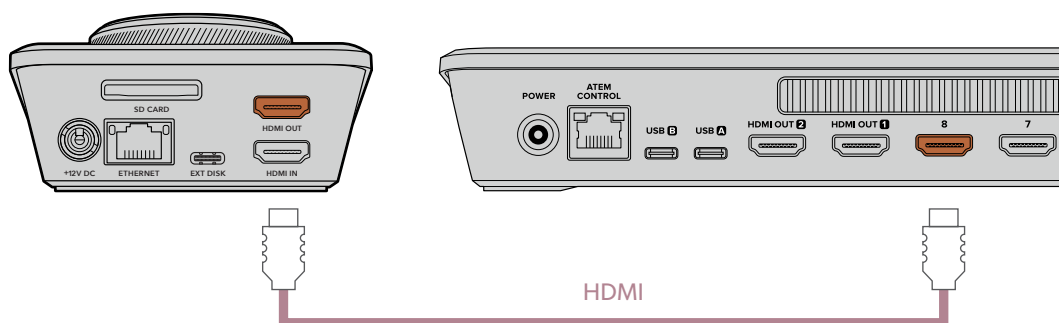
Для подключения источника видеосигнала к HyperDeck Shuttle HD подсоедините HDMI-кабель к соответствующему входу на задней панели устройства.



Подключите оборудование, предназначенное для получения сигнала (например, микшер АТЕМ Mini или HDMI-телевизор), к HDMI-выходу рекордера.

Данный разъем также предназначен для просмотра выводимого поверх видео меню настроек при изменении параметров устройства. Подробнее см. раздел «Настройки» ниже.

СОВЕТ. Если видеоисточник на подключенном дисплее не отображается, возможно, используется режим воспроизведения. Для начала записи нажмите соответствующую кнопку.



Подключите оборудование, предназначенное для получения сигналов (например, микшер АТЕМ Mini или HDMI-телевизор), к HDMI-выходу рекордера

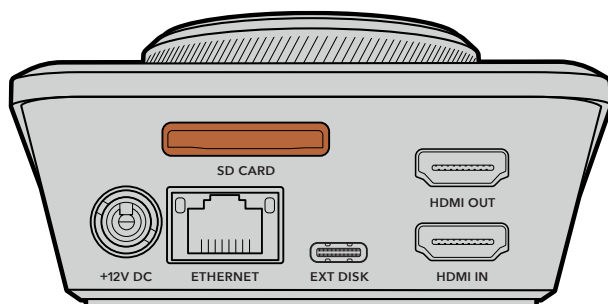
Подключение накопителей

Рекордеры HyperDeck Shuttle HD поставляются готовыми к работе и не требуют дополнительной установки настроек. Все, что нужно, — это отформатированная SD-карта или внешний накопитель.

Носители легко отформатировать с помощью меню настроек. Также это можно сделать на компьютере. Подробнее см. раздел «Форматирование накопителей» ниже. Там же приводится информация о типах носителей, наиболее подходящих для записи видео, а также список рекомендуемых SD-карт и внешних дисков.

Порядок установки SD-карты

- 1 Возьмите SD-карту так, чтобы позолоченные контакты были направлены вверх, и установите ее в соответствующий слот. Осторожно надавите на карту, чтобы она вошла в него до конца.



- 2 Рекордер выполнит проверку SD-карты. В это время индикатор SD-слота на верхней панели устройства будет гореть зеленым цветом. После окончания проверки он погаснет.



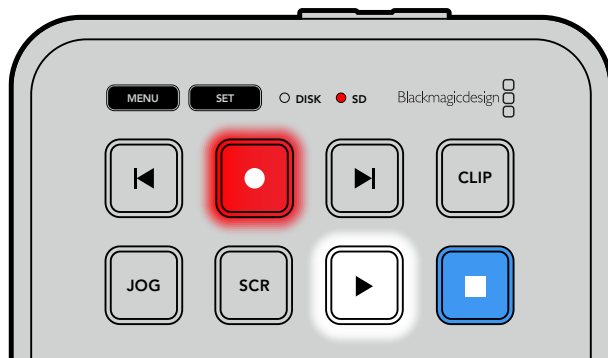
Теперь рекордер HyperDeck Shuttle HD готов к записи и воспроизведению материала.

Подробнее о записи и воспроизведении видео, установке настроек и работе с рекордером HyperDeck Shuttle HD см. следующие разделы этого руководства.

Запись видео

Прежде всего убедитесь, что к оборудованию, предназначенному для получения HDMI-сигнала, подключен нужный источник. После этого можно приступить к записи контента.

Для ее начала нажмите соответствующую кнопку. При записи материала на SD-карту индикатор слота будет гореть красным цветом, а кнопки записи и воспроизведения — белым. Во время сохранения на внешний накопитель индикатор его слота также будет гореть красным цветом.



Чтобы прекратить запись, нажмите кнопку остановки.

Воспроизведение

Для воспроизведения нажмите соответствующую кнопку. После этого она загорится белым цветом, а индикаторы внешнего накопителя или SD-карты — зеленым.

Для перехода между несколькими сохраненными клипами можно использовать кнопки перемотки вперед или назад.



Использование кнопок перемотки

Нажмите кнопку перемотки назад для перехода к началу текущего клипа. Нажатие более одного раза позволит вернуться к ранее записанному видео.

Нажмите кнопку перемотки вперед для перехода к следующим клипам.



Для перехода к началу каждого клипа служат кнопки перемотки вперед и назад

СОВЕТ. Для обеспечения правильного воспроизведения видеофайлов на рекордере HyperDeck требуется выбрать надлежащий кодек. Это можно сделать с помощью меню настроек. Подробнее см. раздел «Изменение настроек» ниже.

Циклическое воспроизведение клипов

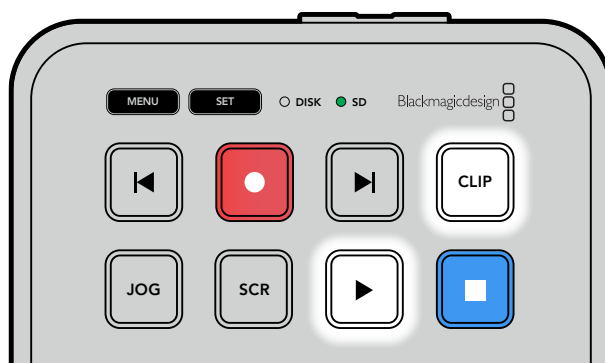
Для перевода воспроизведения в циклический режим при просмотре контента на рекордере HyperDeck Shuttle HD следует еще раз нажать кнопку воспроизведения. Чтобы из него выйти, используйте кнопку остановки.

Для проигрывания текущего видеофайла в циклическом режиме нажмите клавишу CLIP, а затем кнопку воспроизведения еще два раза.

Циклическое воспроизведение всех клипов	Во время воспроизведения контента нажмите соответствующую кнопку еще раз для воспроизведения всех клипов в циклическом режиме.
Циклическое воспроизведение текущего клипа	В режиме CLIP нажмите кнопку воспроизведения еще раз для циклического воспроизведения текущего клипа.

Режим CLIP

Режим CLIP позволяет настраивать воспроизведение в рамках одного клипа. При его активации можно выполнить переход к нужному файлу с помощью соответствующей кнопки или режима перемотки, а затем нажать клавишу воспроизведения. Оно автоматически остановится, когда выбранный клип закончится.



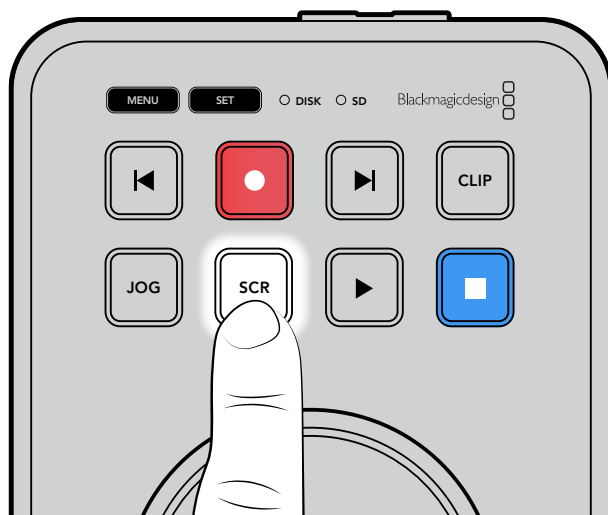
В режиме CLIP нажмите кнопку воспроизведения еще раз для циклического воспроизведения текущего клипа

Круглая ручка поиска

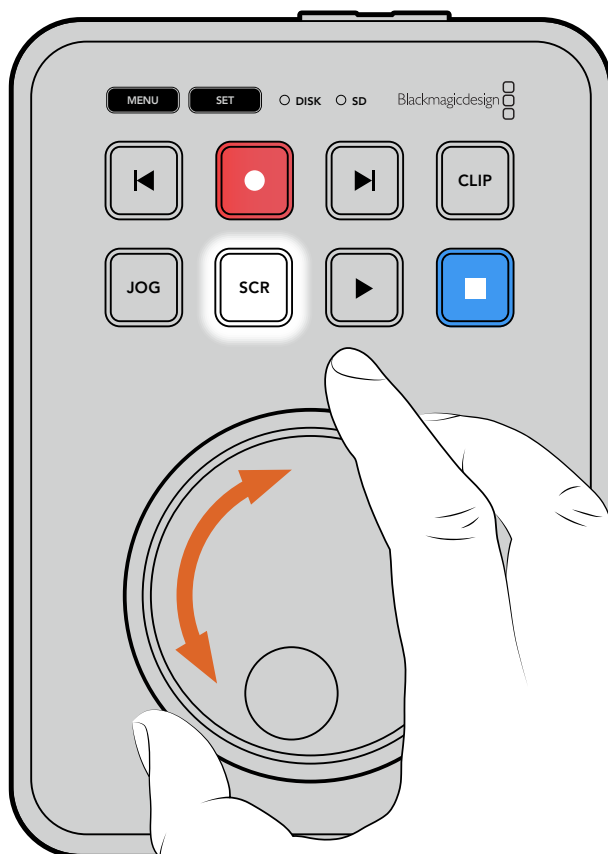
Ручка поиска позволяет быстро переходить от одного клипа к другому, а также выбирать отдельные фрагменты и выполнять покадровый просмотр. Это дает возможность оперативно находить нужный участок визуально и устанавливать точку начала проигрывания клипа для вывода его в эфир при потоковом вещании.

На данном устройстве доступны режимы протяжки, перемотки и прокрутки.

	Протяжка	Воспроизведение клипа на покадровом уровне.
	Прокрутка	Режим прокрутки дает возможность оперативно просматривать ранее записанный материал. Поворот круглой ручки поиска с механизмом фиксации обеспечивает полный контроль и позволяет перейти к тому месту, с которого нужно начать воспроизведение.
	Перемотка	Для перехода к этому режиму нажмите одновременно кнопки JOG и SCR. Поворот круглой ручки поиска вправо или влево позволит выполнить перемотку вперед или назад, а также увеличить ее значение до максимального 50-кратного ускорения. Чтобы уменьшить его вплоть до полного прекращения, верните круглую ручку в исходное положение. Кнопка остановки поможет остановить перемотку, а клавиша воспроизведения — возобновить проигрывание с текущей позиции. Значение максимальной скорости перемотки можно уменьшить с помощью меню настроек. Подробнее см. раздел «Настройки» ниже.



Для выбора режимов протяжки и прокрутки используют соответственно кнопки JOG и SCR

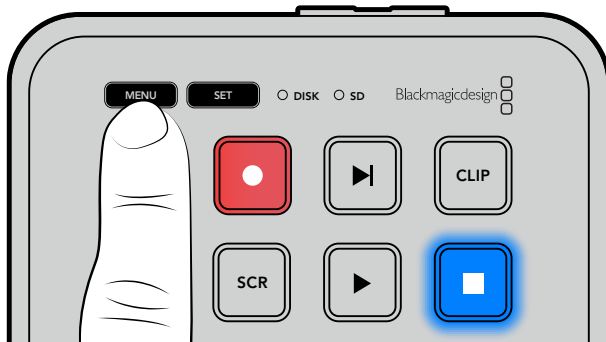


После выбора режима поиска поверните круглую ручку

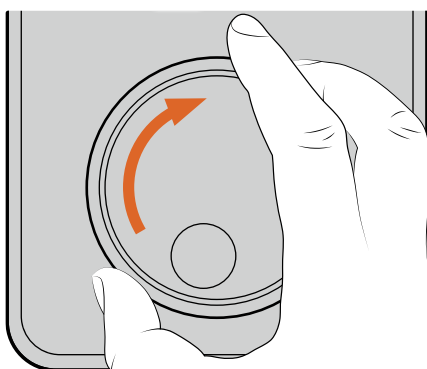
СОВЕТ. Чтобы вернуться в обычный режим воспроизведения, нажмите кнопку воспроизведения или остановки.

Изменение настроек

При нажатии кнопки MENU на рекордере в нижнем левом углу подключенного HDMI-монитора поверх изображения откроется меню настроек.

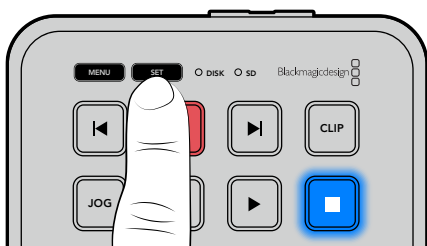


Для перехода к меню настроек нажмите кнопку MENU



Запись	
Вход	HDMI
Кодек	H.264 выс.
Запуск записи	Нет

Для перехода к подменю или отдельной настройке используйте круглую ручку поиска



Запись	
Вход	HDMI
Кодек	H.264 выс.
Запуск записи	Нет

Для выбора подменю или изменяемой настройки нажмите кнопку SET

Регулировку настроек выполняют с помощью круглой ручки или кнопок перемотки. Для подтверждения выбора нажмите SET.

Чтобы выйти из меню и вернуться на один шаг назад вплоть до начальной страницы, используют кнопку MENU.

СОВЕТ. Меню настройки можно расположить в любом углу экрана. После изменения необходимых параметров рекомендуется закрыть меню, чтобы при подключении к HDMI-микшеру, например ATEM Mini Extreme, на HDMI-выход передавался чистый сигнал.

Настройки

Меню настроек состоит из пяти отдельных вкладок: «Запись», «Монитор», «Звук», «Сохранение» и «Настройка». На этих страницах изменяют соответствующие параметры, причем большинство из них можно отрегулировать с панели управления на HyperDeck Shuttle HD. Некоторые настройки отключены и отображены неактивными, например метка в имени файла. В данном случае их можно изменить через утилиту Blackmagic HyperDeck Setup.

Запись

Запись	
Вход	HDMI
Кодек	H.264 выс.
Запуск записи	Нет

Ввод

Отображает HDMI-вход на HyperDeck Shuttle HD.

Кодек

Модель HyperDeck Shuttle HD позволяет записывать видео с компрессией в форматах H.264, Apple ProRes и DNxHD. Чтобы воспользоваться функцией телесуфлера, выберите соответствующую опцию.

Запуск записи

Для этой настройки доступны две опции: «Начало/остановка видео» и «По тайм-коду».

Некоторые камеры (например, Blackmagic Pocket Cinema 4K) используют HDMI-интерфейс для передачи сигнала о запуске и остановке записи на внешних рекордерах. При выборе данной опции сохранение на HyperDeck будет начинаться и прекращаться при соответствующем нажатии кнопки записи на камере.

При выборе второй опции запись на рекордере будет начинаться при поступлении на HDMI-вход действительного тайм-кода. В отсутствие сигнала сохранение остановится. Для отключения данной настройки нужно выбрать «Нет».

ПРИМЕЧАНИЕ. При записи с HDMI-камеры убедитесь в том, что используется чистый сигнал, так как в противном случае вместе с изображением будут записаны выводимые параметры.

Монитор

Монитор	
Формат телесуфлера	
Размер шрифта	450%
Междустрочный интервал	120%
Боковое поле	10%
Перевернуть по горизонтали	Выкл.
Перевернуть по вертикали	Выкл.

Формат телесуфлера

При использовании HyperDeck Shuttle HD в качестве телесуфлера все параметры этой функции можно установить в меню «Монитор».

Размер шрифта

Размер шрифта можно установить, выбрав необходимое значение и нажав кнопку SET. Чтобы его увеличить, ручку нужно повернуть по часовой стрелке, а чтобы уменьшить – в обратном направлении.

Междустрочный интервал

Чтобы увеличить или уменьшить междустрочный интервал, нужно повернуть круглую ручку.

Боковое поле

Эта настройка позволяет регулировать ширину бокового поля по обе стороны дисплея телесуфлера.

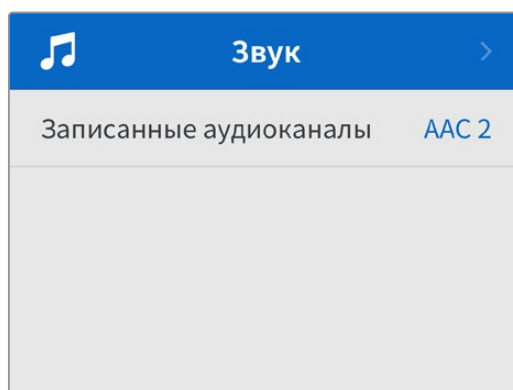
Поворот

Если необходимо зеркально отобразить текст с телесуфлера (например, когда он расположен перед камерой или на сцене для выступающих), можно использовать настройки поворота. Предусмотрены два режима.

Поворот по горизонтали: применяется, когда нижняя часть экрана телесуфлера установлена близко к основанию светоделительного стекла.

Поворот по вертикали: применяется, когда нижняя часть экрана телесуфлера установлена на расстоянии от основания светоделительного стекла.

Звук

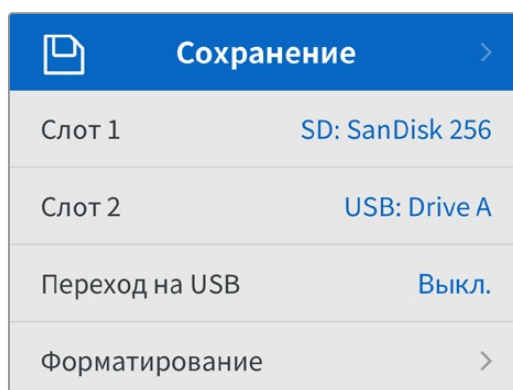


Записанные аудиоканалы

HyperDeck Shuttle HD позволяет одновременно записывать до восьми каналов звука PCM. Чтобы задать количество каналов записи, откройте список данной настройки и выберите значение 2, 4 или 8.

Если используется кодек H.264, можно также выбрать два канала AAC-аудио, что позволит напрямую выгружать записанный материал на платформу YouTube.

Сохранение



В настройках сохранения указываются подключенные накопители. Поля «Слот 1» и «Слот 2» показывают имя подключенной SD-карты и любого флеш-накопителя USB, подсоединенного через разъем EXT DISK, соответственно. При использовании USB-разветвителя, например станции Blackmagic MultiDock 10G, отображается активный носитель.

Переход на USB

Если для подключения нескольких накопителей через USB-разъем EXT DISK используется станция Blackmagic MultiDock 10G или другое аналогичное устройство, то при заполнении одного из носителей активация опции «Переход на USB» обеспечит автоматическое сохранение данных на другом.

Форматирование

SD-карты и накопители, подключенные к разъему EXT DISK на задней панели устройства, можно отформатировать непосредственно на рекордере или компьютере с операционной системой Mac или Windows.

Подготовка накопителя на HyperDeck Shuttle HD

- 1 Перейдите к настройке «Форматирование» поворотом круглой ручки и выберите ее с помощью кнопки SET.
- 2 Из списка выберите накопитель для форматирования и нажмите SET.

- 3 Укажите желаемый формат и нажмите SET.
- 4 Появится подтверждение, содержащее имя карты и заданный формат. Выберите «Форматировать».
- 5 После завершения процедуры появится окно форматирования. Выберите «ОК».

Формат HFS+ также известен как Mac OS X Extended и является предпочтительным, поскольку он поддерживает протоколирование. В этом случае при повреждении носителя содержащиеся на нем данные будет проще восстановить. Формат HFS+ совместим с операционной системой Mac, а exFAT можно использовать на платформах Mac и Windows без дополнительного программного обеспечения, однако он не предусматривает протоколирования.

Инструкции по форматированию накопителей в ОС Mac и Windows приведены в разделе «Форматирование накопителей».

Настройка

Вкладка «Настройка» содержит такие параметры, как язык, заданный стандарт, а также опции отображения меню, сетевых параметров и работы с тайм-кодом.

Настройка	
Имя	HyperDeck Shuttle HD
Язык	Русский
Дата	16 мая 2022
Время	14:32
Часовой пояс	UTC±11:00
ПО	8.1
Камера	A
Заданный формат	1080p/30
Макс. скорость перемотки	x50

Имя рекордера

Когда к сети подключено несколько рекордеров HyperDeck Shuttle HD, им следует присвоить отдельные имена, чтобы их было легко различать. Для этого можно использовать утилиту Blackmagic HyperDeck Setup или протокол Blackmagic HyperDeck Ethernet. Имя появится в меню «Настройка».

Язык

HyperDeck Shuttle HD имеет пользовательский интерфейс на 13 основных языках, включая английский, китайский, японский, корейский, испанский, немецкий, французский, русский, итальянский, португальский, турецкий, украинский и польский.

Выбор языка

- 1 Выберите меню «Настройка» и нажмите SET.
- 2 Перейдите к опции «Язык» поворотом круглой ручки и нажмите SET.

- 3 Выберите нужный язык с помощью круглой ручки и нажмите SET. После этого на экране снова появится основное меню настроек.

Дата

Чтобы изменить дату, выберите соответствующий параметр и нажмите SET. С помощью круглой ручки установите день, месяц и год. Эти данные будут добавлены к имени файла в виде временных меток.

Время

Чтобы изменить время, выберите соответствующий параметр и нажмите SET. С помощью круглой ручки установите часы и минуты. На моделях HyperDeck Shuttle HD используется 24-часовой формат.

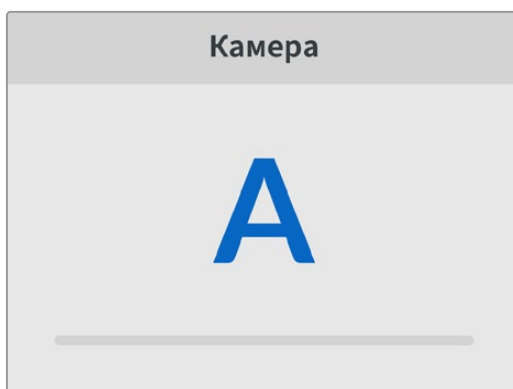
Программное обеспечение

Отображает текущую версию программного обеспечения.

Камера

Данную настройку используют при записи многокамерного контента в виде отдельных файлов, которые затем редактируют на специальной временной шкале в приложении DaVinci Resolve.

В метаданных файлов каждая из камер будет иметь свое обозначение, что позволит легко определить все доступные ракурсы с помощью синхроящика.



Для наименования камер можно использовать обозначения A-Z или 1-9

Заданный формат

Иногда HyperDeck Shuttle HD не в состоянии определить, какой видеоформат следует использовать. Данная настройка поможет рекордеру выбрать формат, применяемый чаще всего.

В качестве примера возьмем ситуацию, когда при включении HyperDeck Shuttle HD отсутствует источник видео, а на вставленном диске записаны файлы двух форматов. Какой из них следует рекордеру воспроизвести? В данном случае устройство будет использовать формат, заданный по умолчанию.

Эта функция также применяется, когда при первом включении HyperDeck Shuttle HD к нему не подсоединен источник видео и не вставлен диск. В данном случае для вывода сигнала мониторинга рекордер использует формат, заданный по умолчанию.

Тем не менее такой вариант является всего лишь рекомендуемым, а не обязательным. Если на диске содержатся файлы только одного типа, при воспроизведении HyperDeck переключится на их формат. Рекордер не будет использовать заданный формат, так как в данном случае выбор очевиден.

То же происходит и во время сохранения контента. Используемый при записи на HyperDeck формат соответствует формату поступающего на него видеосигнала. Он будет применяться рекордером при воспроизведении этого материала, даже если на диске есть другие файлы, которые имеют формат, заданный по умолчанию. Предполагается, что при записи и воспроизведении форматы должны быть одинаковыми. Если диск извлечь, а затем снова вставить, только тогда для проигрывания устройство переключится на формат по умолчанию.

Заданный по умолчанию формат является всего лишь рекомендуемым, а не обязательным, и предназначен только для тех случаев, когда автоматический выбор затруднен.

Максимальная скорость перемотки

Максимальное значение перемотки на HyperDeck Shuttle HD соответствует 50-кратному ускорению. При необходимости можно выбрать другие доступные варианты.

Меню

С помощью вкладки «Меню» можно задать положение и вид меню настроек на подключенном через HDMI-интерфейс экране.

Меню	
Вид	Светлый
Непрозрачность	100%
Положение	Внизу слева

Вид

Здесь можно выбрать темный или светлый вариант отображения меню HyperDeck. При светлом варианте повышается контрастность, если изображение является темным или при использовании функции телесуфлера.

Меню	
Вид	Светлый
Непрозрачность	100%
Положение	Внизу слева

Меню	
Вид	Темный
Непрозрачность	100%
Положение	Внизу слева

Непрозрачность

Степень непрозрачности выводимого на подключенный экран меню можно отрегулировать с заданных по умолчанию 100% до 20%.

Положение

По умолчанию выводимое меню всплывает в нижнем левом углу экрана. Чтобы перенести его в другое место, нужно выбрать поле «Положение» и нажать кнопку SET. Теперь меню можно разместить в любом углу экрана – верхнем левом, верхнем правом, нижнем левом или нижнем правом.

Сетевые параметры

Сеть	
Протокол	Статический IP-адрес
IP-адрес	192.168.24.100
Маска подсети	255.255.255.0
Шлюз	192.168.24.1

Протокол

В поставляемых рекордерах Blackmagic HyperDeck по умолчанию используется протокол DHCP. При подключении устройства к сети сервер автоматически присвоит ему IP-адрес, поэтому выполнять дополнительную настройку не требуется. Чтобы внести адрес вручную, следует выбрать «Статический IP-адрес».

Выделите настройку «Протокол» и нажмите кнопку SET. Перейдите к параметру «Статический IP-адрес» и еще раз нажмите SET.

IP-адрес, маска подсети, шлюз, первичный DNS и вторичный DNS

Когда выбран «Статический IP-адрес», сетевые настройки можно задавать вручную.

Порядок изменения IP-адреса

- 1 Выделите настройку «IP-адрес» с помощью круглой ручки и нажмите кнопку SET на контрольной панели рекордера HyperDeck.
- 2 Внесите изменения в IP-адрес поворотом круглой ручки. Для подтверждения одного сегмента и перехода к следующему нажмите кнопку SET.
- 3 Чтобы подтвердить изменение и перейти к следующему значению, нажмите SET.

После ввода IP-адреса выполните те же операции для настройки маски подсети и шлюза. Когда установка параметров завершена, нажмите кнопку MENU, чтобы вернуться к начальной странице.

Настройки тайм-кода

Это меню позволяет задать параметры ввода и вывода тайм-кода, в том числе запись с тайм-кодом источника, временем суток или установленным вручную значением.

Тайм-код	
Ввод	Видеовход
Пропуск кадров	По умолчанию
П/установка	00:00:00:00
Вывод	Временная шкала

Ввод

При записи доступны четыре опции использования тайм-кода.

Видеовход	Эта опция позволяет использовать встроенный тайм-код из HDMI-источников с метаданными SMPTE RP 188. Она обеспечивает синхронизацию HDMI-сигнала с файлом, сохраняемым на HyperDeck Studio HD.
Внутренний	Эту опцию используют для записи времени суток, получаемого от встроенного генератора тайм-кода.
Возобновление	При выборе этой опции тайм-код каждого последующего файла будет продолжаться с того значения, на котором закончился предыдущий клип. Например, если первый клип остановился на 10:28:30:10, то второй начнется с 10:28:30:11.
Предустановка	Для ввода тайм-кода вручную выберите опцию «П/установка». Запись контента начнется по тайм-коду, который задан с помощью настройки «П/установка» (см. соответствующий раздел ниже).

Пропуск кадров

При работе с видео в NTSC на частоте 29,97 или 59,94 fps можно использовать опцию «С пропуском кадров» или «Без пропуска кадров». Если параметры источника неизвестны, выберите «По умолчанию». В этом случае сохраняется формат входящего сигнала, а при отсутствии действительного тайм-кода выполняется пропуск кадров.

Предустановка

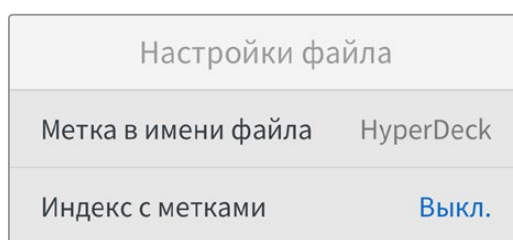
Чтобы ввести тайм-код вручную, нажмите кнопку SET, установите значение с помощью круглой ручки и снова нажмите SET. Убедитесь, что в меню «Ввод» выбрана опция «П/установка».

Вывод

Эта настройка задает вывод тайм-кода.

Временная шкала	Данная настройка позволяет выводить непрерывный тайм-код для всех клипов, записываемых на карту или диск.
Клип	При выборе этой опции выводится тайм-код каждого отдельного клипа.

Настройки файла



Метка в имени файла

После первоначальной настройки рекордера HyperDeck Shuttle HD при записи клипов на SD-карту или флеш-диск USB файлам присваиваются имена по приведенному ниже образцу.

HyperDeck_0001

HyperDeck_0001

Метка

HyperDeck_**0001**

Номер клипа

Метку можно изменить программным способом. Подробнее см. раздел «Утилита Blackmagic HyperDeck Setup».

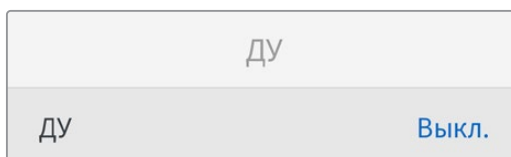
Индекс с метками

По умолчанию индекс с метками времени не добавляется к имени файла. Чтобы активировать эту функцию, ее нужно включить.

HyperDeck_2201061438_0001	
HyperDeck_2201061438_0001	Метка в имени файла
HyperDeck_ 22 01061438_0001	Год
HyperDeck_220 1 061438_0001	Месяц
HyperDeck_2201 06 1438_0001	День
HyperDeck_220106 14 38_0001	Часы
HyperDeck_22010614 38 _0001	Минуты
HyperDeck_2201061438_ 0001	Номер клипа

Настройки ДУ

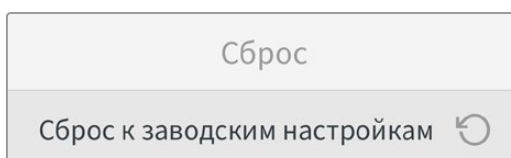
Дистанционное управление позволяет контролировать рекордер HyperDeck с другого оборудования (например, с видеомикшера АТЕМ Mini Extreme).



ДУ

Для активации удаленного контроля через Ethernet нужно включить функцию «ДУ». Чтобы перейти к обычному способу управления, ее следует отключить.

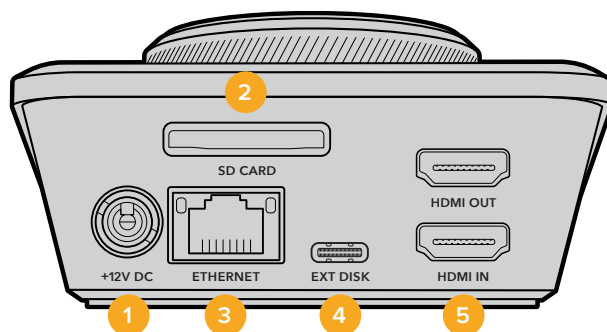
Настройки сброса



Сброс к заводским настройкам

Чтобы восстановить первоначальные параметры, выберите «Сброс к заводским настройкам». После нажатия кнопки SET появится сообщение с просьбой подтвердить действие.

Задняя панель



1 Питание

Для энергоснабжения рекордера HyperDeck Shuttle HD служит блок питания переменного тока. Входящий в комплект поставки силовой кабель имеет фиксирующий разъем, который позволяет предотвратить случайное отсоединение. Также можно использовать любой другой электрический кабель (мощность 36 Вт, напряжение 12 В).

2 SD CARD

Этот слот позволяет использовать SD-карты для записи и воспроизведения.

3 ETHERNET

Порт ETHERNET позволяет подключаться к локальной сети для быстрой передачи данных по FTP и управлять рекордером в дистанционном режиме с помощью протокола HyperDeck Ethernet. Подробнее см. раздел «Передача файлов по сети» ниже.

Рекордером HyperDeck также можно управлять с помощью микшера ATEM или пульта ATEM, если они подключены к единой сети.

4 EXT DISK

Через разъем USB-C с пропускной способностью до 5 Гбит/с можно вести запись на внешний носитель. Также допускается подключение к концентраторам USB-C и к станции MultiDock 10G для сохранения материала на один или несколько твердотельных накопителей.

5 HDMI

HDMI-выход позволяет подключать телевизоры и мониторы, а также видеомикшеры, оснащенные соответствующим разъемом (например, ATEM Mini Extreme). Этот интерфейс можно дополнительно использовать для вывода меню.

Работа с накопителями

SD-карта

Для HD-материала высокого качества рекомендуется использовать скоростные SD-карты класса UHS-I. Эти носители способны работать на скорости свыше 220 МБ/с при сохранении Ultra HD-видео в форматах вплоть до 2160р/60.

При записи с более низким битрейтом и высоким сжатием можно работать с другими носителями, однако скоростные накопители обычно обеспечивают наилучший результат.

Эта информация регулярно обновляется, поэтому мы рекомендуем обращаться к самой последней версии данного руководства, которую можно загрузить на сайте Blackmagic Design по адресу www.blackmagicdesign.com/ru/support.

Выбор SD-карт при работе с HyperDeck Shuttle HD

Рекомендуемые карты SD для записи в формате 1080р с частотой до 60 кадров/с

Производитель	Модель	Емкость
Angelbird	AV PRO SD UHS-II 300MB/s V90 SDXC	256 ГБ
Angelbird	AV PRO SD UHS-II 260MB/s V60 SDXC	128 ГБ
Angelbird	AV PRO SD UHS-II 260MB/s V60 SDXC	64 ГБ
SanDisk	Extreme Pro UHS-I 95MB/s SDXC	64 ГБ
Wise	SD2-64U3 UHS-II 285MB/s SDXC	64 ГБ
Lexar	Professional 1000x UHS-II 150MB/s SDXC	128 ГБ
SONY	Tough SF-G128T	128 ГБ
Kingston	CANVAS GO! Plus 170MB/s V30	64 ГБ
Kingston	CANVAS GO! Plus 170MB/s V30	128 ГБ
Kingston	CANVAS GO! Plus 170MB/s V30	512 ГБ
ProGrade Digital	SDXC UHS-II V90 300R	64 ГБ
ProGrade Digital	SDXC UHS-II V90 300R	128 ГБ
SONY	Tough SF-G64T UHS-II SDXC	64 ГБ
Delkin Devices	Black UHS-II V90 SDXC	256 ГБ
Delkin Devices	Power UHS-II V90 SDXC	128 ГБ
Delkin Devices	Power UHS-II V90 SDXC	256 ГБ
Delkin Devices	Black UHS-II V90 SDXC	128 ГБ
Exascend	Essential SDXC UHS-II V90 R 300MB/s	64 ГБ
Exascend	Essential SDXC UHS-II V90 R 300MB/s	128 ГБ
Exascend	Catalyst SDXC UHS-II V90 R 300MB/s	64 ГБ

Внешний диск

Все модели HyperDeck позволяют вести запись непосредственно на флеш-диски USB-C. Эти носители имеют большую емкость и обеспечивают запись в течение долгого времени. Затем можно подключить их к компьютеру и сразу приступить к монтажу.

Чтобы получить еще больше места для хранения видео, можно добавить док-станцию с портом USB-C или внешний жесткий диск. Для подключения станции Blackmagic MultiDock 10G или флеш-диска USB-C используют кабель USB-C, который соединяют с разъемом EXT DISK на задней панели рекордера HyperDeck.

Выбор дисков USB-C при работе с HyperDeck Shuttle HD

Рекомендуемые диски USB-C для записи в формате 1080p ProRes HQ с частотой до 60 кадров/с

Производитель	Модель	Емкость
Wise	PTS-256 Portable SSD 4K	256 ГБ
OWC	Envoy Pro Ex	240 ГБ
BUFFALO	SSD-PHE500U3-BA	500 ГБ

Рекомендуемые диски USB-C для записи в формате 1080p DNxHR HQX с частотой до 60 кадров/с

Производитель	Модель	Емкость
OWC	Envoy Pro Ex	240 ГБ

Рекомендуемые диски USB-C для записи в формате 1080p H.264 с частотой до 60 кадров/с

Производитель	Модель	Емкость
OWC	Envoy Pro Ex	240 ГБ

Форматирование накопителя

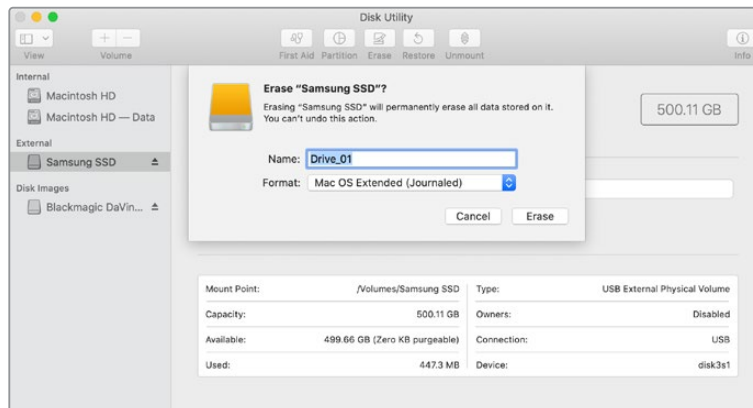
Подготовка накопителя на компьютере

Форматирование накопителя на Mac

Для форматирования диска под систему HFS+ или exFAT воспользуйтесь дисковой утилитой, которая входит в пакет Mac.

Выполните резервное копирование всех важных данных, потому что при форматировании носителя они будут удалены.

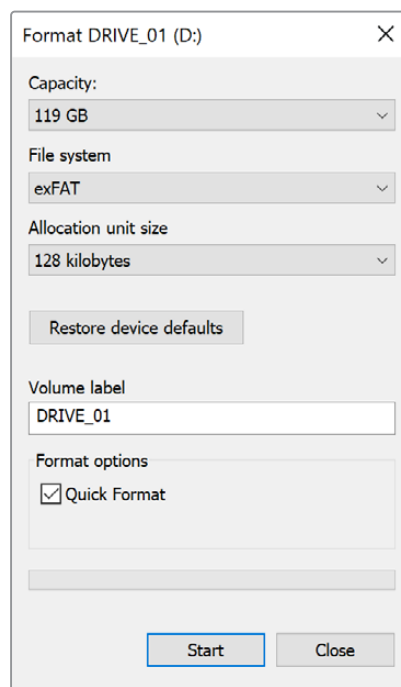
- 1 Подключите USB-диск к компьютеру при помощи внешней док-станции или переходного кабеля и пропустите сообщение, предлагающее использовать диск для создания резервной копии Time Machine. При работе с SD-картой подключите накопитель к компьютеру через внешний картридер.
- 2 Выберите «Программы» > «Утилиты» и запустите приложение «Дисковая утилита».
- 3 Щелкните кнопкой мыши по значку SD-карты или USB-диска и выберите вкладку «Стереть».
- 4 Выберите формат Mac OS Extended (журналируемый) или exFAT.
- 5 Введите название нового тома и выберите «Стереть». По окончании форматирования носитель будет готов к использованию на HyperDeck.



Форматирование накопителя на Windows

На компьютере под управлением Windows форматирование диска под систему exFAT выполняется с помощью диалогового окна «Форматировать». Выполните резервное копирование всех важных данных, потому что при форматировании SSD-диска или SD-карты они будут удалены.

- 1 Подключите USB-диск к компьютеру с помощью внешней док-станции или переходного кабеля. При работе с SD-картой подключите накопитель к компьютеру через внешний картридер.
- 2 Откройте меню или экран «Пуск» и выберите «Компьютер». Щелкните правой кнопкой мыши по значку USB-диска или SD-карты.
- 3 В контекстном меню выберите «Форматировать».
- 4 Выберите файловую систему exFAT и установите размер кластера, равный 128 Кб.
- 5 Укажите метку тома, выберите «Быстрое форматирование» и нажмите «Начать».
- 6 По окончании форматирования носитель будет готов к использованию на HyperDeck.



Использование функции телесуфлера

Рекордер Blackmagic HyperDeck Shuttle HD позволяет использовать функцию телесуфлера. Для этого достаточно создать файл .rtf в приложении TextEdit или WordPad и сохранить его в любом из 13 поддерживаемых языков. Когда такой файл открыт на HyperDeck Shuttle HD, для текста можно изменить размер шрифта и междустрочный интервал.

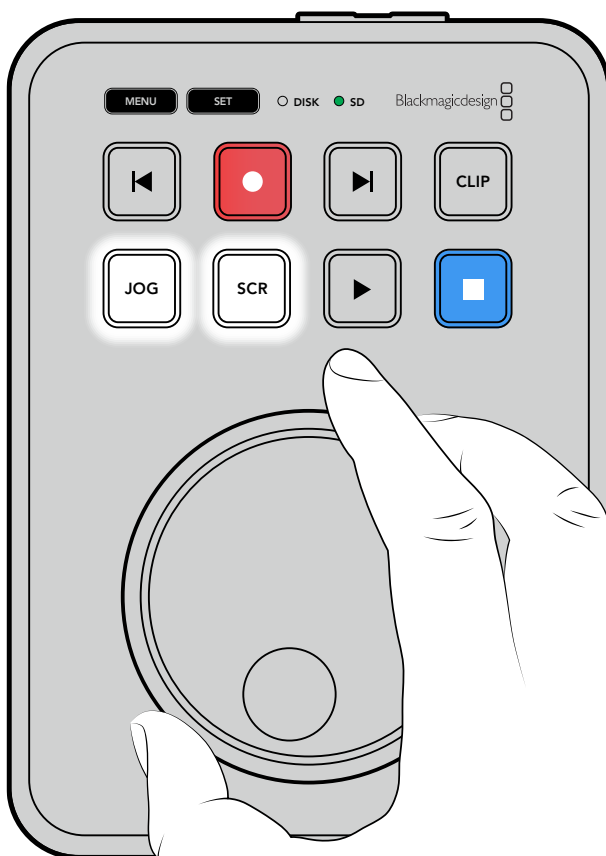
Порядок использования телесуфлера

- 1 Подключите HDMI-выход рекордера HyperDeck Shuttle HD к HDMI-дисплею.
- 2 Установите SD-карту или подключите внешний USB-диск с текстом сценария.
- 3 В меню «Запись» выберите опцию «Кодек». Перейдите к настройке «Телесуфлер» и нажмите SET.

Сценарий будет отображаться на дисплее. Для автоматического запуска нажмите кнопку воспроизведения, а для дополнительного управления выводом используйте круглую ручку.

Скорость телесуфлера при воспроизведении

Круглая ручка на рекордере HyperDeck Shuttle HD позволяет регулировать скорость телесуфлера так же, как при воспроизведении медиаконтента. Когда сценарий загружен, нажмите одновременно кнопки JOG и SCR, чтобы активировать вывод с изменяемым значением данного параметра. Затем поверните ручку. Скорость ее движения определяет, как быстро будет сменяться текст на экране: чем она интенсивнее, тем выше этот темп.



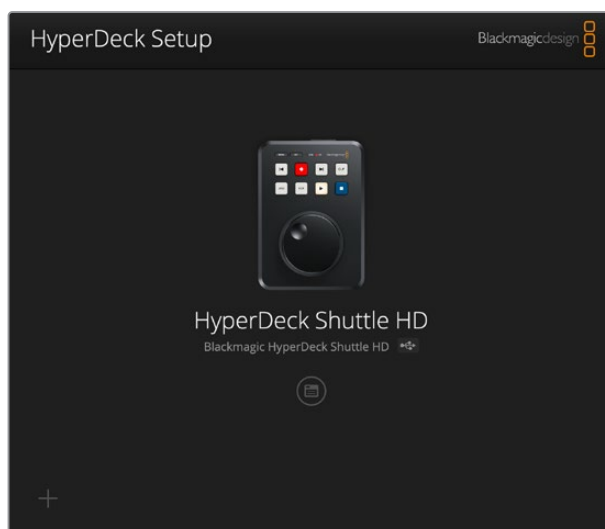
Если нужно использовать постоянную скорость, с кнопками JOG и SCR работают по отдельности. После нажатия одной из них при повороте круглой ручки выполняется медленная (в первом случае) или быстрая (во втором) смена текста на экране.

Для навигации по файлам .rtf на SD-карте или внешнем диске используют кнопки перехода вперед и назад.

При выводе на телесуфлер учитываются такие параметры, как шрифт, цвет и выделение полужирным. Дополнительно можно настроить размер текста, междустрочный интервал, поля и поворот по горизонтали или вертикали, когда проецирование на светоделительное стекло выполняют с помощью меню «Монитор». Подробнее см. раздел «Меню настроек».

Blackmagic HyperDeck Setup

Blackmagic HyperDeck Setup представляет собой программную утилиту, которая позволяет изменять настройки и обновлять прошивку рекордера.

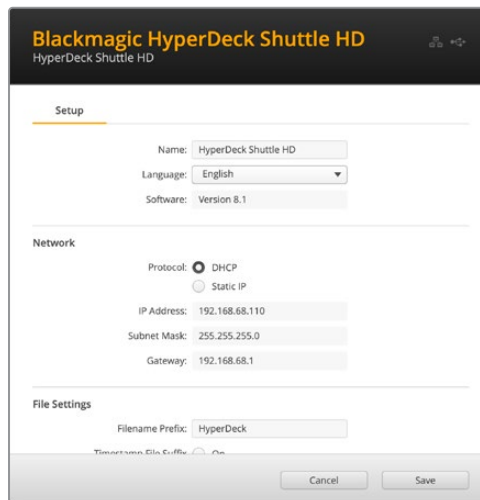


Порядок установки программного обеспечения

- 1 Загрузите последнюю версию Blackmagic HyperDeck Setup в разделе поддержки по адресу www.blackmagicdesign.com/ru/support.
- 2 Запустите установщик Blackmagic HyperDeck Setup и следуйте инструкциям на экране.
- 3 После установки подключите HyperDeck Shuttle HD к компьютеру через порт USB или разъем Ethernet на задней панели устройства.
- 4 Для обновления программного обеспечения запустите Blackmagic HyperDeck Setup и следуйте инструкциям на экране. Если они не появятся, используемая версия является актуальной.

Щелкните кнопкой мыши по изображению HyperDeck или значку настроек, чтобы получить доступ к меню.

На начальной странице будет показан рекордер HyperDeck Shuttle HD со своим именем. Это облегчает идентификацию устройства, если к компьютеру подключено несколько единиц такой техники. Имя можно задать с помощью меню настроек в утилите.



Network (Сеть)

Network

Protocol: DHCP
 Static IP

IP Address: 192.168.68.110

Subnet Mask: 255.255.255.0

Gateway: 192.168.68.1

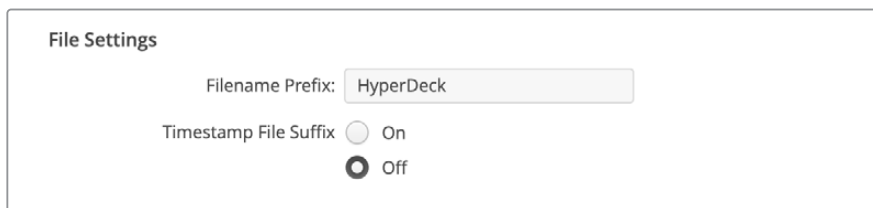
Protocol (Протокол)

Чтобы использовать рекордер HyperDeck Shuttle HD с видеомикшерами ATEM или дистанционно управлять им по протоколу HyperDeck Ethernet, устройство нужно подключить к локальной сети с применением протокола DHCP или фиксированного IP-адреса.

DHCP	Рекордеры HyperDeck Shuttle HD по умолчанию используют протокол DHCP. DHCP — это протокол динамической настройки узла, используемый сетевыми серверами для автоматического обнаружения устройства HyperDeck и присвоения ему IP-адреса. Данная функция, которая поддерживается большинством компьютеров и сетевых маршрутизаторов, значительно облегчает подключение оборудования через Ethernet и не допускает конфликта IP-адресов.
Static IP (Статический IP-адрес)	Когда выбран «Статический IP-адрес», сетевые настройки можно задавать вручную. Чтобы между устройствами существовал канал связи, они должны иметь одинаковые настройки маски подсети и шлюза. Еще одно условие — совпадение первых трех компонентов в IP-адресах панели и микшера.

Если идентифицирующий компонент IP-адреса уже используется другим устройством компьютерной сети, из-за конфликта настроек подключение не будет выполнено. В этом случае необходимо изменить соответствующее поле в IP-адресе.

File Settings (Настройки файла)



The screenshot shows a window titled "File Settings". Inside, there is a text input field for "Filename Prefix" containing the text "HyperDeck". Below it, there are two radio button options for "Timestamp File Suffix": "On" (which is unselected) and "Off" (which is selected).

После первоначальной настройки рекордера HyperDeck Shuttle HD при записи клипов на SD-карту или флеш-диск USB файлы будут содержать метку "HyperDeck". Если ее нужно изменить, введите новое имя файла.

По умолчанию индекс с метками времени не добавляется к имени файла. Чтобы активировать эту функцию (Timestamp File Suffix), ее нужно включить. Задать метки для имени и времени можно с помощью соответствующих настроек в меню на HyperDeck Shuttle HD.

Передача файлов по сети

Рекордеры HyperDeck поддерживают передачу файлов по FTP-протоколу. Это позволяет быстро копировать материалы с компьютера непосредственно на устройство по локальной сети. Например, можно в удаленном режиме перенести файлы на HyperDeck, чтобы использовать их для вывода изображения на цифровые рекламно-информационные панели.

Подключение к HyperDeck Shuttle HD

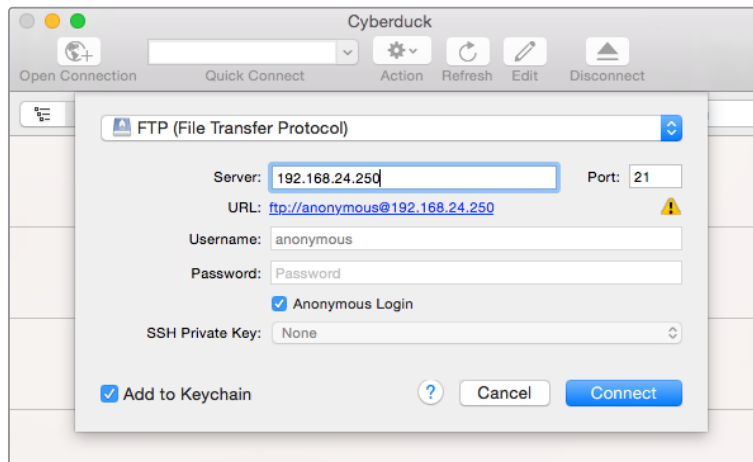
Для обмена файлами между компьютером и HyperDeck Shuttle HD в одной локальной сети потребуются приложение для работы с FTP-протоколом и IP-адрес рекордера.

- 1 Загрузите и установите приложение для работы с FTP-протоколом на компьютер, который будет подключен к рекордеру. Рекомендуется использовать Cyberduck, FileZilla или Transmit, однако подойдут и другие аналогичные программы. Cyberduck и FileZilla предлагаются бесплатно.
- 2 С помощью кабеля Ethernet подключите HyperDeck Shuttle HD к локальной сети и посмотрите IP-адрес рекордера. Для этого нажмите кнопку MENU и поверните круглую ручку, чтобы перейти к настройкам «Сеть». Адрес устройства будет отображаться внизу экрана.

Сеть	
Протокол	Статический IP-адрес
IP-адрес	192.168.24.100
Маска подсети	255.255.255.0
Шлюз	192.168.24.1

IP-адрес рекордера HyperDeck Shuttle HD можно найти в разделе «Сеть» меню настроек

- 3 Введите IP-адрес рекордера HyperDeck в диалоговом окне приложения для работы с TCP-протоколом. В зависимости от программы имя и положение поля могут меняться, но обычно оно называется Server или Host. Если есть опция Anonymous Login, поставьте для нее флажок.



При подключении к HyperDeck Shuttle HD вводить имя пользователя или пароль не нужно. Достаточно указать IP-адрес рекордера и поставить флажок для опции Anonymous Login при ее наличии.

Передача файлов

После установки соединения с HyperDeck можно выполнять передачу файлов по FTP. В большинстве приложений для работы с таким протоколом используется простое перетаскивание.

HyperDeck Shuttle HD позволяет импортировать и экспортировать любые файлы, однако их воспроизведение возможно только в том случае, если рекордер поддерживает используемые кодек и разрешение.

СОВЕТ. Передавать файлы по сети можно в то время, когда HyperDeck ведет запись. В этом случае скорость обмена данными корректируется автоматически.

Developer Information

Blackmagic HyperDeck Ethernet Protocol

The Blackmagic HyperDeck Ethernet Protocol is a text based protocol accessed by connecting to TCP port 9993 on HyperDeck models that have a built in Ethernet connection. If you are a software developer, you can use the protocol to construct devices that integrate with our products. Here at Blackmagic Design our approach is to open up our protocols and we eagerly look forward to seeing what you come up with!

Protocol Commands

Command	Command Description
help or ?	Provides help text on all commands and parameters
commands	return commands in XML format
device info	return device information
disk list	query clip list on active disk
disk list: slot id: {n}	query clip list on disk in slot {n}
quit	disconnect ethernet control
ping	check device is responding
preview: enable: {true/false}	switch to preview or output
play	play from current timecode
play: speed: {-5000 to 5000}	play at specific speed
play: loop: {true/false}	play in loops or stop-at-end
play: single clip: {true/false}	play current clip or all clips
playrange	query playrange setting
playrange set: clip id: {n}	set play range to play clip {n} only
playrange set: clip id: {n} count: {m}	set play range to {m} clips starting from clip {n}
playrange set: in: {inT} out: {outT}	set play range to play between: - timecode {inT} and timecode {outT}
playrange set: timeline in: {in} timeline out: {out}	set play range in units of frames between: - timeline position {in} and position {out} clear/reset play range setting
playrange clear	clear/reset play range setting
play on startup	query unit play on startup state
play on startup: enable: {true/false}	enable or disable play on startup
play on startup: single clip: {true/false}	play single clip or all clips on startup
play option	query play options
play option: stop mode: {lastframe/nextframe/black}	set output frame when playback stops
record	record from current input
record: name: {name}	record named clip

Command	Command Description
record spill	spill current recording to next slot
record: spill: slot id: {n}	spill current recording to specified slot use current id to spill to same slot
stop	stop playback or recording
clips count	query number of clips on timeline
clips get	query all timeline clips
clips get: clip id: {n}	query a timeline clip info
clips get: clip id: {n} count: {m}	query m clips starting from n
clips get: version: {1/2}	query clip info using specified output version: version 1: id: name startT duration version 2: id: startT duration inT outT name
clips add: name: {name}	append a clip to timeline
clips add: clip id: {n} name: {name}	insert clip before existing clip {n}
clips add: in: {inT} out: {outT} name: {name}	append the {inT} to {outT} portion of clip
clips remove: clip id: {n}	remove clip {n} from the timeline (invalidates clip ids following clip {n})
clips clear	empty timeline clip list
transport info	query current activity
slot info	query active slot
slot info: slot id: {n}	query slot {n}
slot select: slot id: {n}	switch to specified slot
slot select: video format: {format}	load clips of specified format
slot unblock	unblock active slot
slot unblock: slot id: {n}	unblock slot {n}
cache info	query cache status
dynamic range	query dynamic range settings
dynamic range: playback override: {off/Rec709/Rec2020_SDR/HLG/ ST2084_300/ST2084_500/ ST2084_800/ST2084_1000/ ST2084_2000/ST2084_4000/ST2084}	set playback dynamic range override
dynamic range: record override: {off/Rec709/Rec2020_SDR/HLG/ ST2084_300/ST2084_500/ ST2084_800/ST2084_1000/ ST2084_2000/ST2084_4000/ST2048}	set record dynamic range override
notify	query notification status
notify: remote: {true/false}	set remote notifications
notify: transport: {true/false}	set transport notifications
notify: slot: {true/false}	set slot notifications
notify: configuration: {true/false}	set configuration notifications

Command	Command Description
notify: dropped frames: {true/false}	set dropped frames notifications
notify: display timecode: {true/false}	set display timecode notifications
notify: timeline position: {true/false}	set playback timeline position notifications
notify: playrange: {true/false}	set playrange notifications
notify: cache: {true/false}	set cache notifications
notify: dynamic range: {true/false}	set dynamic range settings notifications
notify: slate: {true/false}	set digital slate notifications
notify: clips: {true/false}	set timeline clips notifications where two types of changes can occur: add: partial update with list of clips and insert positions snapshot: complete update of all clips on timeline
notify: disk: {true/false}	set disk clips notifications where two types of changes can occur: add: partial update with list of clips and insert positions snapshot: complete update of all clips on timeline
goto: clip id: {start/end}	goto first clip or last clip
goto: clip id: {n}	goto clip id {n}
goto: clip id: +{n}	go forward {n} clips
goto: clip id: -{n}	go backward {n} clips
goto: clip: {n}	goto frame position {n} within current clip
goto: clip: +{n}	go forward {n} frames within current clip
goto: clip: -{n}	go backward {n} frames within current clip
goto: clip: {start/end}	goto start or end of clip
goto: timeline: {n}	goto frame position {n} within timeline
goto: timeline: +{n}	o forward {n} frames within timeline
goto: timeline: -{n}	go backward {n} frames within timeline
goto: timeline: {start/end}	goto start or end of timeline
goto: timecode: {timecode}	goto specified timecode
goto: timecode: +{timecode}	go forward {timecode} duration
goto: timecode: -{timecode}	go backward {timecode} duration
goto: slot id: {n}	goto slot id {n}
jog: timecode: {timecode}	jog to timecode
jog: timecode: +{timecode}	jog forward {timecode} duration
jog: timecode: -{timecode}	jog backward {timecode} duration
shuttle: speed: {-5000 to 5000}	shuttle with speed
remote	query unit remote control state
remote: enable: {true/false}	enable or disable remote control
remote: override: {true/false}	session override remote control
configuration	query configuration settings
configuration: video input: SDI	switch to SDI input

Command	Command Description
configuration: video input: HDMI	switch to HDMI input
configuration: video input: component	switch to component input
configuration: audio input: embedded	capture embedded audio
configuration: audio input: XLR	capture XLR audio
configuration: audio input: RCA	capture RCA audio
configuration: file format: {format}	switch to specific file format
configuration: audio codec: PCM	switch to PCM audio
configuration: audio codec: AAC	switch to AAC audio
configuration: timecode input: {external/embedded/internal/preset/clip}	change the timecode input
configuration: timecode output: {clip/timeline}	change the timecode output
configuration: timecode preference: {default/dropframe/nondropframe}	whether or not to use drop frame timecodes when not otherwise specified
configuration: timecode preset: {timecode}	set the timecode preset
configuration: audio input channels: {n}	set the number of audio channels recorded to {n}
configuration: record trigger: {none/recorderbit/timecoderun}	change the record trigger
configuration: record prefix: {name}	set the record prefix name (supports UTF-8 name)
configuration: append timestamp: {true/false}	append timestamp to recorded filename
configuration: xlr input id: {n} xlr type: {line/mic}	configure xlr input type multiple xlr inputs can be configured in a single command
configuration: genlock input resync: {true/false}	enable or disable genlock input resync
uptime	return time since last boot
format: slot id: {n} prepare: {exFAT/HFS+} name: {name}	prepare a disk formatting operation to filesystem {format}
format: confirm: {token}	perform a pre-prepared formatting operation using token
identify: enable: {true/false}	identify the device
watchdog: period: {period in seconds}	client connection timeout
reboot	reboot device
slate clips	slate clips information
slate project	slate project information
slate lens	slate lens information

Multiline commands:	Command Description
slate clips↵	set slate clips information:
reel: {n}	slate reel number, where {n} is in [1, 999]
scene id: {id}	slate scene id value, where {id} is a string
shot type: {WS/MS/BCU/MCU/ECU/none}	slate shot type
take: {n}	slate take number, where {n} is in [1, 99]
take scenario: {PU/VFX/SER/none}	slate take scenario
take auto inc: {true/false}	slate take auto increment
good take: {true/false}	slate good take
environment: {interior/exterior}	slate environment
day night: {day/night}	slate day or night
slate project:↵	set slate project information:
project name: {name}	project name (can be empty, supports UTF-8)
camera: {index}	set camera index e.g. A
director: {name}	director (can be empty, supports UTF-8)
camera operator: {name}	camera operator (can be empty, supports UTF-8)
slate lens:↵	set lens information:
lens type: {type}	lens type (can be empty, supports UTF-8)
iris: {type}	camera iris (can be empty, supports UTF-8)
focal length: {length}	focal length (can be empty, supports UTF-8)
distance: {distance}	lens distance (can be empty, supports UTF-8)
filter: {filter}	lens filter (can be empty, supports UTF-8)

Command Combinations

You can combine the parameters into a single command, for example:

```
play: speed: 200 loop: true single clip: true
```

Or for configuration:

```
configuration: video input: SDI audio input: XLR
```

Or to switch to the second disk, but only play NTSC clips:

```
slot select: slot id: 2 video format: NTSC
```

Protocol Details

Connection

The HyperDeck Ethernet server listens on TCP port 9993.

Basic syntax

The HyperDeck protocol is a line oriented text protocol. Lines from the server will be separated by an ascii CR LF sequence. Messages from the client may be separated by LF or CR LF.

New lines are represented in this document as a "↵" symbol.

Single line command syntax

Command parameters are usually optional. A command with no parameters is terminated with a new line:

```
{Command name}↵
```

If parameters are specified, the command name is followed by a colon, then pairs of parameter names and values. Each parameter name is terminated with a colon character:

```
{Command name}: {Parameter}: {Value} {Parameter}: {Value} ...↵
```

Multiline command syntax

The HyperDeck protocol also supports an equivalent multiline syntax where each parameter-value pair is entered on a new line. E.g.

```
{Command name}:↵  
{Parameter}: {Value}↵  
{Parameter}: {Value}↵  
↵
```

Response syntax

Simple responses from the server consist of a three digit response code and descriptive text terminated by a new line:

```
{Response code} {Response text}↵
```

If a response carries parameters, the response text is terminated with a colon, and parameter name and value pairs follow on subsequent lines until a blank line is returned:

```
{Response code} {Response text}:↵  
{Parameter}: {Value}↵  
{Parameter}: {Value}↵  
...  
↵
```

Successful response codes

A simple acknowledgement of a command is indicated with a response code of 200:

```
200 ok↵
```

Other successful responses carry parameters and are indicated with response codes in the range of 201 to 299.

Failure response codes

Failure responses to commands are indicated with response codes in the range of 100 to 199:

```
100 syntax error
101 unsupported parameter
102 invalid value
103 unsupported
104 disk full
105 no disk
106 disk error
107 timeline empty
108 internal error
109 out of range
110 no input
111 remote control disabled
112 clip not found
120 connection rejected
150 invalid state
151 invalid codec
160 invalid format
161 invalid token
162 format not prepared
163 parameterized single line command not supported
```

Asynchronous response codes

The server may return asynchronous messages at any time. These responses are indicated with response codes in the range of 500 to 599:

```
5xx {Response Text}:↵
{Parameter}: {Value}↵
{Parameter}: {Value}↵
↵
```

Connection response

On connection, an asynchronous message will be delivered:

```
500 connection info:↵
protocol version: {Version}↵
model: {Model Name}↵
↵
```

Timecode syntax

Timecodes are expressed as non-drop-frame timecode in the format:

```
HH:MM:SS:FF
```

Handling of deck "remote" state

The "remote" command may be used to enable or disable the remote control of the deck. Any attempt to change the deck state over ethernet while remote access is disabled will generate an error:

```
111 remote control disabled↵
```

To enable or disable remote control:

```
remote: enable: {"true", "false"} ↵
```

The current remote control state may be overridden allowing remote access over ethernet irrespective of the current remote control state:

```
remote: override: {"true", "false"} ↵
```

The override state is only valid for the currently connected ethernet client and only while the connection remains open.

The "remote" command may be used to query the remote control state of the deck by specifying no parameters:

```
remote↵
```

The deck will return the current remote control state:

```
210 remote info:↵  
enabled: {"true", "false"}↵  
override: {"true", "false"}↵  
↵
```

Asynchronous remote control information change notification is disabled by default and may be configured with the "notify" command. When enabled, changes in remote state will generate a "510 remote info:" asynchronous message with the same parameters as the "210 remote info:" message.

Closing connection

The "quit" command instructs the server to cleanly shut down the connection:

```
quit↵
```

Checking connection status

The "ping" command has no function other than to determine if the server is responding:

```
ping↵
```

Getting help

The "help" or "?" commands return human readable help text describing all available commands and parameters:

```
help↵
```

Or:

```
?↵
```

The server will respond with a list of all supported commands:

```
201 help:↵  
{Help Text}↵  
{Help Text}↵  
↵
```

Switching to preview mode

The "preview" command instructs the deck to switch between preview mode and output mode:

```
preview: enable: {"true", "false"}↵
```

Playback will be stopped when the deck is switched to preview mode. Capturing will be stopped when the deck is switched to output mode.

Controlling device playback

The "play" command instructs the deck to start playing:

```
play↵
```

The play command accepts a number of parameters which may be used together in most combinations.

By default, the deck will play all remaining clips on the timeline then stop.

The "single clip" parameter may be used to override this behavior:

```
play: single clip: {"true", "false"}↵
```

By default, the deck will play at normal (100%) speed. An alternate speed may be specified in percentage between -5000 to 5000:

```
play: speed: {% normal speed}↵
```

By default, the deck will stop playing when it reaches to the end of the timeline. The "loop" parameter may be used to override this behavior:

```
play: loop: {"true", "false"}↵
```

The "playrange" command instructs the deck to play all the clips. To override this behavior: and select a particular clip:

```
playrange set: clip id: {Clip ID}↵
```

To only play a certain timecode range:

```
playrange set: in: {in timecode} out: {out timecode}↵
```

To clear a set playrange and return to the default value:

```
playrange clear↵
```

The "play on startup" command instructs the deck on what action to take on startup. By default, the deck will not play. Use the "enable" command to start playback after each power up.

```
play on startup: enable {"true", "false"}↵
```

By default, the unit will play back all clips on startup. Use the "single clip" command to override.

```
play on startup: single clip: {"true", "false"}↵
```

Stopping deck operation

The "stop" command instructs the deck to stop the current playback or capture:

```
stop↵
```

Changing timeline position

The "goto" command instructs the deck to switch to playback mode and change its position within the timeline.

To go to the start of a specific clip:

```
goto: clip id: {Clip ID}↵
```

To move forward/back {count} clips from the current clip on the current timeline:

```
goto: clip id: +/-{count}↵
```

Note that if the resultant clip id goes beyond the first or last clip on timeline, it will be clamp at the first or last clip.

To go to the start or end of the current clip:

```
goto: clip: {"start", "end"}↵
```

To go to the start of the first clip or the end of the last clip:

```
goto: timeline: {"start", "end"}↵
```

To go to a specified timecode:

```
goto: timecode: {timecode}↵
```

To move forward or back a specified duration in timecode:

```
goto: timecode: {"+", "-"}{duration in timecode}↵
```

To specify between slot 1 and slot 2:

```
goto: slot id: {Slot ID}↵
```

Note that only one parameter/value pair is allowed for each goto command.

Enumerating supported commands and parameters

The "commands" command returns the supported commands:

```
commands↵
```

The command list is returned in a computer readable XML format:

```
212 commands:
<commands>↵
  <command name="..."><parameter name="..."/>...</command>↵
  <command name="..."><parameter name="..."/>...</command>↵
  ...
</commands>↵
↵
```

Controlling asynchronous notifications

The "notify" command may be used to enable or disable asynchronous notifications from the server.

To enable or disable transport notifications:

```
notify: transport: {"true", "false"}↵
```

To enable or disable slot notifications:

```
notify: slot: {"true", "false"}↵
```

To enable or disable remote notifications:

```
notify: remote: {"true", "false"}↵
```

To enable or disable configuration notifications:

```
notify: configuration: {"true", "false"}↵
```

Multiple parameters may be specified. If no parameters are specified, the server returns the current state of all notifications:

```
209 notify:↵
transport: {"true", "false"}↵
slot: {"true", "false"}↵
remote: {"true", "false"}↵
configuration: {"true", "false"}↵
dropped frames: {"true", "false"}↵
display timecode: {"true", "false"}↵
timeline position: {"true", "false"}↵
playrange: {"true", "false"}↵
cache: {"true", "false"}↵
dynamic range: {"true", "false"}↵
slate: {"true", "false"}↵
clips: {"true", "false"}↵
disk: {"true", "false"}↵
↵
```

Retrieving device information

The "device info" command returns information about the connected deck device:

```
device info↵
```

The server will respond with:

```
204 device info:↵
protocol version: {Version}↵
model: {Model Name}↵
unique id: {unique alphanumeric identifier}↵
slot count: {number of storage slots}↵
software version: {software version}↵
↵
```


Retrieving slot information

The "slot info" command returns information about a slot. Without parameters, the command returns information for the currently selected slot:

```
slot info↵
```

If a slot id is specified, that slot will be queried:

```
slot info: slot id: {Slot ID}↵
```

The server will respond with slot specific information:

```
202 slot info:↵
slot id: {Slot ID}↵
status: {"empty", "mounting", "error", "mounted"}↵
volume name: {Volume name}↵
recording time: {recording time available in seconds}↵
video format: {disk's default video format}↵
blocked: {"true", "false"}↵
↵
```

Asynchronous slot information change notification is disabled by default and may be configured with the "notify" command. When enabled, changes in slot state will generate a "502 slot info:" asynchronous message with the same parameters as the "202 slot info:" message.

Retrieving clip information

The "disk list" command returns the information for each playable clip on a given disk. Without parameters, the command returns information for the current active disk:

```
disk list↵
```

If a slot id is specified, the disk in that slot will be queried:

```
disk list: slot id: {Slot ID}↵
```

The server responds with the list of all playable clips on the disk in the format of: Index, name, formats, and duration in timecode:

```
206 disk list:↵
slot id: {Slot ID}↵
{clip index}: {name} {file format} {video format} {Duration
timecode}↵
{clip index}: {name} {file format} {video format} {Duration
timecode}↵
...
↵
```

Note that the *clip index* starts from 1.

Retrieving clip count

The "clips count" command returns the number of clips on the current timeline:

```
clips count ↵
```

The server responds with the number of clips:

```
214 clips count: ↵
clip count: {Count}↵
```

Retrieving timeline information

The "clips get" command returns information for each available clip on the current timeline. Without parameters, the command returns information for all clips on timeline:

```
clips get↵
```

The server responds with a list of clip IDs, names and timecodes:

```
205 clips info:↵  
clip count: {Count}↵  
{Clip ID}: {Start timecode} {Duration timecode} {In timecode}  
{Out timecode} {Name}↵  
{Clip ID}: {Start timecode} {Duration timecode} {In timecode}  
{Out timecode} {Name}↵  
...  
↵
```

Retrieving transport information

The "transport info" command returns the state of the transport:

```
transport info ↵
```

The server responds with transport specific information:

```
208 transport info:  
status: {"preview", "stopped", "play", "forward", "rewind",  
"jog", "shuttle","record"}↵  
speed: {Play speed between -5000 and 5000 %}↵  
slot id: {Slot ID or "none"}↵  
clip id: {Clip ID or "none"}↵  
single clip: {"true", "false"}↵  
display timecode: {timecode}↵  
timecode: {timecode}↵  
video format: {Video format}↵  
loop: {"true", "false"}↵  
timeline: {n}↵  
input video format: {Video format}↵  
dynamic range: {"off", "Rec709", "Rec2020_SDR", "HLG",  
"ST2084_300", "ST2084_500", "ST2084_800", "ST2084_1000",  
"ST2084_2000", "ST2084_4000", "ST2048" or "none"}↵  
↵
```

The "timecode" value is the timecode within the current timeline for playback or the clip for record. The "display timecode" is the timecode displayed on the front of the deck. The two timecodes will differ in some deck modes.

Asynchronous transport information change notification is disabled by default and may be configured with the "notify" command. When enabled, changes in transport state will generate a "508 transport info:" asynchronous message with the same parameters as the "208 transport info:" message.

Video Formats

The following video formats are currently supported on HyperDeck Shuttle:

720p50, 720p5994, 720p60

1080p23976, 1080p24, 1080p25, 1080p2997, 1080p30, 1080p60

1080i50, 1080i5994, 1080i60

Video format support may vary between models and software releases.

File Formats

All HyperDeck models currently support the following file formats:

H.264High

H.264Medium

H.264Low

QuickTimeProResHQ

QuickTimeProRes

QuickTimeProResLT

QuickTimeProResProxy

QuickTimeDNxHD220x

DNxHD220x

QuickTimeDNxHD145

DNxHD145

QuickTimeDNxHD45

DNxHD45

Supported file formats may vary between models and software releases.

Querying and updating configuration information

The "configuration" command may be used to query the current configuration of the deck:

```
configuration↵
```

The server returns the configuration of the deck:

```
211 configuration:↵
audio input: {"embedded", "XLR", "RCA"}↵
audio mapping: {n}↵
video input: {"SDI", "HDMI", "component", "composite"}↵
file format: {format}↵
audio codec: {"PCM", "AAC"}↵
timecode input: {"external", "embedded", "preset", "clip"}↵
timecode output: {"clip", "timeline"}↵
timecode preference: {"default", "dropframe", "nondropframe"}↵
timecode preset: {timecode}↵
audio input channels: {n}↵
record trigger: {"none", "recordbit", "timecoderun"}↵
record prefix: {name}↵
append timestamp: {"true", "false"}↵
genlock input resync: {"true", "false"}↵
↵
```

One or more configuration parameters may be specified to change the configuration of the deck.

To change the current video input:

```
configuration: video input: {"SDI", "HDMI", "component"}↵
```

Valid video inputs may vary between models. To configure the current audio input:

```
configuration: audio input: {"embedded", "XLR", "RCA"}↵
```

Valid audio inputs may vary between models.

To configure the current file format:

```
configuration: file format: {File format}↵
```

Note that changes to the file format may require the deck to reset, which will cause the client connection to be closed. In such case, response code 213 will be returned (instead of 200) before the client connection is closed:

```
"213 deck rebooting"
```

Asynchronous configuration information change notification is disabled by default and may be configured with the "notify" command. When enabled, changes in configuration will generate a "511 configuration:" asynchronous message with the same parameters as the "211 configuration:" message.

Selecting active slot and video format

The "slot select" command instructs the deck to switch to a specified slot, or/and to select a specified output video format.

To switch to a specified slot:

```
slot select: slot id: {slot ID}↵
```

To select the output video format:

```
slot select: video format: {video format}↵
```

Either or all slot select parameters may be specified. Note that selecting video format will result in a rescan of the disk to reconstruct the timeline with all clips of the specified video format.

Clearing the current timeline

The "clips clear" command instructs the deck to empty the current timeline:

```
clips clear↵
```

The server responds with

```
200 ok↵
```

Adding a clip to the current timeline

The "clips add:" command instructs the deck to add a clip to the current timeline:

```
clips add: name: {clip name}↵
```

The server responds with

```
200 ok↵
```

or in case of error

```
lxx {error description}↵
```

Configuring the watchdog

The "watchdog" command instructs the deck to monitor the connected client and terminate the connection if the client is inactive for at least a specified period of time.

To configure the watchdog:

```
watchdog: period: {period in seconds}↵
```

To avoid disconnection, the client must send a command to the server at least every {period} seconds. Note that if the period is set to 0 or less than 0, connection monitoring will be disabled.

Помощь

Как получить помощь

Самый быстрый способ получить помощь — обратиться к страницам поддержки на сайте Blackmagic Design и проверить наличие последних справочных материалов по рекордерам HyperDeck.

Раздел поддержки на сайте Blackmagic Design

Последние версии руководства по эксплуатации, программного обеспечения и дополнительную информацию можно найти в центре поддержки Blackmagic Design на странице www.blackmagicdesign.com/ru/support.

Форум Blackmagic Design

Посетите форум сообщества Blackmagic Design на нашем веб-сайте, чтобы получить дополнительную информацию и узнать об интересных творческих идеях. На нем можно поделиться своими идеями, а также получить помощь от персонала поддержки и других пользователей. Адрес форума <https://forum.blackmagicdesign.com>.

Обращение в службу поддержки Blackmagic Design

Если с помощью доступных справочных материалов решить проблему не удалось, воспользуйтесь формой «Отправить нам сообщение» на странице поддержки. Можно также позвонить в ближайшее представительство Blackmagic Design, телефон которого вы найдете на нашем веб-сайте.

Проверка используемой версии программного обеспечения

Чтобы узнать версию утилиты Blackmagic HyperDeck Setup, установленной на вашем компьютере, откройте окно About Blackmagic HyperDeck Setup.

- На компьютере с операционной системой Mac OS откройте Blackmagic HyperDeck Setup в папке «Программы». В меню выберите About Blackmagic HyperDeck Setup, чтобы узнать номер версии.
- На компьютере с операционной системой Windows откройте Blackmagic HyperDeck Setup в меню «Пуск» или выберите на начальном экране. В меню «Справка» выберите About Blackmagic HyperDeck Setup, чтобы узнать номер версии.

Загрузка последних версий программного обеспечения

Узнав установленную версию Blackmagic HyperDeck Setup, перейдите в центр поддержки Blackmagic на странице www.blackmagicdesign.com/ru/support, чтобы проверить наличие обновлений. Рекомендуется всегда использовать последнюю версию программного обеспечения, однако обновление лучше всего выполнять после завершения текущего проекта.

Соблюдение нормативных требований

Утилизация электрооборудования и электронной аппаратуры в Европейском Союзе



Изделие содержит маркировку, в соответствии с которой его запрещается утилизировать вместе с бытовыми отходами. непригодное для эксплуатации оборудование необходимо передать в пункт вторичной переработки. Раздельный сбор отходов и их повторное использование позволяют беречь природные ресурсы, охранять окружающую среду и защищать здоровье человека. Чтобы получить подробную информацию о порядке утилизации, обратитесь в местные муниципальные органы или к дилеру, у которого вы приобрели это изделие.



Данное оборудование протестировано по требованиям для цифровых устройств класса А (раздел 15 спецификаций FCC) и признано соответствующим всем предъявляемым критериям. Соблюдение упомянутых нормативов обеспечивает достаточную защиту от вредного излучения при работе оборудования в нежилых помещениях. Так как это изделие генерирует и излучает радиоволны, при неправильной установке оно может становиться источником радиопомех. Если оборудование эксплуатируется в жилых помещениях, высока вероятность возникновения помех, влияние которых в этом случае пользователь должен устранить самостоятельно.

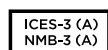
До эксплуатации допускаются устройства, соответствующие двум главным требованиям.

- 1 Оборудование не должно быть источником вредных помех.
- 2 Оборудование должно быть устойчивым к помехам, включая те, которые могут вызвать сбой в работе.



R-R-BMD-20211410001

Соответствие требованиям ISED (Канада)



Данное оборудование соответствует канадским стандартам для цифровых устройств класса А.

Любая модификация или использование изделия не по назначению могут повлечь за собой аннулирование заявления о соответствии этим стандартам.

Подключение к HDMI-интерфейсу должно выполняться с помощью качественного экранированного кабеля.

Данное оборудование протестировано по требованиям, предъявляемым к устройствам при работе в нежилых помещениях. При использовании в бытовых условиях оно может становиться источником помех для радиосигнала.

Правила безопасности

Допускается его эксплуатация в условиях тропического климата с температурой окружающей среды до 40° С.

Для работы устройства необходимо обеспечить достаточную вентиляцию.

Внутри корпуса не содержатся детали, подлежащие обслуживанию. Для выполнения ремонтных работ обратитесь в местный сервисный центр Blackmagic Design.



Допускается эксплуатация в местах не выше 2000 метров над уровнем моря.

Уведомление для жителей штата Калифорния

При работе с этим оборудованием существует возможность контакта с содержащимися в пластмассе микропримесями многобромистого бифенила, который в штате Калифорния признан канцерогеном и увеличивает риск врожденных дефектов и пороков репродуктивной системы.

Подробнее см. информацию на сайте www.P65Warnings.ca.gov.

Гарантия

Ограниченная гарантия сроком 12 месяцев

Компания Blackmagic Design гарантирует отсутствие в данном изделии дефектов материала и производственного брака в течение 12 месяцев с даты продажи. Если во время гарантийного срока будут выявлены дефекты, Blackmagic Design по своему усмотрению выполнит ремонт неисправного изделия без оплаты стоимости запчастей и трудозатрат или заменит такое изделие новым.

Чтобы воспользоваться настоящей гарантией, потребитель обязан уведомить компанию Blackmagic Design о дефекте до окончания гарантийного срока и обеспечить условия для предоставления необходимых услуг. Потребитель несет ответственность за упаковку и доставку неисправного изделия в соответствующий сервисный центр Blackmagic Design с оплатой почтовых расходов. Потребитель обязан оплатить все расходы по доставке и страхованию, пошлины, налоги и иные сборы в связи с возвратом изделия вне зависимости от причины возврата.

Настоящая гарантия не распространяется на дефекты, отказы и повреждения, возникшие из-за ненадлежащего использования, неправильного ухода или обслуживания. Компания Blackmagic Design не обязана предоставлять услуги по настоящей гарантии: а) для устранения повреждений, возникших в результате действий по установке, ремонту или обслуживанию изделия лицами, которые не являются персоналом Blackmagic Design; б) для устранения повреждений, возникших в результате ненадлежащего использования или подключения к несовместимому оборудованию; в) для устранения повреждений или дефектов, вызванных использованием запчастей или материалов других производителей; г) если изделие было модифицировано или интегрировано с другим оборудованием, когда такая модификация или интеграция увеличивает время или повышает сложность обслуживания изделия. НАСТОЯЩАЯ ГАРАНТИЯ ПРЕДОСТАВЛЯЕТСЯ КОМПАНИЕЙ BLACKMAGIC DESIGN ВМЕСТО ЛЮБЫХ ДРУГИХ ПРЯМО ВЫРАЖЕННЫХ ИЛИ ПОДРАЗУМЕВАЕМЫХ ГАРАНТИЙ. КОМПАНИЯ BLACKMAGIC DESIGN И ЕЕ ДИЛЕРЫ ОТКАЗЫВАЮТСЯ ОТ ЛЮБЫХ ПОДРАЗУМЕВАЕМЫХ ГАРАНТИЙ КОММЕРЧЕСКОЙ ЦЕННОСТИ ИЛИ ПРИГОДНОСТИ ДЛЯ КАКОЙ-ЛИБО ОПРЕДЕЛЕННОЙ ЦЕЛИ. ОТВЕТСТВЕННОСТЬ BLACKMAGIC DESIGN ПО РЕМОНТУ ИЛИ ЗАМЕНЕ НЕИСПРАВНЫХ ИЗДЕЛИЙ ЯВЛЯЕТСЯ ПОЛНЫМ И ИСКЛЮЧИТЕЛЬНЫМ СРЕДСТВОМ ВОЗМЕЩЕНИЯ, ПРЕДОСТАВЛЯЕМЫМ ПОТРЕБИТЕЛЮ В СВЯЗИ С КОСВЕННЫМИ, ФАКТИЧЕСКИМИ, СОПУТСТВУЮЩИМИ ИЛИ ПОСЛЕДУЮЩИМИ УБЫТКАМИ, ВНЕ ЗАВИСИМОСТИ ОТ ТОГО, БЫЛА ИЛИ НЕТ КОМПАНИЯ BLACKMAGIC DESIGN (ЛИБО ЕЕ ДИЛЕР) ПРЕДВАРИТЕЛЬНО ИЗВЕЩЕНА О ВОЗМОЖНОСТИ ТАКИХ УБЫТКОВ. BLACKMAGIC DESIGN НЕ НЕСЕТ ОТВЕТСТВЕННОСТИ ЗА ПРОТИВОПРАВНОЕ ИСПОЛЬЗОВАНИЕ ОБОРУДОВАНИЯ СО СТОРОНЫ ПОТРЕБИТЕЛЯ. BLACKMAGIC DESIGN НЕ НЕСЕТ ОТВЕТСТВЕННОСТИ ЗА УБЫТКИ, ВОЗНИКАЮЩИЕ ВСЛЕДСТВИЕ ИСПОЛЬЗОВАНИЯ ЭТОГО ИЗДЕЛИЯ. РИСКИ, СВЯЗАННЫЕ С ЕГО ЭКСПЛУАТАЦИЕЙ, ВОЗЛАГАЮТСЯ НА ПОТРЕБИТЕЛЯ.

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Aprile 2022

Manuale di istruzioni

Blackmagicdesign 

HyperDeck **Shuttle HD**



HyperDeck Shuttle HD



Gentile utente

Grazie per aver acquistato il registratore su disco Blackmagic HyperDeck Shuttle HD!

Abbiamo sviluppato i primi HyperDeck per semplificare la registrazione e la riproduzione del video usando supporti di memoria SSD veloci. Ora siamo felici di presentare HyperDeck Shuttle HD!

HyperDeck Shuttle HD è un registratore video HDMI piccolo e portatile pensato per la scrivania. La grande manopola di ricerca e i comuni controlli di trasporto permettono di operarlo con una mano, ideale in congiunzione allo switcher ATEM Mini nella produzione dal vivo. HyperDeck Shuttle HD funge anche da teleprompter!

HyperDeck Shuttle HD registra sulle schede SD e sui flash disk esterni nei codec ProRes, DNxHD o H.264, offrendo registrazione e riproduzione fulminee.

La versione più recente del manuale e gli aggiornamenti del software HyperDeck sono disponibili alla pagina www.blackmagicdesign.com/it. Consigliamo di aggiornare regolarmente il dispositivo per accedere alle ultime funzioni. Quando scarichi il software, registra i tuoi dati personali per stare al passo con gli aggiornamenti che rilasciamo. Siamo sempre al lavoro per fornire nuove funzioni e miglioramenti, e ti invitiamo a condividere i tuoi preziosi suggerimenti!

A handwritten signature in black ink that reads "Grant Petty". The script is fluid and cursive.

Grant Petty

CEO Blackmagic Design

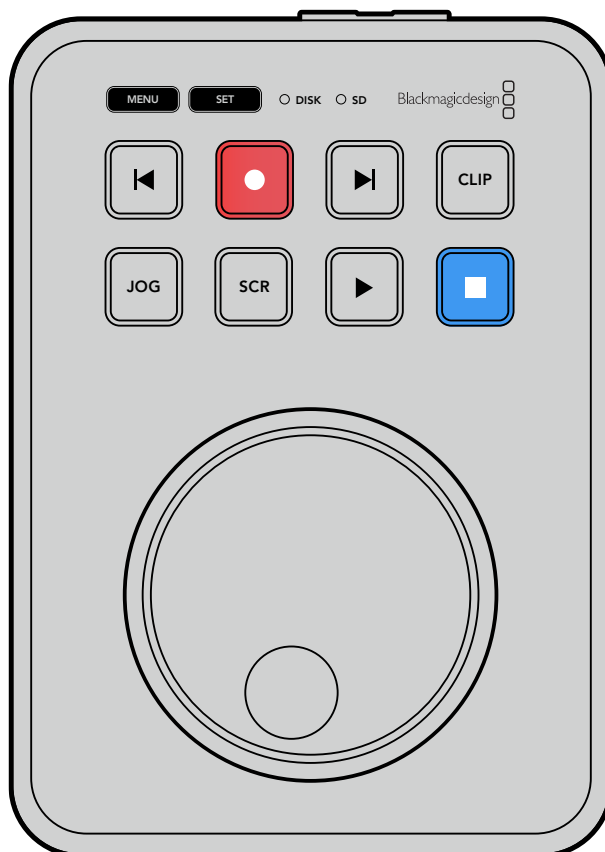
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Operazioni preliminari

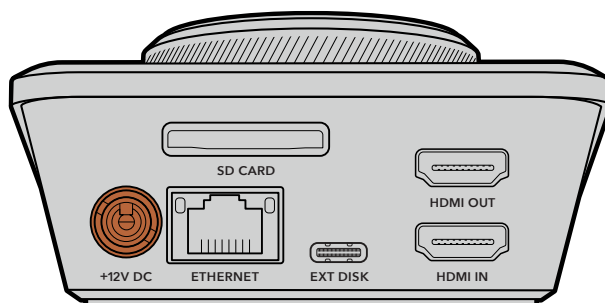
Per preparare HyperDeck Shuttle HD all'utilizzo basta collegare l'alimentazione e una sorgente video HDMI, inserire una scheda SD o un supporto di memoria esterno e premere REC.

Questa parte del manuale illustra come mettere in pratica queste operazioni.



Collegare l'alimentazione

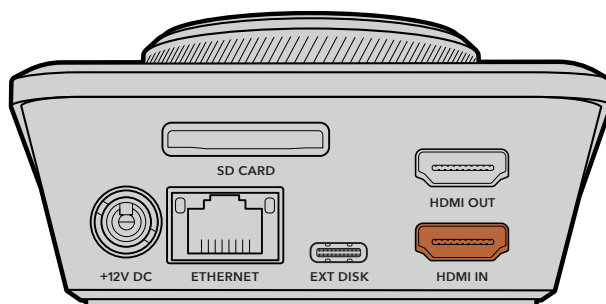
Inserisci l'adattatore in dotazione nell'ingresso di alimentazione sul retro di HyperDeck Shuttle HD, avvitando l'anello di bloccaggio per evitare che il cavo si scollegi.



Inserisci e blocca l'adattatore nell'ingresso di alimentazione

Collegare video e audio

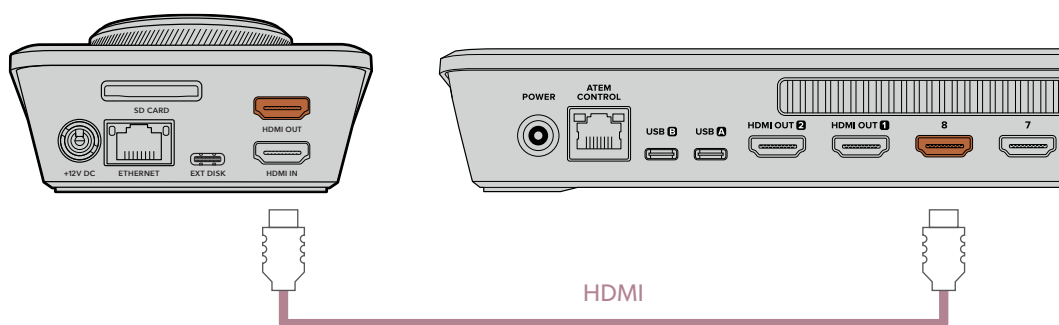
Collega una sorgente video nell'ingresso HDMI sul retro di HyperDeck Shuttle HD.



Collega un dispositivo di destinazione all'uscita HDMI, per esempio uno switcher ATEM Mini o una televisione HDMI.

Mentre cambi le impostazioni di HyperDeck, l'uscita HDMI consente di visualizzare il menù in sovrapposizione sul video. Le informazioni sui menù sono fornite nella sezione "Cambiare le impostazioni".

SUGGERIMENTO Se il display connesso non visualizza la sorgente video in entrata, è probabile che HyperDeck sia in modalità di riproduzione. Premi il tasto REC per abilitare la modalità di registrazione.



Collega l'uscita HDMI a un dispositivo di destinazione, ad esempio una televisione HDMI o uno switcher ATEM Mini

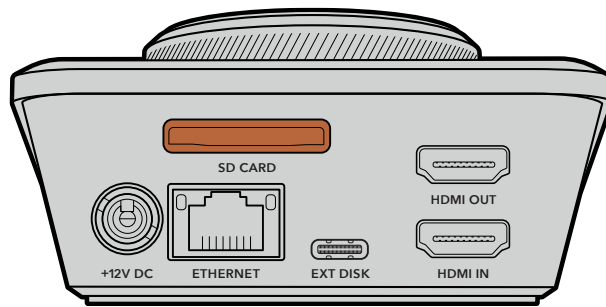
Collegare i supporti di memoria

I registratori HyperDeck Shuttle HD sono già pronti per registrare e non richiedono una configurazione preliminare. Basta inserire una scheda SD o un disco esterno formattati.

I supporti di memoria si possono formattare dal menù o su un computer. La sezione "Formattare i supporti di memoria" contiene tutte le informazioni necessarie, compresi i supporti migliori per registrare il video e la lista delle schede SD e dei dischi esterni consigliati.

Inserire una scheda SD

- 1 Accosta la scheda allo slot con i connettori dorati rivolti verso l'alto. Spingi delicatamente la scheda nello slot fino a bloccarla in posizione.



- HyperDeck verificherà la scheda. Durante questa fase, la spia SD frontale è illuminata di verde. La spia si spegne a verifica effettuata.



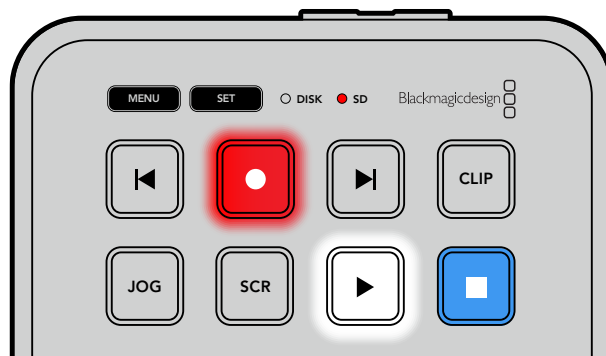
Ora HyperDeck Shuttle HD è pronto per registrare e riprodurre.

Continua a leggere il manuale per scoprire come registrare e riprodurre le clip e cambiare le impostazioni.

Registrazione

Dopo aver verificato la sorgente video sul dispositivo HDMI di destinazione, puoi iniziare a registrare.

Premi REC per avviare la registrazione. Se registri su una scheda SD, la spia SD diventa rossa e i tasti REC e PLAY si illuminano. Se registri su un disco esterno, la spia DISK diventa rossa.



Premi STOP per interrompere la registrazione.

Riproduzione

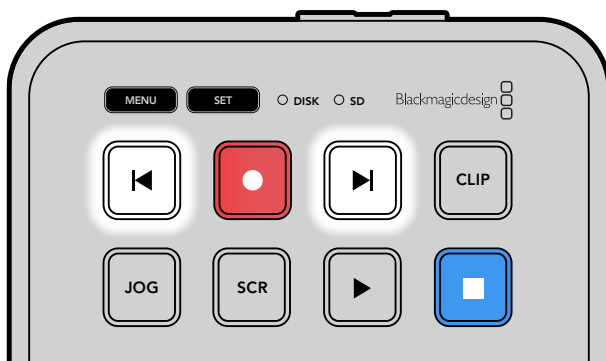
Premi PLAY per avviare la riproduzione. Il tasto PLAY si illumina e la spia SD o DISK diventa verde. Se la registrazione contiene diverse clip, puoi scorrere con i tasti SKIP Avanti e Indietro.



Usare i tasti SKIP

Premi SKIP Indietro per raggiungere l'inizio della clip; premilo più di una volta per indietreggiare tra le clip registrate.

Premi SKIP Avanti per avanzare tra le clip registrate.



Premi SKIP Avanti e Indietro per raggiungere l'inizio di ogni clip

SUGGERIMENTO Per riprodurre i file video è necessario che il codec coincida con quello usato per registrarli. Questa impostazione è disponibile nel menù. Consulta la sezione "Cambiare le impostazioni" per tutti i dettagli.

Riproduzione continua

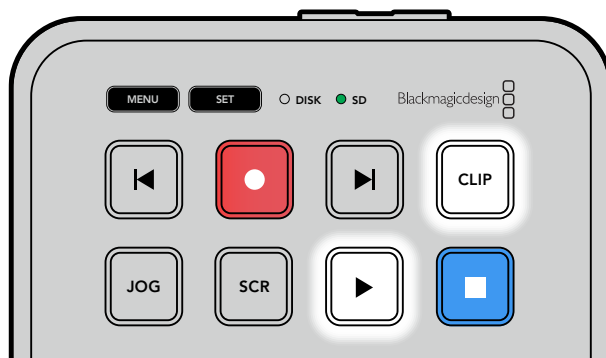
Durante la riproduzione, premi di nuovo PLAY per abilitare la riproduzione continua di tutte le clip; premi STOP per disabilitarla.

Per riprodurre continuamente una sola clip è necessario impostare HyperDeck sulla modalità Clip, ovvero selezionare CLIP e poi premere due volte PLAY.

Tutte le clip	Durante la riproduzione, premi due volte PLAY per riprodurre continuamente tutte le clip.
Una clip	In modalità Clip, premi due volte PLAY per riprodurre continuamente la clip corrente.

Modalità Clip

Limita la riproduzione a una sola clip. Quando è abilitata, puoi scorrere o spostarti su una clip con shuttle o SKIP e riprodurla. La riproduzione terminerà dove termina la clip.






Premi CLIP e poi due volte PLAY per riprodurre continuamente la clip corrente in modalità Clip

Usare la manopola

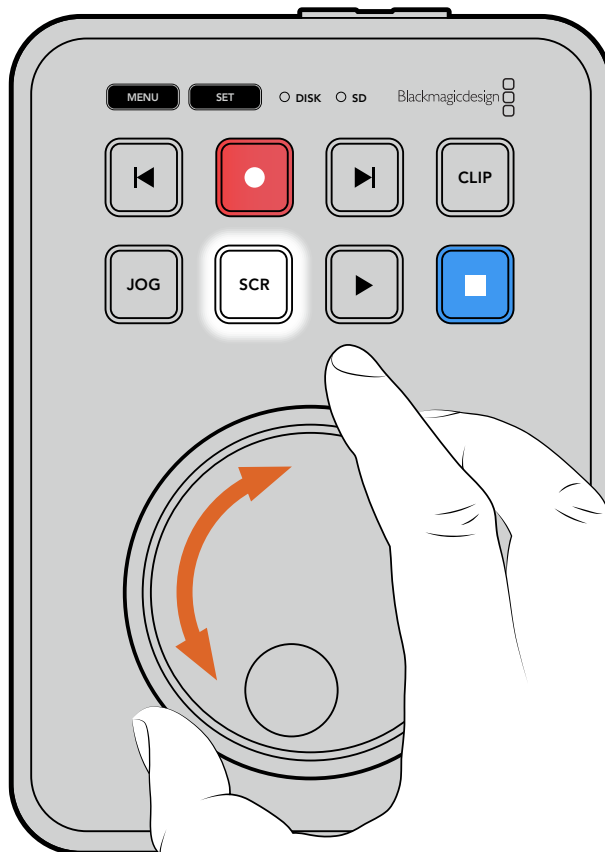
La manopola consente di scorrere con rapidità le clip e trovare parti specifiche da riprodurre, o rivedere fotogramma per fotogramma. È utile per cercare un momento specifico della clip osservando le immagini, e per posizionare con precisione la playhead nel punto da mandare in onda durante la trasmissione.

La manopola funziona in modalità jog, shuttle o scroll.

	Jog	Riproduci fotogramma per fotogramma con precisione.
	Scroll	Spostati velocemente tra tutti i file multimediali registrati ruotando la manopola. In questa modalità puoi posizionare con precisione la playhead prima di avviare la riproduzione.
	Shuttle	Premi insieme i tasti JOG e SCR per passare alla modalità shuttle. In questa modalità, ruota la manopola verso destra o sinistra per spostarti avanti o indietro veloce tra tutti i file multimediali, a una velocità massima di x50. Per diminuire la velocità fino a un punto di arresto, ruota la manopola verso la posizione di partenza. Durante lo shuttle, premi STOP per interrompere la riproduzione in un punto esatto e premi PLAY per farla ripartire da quel punto. Puoi cambiare la velocità massima della funzione di shuttle nel menù Configurazione. Consulta la sezione “Impostazioni” per tutti i dettagli.



Abilita la modalità jog, scroll o shuttle premendo i tasti corrispondenti



Ruota la manopola per scorrere nella modalità selezionata

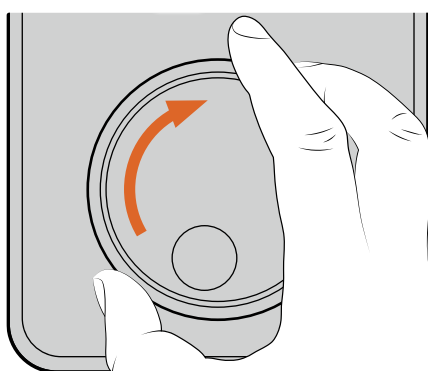
SUGGERIMENTO Premi PLAY o STOP per tornare alla modalità di riproduzione normale.

Cambiare le impostazioni

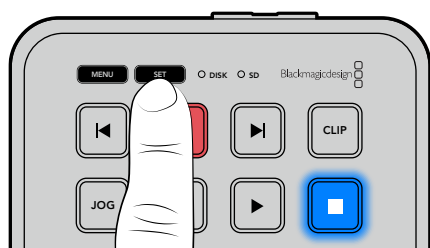
Premi il tasto MENU per vedere il menù in sovrapposizione in basso a sinistra del video visualizzato sul display HDMI connesso.



Premi MENU per visualizzare il menù



Ruota la manopola per navigare i sottomenù e le impostazioni



Premi SET per selezionare un sottomenù o un'impostazione



Puoi cambiare le impostazioni usando la manopola o i tasti SKIP Avanti e Indietro. Premi SET per confermare le selezioni.

Premi MENU per indietro nelle impostazioni fino a tornare alla schermata principale.

SUGGERIMENTO Puoi posizionare il menù in uno qualsiasi dei quattro angoli del display. Dopo aver cambiato le impostazioni, consigliamo di nascondere il menù sull'uscita HDMI per vedere solo il clean feed dello switcher HDMI connesso, ad esempio ATEM Mini Extreme.

Impostazioni

Le impostazioni sono organizzate in 5 menù: Registrazione, Monitoraggio, Audio, Archiviazione e Configurazione. La maggior parte delle impostazioni si può modificare dal pannello di controllo di HyperDeck Shuttle HD. Le impostazioni non selezionabili, per esempio il prefisso del nome del file, si possono modificare solo dall'utility HyperDeck Setup.

Registrazione

Registrazione	
Ingresso	HDMI
Codec	H.264 alta
Innesco Rec	Off

Ingresso

Indica l'ingresso HDMI di HyperDeck Shuttle HD.

Codec

HyperDeck Shuttle HD può registrare video compresso nel codec H.264, Apple ProRes o DNxHD. Seleziona **Teleprompter** per usare questa funzione.

Innesco Rec

La funzione di innesco della registrazione è disponibile in due modalità: Video Start/Stop e Timecode.

Alcune camere, per esempio Blackmagic Pocket Cinema Camera 4K, inviano un segnale tramite HDMI per avviare e interrompere la registrazione sui registratori esterni. Scegli **Video Start/Stop** per far sì che HyperDeck avvii e interrompa la registrazione quando viene premuto Rec sulla telecamera.

Scegli **Timecode** per far sì che HyperDeck avvii la registrazione quando riceve un segnale di timecode valido dall'ingresso HDMI. Se il segnale si disconnette, la registrazione si interrompe. Scegli **Off** per disabilitare la funzione di innesco della registrazione.

NOTA Se la telecamera è HDMI, appurati che il segnale in uscita non mostri informazioni in sovrapposizione per evitare di registrarle con l'immagine.

Monitoraggio

Monitor	
Layout teleprompter	
Dimensione carattere	450%
Spaziatura	120%
Margine laterale	10%
Gira in orizzontale	Off
Gira in verticale	Off

Layout teleprompter

Queste impostazioni servono per gestire il teleprompter di HyperDeck Shuttle HD.

Dimensione carattere

Regola la dimensione del testo e premi SET per confermare. Ruota la manopola per incrementare o ridurre la percentuale.

Spaziatura

Ruota la manopola per incrementare o ridurre la spaziatura tra le righe.

Margine laterale

Regola la larghezza dei due margini laterali del teleprompter.

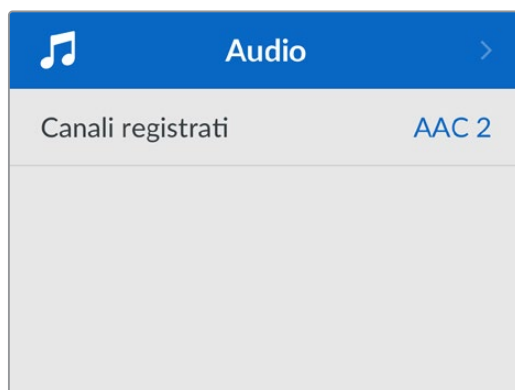
Gira

Se il monitor del tuo teleprompter è impostato per riflettere su vetro, ad esempio davanti a una telecamera o su un podio, gira il testo per consentirne la lettura. Sono disponibili due opzioni:

Gira in orizzontale - Quando la parte inferiore del teleprompter è montata vicino alla base del vetro riflettente.

Gira in verticale - Quando la parte inferiore del teleprompter è montata lontano dalla base del vetro riflettente.

Audio



Canali registrati

Il deck consente di registrare fino a 8 canali di audio PCM alla volta. Apri questa impostazione e scegli **2**, **4** o **8** canali dalla lista.

Se il codec è H.264, puoi selezionare 2 canali di audio AAC per caricare le registrazioni direttamente su YouTube.

Archiviazione



Queste impostazioni si riferiscono ai supporti di memoria collegati. **Supporto 1** mostra il nome della scheda SD inserita. **Supporto 2** indica il flash disk USB collegato al connettore EXT DISK; nel caso di un hub USB, come Blackmagic MultiDock 10G, indica il disco attivo.

Continua su USB

Se usi Blackmagic MultiDock 10G o un dispositivo simile per collegare diversi drive tramite il connettore EXT DISK, abilita questa impostazione per far sì che la registrazione prosegua da un disco esterno all'altro.

Formatta

Le schede SD e i supporti di memoria collegati al connettore EXT DISK si possono formattare su HyperDeck o su un computer Mac o Windows.

Formattare su HyperDeck Shuttle HD

- 1 Ruota la manopola fino all'impostazione **Formatta** e premi SET.
- 2 Seleziona il supporto da formattare dalla lista e premi SET.
- 3 Seleziona il formato e premi SET.
- 4 Nella finestra che conferma il supporto e il formato selezionati, procedi con **Formatta**.
- 5 Nella finestra che conferma la formattazione effettuata, procedi con **OK**.

HFS+, conosciuto anche come Mac OS X Extended, è il formato consigliato perché supporta il journaling, grazie a cui è molto più probabile recuperare i dati in caso di danneggiamento del supporto di memoria. HFS+ è supportato nativamente da Mac; exFAT è supportato nativamente da Mac e Windows senza richiedere altri software, ma non ammette il journaling.

Leggi la sezione “Formattare i supporti di memoria” per formattare su Windows o Mac.

Configurazione

Queste impostazioni permettono di gestire la lingua del software, lo standard di default, l'aspetto del menù, le opzioni di rete e il timecode.



Configurazione	
Nome	HyperDeck Shuttle HD
Lingua	Italiano
Data	16 mag 2022
Ora	14:32
Fuso orario	UTC±11:00
Software	8.1
Camera	A
Standard default	1080p30
Velocità max shuttle	x50

Nome

Se in rete ci sono vari HyperDeck Shuttle HD, conviene dare un nome a ciascuno per distinguerli. Puoi farlo nell'utility Blackmagic HyperDeck Setup o mediante Blackmagic HyperDeck Ethernet Protocol con una applicazione terminale. Il nome inserito compare in questa voce.

Lingua

HyperDeck Shuttle HD si può usare in 13 lingue: inglese, cinese, giapponese, coreano, spagnolo, tedesco, francese, russo, italiano, portoghese, turco, ucraino e polacco.

Selezionare la lingua

- 1 Seleziona il menù **Configurazione** e premi SET.
- 2 Ruota la manopola fino alla voce **Lingua** e premi SET.
- 3 Ruota la manopola fino alla lingua desiderata e premi SET. La schermata tornerà automaticamente al menù Configurazione.

Data

Seleziona questa impostazione e premi SET. Ruota la manopola per impostare giorno, mese e anno. Questi dati finiranno nel suffisso timestamp, se abilitato.

Ora

Seleziona questa impostazione e premi SET. Ruota la manopola per impostare ora e minuti. L'orologio di HyperDeck Shuttle HD è nel formato 24 ore.

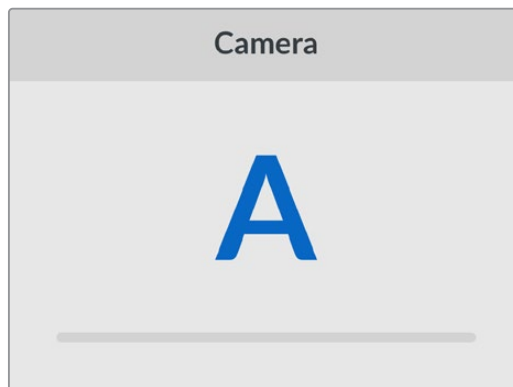
Software

Indica la versione attuale del software.

Camera

Questa impostazione è utile se usi HyperDeck per registrare i file di ciascuna camera separatamente e montarli nella timeline multicamera di DaVinci Resolve.

La lettera identificativa comparirà nei metadati del file, consentendo a DaVinci Resolve di identificare le inquadrature sfruttando la funzione del Sync Bin.



Assegna alla camera una lettera A-Z o un numero 1-9

Standard default

Questa impostazione è utile quando HyperDeck non è in grado di determinare quale standard video usare.

Per esempio se al deck non è connesso nessun ingresso video e colleghi un disco contenente file di due standard video differenti, quale dei due verrà riprodotto? Abilitando questa impostazione, il deck seleziona lo standard più adatto e riproduce i file pertinenti.

L'impostazione dello standard video di default è utile anche alla prima accensione di HyperDeck Shuttle HD, in assenza di un ingresso video e di un supporto di memoria. Non essendo in grado di determinare quale standard video usare sull'uscita di monitoraggio, il deck si basa su quello suggerito da questa impostazione.

Lo standard di default è solo una guida e non prevarica sulle altre funzioni. Ad esempio se colleghi un disco contenente file video dello stesso standard e premi PLAY, HyperDeck passa a quello standard per riprodurre i file, tralasciando lo standard di default.

Lo stesso si verifica nella registrazione. Se premi REC, HyperDeck registra lo standard video dell'ingresso video collegato. Terminata la registrazione, riprodurrà i file in questo stesso standard video, anche se il disco contiene altri file il cui standard video combacia con quello di default. Dà per scontato che voglia riprodurre i file nello stesso standard video con cui sono stati registrati. Solo se scolleghi e ricollegi il disco, il deck adotterà lo standard video di default e riprodurrà i file pertinenti.

Lo standard video di default è un ausilio che consente ad HyperDeck Shuttle HD di effettuare la selezione più adatta nelle circostanze menzionate, senza comprometterne il funzionamento consueto.

Velocità max shuttle

La velocità massima della funzione di shuttle è x50. Scegli una delle opzioni disponibili per ridurla.

Menù

Queste impostazioni permettono di modificare la posizione e l'aspetto del menù in sovrapposizione sul display HDMI collegato.

Menù	
Aspetto	Chiaro
Opacità	100%
Posizione	Sinistra in basso

Aspetto

Scegli se visualizzare il menù con uno sfondo chiaro o scuro. Lo sfondo chiaro è più adatto se il materiale multimediale è scuro o se usi il teleprompter.

Menù		Menù	
Aspetto	Chiaro	Aspetto	Scuro
Opacità	100%	Opacità	100%
Posizione	Sinistra in basso	Posizione	Sinistra in basso

Opacità

Regola l'opacità del menù in sovrapposizione sul display collegato tra il 100% di default e il 20%.

Posizione

Di default, il menù in sovrapposizione compare in basso a sinistra sul display collegato. Apri questa impostazione e scegli un'altra opzione per riposizionarlo in alto a sinistra, in alto a destra o in basso a destra.

Rete

Rete	
Protocollo	IP statico
Indirizzo IP	192.168.24.100
Sottorete	255.255.255.0
Gateway	192.168.24.1

Protocollo

HyperDeck è impostato su DHCP di default: una volta connesso, il server di rete gli assegna automaticamente un indirizzo IP e non c'è bisogno di configurare nessun'altra impostazione. Per impostare manualmente l'indirizzo è necessario un IP statico.

Seleziona **Protocollo** e premi SET; seleziona **IP statico** dalla lista e premi SET.

Indirizzo IP, Sottorete, Gateway, DNS primario e DNS secondario

Dopo aver selezionato l'opzione di IP statico, puoi inserire i valori manualmente.

Cambiare indirizzo IP

- 1 Ruota la manopola fino all'impostazione **Indirizzo IP** e premi SET.
- 2 Ruota la manopola per cambiare i campi dell'indirizzo IP.
- 3 Premi SET per confermare un campo e passare al successivo.

Segui lo stesso procedimento per modificare Sottorete e Gateway. Premi MENU per tornare alla schermata principale.

Timecode

Queste impostazioni servono per definire il timecode in entrata e uscita, e scegliere di registrare il timecode sorgente, ora del giorno o predefinito.

Timecode	
Ingresso	Ingresso video
Drop frame	Default
Predefinito	00:00:00:00
Uscita	Timeline

Ingresso

Sono disponibili quattro opzioni per il timecode in entrata.

Ingresso video	Utilizza il timecode integrato nelle sorgenti HDMI con metadati SMPTE RP 188. Questa opzione rispetta la sincronizzazione tra la sorgente HDMI e il file registrato dal deck.
Interno	Registra l'ora del giorno attraverso il generatore interno di timecode.
Ultima clip	Fa partire ogni file un fotogramma dopo l'ultimo fotogramma della clip precedente. Per esempio se la prima clip finisce a 10:28:30:10, il timecode della clip successiva inizia a 10:28:30:11.
Predefinito	Utilizza il timecode da te impostato. Le clip registrate partono dal timecode definito nell'impostazione Predefinito descritta più avanti.

Drop frame

Scegli **Drop frame** o **Senza drop frame** per le sorgenti NTSC con frame rate di 29.97 o 59.94. Scegli **Default** se la sorgente è sconosciuta. Questa opzione mantiene lo standard dell'ingresso, o passa a Drop frame in assenza di un timecode valido.

Predefinito

Ruota la manopola per impostare il timecode di inizio e premi SET per confermare. Scegli questa opzione nell'impostazione Ingresso per usare il timecode predefinito.

Uscita

Scegli come usare il timecode per le uscite.

Timeline	Trasmette un timecode continuo per tutte le clip registrate su una scheda o su un drive.
Clip	Trasmette il timecode di ciascuna clip.

Impostazioni file

Impostazioni file	
Prefisso	HyperDeck
Suffisso timestamp	Off

Prefisso

Inizialmente, HyperDeck Shuttle HD registra le clip sulla scheda SD o sul flash disk USB con la denominazione riportata di seguito.

HyperDeck_0001

HyperDeck_0001

Prefisso

HyperDeck_**0001**

Numero clip

È necessario aprire l'utility HyperDeck Setup per modificare il prefisso del nome del file. Consulta la sezione "Blackmagic HyperDeck Setup" per tutti i dettagli.

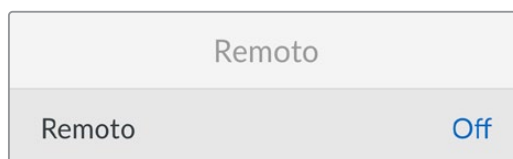
Suffisso timestamp

L'impostazione della marca temporale del nome del file è disabilitata di default. Abilitala per integrare la data e l'ora registrate nel nome del file.

HyperDeck_2201061438_0001	
HyperDeck_2201061438_0001	Prefisso
HyperDeck_ 22 01061438_0001	Anno
HyperDeck_22 01 061438_0001	Mese
HyperDeck_2201 06 1438_0001	Giorno
HyperDeck_220106 14 38_0001	Ora
HyperDeck_22010614 38 _0001	Minuti
HyperDeck_2201061438_ 0001	Numero clip

Remoto

HyperDeck si può controllare da un dispositivo video remoto, ad esempio da uno switcher ATEM Mini Extreme.



Remoto

Abilita questa impostazione per attivare il controllo remoto tramite ethernet; disabilitala per controllare il deck a livello locale.

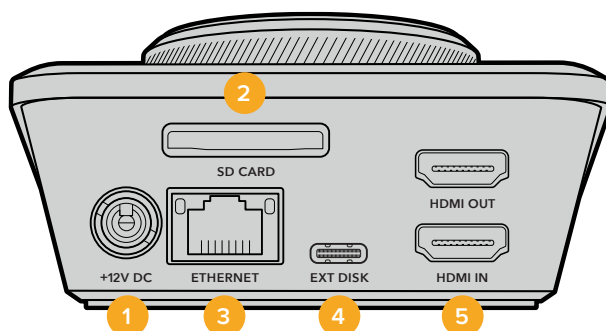
Reset



Impostazioni di fabbrica

Ripristina le impostazioni di fabbrica di HyperDeck. Un messaggio ti chiederà di procedere o annullare l'operazione.

Lato posteriore



1 Alimentazione

Collega l'adattatore AC in dotazione per alimentare il deck. Il connettore dell'adattatore dispone di un anello di bloccaggio per evitare che si scolleghi. Sono compatibili anche i cavi 12V 36W.

2 Slot SD

Inserisci una scheda SD per registrare e riprodurre.

3 Ethernet

La porta ethernet permette di connettere il deck alla rete per trasferire i file con FTP ad alta velocità o per controllarlo remotamente usando HyperDeck Ethernet Protocol. I dettagli sul trasferimento file tramite un client FTP si trovano nella sezione "Trasferire i file in rete".

Se HyperDeck è connesso alla stessa rete di uno switcher ATEM, è possibile controllarlo da quest'ultimo o da un pannello ATEM.

4 Disco esterno

Il connettore USB-C permette di collegare e registrare su un flash disk esterno fino a 5Gb/s. Puoi anche collegare gli hub USB-C o Blackmagic MultiDock 10G per usare uno o più SSD.

5 HDMI

L'uscita HDMI permette di collegare televisioni HDMI, monitor e persino switcher, per esempio ATEM Mini Extreme. Serve anche per visualizzare il menù in sovrapposizione.

Supporti di memoria

Schede SD

Consigliamo di usare schede SD UHS-I veloci per registrare in HD ad alta qualità. Hanno una velocità di scrittura superiore a 220MB/s ideale per l'Ultra HD 2160p60.

Per registrare a bit rate più bassi con una compressione maggiore potrebbero essere sufficienti schede più lente, ma in generale è preferibile scegliere schede veloci.

Consigliamo di visitare regolarmente la pagina www.blackmagicdesign.com/it/support per scaricare l'ultima versione del manuale con le informazioni aggiornate.

Quali schede SD usare con HyperDeck Shuttle HD?

Queste schede SD sono consigliate per registrare a 1080p fino a 60 fps

Marca	Modello	Capienza
Angelbird	AV PRO SD UHS-II 300MB/s V90 SDXC	256GB
Angelbird	AV PRO SD UHS-II 260MB/s V60 SDXC	128GB
Angelbird	AV PRO SD UHS-II 260MB/s V60 SDXC	64GB
SanDisk	Extreme Pro UHS-I 95MB/s SDXC	64GB
Wise	SD2-64U3 UHS-II 285MB/s SDXC	64GB
Lexar	Professional 1000x UHS-II 150MB/s SDXC	128GB
SONY	Tough SF-G128T	128GB
Kingston	CANVAS GO! Plus 170MB/s V30	64GB
Kingston	CANVAS GO! Plus 170MB/s V30	128GB
Kingston	CANVAS GO! Plus 170MB/s V30	512GB
ProGrade Digital	SDXC UHS-II V90 300R	64GB
ProGrade Digital	SDXC UHS-II V90 300R	128GB
SONY	Tough SF-G64T UHS-II SDXC	64GB
Delkin Devices	Black UHS-II V90 SDXC	256GB
Delkin Devices	Power UHS-II V90 SDXC	128GB
Delkin Devices	Power UHS-II V90 SDXC	256GB
Delkin Devices	Black UHS-II V90 SDXC	128GB
Exascend	Essential SDXC UHS-II V90 R 300MB/s	64GB
Exascend	Essential SDXC UHS-II V90 R 300MB/s	128GB
Exascend	Catalyst SDXC UHS-II V90 R 300MB/s	64GB

Dischi esterni

Tutti i modelli HyperDeck sono in grado di registrare sui flash disk USB-C, drive veloci e ad alta capacità che consentono registrazioni di lunga durata. Poi basta collegare i drive al computer per montare il materiale direttamente da lì.

Per una capienza maggiore puoi collegare un dock USB-C o un hard drive esterno. Per usare Blackmagic MultiDock 10G o un flash disk USB-C, collega un cavo USB-C dal dispositivo alla porta EXT DISK di HyperDeck.

Quali drive USB-C usare con HyperDeck Shuttle HD?

Questi drive USB-C sono consigliati per registrare in ProRes HQ 1080p fino a 60 fps

Marca	Modello	Capienza
Wise	PTS-256 Portable SSD 4K	256GB
OWC	Envoy Pro Ex	240GB
BUFFALO	SSD-PHE500U3-BA	500GB

Questi drive USB-C sono consigliati per registrare in DNxHR HQX 1080p fino a 60 fps

Marca	Modello	Capienza
OWC	Envoy Pro Ex	240GB

Questi drive USB-C sono consigliati per registrare in H.264 1080p fino a 60 fps

Marca	Modello	Capienza
OWC	Envoy Pro Ex	240GB

Formattare i supporti di memoria

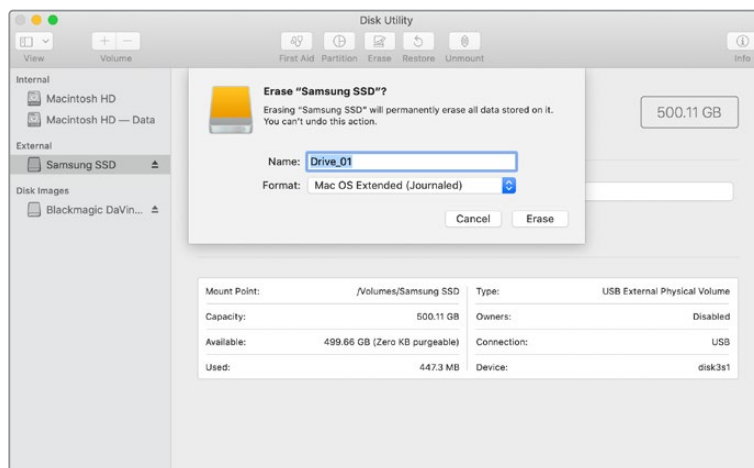
Preparare i supporti di memoria sul computer

Formattare su Mac

L'applicazione Utility Disco del Mac consente di formattare i drive in HFS+ o exFAT.

Ricorda di fare il backup dei contenuti importanti archiviati sul disco perché la formattazione li elimina permanentemente.

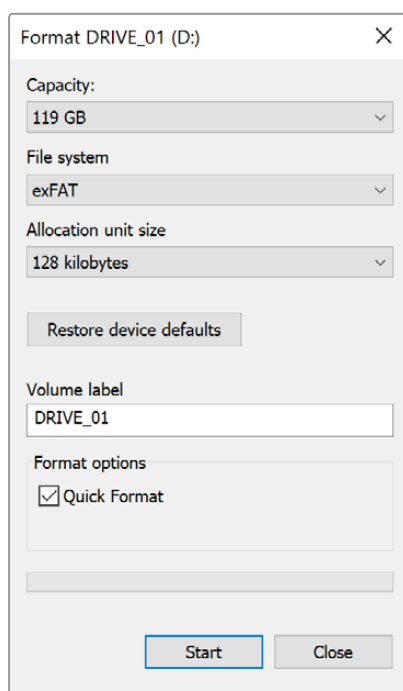
- 1 Nel caso di un flash disk USB, collegalo al computer tramite un dock esterno o un cavo adattatore e ignora il messaggio che suggerisce di usare l'SSD per i backup della Time Machine. Nel caso di una scheda SD, collegala al computer tramite un lettore esterno di schede.
- 2 Vai su **Applicazioni > Utility Disco**.
- 3 Clicca sull'icona del disco della scheda SD o del flash disk USB e clicca sulla tab **Inizializza**.
- 4 Seleziona il formato **Mac OS Extended (Journaled)** o **exFAT**.
- 5 Dai un **Nome** al nuovo volume e poi clicca su **Elimina**. La formattazione durerà pochi istanti e il supporto di archiviazione sarà pronto all'uso.



Formattare su Windows

Usa la finestra di dialogo Formatta su Windows per formattare i drive in exFAT. Ricorda di fare il backup dei contenuti importanti archiviati sulla scheda SD o sull'SSD perché la formattazione li elimina permanentemente.

- 1 Nel caso di un flash disk USB, collegalo al computer tramite un dock esterno o un cavo adattatore. Nel caso di una scheda SD, collegala al computer tramite un lettore esterno di schede.
- 2 Seleziona **Computer** dal menù **Start** o dalla schermata iniziale. Fai clic destro sul flash disk USB o sulla scheda SD.
- 3 Seleziona **Inizializza** dal menù contestuale.
- 4 Imposta **File system** su **exFAT** e **Dimensioni unità di allocazione** su **128 kilobyte**.
- 5 Dai un nome al volume, seleziona **Formattazione veloce** e clicca su **Esegui**.
- 6 La formattazione durerà pochi istanti e il supporto di archiviazione sarà pronto all'uso.



Usare la funzione Teleprompter

Blackmagic HyperDeck Shuttle HD si può usare come teleprompter con i file RTF standard (Rich Text Format). Basta creare un file su TextEdit o WordPad e salvarlo in RTF in una delle 13 lingue compatibili. Dopo aver aperto il testo con HyperDeck Shuttle HD, potrai modificare le dimensioni del carattere e la spaziatura.

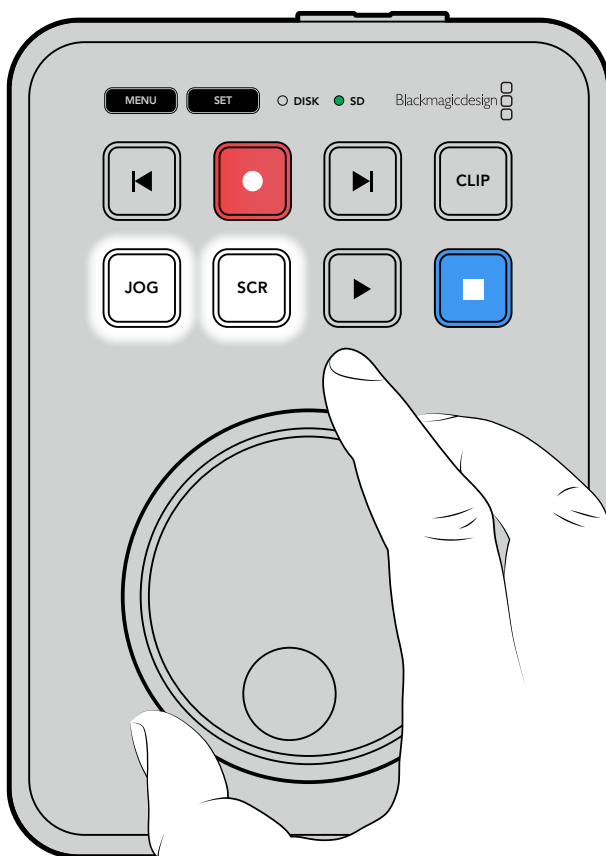
Usare il teleprompter

- 1 Collega l'uscita HDMI di HyperDeck Shuttle HD al display HDMI desiderato.
- 2 Inserisci la scheda SD o collega il flash disk USB esterno su cui è salvato il testo.
- 3 Scegli un codec nel menù **Registrazione**. Vai all'impostazione **Teleprompter** e premi SET.

Il testo comparirà sul display. A questo punto puoi avviare la riproduzione premendo PLAY e gestirla con la manopola.

Velocità di scorrimento del testo

Come la riproduzione dei file multimediali, anche lo scorrimento del testo del teleprompter si può controllare con la manopola di HyperDeck Shuttle HD. Dopo aver caricato un testo, premi insieme i tasti JOG e SCR per abilitare la modalità di scorrimento variabile. Il testo scorrerà alla stessa velocità con cui ruoti la manopola.



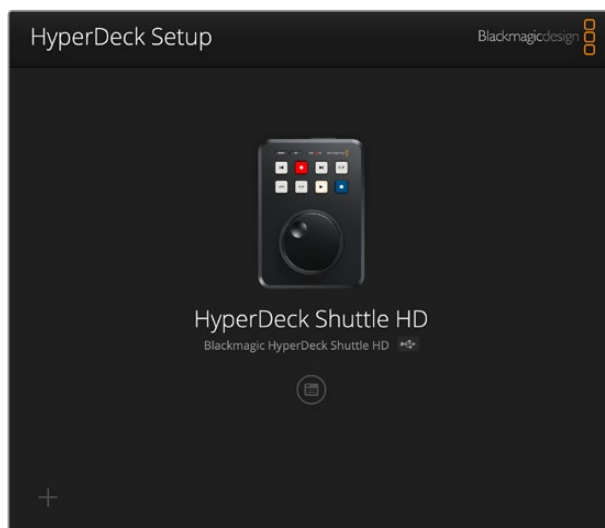
Se invece premi singolarmente i tasti JOG o SCR, ruotando la manopola il testo scorrerà a una velocità bassa e costante (jog) o a una velocità alta e costante (scroll).

Premi i tasti SKIP Avanti e Indietro per navigare tra i file RTF sulla scheda SD o sul disco esterno.

Il teleprompter rileva le dimensioni, il colore e il grassetto del testo. Nel menù **Monitoraggio** puoi modificare le dimensioni del carattere, la spaziatura, i margini e la posizione verticale/orizzontale del testo per lavorare con un vetro riflettente. Leggi la sezione “Impostazioni” per tutti i dettagli.

Blackmagic HyperDeck Setup

L'utility Blackmagic HyperDeck Setup consente di modificare le impostazioni e di aggiornare il software interno di HyperDeck.

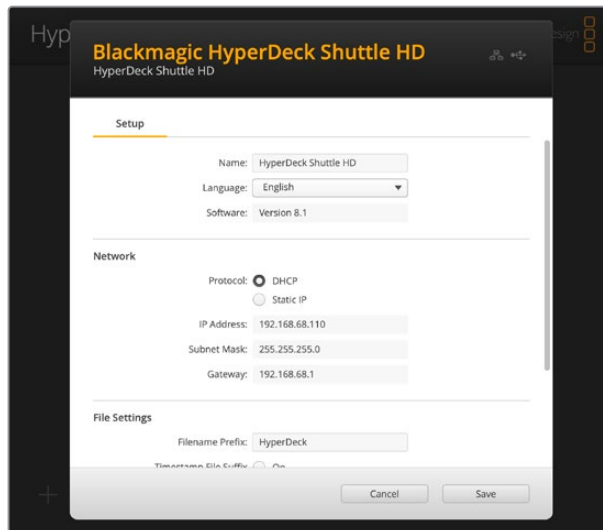


Installare l'utility

- 1 Scarica l'installer Blackmagic HyperDeck Setup più recente da www.blackmagicdesign.com/it/support
- 2 Apri l'installer e segui le istruzioni a schermo per installare l'utility sul computer.
- 3 Completata l'installazione, collega HyperDeck Shuttle HD al computer tramite i connettori USB o ethernet sul retro del dispositivo.
- 4 Lancia Blackmagic HyperDeck Setup e segui le istruzioni nella finestra che compare per aggiornare il software interno. Se la finestra non compare, il software interno è già aggiornato e non dovrai fare nient'altro.

Clicca sull'icona circolare sotto l'immagine di HyperDeck per accedere alle impostazioni.

La schermata principale mostra HyperDeck Shuttle HD e il suo nome. Il nome è utile per distinguere i deck collegati al computer e si può inserire dall'utility.



Network

Network

Protocol: DHCP
 Static IP

IP Address: 192.168.68.110

Subnet Mask: 255.255.255.0

Gateway: 192.168.68.1

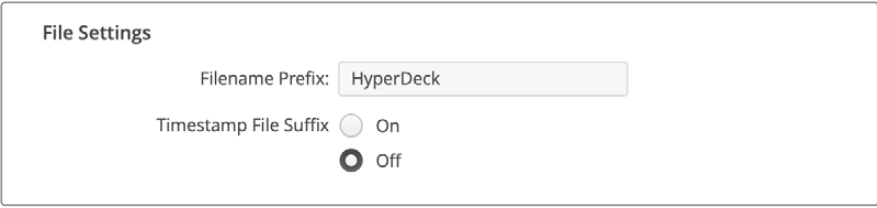
Protocol

Per controllare HyperDeck Shuttle HD da uno switcher ATEM o in remoto con HyperDeck Ethernet Protocol, il deck e il dispositivo prescelto devono trovarsi sulla stessa rete mediante DHCP o un indirizzo IP fisso impostato manualmente.

DHCP	HyperDeck Shuttle HD è impostato su DHCP di default. Il protocollo di configurazione IP dinamica (DHCP) è un servizio sui server di rete che trova e assegna automaticamente un indirizzo IP all'HyperDeck. Questo servizio facilita la connessione dei dispositivi tramite ethernet, evitando che gli indirizzi IP entrino in conflitto tra loro. La maggior parte dei computer e dei commutatori di rete è compatibile con il DHCP.
Static IP	Selezionalo per inserire manualmente le impostazioni di rete. Per poter comunicare, tutte le unità devono avere la stessa maschera di sottorete e gateway, e gli stessi primi tre campi dell'indirizzo IP.

Se sulla rete ci sono altri dispositivi che hanno lo stesso numero identificativo nell'indirizzo IP, le unità interessate non riusciranno a connettersi. In questi casi è necessario modificare l'ultimo campo dell'indirizzo IP dell'unità.

File Settings



File Settings

Filename Prefix:

Timestamp File Suffix On Off

Inizialmente, HyperDeck Shuttle HD registra le clip sulla scheda SD o sul flash disk USB usando “HyperDeck” come prefisso del nome del file. Per cambiarlo, scrivi un altro nome nel campo **Filename Prefix**.

L'impostazione della marca temporale **Timestamp File Suffix** è disabilitata di default. Seleziona **On** per integrare la data e l'ora registrate nel nome del file. Le impostazioni del prefisso e della marca temporale sono disponibili anche nel menù di HyperDeck Shuttle HD.

Trasferire i file in rete

HyperDeck consente il trasferimento dei file mediante FTP (protocollo di trasferimento file). Grazie a questa funzione è possibile copiare i file dal computer direttamente su HyperDeck all'interno di una rete, alla velocità offerta dalla rete locale. Ad esempio puoi copiare dei file su un HyperDeck remoto impiegato per un'insegna digitale.

Connettere HyperDeck Shuttle HD

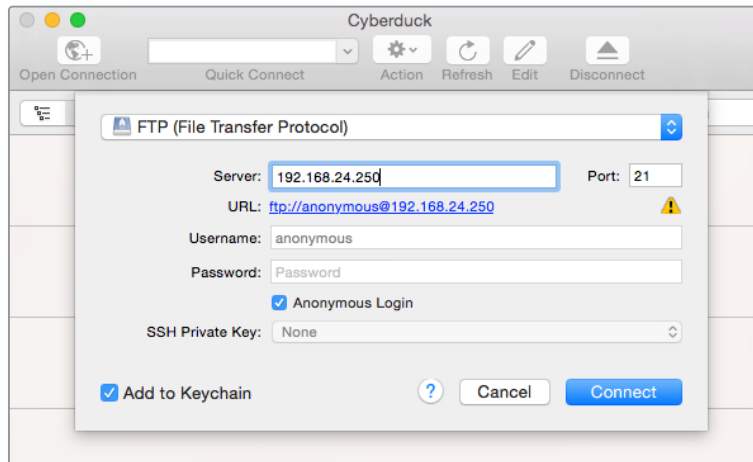
Quando il computer e HyperDeck Shuttle HD sono sulla stessa rete, servono solo un client FTP e l'indirizzo IP del deck.

- 1 Scarica e installa un client FTP sul computer a cui vuoi connettere HyperDeck. Consigliamo Cyberduck, FileZilla o Transmit, ma gran parte delle applicazioni FTP è compatibile. Cyberduck e FileZilla sono gratuiti.
- 2 Connetti HyperDeck Shuttle HD alla rete con un cavo ethernet e appuntati l'indirizzo IP. Per accedere all'indirizzo IP, premi MENU e ruota la manopola fino all'impostazione **Rete**. L'indirizzo IP è indicato in questa schermata.

Rete	
Protocollo	IP statico
Indirizzo IP	192.168.24.100
Sottorete	255.255.255.0
Gateway	192.168.24.1

L'indirizzo IP di HyperDeck Shuttle HD è indicato nel menù Configurazione > Rete

- 3 Inserisci l'indirizzo IP nella finestra di dialogo dell'applicazione TCP. Il nome e la posizione del campo in cui inserire l'indirizzo IP variano a seconda dell'applicazione. Di solito è **Server** o **Host**. Se la finestra include la casella **Anonymous Login**, spuntala.



Per connettere HyperDeck Shuttle HD non servono nome utente e password. Inserisci l'indirizzo IP del deck nel campo Server o Host dell'applicazione FTP e spunta la casella Anonymous Login (se disponibile)

Trasferire i file

Quando HyperDeck è connesso puoi trasferire i file normalmente con l'applicazione FTP. Gran parte delle applicazioni FTP offre un'interfaccia di tipo trascina e rilascia.

Puoi trasferire qualsiasi file da e su HyperDeck, ma ricorda che i file che intendi riprodurre con HyperDeck Shuttle HD devono essere compatibili con le risoluzioni e con i codec da esso supportati.

SUGGERIMENTO Puoi trasferire file in rete mentre HyperDeck sta registrando. Il deck regola automaticamente la velocità di trasferimento per non compromettere la registrazione.

Developer Information

Blackmagic HyperDeck Ethernet Protocol

The Blackmagic HyperDeck Ethernet Protocol is a text based protocol accessed by connecting to TCP port 9993 on HyperDeck models that have a built in Ethernet connection. If you are a software developer, you can use the protocol to construct devices that integrate with our products. Here at Blackmagic Design our approach is to open up our protocols and we eagerly look forward to seeing what you come up with!

Protocol Commands

Command	Command Description
help or ?	Provides help text on all commands and parameters
commands	return commands in XML format
device info	return device information
disk list	query clip list on active disk
disk list: slot id: {n}	query clip list on disk in slot {n}
quit	disconnect ethernet control
ping	check device is responding
preview: enable: {true/false}	switch to preview or output
play	play from current timecode
play: speed: {-5000 to 5000}	play at specific speed
play: loop: {true/false}	play in loops or stop-at-end
play: single clip: {true/false}	play current clip or all clips
playrange	query playrange setting
playrange set: clip id: {n}	set play range to play clip {n} only
playrange set: clip id: {n} count: {m}	set play range to {m} clips starting from clip {n}
playrange set: in: {inT} out: {outT}	set play range to play between: - timecode {inT} and timecode {outT}
playrange set: timeline in: {in} timeline out: {out}	set play range in units of frames between: - timeline position {in} and position {out} clear/reset play range setting
playrange clear	clear/reset play range setting
play on startup	query unit play on startup state
play on startup: enable: {true/false}	enable or disable play on startup
play on startup: single clip: {true/false}	play single clip or all clips on startup
play option	query play options
play option: stop mode: {lastframe/nextframe/black}	set output frame when playback stops
record	record from current input
record: name: {name}	record named clip

Command	Command Description
record spill	spill current recording to next slot
record: spill: slot id: {n}	spill current recording to specified slot use current id to spill to same slot
stop	stop playback or recording
clips count	query number of clips on timeline
clips get	query all timeline clips
clips get: clip id: {n}	query a timeline clip info
clips get: clip id: {n} count: {m}	query m clips starting from n
clips get: version: {1/2}	query clip info using specified output version: version 1: id: name startT duration version 2: id: startT duration inT outT name
clips add: name: {name}	append a clip to timeline
clips add: clip id: {n} name: {name}	insert clip before existing clip {n}
clips add: in: {inT} out: {outT} name: {name}	append the {inT} to {outT} portion of clip
clips remove: clip id: {n}	remove clip {n} from the timeline (invalidates clip ids following clip {n})
clips clear	empty timeline clip list
transport info	query current activity
slot info	query active slot
slot info: slot id: {n}	query slot {n}
slot select: slot id: {n}	switch to specified slot
slot select: video format: {format}	load clips of specified format
slot unblock	unblock active slot
slot unblock: slot id: {n}	unblock slot {n}
cache info	query cache status
dynamic range	query dynamic range settings
dynamic range: playback override: {off/Rec709/Rec2020_SDR/HLG/ ST2084_300/ST2084_500/ ST2084_800/ST2084_1000/ ST2084_2000/ST2084_4000/ST2084}	set playback dynamic range override
dynamic range: record override: {off/Rec709/Rec2020_SDR/HLG/ ST2084_300/ST2084_500/ ST2084_800/ST2084_1000/ ST2084_2000/ST2084_4000/ST2048}	set record dynamic range override
notify	query notification status
notify: remote: {true/false}	set remote notifications
notify: transport: {true/false}	set transport notifications
notify: slot: {true/false}	set slot notifications
notify: configuration: {true/false}	set configuration notifications

Command	Command Description
notify: dropped frames: {true/false}	set dropped frames notifications
notify: display timecode: {true/false}	set display timecode notifications
notify: timeline position: {true/false}	set playback timeline position notifications
notify: playrange: {true/false}	set playrange notifications
notify: cache: {true/false}	set cache notifications
notify: dynamic range: {true/false}	set dynamic range settings notifications
notify: slate: {true/false}	set digital slate notifications
notify: clips: {true/false}	set timeline clips notifications where two types of changes can occur: add: partial update with list of clips and insert positions snapshot: complete update of all clips on timeline
notify: disk: {true/false}	set disk clips notifications where two types of changes can occur: add: partial update with list of clips and insert positions snapshot: complete update of all clips on timeline
goto: clip id: {start/end}	goto first clip or last clip
goto: clip id: {n}	goto clip id {n}
goto: clip id: +{n}	go forward {n} clips
goto: clip id: -{n}	go backward {n} clips
goto: clip: {n}	goto frame position {n} within current clip
goto: clip: +{n}	go forward {n} frames within current clip
goto: clip: -{n}	go backward {n} frames within current clip
goto: clip: {start/end}	goto start or end of clip
goto: timeline: {n}	goto frame position {n} within timeline
goto: timeline: +{n}	o forward {n} frames within timeline
goto: timeline: -{n}	go backward {n} frames within timeline
goto: timeline: {start/end}	goto start or end of timeline
goto: timecode: {timecode}	goto specified timecode
goto: timecode: +{timecode}	go forward {timecode} duration
goto: timecode: -{timecode}	go backward {timecode} duration
goto: slot id: {n}	goto slot id {n}
jog: timecode: {timecode}	jog to timecode
jog: timecode: +{timecode}	jog forward {timecode} duration
jog: timecode: -{timecode}	jog backward {timecode} duration
shuttle: speed: {-5000 to 5000}	shuttle with speed
remote	query unit remote control state
remote: enable: {true/false}	enable or disable remote control
remote: override: {true/false}	session override remote control
configuration	query configuration settings
configuration: video input: SDI	switch to SDI input

Command	Command Description
configuration: video input: HDMI	switch to HDMI input
configuration: video input: component	switch to component input
configuration: audio input: embedded	capture embedded audio
configuration: audio input: XLR	capture XLR audio
configuration: audio input: RCA	capture RCA audio
configuration: file format: {format}	switch to specific file format
configuration: audio codec: PCM	switch to PCM audio
configuration: audio codec: AAC	switch to AAC audio
configuration: timecode input: {external/embedded/internal/preset/clip}	change the timecode input
configuration: timecode output: {clip/timeline}	change the timecode output
configuration: timecode preference: {default/dropframe/nondropframe}	whether or not to use drop frame timecodes when not otherwise specified
configuration: timecode preset: {timecode}	set the timecode preset
configuration: audio input channels: {n}	set the number of audio channels recorded to {n}
configuration: record trigger: {none/recorderbit/timecoderun}	change the record trigger
configuration: record prefix: {name}	set the record prefix name (supports UTF-8 name)
configuration: append timestamp: {true/false}	append timestamp to recorded filename
configuration: xlr input id: {n} xlr type: {line/mic}	configure xlr input type multiple xlr inputs can be configured in a single command
configuration: genlock input resync: {true/false}	enable or disable genlock input resync
uptime	return time since last boot
format: slot id: {n} prepare: {exFAT/HFS+} name: {name}	prepare a disk formatting operation to filesystem {format}
format: confirm: {token}	perform a pre-prepared formatting operation using token
identify: enable: {true/false}	identify the device
watchdog: period: {period in seconds}	client connection timeout
reboot	reboot device
slate clips	slate clips information
slate project	slate project information
slate lens	slate lens information

Multiline commands:	Command Description
slate clips↵	set slate clips information:
reel: {n}	slate reel number, where {n} is in [1, 999]
scene id: {id}	slate scene id value, where {id} is a string
shot type: {WS/MS/BCU/MCU/ECU/none}	slate shot type
take: {n}	slate take number, where {n} is in [1, 99]
take scenario: {PU/VFX/SER/none}	slate take scenario
take auto inc: {true/false}	slate take auto increment
good take: {true/false}	slate good take
environment: {interior/exterior}	slate environment
day night: {day/night}	slate day or night
slate project:↵	set slate project information:
project name: {name}	project name (can be empty, supports UTF-8)
camera: {index}	set camera index e.g. A
director: {name}	director (can be empty, supports UTF-8)
camera operator: {name}	camera operator (can be empty, supports UTF-8)
slate lens:↵	set lens information:
lens type: {type}	lens type (can be empty, supports UTF-8)
iris: {type}	camera iris (can be empty, supports UTF-8)
focal length: {length}	focal length (can be empty, supports UTF-8)
distance: {distance}	lens distance (can be empty, supports UTF-8)
filter: {filter}	lens filter (can be empty, supports UTF-8)

Command Combinations

You can combine the parameters into a single command, for example:

```
play: speed: 200 loop: true single clip: true
```

Or for configuration:

```
configuration: video input: SDI audio input: XLR
```

Or to switch to the second disk, but only play NTSC clips:

```
slot select: slot id: 2 video format: NTSC
```

Protocol Details

Connection

The HyperDeck Ethernet server listens on TCP port 9993.

Basic syntax

The HyperDeck protocol is a line oriented text protocol. Lines from the server will be separated by an ascii CR LF sequence. Messages from the client may be separated by LF or CR LF.

New lines are represented in this document as a "↵" symbol.

Single line command syntax

Command parameters are usually optional. A command with no parameters is terminated with a new line:

```
{Command name}↵
```

If parameters are specified, the command name is followed by a colon, then pairs of parameter names and values. Each parameter name is terminated with a colon character:

```
{Command name}: {Parameter}: {Value} {Parameter}: {Value} ...↵
```

Multiline command syntax

The HyperDeck protocol also supports an equivalent multiline syntax where each parameter-value pair is entered on a new line. E.g.

```
{Command name}:↵  
{Parameter}: {Value}↵  
{Parameter}: {Value}↵  
↵
```

Response syntax

Simple responses from the server consist of a three digit response code and descriptive text terminated by a new line:

```
{Response code} {Response text}↵
```

If a response carries parameters, the response text is terminated with a colon, and parameter name and value pairs follow on subsequent lines until a blank line is returned:

```
{Response code} {Response text}:↵  
{Parameter}: {Value}↵  
{Parameter}: {Value}↵  
...  
↵
```

Successful response codes

A simple acknowledgement of a command is indicated with a response code of 200:

```
200 ok↵
```

Other successful responses carry parameters and are indicated with response codes in the range of 201 to 299.

Failure response codes

Failure responses to commands are indicated with response codes in the range of 100 to 199:

```
100 syntax error
101 unsupported parameter
102 invalid value
103 unsupported
104 disk full
105 no disk
106 disk error
107 timeline empty
108 internal error
109 out of range
110 no input
111 remote control disabled
112 clip not found
120 connection rejected
150 invalid state
151 invalid codec
160 invalid format
161 invalid token
162 format not prepared
163 parameterized single line command not supported
```

Asynchronous response codes

The server may return asynchronous messages at any time. These responses are indicated with response codes in the range of 500 to 599:

```
5xx {Response Text}:↵
{Parameter}: {Value}↵
{Parameter}: {Value}↵
↵
```

Connection response

On connection, an asynchronous message will be delivered:

```
500 connection info:↵
protocol version: {Version}↵
model: {Model Name}↵
↵
```

Timecode syntax

Timecodes are expressed as non-drop-frame timecode in the format:

```
HH:MM:SS:FF
```

Handling of deck "remote" state

The "remote" command may be used to enable or disable the remote control of the deck. Any attempt to change the deck state over ethernet while remote access is disabled will generate an error:

```
111 remote control disabled↵
```

To enable or disable remote control:

```
remote: enable: {"true", "false"} ↵
```

The current remote control state may be overridden allowing remote access over ethernet irrespective of the current remote control state:

```
remote: override: {"true", "false"} ↵
```

The override state is only valid for the currently connected ethernet client and only while the connection remains open.

The "remote" command may be used to query the remote control state of the deck by specifying no parameters:

```
remote↵
```

The deck will return the current remote control state:

```
210 remote info:↵  
enabled: {"true", "false"}↵  
override: {"true", "false"}↵  
↵
```

Asynchronous remote control information change notification is disabled by default and may be configured with the "notify" command. When enabled, changes in remote state will generate a "510 remote info:" asynchronous message with the same parameters as the "210 remote info:" message.

Closing connection

The "quit" command instructs the server to cleanly shut down the connection:

```
quit↵
```

Checking connection status

The "ping" command has no function other than to determine if the server is responding:

```
ping↵
```

Getting help

The "help" or "?" commands return human readable help text describing all available commands and parameters:

```
help↵
```

Or:

```
?↵
```

The server will respond with a list of all supported commands:

```
201 help:↵  
{Help Text}↵  
{Help Text}↵  
↵
```

Switching to preview mode

The "preview" command instructs the deck to switch between preview mode and output mode:

```
preview: enable: {"true", "false"}↵
```

Playback will be stopped when the deck is switched to preview mode. Capturing will be stopped when the deck is switched to output mode.

Controlling device playback

The "play" command instructs the deck to start playing:

```
play↵
```

The play command accepts a number of parameters which may be used together in most combinations.

By default, the deck will play all remaining clips on the timeline then stop.

The "single clip" parameter may be used to override this behavior:

```
play: single clip: {"true", "false"}↵
```

By default, the deck will play at normal (100%) speed. An alternate speed may be specified in percentage between -5000 to 5000:

```
play: speed: {% normal speed}↵
```

By default, the deck will stop playing when it reaches to the end of the timeline. The "loop" parameter may be used to override this behavior:

```
play: loop: {"true", "false"}↵
```

The "playrange" command instructs the deck to play all the clips. To override this behavior: and select a particular clip:

```
playrange set: clip id: {Clip ID}↵
```

To only play a certain timecode range:

```
playrange set: in: {in timecode} out: {out timecode}↵
```

To clear a set playrange and return to the default value:

```
playrange clear↵
```

The "play on startup" command instructs the deck on what action to take on startup. By default, the deck will not play. Use the "enable" command to start playback after each power up.

```
play on startup: enable {"true", "false"}↵
```

By default, the unit will play back all clips on startup. Use the "single clip" command to override.

```
play on startup: single clip: {"true", "false"}↵
```

Stopping deck operation

The "stop" command instructs the deck to stop the current playback or capture:

```
stop↵
```

Changing timeline position

The "goto" command instructs the deck to switch to playback mode and change its position within the timeline.

To go to the start of a specific clip:

```
goto: clip id: {Clip ID}↵
```

To move forward/back {count} clips from the current clip on the current timeline:

```
goto: clip id: +/-{count}↵
```

Note that if the resultant clip id goes beyond the first or last clip on timeline, it will be clamp at the first or last clip.

To go to the start or end of the current clip:

```
goto: clip: {"start", "end"}↵
```

To go to the start of the first clip or the end of the last clip:

```
goto: timeline: {"start", "end"}↵
```

To go to a specified timecode:

```
goto: timecode: {timecode}↵
```

To move forward or back a specified duration in timecode:

```
goto: timecode: {"+", "-"}{duration in timecode}↵
```

To specify between slot 1 and slot 2:

```
goto: slot id: {Slot ID}↵
```

Note that only one parameter/value pair is allowed for each goto command.

Enumerating supported commands and parameters

The "commands" command returns the supported commands:

```
commands↵
```

The command list is returned in a computer readable XML format:

```
212 commands:
<commands>↵
  <command name="..."><parameter name="..."/>...</command>↵
  <command name="..."><parameter name="..."/>...</command>↵
  ...
</commands>↵
↵
```

Controlling asynchronous notifications

The "notify" command may be used to enable or disable asynchronous notifications from the server.

To enable or disable transport notifications:

```
notify: transport: {"true", "false"}↵
```

To enable or disable slot notifications:

```
notify: slot: {"true", "false"}↵
```

To enable or disable remote notifications:

```
notify: remote: {"true", "false"}↵
```

To enable or disable configuration notifications:

```
notify: configuration: {"true", "false"}↵
```

Multiple parameters may be specified. If no parameters are specified, the server returns the current state of all notifications:

```
209 notify:↵
transport: {"true", "false"}↵
slot: {"true", "false"}↵
remote: {"true", "false"}↵
configuration: {"true", "false"}↵
dropped frames: {"true", "false"}↵
display timecode: {"true", "false"}↵
timeline position: {"true", "false"}↵
playrange: {"true", "false"}↵
cache: {"true", "false"}↵
dynamic range: {"true", "false"}↵
slate: {"true", "false"}↵
clips: {"true", "false"}↵
disk: {"true", "false"}↵
↵
```

Retrieving device information

The "device info" command returns information about the connected deck device:

```
device info↵
```

The server will respond with:

```
204 device info:↵
protocol version: {Version}↵
model: {Model Name}↵
unique id: {unique alphanumeric identifier}↵
slot count: {number of storage slots}↵
software version: {software version}↵
↵
```


Retrieving slot information

The "slot info" command returns information about a slot. Without parameters, the command returns information for the currently selected slot:

```
slot info↵
```

If a slot id is specified, that slot will be queried:

```
slot info: slot id: {Slot ID}↵
```

The server will respond with slot specific information:

```
202 slot info:↵
slot id: {Slot ID}↵
status: {"empty", "mounting", "error", "mounted"}↵
volume name: {Volume name}↵
recording time: {recording time available in seconds}↵
video format: {disk's default video format}↵
blocked: {"true", "false"}↵
↵
```

Asynchronous slot information change notification is disabled by default and may be configured with the "notify" command. When enabled, changes in slot state will generate a "502 slot info:" asynchronous message with the same parameters as the "202 slot info:" message.

Retrieving clip information

The "disk list" command returns the information for each playable clip on a given disk. Without parameters, the command returns information for the current active disk:

```
disk list↵
```

If a slot id is specified, the disk in that slot will be queried:

```
disk list: slot id: {Slot ID}↵
```

The server responds with the list of all playable clips on the disk in the format of: Index, name, formats, and duration in timecode:

```
206 disk list:↵
slot id: {Slot ID}↵
{clip index}: {name} {file format} {video format} {Duration
timecode}↵
{clip index}: {name} {file format} {video format} {Duration
timecode}↵
...
↵
```

Note that the *clip index* starts from 1.

Retrieving clip count

The "clips count" command returns the number of clips on the current timeline:

```
clips count ↵
```

The server responds with the number of clips:

```
214 clips count: ↵
clip count: {Count}↵
```

Retrieving timeline information

The "clips get" command returns information for each available clip on the current timeline. Without parameters, the command returns information for all clips on timeline:

```
clips get↵
```

The server responds with a list of clip IDs, names and timecodes:

```
205 clips info:↵  
clip count: {Count}↵  
  
{Clip ID}: {Start timecode} {Duration timecode} {In timecode}  
{Out timecode} {Name}↵  
  
{Clip ID}: {Start timecode} {Duration timecode} {In timecode}  
{Out timecode} {Name}↵  
  
...  
↵
```

Retrieving transport information

The "transport info" command returns the state of the transport:

```
transport info ↵
```

The server responds with transport specific information:

```
208 transport info:  
  
status: {"preview", "stopped", "play", "forward", "rewind",  
"jog", "shuttle","record"}↵  
  
speed: {Play speed between -5000 and 5000 %}↵  
  
slot id: {Slot ID or "none"}↵  
  
clip id: {Clip ID or "none"}↵  
  
single clip: {"true", "false"}↵  
  
display timecode: {timecode}↵  
  
timecode: {timecode}↵  
  
video format: {Video format}↵  
  
loop: {"true", "false"}↵  
  
timeline: {n}↵  
  
input video format: {Video format}↵  
  
dynamic range: {"off", "Rec709", "Rec2020_SDR", "HLG",  
"ST2084_300", "ST2084_500", "ST2084_800", "ST2084_1000",  
"ST2084_2000", "ST2084_4000", "ST2048" or "none"}↵  
  
↵
```

The "timecode" value is the timecode within the current timeline for playback or the clip for record. The "display timecode" is the timecode displayed on the front of the deck. The two timecodes will differ in some deck modes.

Asynchronous transport information change notification is disabled by default and may be configured with the "notify" command. When enabled, changes in transport state will generate a "508 transport info:" asynchronous message with the same parameters as the "208 transport info:" message.

Video Formats

The following video formats are currently supported on HyperDeck Shuttle:

720p50, 720p5994, 720p60

1080p23976, 1080p24, 1080p25, 1080p2997, 1080p30, 1080p60

1080i50, 1080i5994, 1080i60

Video format support may vary between models and software releases.

File Formats

All HyperDeck models currently support the following file formats:

H.264High

H.264Medium

H.264Low

QuickTimeProResHQ

QuickTimeProRes

QuickTimeProResLT

QuickTimeProResProxy

QuickTimeDNxHD220x

DNxHD220x

QuickTimeDNxHD145

DNxHD145

QuickTimeDNxHD45

DNxHD45

Supported file formats may vary between models and software releases.

Querying and updating configuration information

The "configuration" command may be used to query the current configuration of the deck:

```
configuration↵
```

The server returns the configuration of the deck:

```
211 configuration:↵
audio input: {"embedded", "XLR", "RCA"}↵
audio mapping: {n}↵
video input: {"SDI", "HDMI", "component", "composite"}↵
file format: {format}↵
audio codec: {"PCM", "AAC"}↵
timecode input: {"external", "embedded", "preset", "clip"}↵
timecode output: {"clip", "timeline"}↵
timecode preference: {"default", "dropframe", "nondropframe"}↵
timecode preset: {timecode}↵
audio input channels: {n}↵
record trigger: {"none", "recordbit", "timecoderun"}↵
record prefix: {name}↵
append timestamp: {"true", "false"}↵
genlock input resync: {"true", "false"}↵
↵
```

One or more configuration parameters may be specified to change the configuration of the deck.

To change the current video input:

```
configuration: video input: {"SDI", "HDMI", "component"}↵
```

Valid video inputs may vary between models. To configure the current audio input:

```
configuration: audio input: {"embedded", "XLR", "RCA"}↵
```

Valid audio inputs may vary between models.

To configure the current file format:

```
configuration: file format: {File format}↵
```

Note that changes to the file format may require the deck to reset, which will cause the client connection to be closed. In such case, response code 213 will be returned (instead of 200) before the client connection is closed:

```
"213 deck rebooting"
```

Asynchronous configuration information change notification is disabled by default and may be configured with the "notify" command. When enabled, changes in configuration will generate a "511 configuration:" asynchronous message with the same parameters as the "211 configuration:" message.

Selecting active slot and video format

The "slot select" command instructs the deck to switch to a specified slot, or/and to select a specified output video format.

To switch to a specified slot:

```
slot select: slot id: {slot ID}↵
```

To select the output video format:

```
slot select: video format: {video format}↵
```

Either or all slot select parameters may be specified. Note that selecting video format will result in a rescan of the disk to reconstruct the timeline with all clips of the specified video format.

Clearing the current timeline

The "clips clear" command instructs the deck to empty the current timeline:

```
clips clear↵
```

The server responds with

```
200 ok↵
```

Adding a clip to the current timeline

The "clips add:" command instructs the deck to add a clip to the current timeline:

```
clips add: name: {clip name}↵
```

The server responds with

```
200 ok↵
```

or in case of error

```
lxx {error description}↵
```

Configuring the watchdog

The "watchdog" command instructs the deck to monitor the connected client and terminate the connection if the client is inactive for at least a specified period of time.

To configure the watchdog:

```
watchdog: period: {period in seconds}↵
```

To avoid disconnection, the client must send a command to the server at least every {period} seconds. Note that if the period is set to 0 or less than 0, connection monitoring will be disabled.

Assistenza

Ottenere assistenza

Il modo più veloce per ottenere assistenza è consultare il materiale di riferimento più recente alla pagina [Supporto](#) del sito di Blackmagic Design.

Supporto online Blackmagic Design

Il manuale, il software e le note di supporto più recenti sono disponibili alla pagina www.blackmagicdesign.com/it/support

Blackmagic Forum

Il Blackmagic Forum sul nostro sito web è un'ottima risorsa per ottenere informazioni utili e condividere idee creative. Qui trovi le risposte alle domande più frequenti, oltre ai consigli forniti da utenti esperti e dal team Blackmagic Design. Visita il Forum alla pagina <https://forum.blackmagicdesign.com>

Contattare Blackmagic Design

Se il materiale di supporto disponibile e il Blackmagic Forum non rispondono alle tue domande, clicca su **Invia una email** o su **Trova un team di supporto** per contattare direttamente il team di Blackmagic Design più vicino a te.

Verificare la versione del software

Per verificare quale versione del software HyperDeck è installata sul tuo computer, lancia Blackmagic HyperDeck Setup.

- Su Mac OS, apri la cartella **Applicazioni** e seleziona **Blackmagic HyperDeck Setup**. Il numero della versione del software è indicato nel menù **About Blackmagic HyperDeck Setup**.
- Su Windows, seleziona **Blackmagic HyperDeck Setup** dal menù **Start** o dalla schermata iniziale. Clicca su **Help** e seleziona **About Blackmagic HyperDeck Setup** per leggere il numero della versione del software.

Scaricare gli aggiornamenti software

Dopo aver verificato quale versione del software HyperDeck è installata sul tuo computer, visita il Centro assistenza di Blackmagic Design su www.blackmagicdesign.com/it/support per scaricare gli ultimi aggiornamenti. Consigliamo di non aggiornare il software in pieno svolgimento di un progetto importante.

Normative

Smaltimento di apparecchiature elettriche ed elettroniche nell'Unione Europea



Questo simbolo indica che il dispositivo non deve essere scartato insieme agli altri rifiuti, ma consegnato a uno degli appositi centri di raccolta e riciclaggio. La raccolta e lo smaltimento differenziato corretto di questo tipo di apparecchiatura evita lo spreco di risorse e contribuisce alla sostenibilità ambientale e umana. Per tutte le informazioni sui centri di raccolta e riciclaggio, contatta gli uffici del tuo comune di residenza o il punto vendita presso cui hai acquistato il prodotto.



Questo dispositivo è stato testato e dichiarato conforme ai limiti relativi ai dispositivi digitali di Classe A, ai sensi dell'articolo 15 del regolamento FCC. Tali limiti sono stati stabiliti con lo scopo di fornire protezione ragionevole da interferenze dannose in ambienti commerciali. Questo dispositivo genera, usa e può irradiare energia a radiofrequenza e, se non è installato o usato in conformità alle istruzioni, può causare interferenze dannose che compromettono le comunicazioni radio. Operare questo dispositivo in ambienti residenziali può causare interferenze dannose, nella cui evenienza l'utente dovrà porvi rimedio a proprie spese.

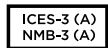
Il funzionamento è soggetto alle due condizioni seguenti:

- 1 Questo dispositivo non deve causare interferenze dannose.
- 2 Questo dispositivo deve accettare eventuali interferenze ricevute, incluse le interferenze che possono causare un funzionamento indesiderato.



R-R-BMD-20211410001

Dichiarazione ISED (Canada)



Questo dispositivo è conforme agli standard canadesi sui dispositivi digitali di Classe A.

Qualsiasi modifica o utilizzo del dispositivo al di fuori di quello previsto potrebbero invalidare la conformità a tali standard.

Connettere le interfacce HDMI usando cavi schermati HDMI di alta qualità.

Questo dispositivo è stato testato per l'uso in ambienti commerciali. Se utilizzato in ambienti domestici, può causare interferenze radio.

Sicurezza

Questo dispositivo è adatto all'uso nei luoghi tropicali con una temperatura ambiente non superiore ai 40°C.

Lasciare uno spazio adeguato intorno al dispositivo per consentire sufficiente ventilazione.

Le parti all'interno del dispositivo non sono riparabili dall'utente. Contattare un centro assistenza Blackmagic Design per le operazioni di manutenzione.



Usare il dispositivo a un'altitudine non superiore a 2000 m sopra il livello del mare.

Dichiarazione dello Stato della California

Questo dispositivo può esporre l'utente a sostanze chimiche, per esempio tracce di bifenili polibromurati nelle parti in plastica, che nello Stato della California sono considerati causa di cancro e difetti congeniti o altri danni riproduttivi.

Per maggiori informazioni, visitare www.P65Warnings.ca.gov

Garanzia

Garanzia limitata di 12 mesi

Blackmagic Design garantisce che questo prodotto è fornito privo di difetti nei materiali e nella manifattura per un periodo di 12 mesi a partire dalla data d'acquisto. Durante il periodo di garanzia, Blackmagic Design, a sua scelta, riparerà il prodotto difettoso senza alcun costo per le parti o la manodopera, o sostituirà il prodotto purché questo venga restituito dal/la Cliente.

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Abril 2022

Manual de Instalação e Operação

Blackmagicdesign 

HyperDeck Shuttle HD



HyperDeck Shuttle HD



Prezado Cliente,

Obrigado por adquirir um gravador de disco Blackmagic HyperDeck Shuttle HD.

Quando criamos os gravadores de disco Blackmagic HyperDeck originais, nossa intenção era facilitar a gravação e reprodução de vídeos utilizando mídias SSD rápidas. Agora, temos o orgulho de apresentar o HyperDeck Shuttle HD.

O HyperDeck Shuttle HD é um gravador de vídeo HDMI compacto e portátil, desenvolvido para uso em mesa. O seletor de busca grande e os controles de transporte familiares permitem que você opere o gravador com uma mão só, o que torna o HyperDeck Shuttle HD a companhia perfeita para produção ao vivo com um switcher ATEM Mini. Você pode inclusive utilizar o HyperDeck Shuttle HD como um teleprôpther.

O HyperDeck Shuttle HD grava em cartões SD ou discos flash externos usando codecs ProRes, DNxHD ou H.264 para gravação e reprodução ultrarrápidas.

Consulte a página de suporte em www.blackmagicdesign.com/br para obter a versão mais recente deste manual e das atualizações do software HyperDeck. Para garantir que você receba todos os recursos mais recentes, mantenha o seu programa atualizado. Ao baixar o software, registre suas informações para que possamos mantê-lo atualizado quando novos programas forem lançados. Estamos sempre trabalhando com novos recursos e aprimoramentos, então adoráramos ouvir a sua opinião.

Grant Petty

Diretor Executivo da Blackmagic Design

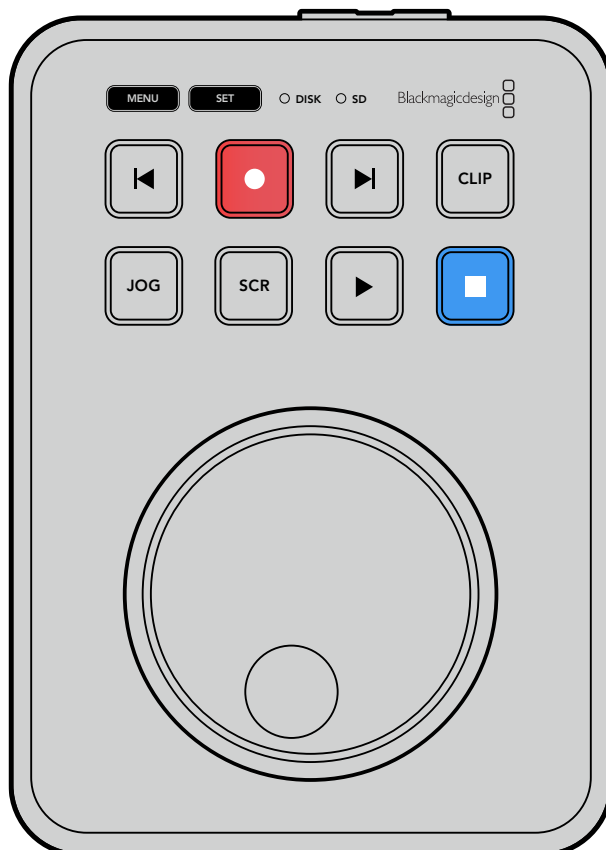
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Primeiros Passos

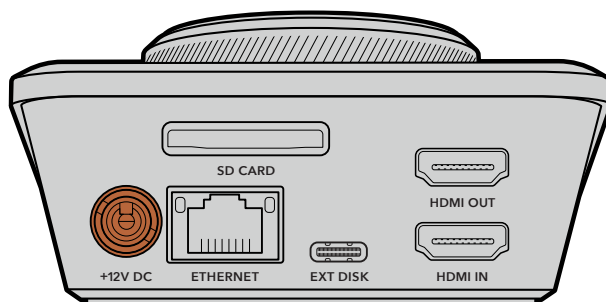
Para começar a usar o seu HyperDeck Shuttle HD, basta conectar a alimentação, plugar uma fonte de vídeo HDMI, inserir um cartão SD ou mídia externa e pressionar o botão de gravação.

Esta seção do manual mostra como começar a usar o seu HyperDeck Shuttle HD.



Conexão de alimentação

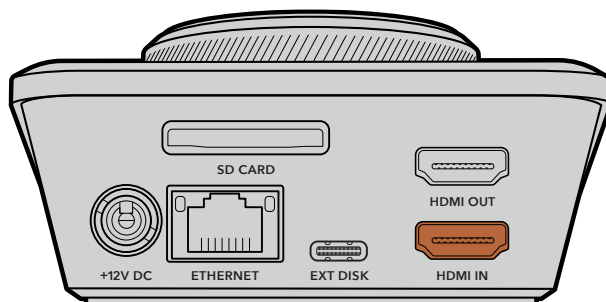
Para alimentar o HyperDeck Shuttle HD, conecte a fonte de alimentação fornecida à entrada de alimentação no painel traseiro. É recomendável utilizar o anel de travamento para fixar o cabo de alimentação e prevenir desconexões acidentais.



Prenda o adaptador de alimentação na entrada de alimentação do HyperDeck Shuttle HD.

Conexão de vídeo e áudio

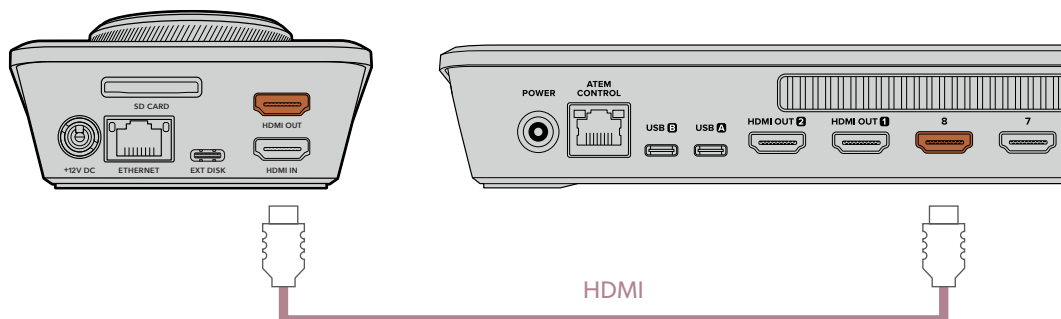
Para conectar vídeo ao HyperDeck Shuttle HD, plugue uma fonte de vídeo HDMI na entrada HDMI no painel traseiro.



Conecte o seu equipamento de destino na saída HDMI. Por exemplo, um switcher ATEM Mini ou uma televisão HDMI.

A saída HDMI também é usada para visualizar o menu de configurações ao alterar definições no seu HyperDeck. Isso ocorre porque o menu de configurações é visualizado através de uma sobreposição de vídeo na saída HDMI. Para mais informações sobre o menu de configurações, consulte a seção “Alterar Configurações” deste manual.

DICA Caso não consiga visualizar sua fonte de entrada de vídeo na tela conectada, é possível que você esteja no modo de reprodução. Pressione o botão de gravação para habilitar o modo de gravação.



Conecte a saída HDMI ao equipamento de destino, como uma televisão HDMI ou um switcher ATEM Mini.

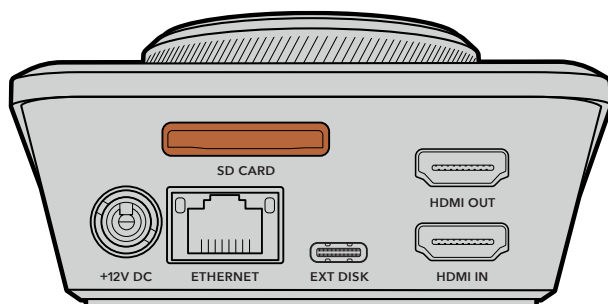
Conexão de mídias

Todos os gravadores de disco HyperDeck Shuttle HD são comercializados prontos para gravar imediatamente sem precisar ajustar nenhuma configuração. Tudo que você precisa é de um cartão SD ou disco externo formatado.

Você pode formatar mídias facilmente através das configurações do menu. Você também pode formatar usando um computador. Para mais informações, consulte a seção ‘Formatar Mídias’ neste manual. Você também pode encontrar informações sobre os tipos de mídia mais indicados para gravar vídeos e uma lista de cartões SD e discos externos recomendados.

Para plugar um cartão SD:

- 1 Segure o cartão SD com os conectores dourados voltados para cima e alinhe-o com o compartimento de mídia. Agora, insira o cartão no compartimento cuidadosamente até que ele se encaixe firmemente no lugar.



- 2 O HyperDeck verificará o cartão SD. O indicador verde “SD” acenderá na parte superior do HyperDeck Shuttle HD. Após a verificação, o indicador desligará.



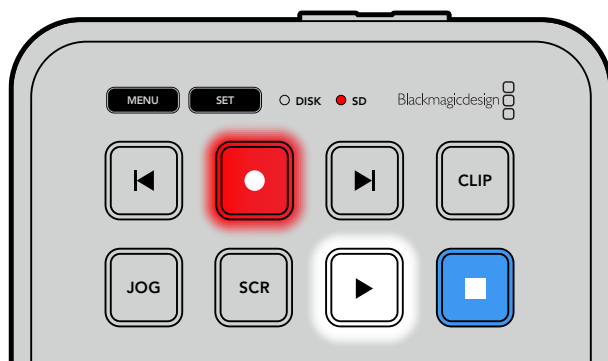
Seu HyperDeck Shuttle HD está pronto para gravar e reproduzir!

Continue lendo este manual para obter informações detalhadas sobre como gravar e reproduzir clipes, alterar configurações e muito mais.

Gravação de Vídeo

Depois de confirmar que sua fonte de vídeo está sendo exibida no equipamento HDMI de destino, você pode começar a gravar imediatamente.

Para iniciar a gravação, pressione o botão de gravação. Ao gravar em um cartão SD, o indicador SD acenderá em vermelho. Os botões de gravação e reprodução também acenderão. Ao gravar em um disco externo, o indicador de disco acenderá em vermelho.

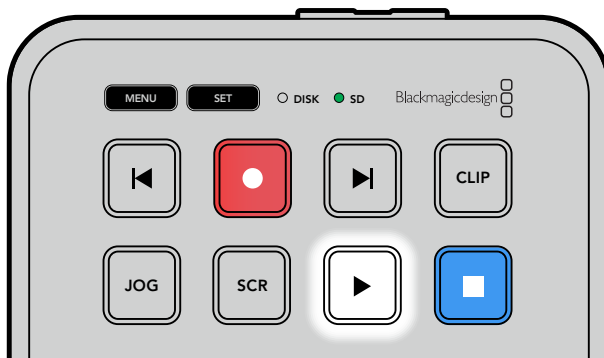


Pressione o botão “Stop” para finalizar a gravação.

Reprodução

Pressione o botão “Play” para iniciar a reprodução. Durante a reprodução, o botão “Play” acenderá e o indicador de compartimento de mídia “Disk” ou “SD” acenderá em verde.

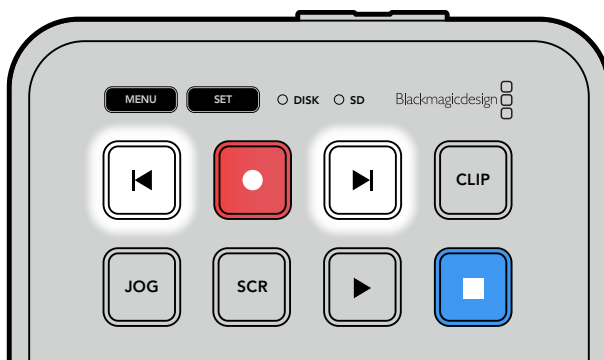
Se houver vários clipes gravados, você pode alternar entre eles pressionando os botões de avanço e retrocesso.



Usar os botões Skip

Pressione o botão de retrocesso para saltar ao início do clipe. Pressionar mais de uma vez navegará pelos clipes gravados anteriormente.

Pressione o botão de avanço para navegar pelos clipes em avanço.



Use os botões de avanço e retrocesso para saltar ao início de cada clipe.

DICA Para reproduzir arquivos de vídeo no seu HyperDeck, você precisará corresponder o codec usado para gravar os arquivos. Isso pode ser feito no menu. Consulte a seção “Alterar Configurações” neste manual para mais informações.

Repetição de clipes

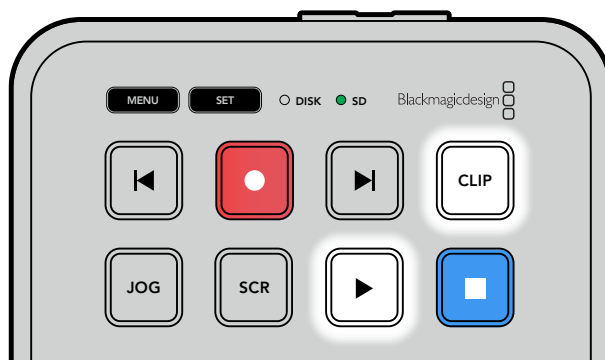
Durante a reprodução, pressionar o botão “Play” novamente configurará o seu HyperDeck Shuttle HD para repetir todos os clipes até que você pressione o botão “Stop”.

Caso deseje repetir um único clipe, configure o seu HyperDeck no modo “Clipe” e pressione o botão “Play” uma vez para reproduzir e novamente para repetir.

Repetir todos	Durante a reprodução, pressione o botão “Play” uma segunda vez para repetir todos os clipes gravados.
Repetir atual	No modo clipe, pressione o botão “Play” uma segunda vez para repetir o clipe atual.

Modo clipe

No modo clipe, é possível restringir a reprodução a um único clipe apenas. Por exemplo, com o modo clipe habilitado, você pode navegar ou pular para um clipe e, em seguida, pressionar “Play” sabendo que a reprodução cessará quando o clipe terminar.



Quando o modo clipe é selecionado, pressionar “Play” uma segunda vez repetirá o clipe atual.

Usar o seletor de busca

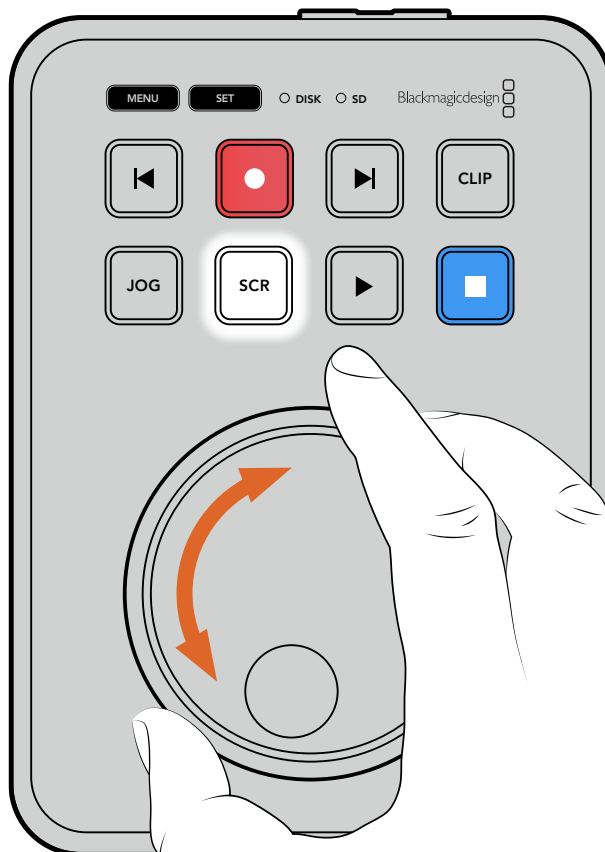
O seletor de busca oferece uma maneira rápida de navegar pelos seus clipes e selecionar momentos específicos para reproduzi-los, ou revisá-los quadro a quadro. Isso pode ser importante caso você precise localizar um momento específico monitorando o clipe visualmente à medida que você gira o seletor. Também é útil para posicionar o cursor de reprodução em um ponto de indicação específico, pronto para colocar o clipe no ar durante uma transmissão ao vivo.

Os modos de busca do seletor são: jog, scroll e shuttle.

	Jog	Reproduz o clipe quadro por quadro, oferecendo controle preciso.
	Scroll	O modo scroll permite navegar em avanço ou retrocesso por todas as suas mídias gravadas. Conforme você gira o seletor, a rolagem acompanha a velocidade do movimento, oferecendo controle total sobre o posicionamento da reprodução.
	Shuttle	Pressione os botões “JOG” e “SCR” simultaneamente para entrar no modo shuttle. No modo shuttle, você pode retroceder ou avançar pela sua mídia girando o seletor para a esquerda ou direita. Conforme você gira o seletor, a mídia se movimenta mais rápido, até a velocidade máxima de 50x. Para reduzir a velocidade de navegação a zero, gire o seletor de volta à posição inicial. Caso deseje parar em um ponto específico durante a navegação, pressione o botão “Stop”; ou pressione “Play” para continuar a reprodução na posição atual. É importante observar que a velocidade máxima de navegação pode ser reduzida no menu de configurações. Para mais informações, consulte a seção “Configurações” neste manual.



Pressione os botões “JOG” ou “SCR” para selecionar os modos de busca jog e scroll.

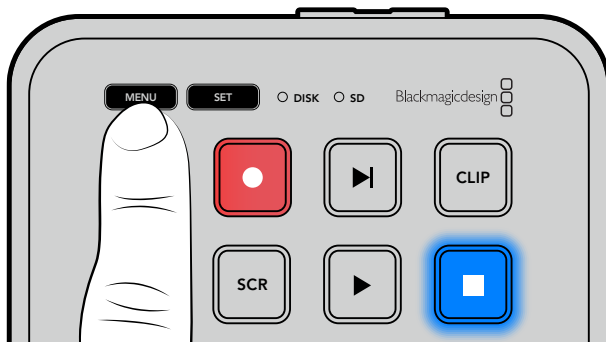


Após selecionar um modo de busca, gire o seletor.

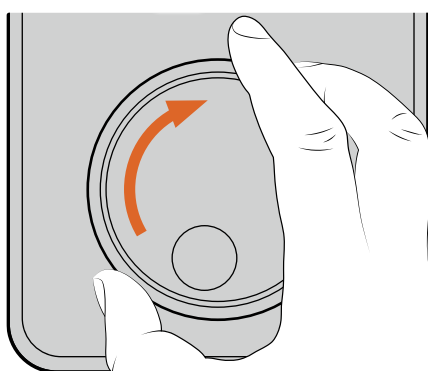
DICA Para retornar à reprodução normal, pressione o botão “Play” ou “Stop”

Alterar Configurações

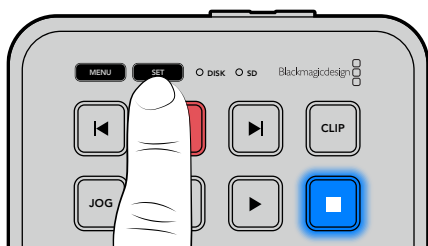
Pressionar o botão “Menu” abrirá o menu de configurações, que será exibido como uma sobreposição de vídeo no canto inferior esquerdo da tela HDMI conectada.



Pressione o botão “Menu” para acessar o menu de configurações.



Use o seletor de busca para navegar até um submenu ou configuração.



Pressione o botão “Set” para selecionar um submenu ou configuração.

Ajuste as configurações usando o seletor de busca ou os botões de avanço e retrocesso. Confirme a seleção pressionando o botão “Set”.

Para sair do menu, pressione “Menu” para retornar pelas opções até a tela inicial.

DICA Você pode posicionar o menu em qualquer um dos quatro cantos da sua tela usando o menu de configurações. Recomendamos desabilitar o menu após alterar as configurações para garantir que a saída HDMI forneça uma alimentação limpa quando conectada a um switcher HDMI, como o ATEM Mini Extreme.

Configurações

O menu de configurações é dividido em cinco categorias diferentes, incluindo Gravação, Monitoramento, Áudio, Armazenamento e Configuração. Cada um desses submenus contém configurações relacionadas, a maioria das quais podem ser ajustadas usando o painel de controle do HyperDeck Shuttle HD. Algumas configurações são exibidas apenas para referência e aparecerão sombreadas, como “Prefixo do Arquivo”, por exemplo. Nestes casos, as configurações podem ser ajustadas através do utilitário HyperDeck Setup.

Menu Gravação

Gravação	
Entrada	HDMI
Codec	H.264 High
Disparo de Gravação	Nenhum

Entrada

Exibe a entrada HDMI do HyperDeck Shuttle HD.

Codec

O HyperDeck Shuttle HD pode gravar vídeos compactados usando codecs H.264, Apple ProRes e DNxHD. Para usar a função de teleprompter, selecione “Teleprompter”.

Disparo de Gravação

Há dois modos de disparo de gravação disponíveis: “Iniciar/Parar Vídeo” e “Timecode de Execução”.

Algumas câmeras, como a Blackmagic Pocket Cinema Camera 4K, enviam um sinal via HDMI para iniciar e cessar a gravação em gravadores externos. A configuração “Iniciar/Parar Vídeo” acionará o HyperDeck para que inicie ou pare a gravação quando você pressionar o botão de gravação na câmera.

Utilize a opção “Timecode de Execução” para acionar a unidade e iniciar a gravação quando ela receber um sinal de código de tempo válido através da entrada HDMI. Quando o sinal parar, a gravação também irá parar. Você pode desabilitar o disparo de gravação selecionando a opção “Nenhum”.

OBSERVAÇÃO Ao gravar com uma câmera HDMI, certifique-se de que a saída esteja limpa e com as sobreposições desativadas, pois qualquer sobreposição presente na saída de vídeo da sua câmera será gravada com a sua imagem.

Menu Monitoramento

Monitoramento	
Layout do Teleprôppter	
Tamanho da Fonte	450%
Espaçamento de Linhas	120%
Margem Lateral	10%
Girar Horizontalmente	Não
Girar Verticalmente	Não

Layout do Teleprôppter

O menu de monitoramento contém todas as configurações necessárias para utilizar o HyperDeck Shuttle HD como um teleprôppter.

Tamanho da Fonte

Ajuste o tamanho do texto selecionando a opção “Tamanho da Fonte” e pressionando “Set”. Gire o seletor no sentido horário para aumentar ou no sentido anti-horário para reduzir.

Espaçamento de Linhas

Gire o seletor para aumentar ou reduzir o espaçamento entre linhas.

Margem Lateral

Ajuste a largura das margens em ambos os lados da tela do teleprôppter.

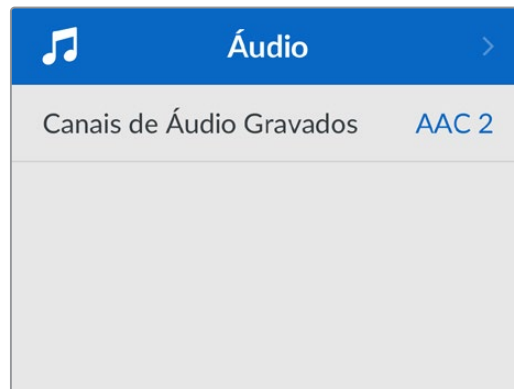
Girar

Se o monitor do seu teleprôppter estiver configurado para refletir em um vidro, por exemplo, diante de uma câmera ou um púlpito, será necessário ajustar as configurações no menu “Girar” para que o texto fique legível para o apresentador. Duas opções estão disponíveis:

Girar Horizontalmente - Utilize essa opção quando a parte inferior do monitor do teleprôppter estiver instalada mais perto da base do vidro.

Girar Verticalmente - Utilize essa opção quando a parte inferior do monitor do teleprôppter estiver instalada mais distante da base do vidro.

Menu Áudio



Canais de Áudio Gravados

O HyperDeck Shuttle HD pode gravar até oito canais de áudio PCM por vez. Para selecionar a quantidade de canais para gravação, expanda a lista de canais de áudio gravados e selecione 2, 4 ou 8 canais.

Menu Armazenamento



As mídias conectadas aparecerão nas configurações de armazenamento. Mídia 1 mostrará o nome do cartão SD conectado e Mídia 2 mostrará quaisquer discos flash USB plugados no conector "Ext Disk". Ao utilizar um hub USB, como a Blackmagic MultiDock 10G, o disco ativo será exibido.

USB Sequencial

Caso esteja utilizando uma Blackmagic MultiDock 10G ou similar para conectar mais de um drive através da conexão USB "Ext Disk", ativar o recurso "USB Sequencial" garantirá que a gravação passe de um disco externo para o próximo.

Formatar Mídia

Cartões SD e mídias conectadas à porta rotulada "Ext Disk" na parte traseira podem ser formatados diretamente no HyperDeck ou através de um computador Mac ou Windows.

Para preparar mídias no HyperDeck Shuttle HD:

- 1 Usando o seletor de busca e o botão "Set", selecione "Formatar Mídia".
- 2 Selecione a mídia a ser formatada na lista e pressione "Set".
- 3 Escolha o formato e pressione "Set".

- 4 Uma janela de confirmação será exibida, detalhando qual cartão será formatado e o formato selecionado. Selecione “Formatar”.
- 5 Uma vez concluída, uma janela de formatação será exibida. Selecione “Ok”.

O HFS+, também conhecido como macOS X Expandido, é o formato recomendado porque é compatível com “journaling”. Dados em mídias com “journaling” têm uma probabilidade maior de recuperação na rara eventualidade da sua mídia de armazenamento se corromper. O HFS+ é nativamente suportado pelo Mac. Já o exFAT é suportado nativamente pelo Mac e Windows sem a necessidade de adquirir um software adicional. No entanto, o formato exFAT não é compatível com “journaling”.

Para formatar mídias em um computador Mac ou Windows, consulte a seção “Formatar Mídias” neste manual.

Menu Configuração

Este menu oferece várias configurações, incluindo seleção de idioma e padrão principal, além de submenus para ajustar a exibição do menu, configurações de rede e código de tempo.

Configuração	
Nome	HyperDeck Shuttle HD
Idioma	Português
Data	16 Mai 2022
Hora	14:32
Fuso Horário	UTC±11:00
Software	8.1
Câmera	A
Padrão Principal	1080p30
Velocidade de Shuttle Máx.	x50

Nome

Quando mais de um HyperDeck Shuttle HD estiver na rede, é recomendável nomear os gravadores para ajudar a identificá-los. Isso pode ser feito através do Blackmagic HyperDeck Setup ou do Blackmagic HyperDeck Ethernet Protocol usando um aplicativo terminal. O nome será exibido no menu de configurações.

Idioma

O HyperDeck Shuttle HD suporta 13 idiomas, incluindo inglês, chinês, japonês, coreano, espanhol, alemão, francês, russo, italiano, português, turco, ucraniano e polonês.

Para selecionar o idioma:

- 1 Após destacar o menu “Configuração”, pressione “Set”.
- 2 Gire o seletor de busca para escolher “Idioma” e pressione “Set”.

- 3 Utilize o seletor para escolher o idioma e pressione "Set". Após a seleção, você retornará ao menu de configurações automaticamente.

Data

Para ajustar a data, selecione o campo "Data" e pressione "Set". Com o seletor de busca, você pode selecionar dia, mês e ano. Quando selecionado, este recurso registrará a data e hora nos nomes dos arquivos.

Hora

Para ajustar a hora, selecione "Hora" e pressione "Set". Use o seletor de busca para ajustar as horas e os minutos. O relógio interno do HyperDeck Shuttle HD utiliza o padrão 24 horas.

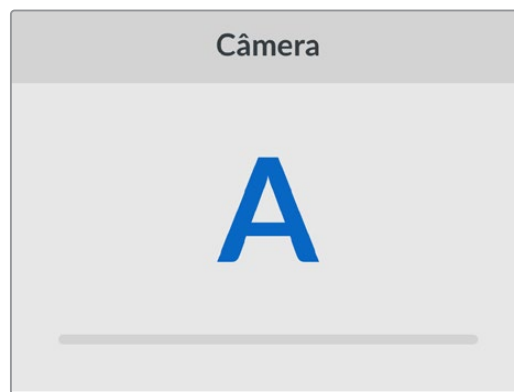
Software

Exibe a versão do software instalado.

Câmera

Esta configuração é útil ao usar o HyperDeck para gravar arquivos ISO de várias câmeras e, em seguida, editá-los em uma linha de tempo multicâmera no DaVinci Resolve.

Cada letra de identificação de câmera aparecerá nos metadados dos arquivos, permitindo que o DaVinci Resolve identifique cada ângulo facilmente ao usar o recurso de compartimento sincronizado.



Identifique sua câmera usando caracteres de A a Z; ou 1 a 9.

Padrão Principal

Em alguns casos, o HyperDeck Shuttle HD não consegue identificar qual é o padrão de vídeo que você deseja usar. Este recurso indicará ao HyperDeck qual é o padrão de vídeo que você mais usa.

Um bom exemplo é quando você habilita um HyperDeck Shuttle HD sem uma entrada de vídeo conectada e insere um disco com arquivos em dois padrões de vídeo diferentes. Qual padrão de vídeo o HyperDeck deve reproduzir? O recurso de padrão principal indicará o padrão de vídeo de sua preferência, alternará para esse formato e reproduzirá os arquivos.

O padrão principal também é útil quando você inicializa um HyperDeck Shuttle HD pela primeira vez e não há uma entrada de vídeo ou um disco de mídias inserido. Neste caso, o HyperDeck não consegue identificar qual padrão de vídeo usar para a saída de monitoramento. O padrão principal de vídeo indicará o que fazer.

Contudo, o recurso do padrão de vídeo principal é apenas um guia. Ele não substituirá nada. Por isso, se você tiver um disco de mídia com somente um tipo de arquivo de vídeo e acionar a reprodução, o gravador de disco HyperDeck alternará para esse padrão de vídeo e reproduzirá. O padrão principal de vídeo será ignorado, já que é óbvio que você deseja apenas reproduzir os arquivos do disco.

É uma situação semelhante com a gravação. Se você acionar a gravação, o HyperDeck simplesmente gravará qualquer padrão de vídeo que esteja conectado à entrada de vídeo. Depois que você concluir a gravação, o HyperDeck Shuttle HD reproduzirá os arquivos no mesmo padrão de vídeo do disco,

mesmo se existirem outros arquivos no disco que correspondam ao padrão principal. É presumido que você deseja reproduzir o mesmo padrão de vídeo que acabou de gravar. Se você desconectar o disco de mídia e plugá-lo novamente, somente então o padrão principal será utilizado para selecionar quais tipos de arquivo você deseja reproduzir.

O recurso de padrão principal é apenas um guia para ajudar o HyperDeck Shuttle HD a tomar decisões sobre o que fazer quando ele não tiver certeza. Ele não é uma substituição que força o deck a se comportar de uma maneira específica.

Velocidade de Shuttle Máx.

A velocidade de shuttle máxima do HyperDeck Shuttle HD é 50x. Caso queira reduzi-la, você pode selecionar uma das outras predefinições de velocidade.

Menu

Use as configurações de Menu para ajustar a posição e a aparência do menu na tela HDMI conectada.

Menu	
Aparência	Clara
Opacidade	100%
Posição	Inferior Esquerdo

Aparência

Você pode configurar o menu na tela do HyperDeck no modo “Aparência Clara” ou “Aparência Escura”. O modo “Aparência Clara” oferece mais contraste ao utilizar mídias mais escuras, assim como no modo teleprompter.

Menu	
Aparência	Clara
Opacidade	100%
Posição	Inferior Esquerdo

Menu	
Aparência	Escura
Opacidade	100%
Posição	Inferior Esquerdo

Opacidade

Ajuste os níveis para reduzir a opacidade da sobreposição do menu na tela conectada de 100% (nível padrão) para 20%.

Posição

Por padrão, o menu será sobreposto ao canto inferior esquerdo da tela. Para alterar a posição do menu, selecione “Posição” e pressione o botão “Set”. Agora você pode selecionar o canto superior esquerdo, superior direito, inferior esquerdo ou inferior direito da tela.

Rede

Rede	
Protocolo	IP Estático
Endereço IP	192.168.24.100
Sub-rede	255.255.255.0
Gateway	192.168.24.1

Protocolo

O Blackmagic HyperDeck vem configurado de fábrica como DHCP, portanto, uma vez conectado, o servidor de rede atribuirá um endereço IP automaticamente e nenhuma outra configuração de rede precisará ser ajustada. Caso precise definir um endereço manualmente, você pode conectar usando um IP estático.

Com “Protocolo” selecionado, pressione o botão “Set” para acessar o menu, navegue até “IP Estático” e pressione “Set”.

Endereço IP, Máscara de Sub-rede, Gateway, DNS Primário e DNS Secundário

Quando “IP Estático” estiver selecionado, você pode inserir as informações da sua rede manualmente.

Para alterar o endereço IP:

- 1 Use o seletor de busca para destacar “Endereço IP” e pressione o botão “Set” no painel frontal do HyperDeck.
- 2 Usando o seletor de busca, ajuste o seu endereço IP, pressionando “Set” para confirmar antes de ajustar o próximo valor.
- 3 Pressione “Set” para confirmar a alteração e passar para o próximo valor.

Após inserir seu endereço IP, você pode repetir esses passos para ajustar a Máscara de Sub-rede e o Gateway. Quando concluir, pressione o botão “Menu” para sair e retornar à tela inicial.

Timecode

Defina suas opções de entrada e saída de código de tempo. É possível gravar o código de tempo de origem, código de tempo da hora do dia ou definir seu código de tempo manualmente.

Timecode	
Entrada	Entrada de Vídeo
Descarte	Padrão
Predefinição	00:00:00:00
Saída	Linha de Tempo

Entrada

Há quatro opções de entrada de código de tempo disponíveis durante a gravação.

Entrada de Vídeo	A seleção da entrada de vídeo obterá o código de tempo embutido de fontes HDMI com metadados SMPTE RP 188. Isso manterá a sincronização entre sua fonte HDMI e o arquivo gravado no HyperDeck Shuttle HD.
Interno	Use esta opção para gravar timecode de hora do dia através do gerador de timecode integrado.
Regen. Último Clipe	Selecionando a opção “Regen. Último Clipe” para sua entrada de código de tempo, cada arquivo iniciará um quadro após o último quadro do clipe anterior. Por exemplo, se o primeiro clipe terminar em 10:28:30:10, o código de tempo do próximo clipe começará em 10:28:30:11.
Predefinição	Caso deseje definir um código de tempo manualmente, selecione a opção “Predefinição”. Os clipes gravados começarão no código de tempo definido através da configuração “Predefinição”, descrita abaixo.

Descarte

Para fontes NTSC com taxas de quadros de 29,97 ou 59,94, você pode selecionar entre “Descartar Quadros” e “Sem Descartar Quadros”. Caso a fonte seja desconhecida, selecione “Padrão”. Isso manterá o padrão da entrada ou gravará com descarte de quadros se não houver nenhum código de tempo válido.

Predefinição

Você pode definir seu código de tempo manualmente ao pressionar o botão “Set” e inserir o código de tempo de início usando o seletor de busca e o botão “Set”. Certifique-se de que a opção “Predefinição” esteja selecionada no menu “Entrada”.

Saída

Selecione as opções de código de tempo para as saídas.

Linha de Tempo	Para enviar um código de tempo contínuo a todos os clipes gravados em um cartão ou drive, selecione “Linha de Tempo”.
Clipe	Selecionar a opção “Clipe” enviará o código de tempo de cada clipe individual.

Configurações de Arquivo

Configurações de Arquivo	
Prefixo do Arquivo	HyperDeck
Sufixo com Timestamp	Não

Prefixo do Arquivo

Quando configurado pela primeira vez, o HyperDeck Shuttle HD gravará clipes no seu cartão SD ou disco flash USB usando a seguinte convenção de nome de arquivo:

HyperDeck_0001

HyperDeck_0001

Prefixo

HyperDeck_**0001**

Número do Clipe

Você pode alterar o prefixo do nome do arquivo através do utilitário HyperDeck Setup. Para mais informações, consulte a seção ‘Blackmagic HyperDeck Setup’ neste manual.

Sufixo com Timestamp

O carimbo de data/hora adicionado ao nome do arquivo é desativado por padrão. Caso queira registrar a data e a hora no nome do arquivo, habilite a opção “Sufixo com Timestamp”.

HyperDeck_2201061438_0001	
HyperDeck_2201061438_0001	Prefixo do Arquivo
HyperDeck_ 22 01061438_0001	Ano
HyperDeck_22 01 061438_0001	Mês
HyperDeck_2201 06 1438_0001	Dia
HyperDeck_220106 14 38_0001	Hora
HyperDeck_22010614 38 _0001	Minutos
HyperDeck_2201061438_ 0001	Número do Clipe

Remoto


Esta configuração permite que o HyperDeck seja controlado remotamente por outro equipamento de vídeo, como um switcher ATEM Mini Extreme.

Remoto	
Remoto	Não

Remoto

Selecione “Remoto” para habilitar o controle remoto via Ethernet. Basta desativar “Remoto” para controlar a unidade localmente.

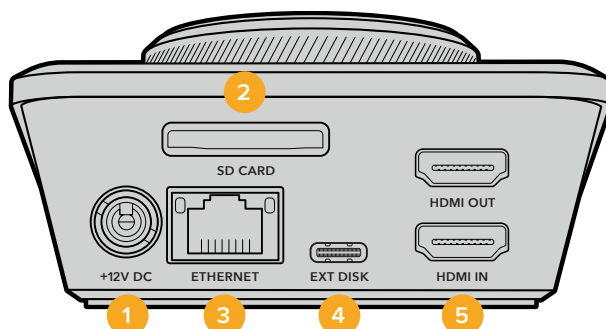
Redefinir

Redefinir	
Padrão de Fábrica	

Padrão de Fábrica

Destaque “Padrão de Fábrica” no menu de configurações para redefinir seu HyperDeck com as configurações de fábrica. Quando você pressionar “Set”, será solicitado que você confirme sua seleção.

Painel Traseiro



1 Alimentação

O HyperDeck Shuttle HD é alimentado através de um kit de alimentação AC. O cabo de alimentação fornecido possui um conector com trava para prevenir desconexões, mas você também pode usar qualquer cabo 12 V 36 W para alimentar o HyperDeck Shuttle HD.

2 Cartão SD

Insira cartões SD no compartimento para gravação e reprodução.

3 Ethernet

A conexão Ethernet permite que você se conecte à sua rede para transferências FTP rápidas ou para controlar a unidade remotamente através do HyperDeck Ethernet Protocol. Para mais detalhes sobre a transferência de arquivos através de um cliente de FTP, consulte a seção “Transferir Arquivos via Rede” mais adiante neste manual.

Quando conectado à mesma rede compartilhada com um switcher ATEM, você também pode controlar seu HyperDeck usando o switcher ATEM ou um painel ATEM físico.

4 Disco Externo

Conecte um disco flash no conector USB-C para gravar em unidades externas a até 5 Gb/s. Você também pode utilizar hubs USB-C multiporta ou uma Blackmagic MultiDock 10G para conectar um ou vários SSDs.

5 HDMI

Conecte a saída HDMI a televisores, monitores ou até mesmo um switcher HDMI, como o ATEM Mini Extreme. A saída HDMI também é usada para visualizar a sobreposição de menu.

Mídias de Armazenamento

Cartão SD

Para gravações HD de alta qualidade, recomendamos cartões SD UHS-I de alta velocidade. Esses cartões precisam ser capazes de obter velocidades de gravação acima de 220 MB/s para gravações de até Ultra HD 2160p60.

No entanto, caso esteja gravando a uma taxa de bits mais baixa com compactação mais elevada, você deve conseguir usar cartões mais lentos. Geralmente, quanto mais rápidos forem os cartões, melhores eles serão.

É recomendável verificar regularmente a última versão deste manual, que pode ser baixado a qualquer momento no site da Blackmagic Design em www.blackmagicdesign.com/br/support

Quais cartões SD devo usar com o HyperDeck Shuttle HD?

Os seguintes cartões SD são recomendados para 1080p a até 60 fps:

Marca	Modelo	Capacidade
Angelbird	AV PRO SD UHS-II 300MB/s V90 SDXC	256GB
Angelbird	AV PRO SD UHS-II 260MB/s V60 SDXC	128GB
Angelbird	AV PRO SD UHS-II 260MB/s V60 SDXC	64GB
SanDisk	Extreme Pro UHS-I 95MB/s SDXC	64GB
Wise	SD2-64U3 UHS-II 285MB/s SDXC	64GB
Lexar	Professional 1000x UHS-II 150MB/s SDXC	128GB
SONY	Tough SF-G128T	128GB
Kingston	CANVAS GO! Plus 170MB/s V30	64GB
Kingston	CANVAS GO! Plus 170MB/s V30	128GB
Kingston	CANVAS GO! Plus 170MB/s V30	512GB
ProGrade Digital	SDXC UHS-II V90 300R	64GB
ProGrade Digital	SDXC UHS-II V90 300R	128GB
SONY	Tough SF-G64T UHS-II SDXC	64GB
Delkin Devices	Black UHS-II V90 SDXC	256GB
Delkin Devices	Power UHS-II V90 SDXC	128GB
Delkin Devices	Power UHS-II V90 SDXC	256GB
Delkin Devices	Black UHS-II V90 SDXC	128GB
Exascend	Essential SDXC UHS-II V90 R 300MB/s	64GB
Exascend	Essential SDXC UHS-II V90 R 300MB/s	128GB
Exascend	Catalyst SDXC UHS-II V90 R 300MB/s	64GB

Discos Externos

Todos os modelos HyperDeck podem gravar diretamente em unidades flash USB-C. Essas unidades rápidas e de capacidade superior possibilitam a gravação de vídeos por períodos prolongados. Depois, você pode conectar a unidade flash ao seu computador e editar diretamente dela.

Para capacidades de armazenamento ainda mais elevadas, você pode conectar uma doca ou um disco rígido externo USB-C. Para conectar sua Blackmagic MultiDock 10G ou unidade flash USB-C, conecte um cabo do seu dispositivo USB-C à porta “EXT DISK” na parte traseira do HyperDeck.

Quais drives USB-C devo utilizar com o HyperDeck Shuttle HD?

Os seguintes drives USB-C são recomendados para 1080p ProRes HQ a até 60 fps:

Marca	Modelo	Capacidade
Wise	PTS-256 Portable SSD 4K	256GB
OWC	Envoy Pro Ex	240GB
BUFFALO	SSD-PHE500U3-BA	500GB

Os seguintes drives USB-C são recomendados para 1080p DNxHR HQX a até 60 fps:

Marca	Modelo	Capacidade
OWC	Envoy Pro Ex	240GB

Os seguintes drives USB-C são recomendados para 1080p H.264 a até 60 fps:

Marca	Modelo	Capacidade
OWC	Envoy Pro Ex	240GB

Formatar Mídias

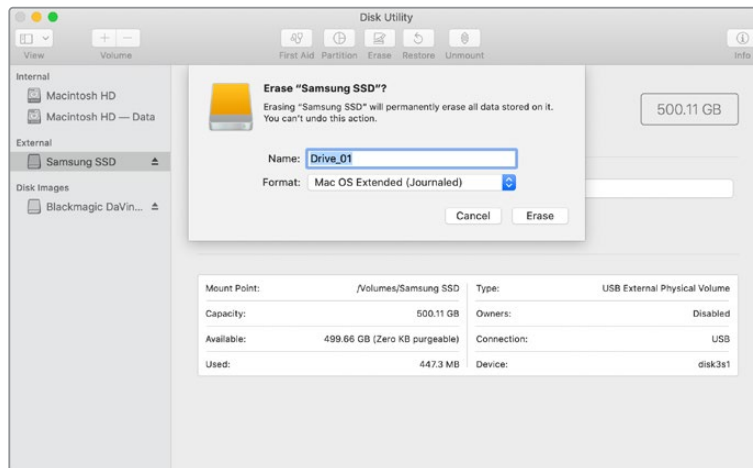
Preparar mídias em um computador

Formatar mídias em um computador Mac

O Utilitário de Disco incluído no Mac pode formatar um drive nos formatos HFS+ ou exFAT.

Lembre-se de fazer o backup de gravações importantes do seu disco, pois todos os dados serão perdidos após a formatação.

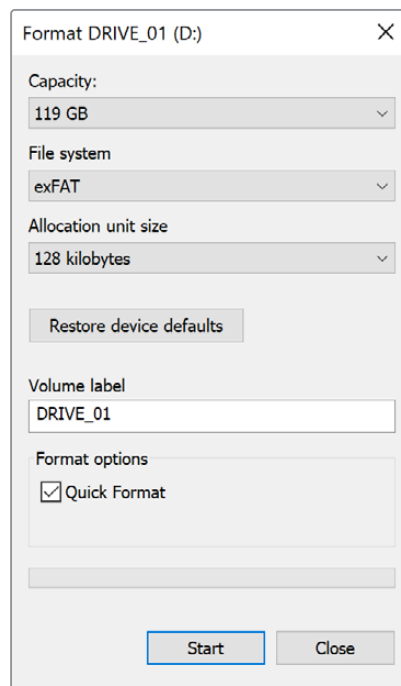
- 1 Conecte um disco flash USB ao seu computador através de uma doca externa ou adaptador de cabo e ignore qualquer mensagem relativa à utilização do SSD para backups com Time Machine. Para cartões SD, faça a conexão com o seu computador usando um leitor externo.
- 2 Vá até “Aplicativos/Utilitários” e inicie “Utilitário de Disco”.
- 3 Clique no ícone de disco do seu cartão SD ou disco flash USB e, em seguida, clique na aba “Apagar”.
- 4 Defina o formato como “macOS Expandido (Journaling)” ou “exFAT”.
- 5 Digite um nome para o novo volume e clique em “Apagar”. A sua mídia será formatada rapidamente e disponibilizada para uso com o HyperDeck.



Formatar mídias em um computador Windows

A caixa de diálogo “Formatar” permite formatar um drive no formato exFAT em um computador Windows. Lembre-se de fazer o backup de gravações importantes do seu SSD ou cartão SD, pois todos os dados serão perdidos após a formatação.

- 1 Conecte um disco flash USB ao seu computador com uma doca externa ou cabo adaptador. Para cartões SD, faça a conexão com o seu computador usando um leitor externo.
- 2 Abra o menu “Iniciar” ou a “Tela Inicial” e selecione “Computador”. Clique com o botão direito do mouse no seu disco flash USB ou cartão SD.
- 3 No menu contextual, selecione “Formatar”.
- 4 Defina o sistema de arquivo como “exFAT” e o tamanho da unidade de alocação para 128 kilobytes.
- 5 Digite um rótulo de volume, selecione “Formatação Rápida” e clique em “Iniciar”.
- 6 A sua mídia será formatada rapidamente e disponibilizada para uso com o HyperDeck.



Usar a Função Teleprompter

Com um arquivo RTF padrão, você pode usar o Blackmagic HyperDeck Shuttle HD como um teleprompter. Crie seu arquivo no Editor de Texto ou WordPad e salve como um arquivo .rtf em qualquer um dos 13 idiomas suportados. Uma vez aberto com o HyperDeck Shuttle HD, você pode ajustar o tamanho da fonte e o espaçamento entre linhas do seu texto.

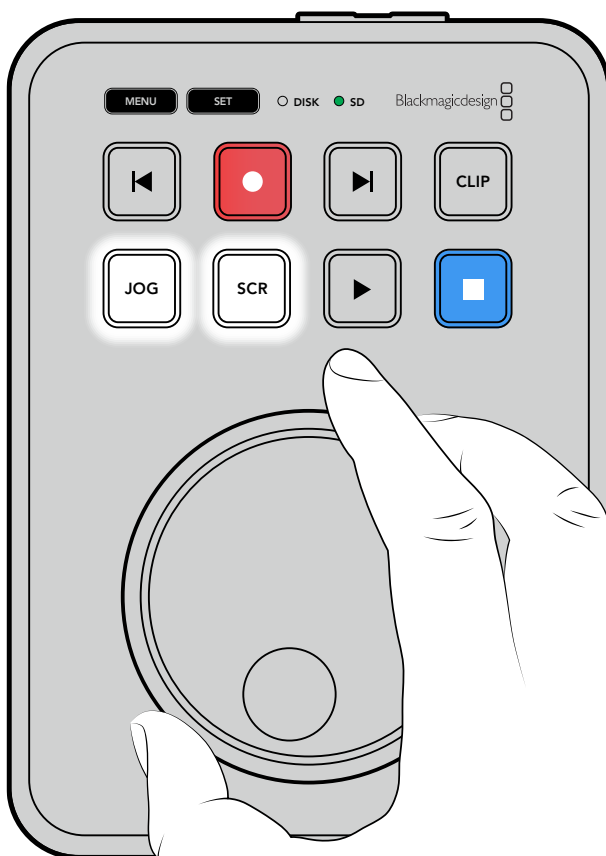
Para usar o teleprompter:

- 1 Conecte a saída HDMI do HyperDeck Shuttle HD à tela HDMI que deseja utilizar.
- 2 Insira um cartão SD ou conecte um disco flash USB externo contendo o seu texto.
- 3 No menu “Gravação”, selecione a opção “Codec”. Navegue até a configuração “Teleprompter” e pressione “Set”.

O texto aparecerá na sua tela. Agora, você pode iniciar a reprodução automaticamente usando o botão “Play” ou, para controle adicional, utilizando o seletor.

Controlar a velocidade de reprodução do teleprompter

O seletor do HyperDeck Shuttle HD pode ser usado para controlar a reprodução no modo teleprompter da mesma maneira que na reprodução de mídias. Após carregar o texto, pressione os botões “Jog” e “Scr” ao mesmo tempo para habilitar a reprodução de velocidade variável. Em seguida, gire o seletor. A rolagem do texto acompanhará a velocidade do movimento do seletor. Ou seja, quanto mais rápido você girar o seletor, mais rápido o texto se movimentará.



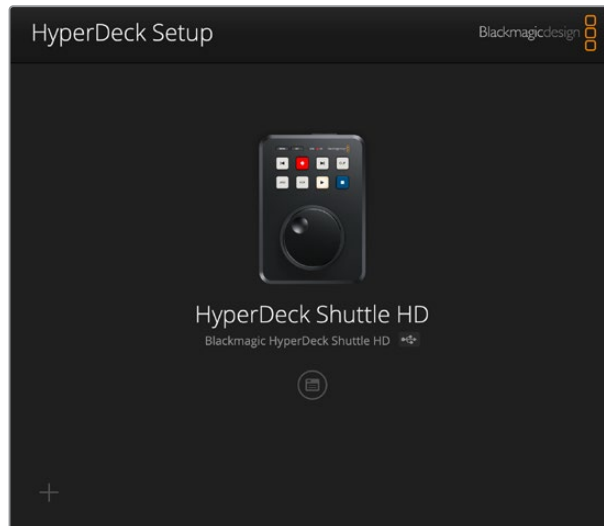
Para velocidades constantes, você pode usar os botões “Jog” e “Scroll” individualmente. No modo jog, girar o seletor movimentará o texto em uma velocidade lenta constante. No modo scroll, a velocidade será mais alta.

Para navegar pelos arquivos .rtf no seu cartão SD ou disco externo, pressione os botões de avanço e retrocesso.

O teleprompter reconhecerá o tamanho, cor e se o texto está em negrito. Além disso, no menu “Monitoramento”, você pode ajustar o tamanho da fonte, espaçamento entre linhas, margens ou inverter a exibição horizontal ou verticalmente quando estiver projetando a tela em vidros divisores de feixe. Para mais informações, consulte a seção “Menu” acima.

Blackmagic HyperDeck Setup

O Blackmagic HyperDeck Setup é um utilitário de software para ajustar configurações e atualizar o software interno no seu HyperDeck.

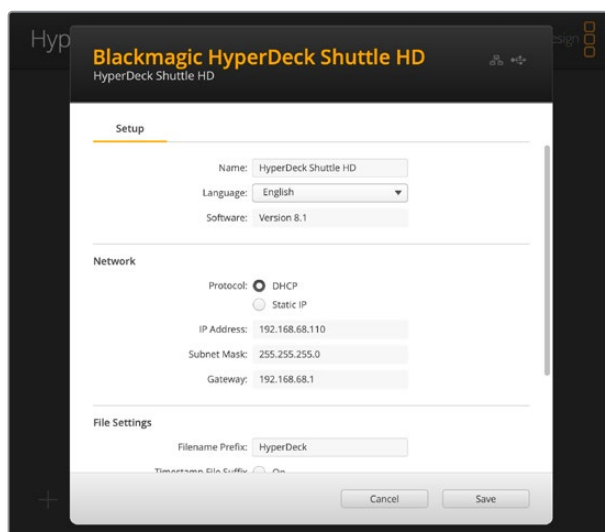


Para instalar o programa:

- 1 Baixe o instalador do Blackmagic HyperDeck Setup mais recente em www.blackmagicdesign.com/br/support.
- 2 Execute o instalador do Blackmagic HyperDeck Setup e siga as instruções na tela.
- 3 Após a instalação, conecte o seu HyperDeck Shuttle HD ao computador via o conector USB ou Ethernet no painel traseiro.
- 4 Inicie o Blackmagic HyperDeck Setup e siga as orientações na tela para atualizar o programa interno. Caso nenhuma instrução apareça, o software interno está atualizado e não há nada mais que você precise fazer.

Clique na imagem do HyperDeck ou no ícone de configuração para abrir o menu de configurações.

A tela inicial mostrará o seu HyperDeck Shuttle HD e o nome da unidade. Este nome é útil para identificar a unidade quando mais de um HyperDeck estiver conectado ao seu computador e pode ser definido utilizando o menu de configurações do utilitário.



Network

Network

Protocol: DHCP
 Static IP

IP Address: 192.168.68.110

Subnet Mask: 255.255.255.0

Gateway: 192.168.68.1

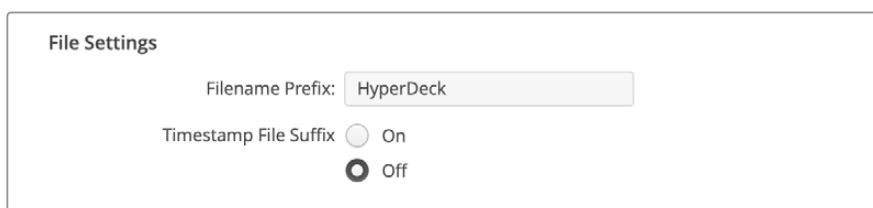
Protocol

Para controlar o HyperDeck Shuttle HD com switchers ATEM ou controlá-lo remotamente através do HyperDeck Ethernet Protocol, o HyperDeck Studio precisa estar na mesma rede que o outro equipamento usando DHCP ou adicionando um endereço IP fixo manualmente.

DHCP	Os gravadores de disco HyperDeck Shuttle HD vêm de fábrica configurados como DHCP. O protocolo dinâmico de configuração do host, ou DHCP, é um serviço em servidores de rede que encontra automaticamente o gravador de disco HyperDeck e atribui um endereço IP. O DHCP é um ótimo recurso que facilita a conexão de equipamentos via Ethernet e garante que seus endereços IP não entrem em conflito entre si. A maioria dos computadores e switchers de rede suporta DHCP.
Static IP	Quando “Static IP” estiver selecionado, você pode inserir as informações da sua rede manualmente. Ao definir endereços IP manualmente para que todas as unidades possam se comunicar, elas devem compartilhar as mesmas configurações de máscara de sub-rede e gateway. Além disso, os três primeiros campos de números no endereço IP do painel também precisam corresponder.

Se existirem mais dispositivos na rede com o mesmo número de identificação nos seus endereços IP, haverá um conflito e as unidades não se conectarão. Caso haja um conflito, basta alterar o número de identificação no endereço IP da unidade.

File Settings



File Settings

Filename Prefix:

Timestamp File Suffix On Off

Quando configurado pela primeira vez, o HyperDeck Shuttle HD gravará clipes no seu cartão SD ou disco flash USB usando o prefixo “HyperDeck”. Digite um novo nome de arquivo para alterar o prefixo.

O carimbo de data/hora adicionado ao nome do arquivo é desativado por padrão. Caso queira registrar a data e a hora no nome do arquivo, selecione “On”. As configurações de prefixo e timestamp para o nome de arquivo também estão disponíveis através do menu na tela do HyperDeck Shuttle HD.

Transferir Arquivos via Rede

O gravador de disco HyperDeck suporta transferência de arquivos via protocolo de transferência de arquivos, ou FTP. Este recurso poderoso permite que você copie arquivos diretamente do seu computador para o seu HyperDeck através de uma rede com as velocidades rápidas que uma rede local pode oferecer. Por exemplo, você pode copiar novos arquivos para uma unidade HyperDeck remota baseada em outro local para sinalização digital.

Conectar ao HyperDeck Shuttle HD

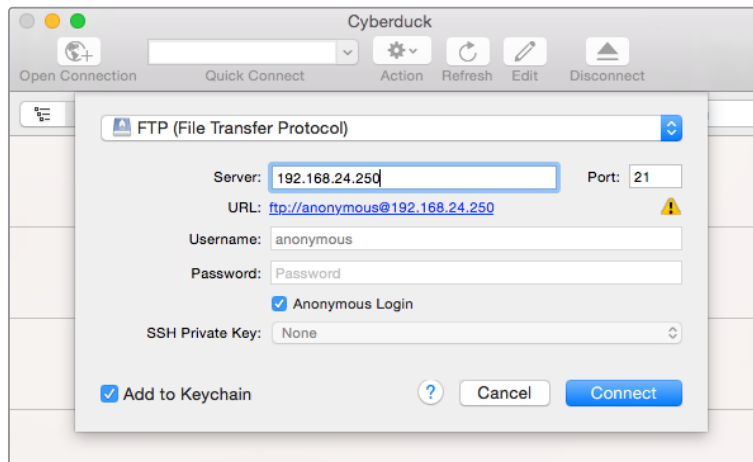
Com o computador e o HyperDeck Shuttle HD na mesma rede, você só precisará de um cliente FTP e do endereço IP do seu HyperDeck Shuttle HD.

- 1 Baixe e instale um cliente FTP no computador ao qual você quer conectar o HyperDeck. Recomendamos o Cyberduck, FileZilla ou Transmit, mas a maioria dos aplicativos FTP funcionará. O download do Cyberduck e do FileZilla é gratuito.
- 2 Conecte o HyperDeck Shuttle HD à sua rede utilizando um cabo Ethernet e anote o endereço IP. Para acessar o endereço IP, pressione o botão “Menu” e gire o seletor de busca para acessar a tela “Rede”. O endereço IP do HyperDeck aparecerá na parte inferior dessa tela.

Rede	
Protocolo	IP Estático
Endereço IP	192.168.24.100
Sub-rede	255.255.255.0
Gateway	192.168.24.1

O endereço IP do seu HyperDeck Shuttle HD pode ser encontrado na seção “Rede” do menu de configurações. s

- 3 Insira o endereço IP do HyperDeck na caixa de diálogo de conexão do aplicativo TCP. O nome e a posição da caixa podem variar dependendo do aplicativo, mas normalmente é denominada como “Server” ou “Host”. Se o programa FTP possuir a caixa de seleção “Anonymous Login”, marque esta opção.



Não é preciso digitar um nome de usuário ou senha para se conectar ao HyperDeck Shuttle HD. Basta digitar o endereço IP do gravador de disco no campo "Server" ou "Host" do aplicativo FTP e marcar a caixa de seleção "Anonymous Login", se existente.

Transferir Arquivos

Após se conectar ao HyperDeck, você pode transferir arquivos da mesma maneira que em um programa FTP. A maioria dos aplicativos oferece uma interface de arrastar e soltar, no entanto, verifique o método mais adequado para o aplicativo que você estiver usando.

É possível transferir qualquer arquivo para o HyperDeck ou a partir dele, mas vale a pena ressaltar que qualquer arquivo que você pretenda reproduzir a partir do HyperDeck Shuttle HD precisará ser compatível com os codecs e as resoluções que o seu HyperDeck suporta.

DICA Você pode transferir arquivos através de uma rede enquanto o HyperDeck estiver gravando. O HyperDeck ajustará automaticamente a velocidade de transferência para garantir que a gravação não seja afetada.

Developer Information

Blackmagic HyperDeck Ethernet Protocol

The Blackmagic HyperDeck Ethernet Protocol is a text based protocol accessed by connecting to TCP port 9993 on HyperDeck models that have a built in Ethernet connection. If you are a software developer, you can use the protocol to construct devices that integrate with our products. Here at Blackmagic Design our approach is to open up our protocols and we eagerly look forward to seeing what you come up with!

Protocol Commands

Command	Command Description
help or ?	Provides help text on all commands and parameters
commands	return commands in XML format
device info	return device information
disk list	query clip list on active disk
disk list: slot id: {n}	query clip list on disk in slot {n}
quit	disconnect ethernet control
ping	check device is responding
preview: enable: {true/false}	switch to preview or output
play	play from current timecode
play: speed: {-5000 to 5000}	play at specific speed
play: loop: {true/false}	play in loops or stop-at-end
play: single clip: {true/false}	play current clip or all clips
playrange	query playrange setting
playrange set: clip id: {n}	set play range to play clip {n} only
playrange set: clip id: {n} count: {m}	set play range to {m} clips starting from clip {n}
playrange set: in: {inT} out: {outT}	set play range to play between: - timecode {inT} and timecode {outT}
playrange set: timeline in: {in} timeline out: {out}	set play range in units of frames between: - timeline position {in} and position {out} clear/reset play range setting
playrange clear	clear/reset play range setting
play on startup	query unit play on startup state
play on startup: enable: {true/false}	enable or disable play on startup
play on startup: single clip: {true/false}	play single clip or all clips on startup
play option	query play options
play option: stop mode: {lastframe/nextframe/black}	set output frame when playback stops
record	record from current input
record: name: {name}	record named clip

Command	Command Description
record spill	spill current recording to next slot
record: spill: slot id: {n}	spill current recording to specified slot use current id to spill to same slot
stop	stop playback or recording
clips count	query number of clips on timeline
clips get	query all timeline clips
clips get: clip id: {n}	query a timeline clip info
clips get: clip id: {n} count: {m}	query m clips starting from n
clips get: version: {1/2}	query clip info using specified output version: version 1: id: name startT duration version 2: id: startT duration inT outT name
clips add: name: {name}	append a clip to timeline
clips add: clip id: {n} name: {name}	insert clip before existing clip {n}
clips add: in: {inT} out: {outT} name: {name}	append the {inT} to {outT} portion of clip
clips remove: clip id: {n}	remove clip {n} from the timeline (invalidates clip ids following clip {n})
clips clear	empty timeline clip list
transport info	query current activity
slot info	query active slot
slot info: slot id: {n}	query slot {n}
slot select: slot id: {n}	switch to specified slot
slot select: video format: {format}	load clips of specified format
slot unblock	unblock active slot
slot unblock: slot id: {n}	unblock slot {n}
cache info	query cache status
dynamic range	query dynamic range settings
dynamic range: playback override: {off/Rec709/Rec2020_SDR/HLG/ ST2084_300/ST2084_500/ ST2084_800/ST2084_1000/ ST2084_2000/ST2084_4000/ST2084}	set playback dynamic range override
dynamic range: record override: {off/Rec709/Rec2020_SDR/HLG/ ST2084_300/ST2084_500/ ST2084_800/ST2084_1000/ ST2084_2000/ST2084_4000/ST2048}	set record dynamic range override
notify	query notification status
notify: remote: {true/false}	set remote notifications
notify: transport: {true/false}	set transport notifications
notify: slot: {true/false}	set slot notifications
notify: configuration: {true/false}	set configuration notifications

Command	Command Description
notify: dropped frames: {true/false}	set dropped frames notifications
notify: display timecode: {true/false}	set display timecode notifications
notify: timeline position: {true/false}	set playback timeline position notifications
notify: playrange: {true/false}	set playrange notifications
notify: cache: {true/false}	set cache notifications
notify: dynamic range: {true/false}	set dynamic range settings notifications
notify: slate: {true/false}	set digital slate notifications
notify: clips: {true/false}	set timeline clips notifications where two types of changes can occur: add: partial update with list of clips and insert positions snapshot: complete update of all clips on timeline
notify: disk: {true/false}	set disk clips notifications where two types of changes can occur: add: partial update with list of clips and insert positions snapshot: complete update of all clips on timeline
goto: clip id: {start/end}	goto first clip or last clip
goto: clip id: {n}	goto clip id {n}
goto: clip id: +{n}	go forward {n} clips
goto: clip id: -{n}	go backward {n} clips
goto: clip: {n}	goto frame position {n} within current clip
goto: clip: +{n}	go forward {n} frames within current clip
goto: clip: -{n}	go backward {n} frames within current clip
goto: clip: {start/end}	goto start or end of clip
goto: timeline: {n}	goto frame position {n} within timeline
goto: timeline: +{n}	o forward {n} frames within timeline
goto: timeline: -{n}	go backward {n} frames within timeline
goto: timeline: {start/end}	goto start or end of timeline
goto: timecode: {timecode}	goto specified timecode
goto: timecode: +{timecode}	go forward {timecode} duration
goto: timecode: -{timecode}	go backward {timecode} duration
goto: slot id: {n}	goto slot id {n}
jog: timecode: {timecode}	jog to timecode
jog: timecode: +{timecode}	jog forward {timecode} duration
jog: timecode: -{timecode}	jog backward {timecode} duration
shuttle: speed: {-5000 to 5000}	shuttle with speed
remote	query unit remote control state
remote: enable: {true/false}	enable or disable remote control
remote: override: {true/false}	session override remote control
configuration	query configuration settings
configuration: video input: SDI	switch to SDI input

Command	Command Description
configuration: video input: HDMI	switch to HDMI input
configuration: video input: component	switch to component input
configuration: audio input: embedded	capture embedded audio
configuration: audio input: XLR	capture XLR audio
configuration: audio input: RCA	capture RCA audio
configuration: file format: {format}	switch to specific file format
configuration: audio codec: PCM	switch to PCM audio
configuration: audio codec: AAC	switch to AAC audio
configuration: timecode input: {external/embedded/internal/preset/clip}	change the timecode input
configuration: timecode output: {clip/timeline}	change the timecode output
configuration: timecode preference: {default/dropframe/nondropframe}	whether or not to use drop frame timecodes when not otherwise specified
configuration: timecode preset: {timecode}	set the timecode preset
configuration: audio input channels: {n}	set the number of audio channels recorded to {n}
configuration: record trigger: {none/recorderbit/timecoderun}	change the record trigger
configuration: record prefix: {name}	set the record prefix name (supports UTF-8 name)
configuration: append timestamp: {true/false}	append timestamp to recorded filename
configuration: xlr input id: {n} xlr type: {line/mic}	configure xlr input type multiple xlr inputs can be configured in a single command
configuration: genlock input resync: {true/false}	enable or disable genlock input resync
uptime	return time since last boot
format: slot id: {n} prepare: {exFAT/HFS+} name: {name}	prepare a disk formatting operation to filesystem {format}
format: confirm: {token}	perform a pre-prepared formatting operation using token
identify: enable: {true/false}	identify the device
watchdog: period: {period in seconds}	client connection timeout
reboot	reboot device
slate clips	slate clips information
slate project	slate project information
slate lens	slate lens information

Multiline commands:	Command Description
slate clips↵	set slate clips information:
reel: {n}	slate reel number, where {n} is in [1, 999]
scene id: {id}	slate scene id value, where {id} is a string
shot type: {WS/MS/BCU/MCU/ECU/none}	slate shot type
take: {n}	slate take number, where {n} is in [1, 99]
take scenario: {PU/VFX/SER/none}	slate take scenario
take auto inc: {true/false}	slate take auto increment
good take: {true/false}	slate good take
environment: {interior/exterior}	slate environment
day night: {day/night}	slate day or night
slate project:↵	set slate project information:
project name: {name}	project name (can be empty, supports UTF-8)
camera: {index}	set camera index e.g. A
director: {name}	director (can be empty, supports UTF-8)
camera operator: {name}	camera operator (can be empty, supports UTF-8)
slate lens:↵	set lens information:
lens type: {type}	lens type (can be empty, supports UTF-8)
iris: {type}	camera iris (can be empty, supports UTF-8)
focal length: {length}	focal length (can be empty, supports UTF-8)
distance: {distance}	lens distance (can be empty, supports UTF-8)
filter: {filter}	lens filter (can be empty, supports UTF-8)

Command Combinations

You can combine the parameters into a single command, for example:

```
play: speed: 200 loop: true single clip: true
```

Or for configuration:

```
configuration: video input: SDI audio input: XLR
```

Or to switch to the second disk, but only play NTSC clips:

```
slot select: slot id: 2 video format: NTSC
```

Protocol Details

Connection

The HyperDeck Ethernet server listens on TCP port 9993.

Basic syntax

The HyperDeck protocol is a line oriented text protocol. Lines from the server will be separated by an ascii CR LF sequence. Messages from the client may be separated by LF or CR LF.

New lines are represented in this document as a "↵" symbol.

Single line command syntax

Command parameters are usually optional. A command with no parameters is terminated with a new line:

```
{Command name}↵
```

If parameters are specified, the command name is followed by a colon, then pairs of parameter names and values. Each parameter name is terminated with a colon character:

```
{Command name}: {Parameter}: {Value} {Parameter}: {Value} ...↵
```

Multiline command syntax

The HyperDeck protocol also supports an equivalent multiline syntax where each parameter-value pair is entered on a new line. E.g.

```
{Command name}:↵  
{Parameter}: {Value}↵  
{Parameter}: {Value}↵  
↵
```

Response syntax

Simple responses from the server consist of a three digit response code and descriptive text terminated by a new line:

```
{Response code} {Response text}↵
```

If a response carries parameters, the response text is terminated with a colon, and parameter name and value pairs follow on subsequent lines until a blank line is returned:

```
{Response code} {Response text}:↵  
{Parameter}: {Value}↵  
{Parameter}: {Value}↵  
...  
↵
```

Successful response codes

A simple acknowledgement of a command is indicated with a response code of 200:

```
200 ok↵
```

Other successful responses carry parameters and are indicated with response codes in the range of 201 to 299.

Failure response codes

Failure responses to commands are indicated with response codes in the range of 100 to 199:

```
100 syntax error
101 unsupported parameter
102 invalid value
103 unsupported
104 disk full
105 no disk
106 disk error
107 timeline empty
108 internal error
109 out of range
110 no input
111 remote control disabled
112 clip not found
120 connection rejected
150 invalid state
151 invalid codec
160 invalid format
161 invalid token
162 format not prepared
163 parameterized single line command not supported
```

Asynchronous response codes

The server may return asynchronous messages at any time. These responses are indicated with response codes in the range of 500 to 599:

```
5xx {Response Text}:↵
{Parameter}: {Value}↵
{Parameter}: {Value}↵
↵
```

Connection response

On connection, an asynchronous message will be delivered:

```
500 connection info:↵
protocol version: {Version}↵
model: {Model Name}↵
↵
```

Timecode syntax

Timecodes are expressed as non-drop-frame timecode in the format:

```
HH:MM:SS:FF
```

Handling of deck "remote" state

The "remote" command may be used to enable or disable the remote control of the deck. Any attempt to change the deck state over ethernet while remote access is disabled will generate an error:

```
111 remote control disabled↵
```

To enable or disable remote control:

```
remote: enable: {"true", "false"} ↵
```

The current remote control state may be overridden allowing remote access over ethernet irrespective of the current remote control state:

```
remote: override: {"true", "false"} ↵
```

The override state is only valid for the currently connected ethernet client and only while the connection remains open.

The "remote" command may be used to query the remote control state of the deck by specifying no parameters:

```
remote↵
```

The deck will return the current remote control state:

```
210 remote info:↵  
enabled: {"true", "false"}↵  
override: {"true", "false"}↵  
↵
```

Asynchronous remote control information change notification is disabled by default and may be configured with the "notify" command. When enabled, changes in remote state will generate a "510 remote info:" asynchronous message with the same parameters as the "210 remote info:" message.

Closing connection

The "quit" command instructs the server to cleanly shut down the connection:

```
quit↵
```

Checking connection status

The "ping" command has no function other than to determine if the server is responding:

```
ping↵
```

Getting help

The "help" or "?" commands return human readable help text describing all available commands and parameters:

```
help↵
```

Or:

```
?↵
```

The server will respond with a list of all supported commands:

```
201 help:↵  
{Help Text}↵  
{Help Text}↵  
↵
```

Switching to preview mode

The "preview" command instructs the deck to switch between preview mode and output mode:

```
preview: enable: {"true", "false"}↵
```

Playback will be stopped when the deck is switched to preview mode. Capturing will be stopped when the deck is switched to output mode.

Controlling device playback

The "play" command instructs the deck to start playing:

```
play↵
```

The play command accepts a number of parameters which may be used together in most combinations.

By default, the deck will play all remaining clips on the timeline then stop.

The "single clip" parameter may be used to override this behavior:

```
play: single clip: {"true", "false"}↵
```

By default, the deck will play at normal (100%) speed. An alternate speed may be specified in percentage between -5000 to 5000:

```
play: speed: {% normal speed}↵
```

By default, the deck will stop playing when it reaches to the end of the timeline. The "loop" parameter may be used to override this behavior:

```
play: loop: {"true", "false"}↵
```

The "playrange" command instructs the deck to play all the clips. To override this behavior: and select a particular clip:

```
playrange set: clip id: {Clip ID}↵
```

To only play a certain timecode range:

```
playrange set: in: {in timecode} out: {out timecode}↵
```

To clear a set playrange and return to the default value:

```
playrange clear↵
```

The "play on startup" command instructs the deck on what action to take on startup. By default, the deck will not play. Use the "enable" command to start playback after each power up.

```
play on startup: enable {"true", "false"}↵
```

By default, the unit will play back all clips on startup. Use the "single clip" command to override.

```
play on startup: single clip: {"true", "false"}↵
```

Stopping deck operation

The "stop" command instructs the deck to stop the current playback or capture:

```
stop↵
```

Changing timeline position

The "goto" command instructs the deck to switch to playback mode and change its position within the timeline.

To go to the start of a specific clip:

```
goto: clip id: {Clip ID}↵
```

To move forward/back {count} clips from the current clip on the current timeline:

```
goto: clip id: +/-{count}↵
```

Note that if the resultant clip id goes beyond the first or last clip on timeline, it will be clamp at the first or last clip.

To go to the start or end of the current clip:

```
goto: clip: {"start", "end"}↵
```

To go to the start of the first clip or the end of the last clip:

```
goto: timeline: {"start", "end"}↵
```

To go to a specified timecode:

```
goto: timecode: {timecode}↵
```

To move forward or back a specified duration in timecode:

```
goto: timecode: {"+", "-"}{duration in timecode}↵
```

To specify between slot 1 and slot 2:

```
goto: slot id: {Slot ID}↵
```

Note that only one parameter/value pair is allowed for each goto command.

Enumerating supported commands and parameters

The "commands" command returns the supported commands:

```
commands↵
```

The command list is returned in a computer readable XML format:

```
212 commands:  
<commands>↵  
  <command name="..."><parameter name="..."/>...</command>↵  
  <command name="..."><parameter name="..."/>...</command>↵  
  ...  
</commands>↵  
↵
```

Controlling asynchronous notifications

The "notify" command may be used to enable or disable asynchronous notifications from the server.

To enable or disable transport notifications:

```
notify: transport: {"true", "false"}↵
```

To enable or disable slot notifications:

```
notify: slot: {"true", "false"}↵
```

To enable or disable remote notifications:

```
notify: remote: {"true", "false"}↵
```

To enable or disable configuration notifications:

```
notify: configuration: {"true", "false"}↵
```

Multiple parameters may be specified. If no parameters are specified, the server returns the current state of all notifications:

```
209 notify:↵
transport: {"true", "false"}↵
slot: {"true", "false"}↵
remote: {"true", "false"}↵
configuration: {"true", "false"}↵
dropped frames: {"true", "false"}↵
display timecode: {"true", "false"}↵
timeline position: {"true", "false"}↵
playrange: {"true", "false"}↵
cache: {"true", "false"}↵
dynamic range: {"true", "false"}↵
slate: {"true", "false"}↵
clips: {"true", "false"}↵
disk: {"true", "false"}↵
↵
```

Retrieving device information

The "device info" command returns information about the connected deck device:

```
device info↵
```

The server will respond with:

```
204 device info:↵
protocol version: {Version}↵
model: {Model Name}↵
unique id: {unique alphanumeric identifier}↵
slot count: {number of storage slots}↵
software version: {software version}↵
↵
```


Retrieving slot information

The "slot info" command returns information about a slot. Without parameters, the command returns information for the currently selected slot:

```
slot info↵
```

If a slot id is specified, that slot will be queried:

```
slot info: slot id: {Slot ID}↵
```

The server will respond with slot specific information:

```
202 slot info:↵
slot id: {Slot ID}↵
status: {"empty", "mounting", "error", "mounted"}↵
volume name: {Volume name}↵
recording time: {recording time available in seconds}↵
video format: {disk's default video format}↵
blocked: {"true", "false"}↵
↵
```

Asynchronous slot information change notification is disabled by default and may be configured with the "notify" command. When enabled, changes in slot state will generate a "502 slot info:" asynchronous message with the same parameters as the "202 slot info:" message.

Retrieving clip information

The "disk list" command returns the information for each playable clip on a given disk. Without parameters, the command returns information for the current active disk:

```
disk list↵
```

If a slot id is specified, the disk in that slot will be queried:

```
disk list: slot id: {Slot ID}↵
```

The server responds with the list of all playable clips on the disk in the format of: Index, name, formats, and duration in timecode:

```
206 disk list:↵
slot id: {Slot ID}↵
{clip index}: {name} {file format} {video format} {Duration
timecode}↵
{clip index}: {name} {file format} {video format} {Duration
timecode}↵
...
↵
```

Note that the *clip index* starts from 1.

Retrieving clip count

The "clips count" command returns the number of clips on the current timeline:

```
clips count ↵
```

The server responds with the number of clips:

```
214 clips count: ↵
clip count: {Count}↵
```

Retrieving timeline information

The "clips get" command returns information for each available clip on the current timeline. Without parameters, the command returns information for all clips on timeline:

```
clips get↵
```

The server responds with a list of clip IDs, names and timecodes:

```
205 clips info:↵  
clip count: {Count}↵  
  
{Clip ID}: {Start timecode} {Duration timecode} {In timecode}  
{Out timecode} {Name}↵  
  
{Clip ID}: {Start timecode} {Duration timecode} {In timecode}  
{Out timecode} {Name}↵  
  
...  
↵
```

Retrieving transport information

The "transport info" command returns the state of the transport:

```
transport info ↵
```

The server responds with transport specific information:

```
208 transport info:  
  
status: {"preview", "stopped", "play", "forward", "rewind",  
"jog", "shuttle","record"}↵  
  
speed: {Play speed between -5000 and 5000 %}↵  
  
slot id: {Slot ID or "none"}↵  
  
clip id: {Clip ID or "none"}↵  
  
single clip: {"true", "false"}↵  
  
display timecode: {timecode}↵  
  
timecode: {timecode}↵  
  
video format: {Video format}↵  
  
loop: {"true", "false"}↵  
  
timeline: {n}↵  
  
input video format: {Video format}↵  
  
dynamic range: {"off", "Rec709", "Rec2020_SDR", "HLG",  
"ST2084_300", "ST2084_500", "ST2084_800", "ST2084_1000",  
"ST2084_2000", "ST2084_4000", "ST2048" or "none"}↵  
  
↵
```

The "timecode" value is the timecode within the current timeline for playback or the clip for record. The "display timecode" is the timecode displayed on the front of the deck. The two timecodes will differ in some deck modes.

Asynchronous transport information change notification is disabled by default and may be configured with the "notify" command. When enabled, changes in transport state will generate a "508 transport info:" asynchronous message with the same parameters as the "208 transport info:" message.

Video Formats

The following video formats are currently supported on HyperDeck Shuttle:

720p50, 720p5994, 720p60

1080p23976, 1080p24, 1080p25, 1080p2997, 1080p30, 1080p60

1080i50, 1080i5994, 1080i60

Video format support may vary between models and software releases.

File Formats

All HyperDeck models currently support the following file formats:

H.264High

H.264Medium

H.264Low

QuickTimeProResHQ

QuickTimeProRes

QuickTimeProResLT

QuickTimeProResProxy

QuickTimeDNxHD220x

DNxHD220x

QuickTimeDNxHD145

DNxHD145

QuickTimeDNxHD45

DNxHD45

Supported file formats may vary between models and software releases.

Querying and updating configuration information

The "configuration" command may be used to query the current configuration of the deck:

```
configuration↵
```

The server returns the configuration of the deck:

```
211 configuration:↵
audio input: {"embedded", "XLR", "RCA"}↵
audio mapping: {n}↵
video input: {"SDI", "HDMI", "component", "composite"}↵
file format: {format}↵
audio codec: {"PCM", "AAC"}↵
timecode input: {"external", "embedded", "preset", "clip"}↵
timecode output: {"clip", "timeline"}↵
timecode preference: {"default", "dropframe", "nondropframe"}↵
timecode preset: {timecode}↵
audio input channels: {n}↵
record trigger: {"none", "recordbit", "timecoderun"}↵
record prefix: {name}↵
append timestamp: {"true", "false"}↵
genlock input resync: {"true", "false"}↵
↵
```

One or more configuration parameters may be specified to change the configuration of the deck.

To change the current video input:

```
configuration: video input: {"SDI", "HDMI", "component"}↵
```

Valid video inputs may vary between models. To configure the current audio input:

```
configuration: audio input: {"embedded", "XLR", "RCA"}↵
```

Valid audio inputs may vary between models.

To configure the current file format:

```
configuration: file format: {File format}↵
```

Note that changes to the file format may require the deck to reset, which will cause the client connection to be closed. In such case, response code 213 will be returned (instead of 200) before the client connection is closed:

```
"213 deck rebooting"
```

Asynchronous configuration information change notification is disabled by default and may be configured with the "notify" command. When enabled, changes in configuration will generate a "511 configuration:" asynchronous message with the same parameters as the "211 configuration:" message.

Selecting active slot and video format

The "slot select" command instructs the deck to switch to a specified slot, or/and to select a specified output video format.

To switch to a specified slot:

```
slot select: slot id: {slot ID}↵
```

To select the output video format:

```
slot select: video format: {video format}↵
```

Either or all slot select parameters may be specified. Note that selecting video format will result in a rescan of the disk to reconstruct the timeline with all clips of the specified video format.

Clearing the current timeline

The "clips clear" command instructs the deck to empty the current timeline:

```
clips clear↵
```

The server responds with

```
200 ok↵
```

Adding a clip to the current timeline

The "clips add:" command instructs the deck to add a clip to the current timeline:

```
clips add: name: {clip name}↵
```

The server responds with

```
200 ok↵
```

or in case of error

```
lxx {error description}↵
```

Configuring the watchdog

The "watchdog" command instructs the deck to monitor the connected client and terminate the connection if the client is inactive for at least a specified period of time.

To configure the watchdog:

```
watchdog: period: {period in seconds}↵
```

To avoid disconnection, the client must send a command to the server at least every {period} seconds. Note that if the period is set to 0 or less than 0, connection monitoring will be disabled.

Ajuda

Obtendo Ajuda

A maneira mais rápida de obter ajuda é visitando as páginas de suporte online da Blackmagic Design e consultando os materiais de suporte mais recentes disponíveis para o seu gravador de disco Blackmagic HyperDeck.

Central de Suporte Técnico Online Blackmagic Design

O manual, o software e as notas de suporte mais recentes podem ser encontrados na Central de Suporte Técnico da Blackmagic Design em www.blackmagicdesign.com/br/support.

Fórum Blackmagic Design

O fórum da Blackmagic Design no nosso site é um recurso útil que você pode acessar para obter mais informações e ideias criativas. Também pode ser uma maneira mais rápida de obter ajuda, pois já podem existir respostas de outros usuários experientes e da equipe da Blackmagic Design, o que o ajudará a seguir em frente. Você pode visitar o fórum em <https://forum.blackmagicdesign.com>

Entrar em Contato com o Suporte Técnico Blackmagic Design

Caso não encontre a ajuda que precisa no nosso material de suporte ou no fórum, use o botão “Envie-nos um email” na página de suporte para nos encaminhar uma solicitação de suporte. Como alternativa, clique no botão “Encontre sua equipe de suporte local” na página de suporte e ligue para a sua assistência técnica da Blackmagic Design mais próxima.

Verificar a Versão de Software Instalada

Para verificar a versão do software Blackmagic HyperDeck instalada no seu computador, abra a janela “Sobre Blackmagic HyperDeck Setup”.

- No macOS, abra o Blackmagic HyperDeck Setup na pasta de aplicativos. Selecione “Sobre Blackmagic HyperDeck Setup” no menu de aplicativos para revelar o número da versão.
- No Windows, abra o utilitário Blackmagic HyperDeck Setup a partir do menu “Iniciar” ou da tela inicial. Clique em “Ajuda” na barra de menu e selecione “Sobre Blackmagic HyperDeck Setup” para revelar o número da versão.

Como Obter as Atualizações de Software Mais Recentes

Após verificar a versão do software Blackmagic HyperDeck Setup instalado no seu computador, por favor visite a Central de Suporte Técnico da Blackmagic Design em www.blackmagicdesign.com/br/support para conferir as últimas atualizações. Embora seja aconselhável executar as atualizações mais recentes, você deve evitar atualizar aplicativos caso esteja no meio de um projeto importante.

Informações Regulatórias

Eliminação de resíduos de equipamentos elétricos e eletrônicos dentro da União Europeia



O símbolo no produto indica que este equipamento não pode ser eliminado com outros materiais residuais. Para descartar seus resíduos de equipamento, ele deve ser entregue a um ponto de coleta designado para reciclagem. A coleta separada e a reciclagem dos seus resíduos de equipamento no momento da eliminação ajudarão a preservar os recursos naturais e a garantir que sejam reciclados de uma maneira que proteja a saúde humana e o meio ambiente. Para mais informações sobre onde você pode eliminar os resíduos do seu equipamento para reciclagem, por favor entre em contato com a agência de reciclagem local da sua cidade ou o revendedor do produto adquirido.



Este equipamento foi testado e respeita os limites para um dispositivo digital Classe A, conforme a Parte 15 das normas da FCC. Esses limites foram criados para fornecer proteção razoável contra interferências nocivas quando o equipamento é operado em um ambiente comercial. Este equipamento gera, usa e pode irradiar energia de radiofrequência e, se não for instalado ou usado de acordo com as instruções, poderá causar interferências nocivas nas comunicações via rádio. A operação deste produto em uma área residencial pode causar interferência nociva, nesse caso o usuário será solicitado a corrigir a interferência às suas próprias custas.

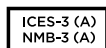
A operação está sujeita às duas condições a seguir:

- 1 Este dispositivo não poderá causar interferência nociva.
- 2 Este dispositivo deve aceitar qualquer interferência recebida, incluindo interferência que possa causar uma operação indesejada.



R-R-BMD-20211410001

Norma Canadense ISED



Este dispositivo está em conformidade com os padrões do Canadá para equipamentos digitais de Classe A.

Quaisquer modificações ou utilização deste produto fora dos limites previstos poderão anular a conformidade com estas normas.

A conexão com interfaces HDMI deve ser feita com cabos HDMI com proteção de alta qualidade.

Este equipamento foi testado para fins de cumprimento com a sua utilização pretendida em um ambiente comercial. Se o equipamento for usado em um ambiente doméstico, ele poderá causar interferência radioelétrica.

Informações de Segurança

O produto é adequado para uso em locais tropicais com temperatura ambiente de até 40 °C.

Certifique-se de que ventilação adequada seja fornecida ao redor do produto e não esteja restringida.

Não há componentes internos reparáveis pelo operador. Solicite o serviço de manutenção à assistência técnica local da Blackmagic Design.



Utilize apenas em altitudes inferiores a 2000 m acima do nível do mar.

Declaração do Estado da Califórnia

Este produto pode expô-lo a produtos químicos, tais como vestígios de bifenilos polibromados dentro de peças de plástico, que é conhecido no estado da Califórnia por causar câncer e defeitos congênitos ou outros danos reprodutivos.

Para mais informações, visite www.P65Warnings.ca.gov.

Garantia

12 Meses de Garantia Limitada

A Blackmagic Design garante que este produto estará livre de defeitos de materiais e fabricação por um período de 12 meses a partir da data de compra. Se o produto apresentar defeito durante este período de garantia, a Blackmagic Design, a seu critério, consertará o produto com defeito sem cobrança pelos componentes e mão de obra, ou providenciará a substituição em troca pelo produto defeituoso.

Para obter o serviço sob esta garantia você, o Consumidor, deve notificar a Blackmagic Design do defeito antes da expiração do período de garantia e tomar as providências necessárias para o desempenho do serviço. O Consumidor é responsável pelo empacotamento e envio do produto defeituoso para um centro de assistência designado pela Blackmagic Design com os custos de envio pré-pagos. O Consumidor é responsável pelo pagamento de todos os custos de envio, seguro, taxas, impostos e quaisquer outros custos para os produtos que nos forem devolvidos por qualquer razão.

Esta garantia não se aplica a defeitos, falhas ou danos causados por uso inadequado ou manutenção e cuidado inadequado ou impróprio. A Blackmagic Design não é obrigada a fornecer serviços sob esta garantia: a) para consertar danos causados por tentativas de instalar, consertar ou fornecer assistência técnica ao produto por pessoas que não sejam representantes da Blackmagic Design, b) para consertar danos causados por uso ou conexão imprópria a equipamentos não compatíveis, c) para consertar danos ou falhas causadas pelo uso de componentes ou materiais que não são da Blackmagic Design, d) para fornecer assistência técnica de um produto que foi modificado ou integrado a outros produtos quando o efeito de tal modificação ou integração aumenta o tempo ou a dificuldade da assistência técnica do serviço. ESTA GARANTIA É FORNECIDA PELA BLACKMAGIC DESIGN NO LUGAR DE QUAISQUER OUTRAS GARANTIAS, EXPLÍCITAS OU IMPLÍCITAS. A BLACKMAGIC DESIGN E SEUS FORNECEDORES NEGAM QUAISQUER GARANTIAS IMPLÍCITAS DE COMERCIALIZAÇÃO OU ADEQUAÇÃO A UMA FINALIDADE ESPECÍFICA. A RESPONSABILIDADE DA BLACKMAGIC DESIGN DE CONSERTAR OU SUBSTITUIR PRODUTOS DEFEITUOSOS É A ÚNICA E EXCLUSIVA MEDIDA FORNECIDA AO CONSUMIDOR PARA QUAISQUER DANOS INDIRETOS, ESPECIAIS OU ACIDENTAIS INDEPENDENTEMENTE DA BLACKMAGIC DESIGN OU DE FORNECEDORES POSSUÍREM INFORMAÇÕES PRÉVIAS SOBRE A POSSIBILIDADE DE TAIS DANOS. A BLACKMAGIC DESIGN NÃO É RESPONSÁVEL POR QUAISQUER USOS ILEGAIS DO EQUIPAMENTO PELO CONSUMIDOR. A BLACKMAGIC NÃO É RESPONSÁVEL POR QUAISQUER DANOS CAUSADOS PELO USO DESTE PRODUTO. O USUÁRIO DEVE OPERAR ESTE PRODUTO POR CONTA E RISCO PRÓPRIOS.

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Nisan 2022

Kurulum ve Kullanım Kılavuzu

Blackmagicdesign

HyperDeck Shuttle HD



HyperDeck Shuttle HD



Hoş Geldiniz

Blackmagic HyperDeck Shuttle HD disk kaydedicinizi satın aldığınız için teşekkür ederiz!

İlk Blackmagic HyperDeck disk kaydedicileri tasarladığımızda, hızlı SSD depolama kullanarak video kaydını ve oynatımını kolaylaştırmak istedik. Şu an, HyperDeck Shuttle HD'yi sunmaktan heyecan duyuyoruz!

HyperDeck Shuttle HD, masaüstünüz için tasarlanmış, küçük, taşınabilir bir HDMI video kayıt cihazıdır. Büyük bir arama kadranının ve alışık olduğunuz aktarım kontrollerinin, kayıt cihazını tek elle çalıştırmanıza olanak vermesi, canlı yapımda bir ATEM Mini switcher ile birlikte kullanmak üzere HyperDeck Shuttle HD'yi mükemmel bir eş haline getirir. HyperDeck Shuttle HD'yi, bir teleprompter olarak bile kullanabilirsiniz!

ProRes, DNxHD ya da H.264 kodeklerini kullanan HyperDeck Shuttle HD, yıldırım gibi hızlı kayıt ve oynatım için SD kartlara veya harici flaş disklere kayıt yapar.

Bu kullanım kılavuzunun en güncel versiyonu ve HyperDeck yazılım güncellemeleri için lütfen, www.blackmagicdesign.com/tr adresindeki destek sayfamıza bakın. Yazılımınızı güncel tutarak, daima en son özelliklere sahip olduğunuzdan emin olabilirsiniz. Yeni yazılımlar çıktığında size duyurabilmemiz için yazılımı indirirken, lütfen güncel bilgilerinizle sitemize kaydolun. Yeni özellikler ve geliştirmeler üzerinde sürekli çalıştığımızdan, yorumlarınızı almaktan mutluluk duyarız!

Grant Petty Blackmagic Design CEO

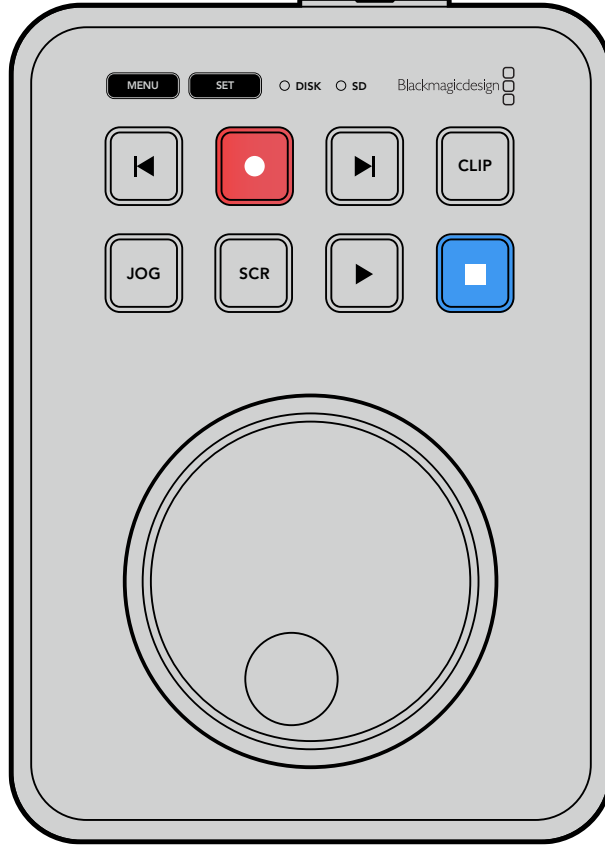
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Başlarken

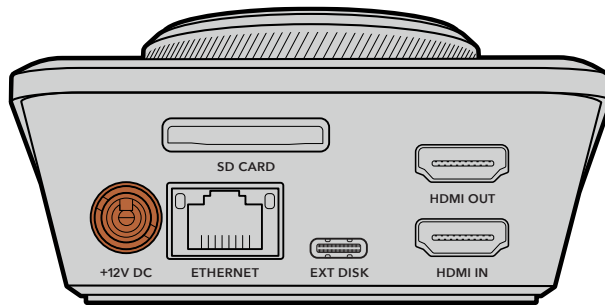
HyperDeck Shuttle HD'nizi kullanmaya başlamak için; güç kaynağını bağlamanız, bir HDMI video kaynağı takmanız, bir SD kart veya harici ortam yerleştirmeniz ve ardından kaydet butonuna basmanız yeterlidir!

HyperDeck Shuttle HD cihazınızı kullanmaya nasıl başlayacağınızı, kılavuzun bu bölümü gösterir.



Güç Kaynağının Takılması

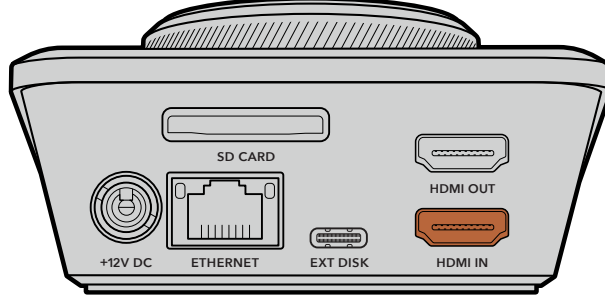
HyperDeck Shuttle HD'nize güç vermek için beraberinde gelen güç adaptörünü, arka paneldeki güç girişine takın. Kilitleme halkasının sıkılması, kazayla çıkmasını önlemek üzere güç kablosunu sabitleyin.



Güç adaptörünün kablosunu, HyperDeck Shuttle HD'nin güç girişine bağlayın

Video ve Sesin Bağlanması

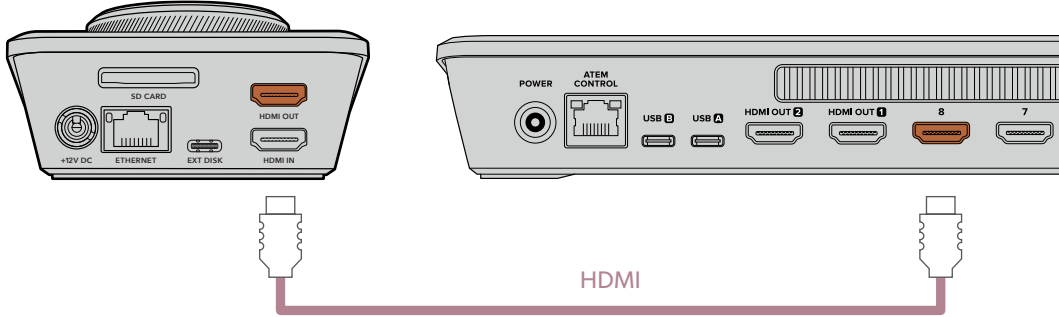
HyperDeck Shuttle HD'nize video bağlantısı yapmak için, arka paneldeki HDMI girişine bir HDMI video kaynağı takın.



Bir ATEM Mini switcher ya da HDMI televizyon gibi hedef ekipmanlarınızı, HDMI çıkışına bağlayın.

HyperDeck'inizin ayarlarını değiştirirken, ayarlar menüsünü görüntülemek için de HDMI çıkışı kullanılır. Çünkü ayarlar menüsü, HDMI girişindeki video katmanı aracılığıyla görüntülenir. Menü ayarları hakkında daha fazla bilgiyi, bu kılavuzun ilerisindeki 'Ayarların Değiştirilmesi' bölümünde bulabilirsiniz.

BİLGİ Giriş video kaynağınızı, bağlı ekranda göremiyorsanız muhtemelen oynatım modunda olabilirsiniz. Kayıt modunu etkinleştirmek için 'kayıt' butonuna basın.



Bir HDMI televizyon veya ATEM Mini switcher gibi hedef ekipmanlarınızı, HDMI çıkışına bağlayın

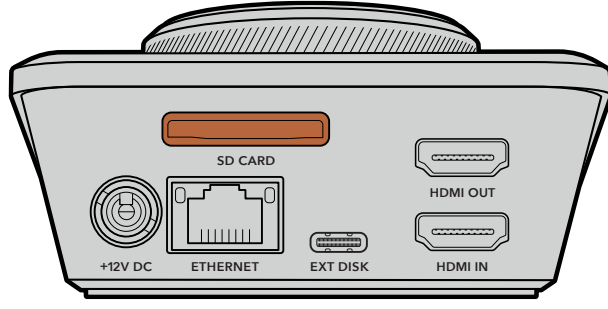
Ortamın Takılması

Tüm HyperDeck Shuttle HD disk kayıt cihazları, hiçbir ayarı yapılandırmaya gerek kalmadan, hemen kayıt yapmaya hazır bir şekilde satılırlar. İhtiyacınız olan tek şey, formatlanmış bir SD kart veya harici disk.

Menü ayarları üzerinden ortamı kolaylıkla formatlayabilirsiniz. Ayrıca, bir bilgisayar kullanarak da formatlayabilirsiniz. Daha fazla bilgi için bu kılavuzdaki 'Ortamın Formatlanması' bölümüne başvurun. Video kaydetmek için en iyi ortam türleri hakkında bilgiler ile önerilen SD kartlar ve disklerin bir listesini de orada bulabilirsiniz.

Bir SD kart takmak için:

- 1 Altın rengindeki konnektörler yukarı bakacak şekilde SD kartı tutun ve ortam yuvasıyla hizalayın. Sıkı bir şekilde yerine kilitletiğini hissedene dek, kartı yuvaya yavaşça itin.



- HyperDeck'iniz, SD kartı doğrular. HyperDeck Shuttle HD'nin üst tarafındaki ışıklı SD göstergesi, doğrulama yapılırken yeşil yanar. Doğrulandıktan sonra gösterge kapanır.



Başlamak için yapmanız gerekenlerin hepsi bundan ibarettir ve artık HyperDeck Shuttle HD'niz, kayıt ve oynatım için hazırdır!

Kliplerin nasıl kaydedildiği ve oynatıldığı, ayarların nasıl değiştirildiği ve benzeri birçok konuda ayrıntılı bilgi için bu kılavuzu okumaya devam edin.

Video Kaydı

Video kaynağınızın HDMI hedef ekipmanınızda görüntülediğini teyit ettikten sonra, hemen kayda başlayabilirsiniz!

Kayıdı başlatmak için, 'kayıt' butonuna basın. Bir SD karta kayıt yaparken, SD göstergesinin yanı sıra, 'kayıt' ve 'oynat' butonları da kırmızı yanar. Harici bir diske kayıt yaparken, 'disk' göstergesi kırmızı yanar.



Kayıdı bitirmek için 'durdur' butonuna basın.

Oynatım

Oynatımı başlatmak için 'oynat' butonuna basın. Oynatım sırasında, 'oynat' butonunun ışığı yanar ve 'disk' ya da 'SD' ortam yuvasının göstergesi yeşil yanar.

Kaydedilmiş birden fazla klip varsa 'ileri' ve 'geri' atlama butonlarına basarak bunlar arasında hızla hareket edebilirsiniz.



Atlama Butonlarının Kullanımı

Klibin başına gitmek için 'geri' atlama butonuna basın. Bu butona birden fazla basmak, daha önce kaydedilmiş kliplerden geçerek geriye doğru gider.

Klipleriniz arasında ilerlemek için 'ileri' atlama butonuna basın.



Her klibin başına gitmek için 'ileri' ve 'geri' atlama butonlarını kullanın.

BİLGİ Video dosyalarını oynatmak üzere HyperDeck'inizi, dosyaları kaydetmek için kullanılan kodla eşleştirecek şekilde ayarlamanız gerekir. Bunu, menüyü kullanarak yapabilirsiniz. Daha fazla bilgi için, bu kullanım kılavuzunun ilerisindeki 'Ayarların Değiştirilmesi' bölümüne başvurun.

Kliplerin Döngüye Alınması

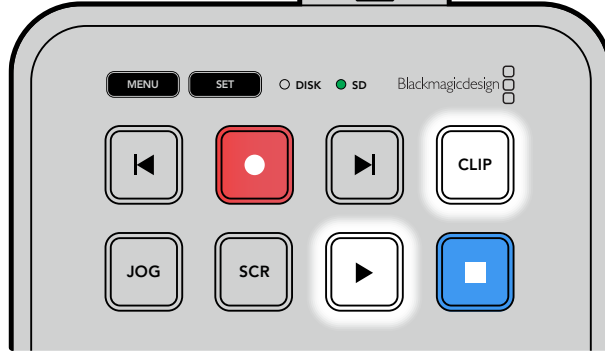
Oynatım sırasında 'oynat' butonuna tekrar basmak, siz 'durdur' butonuna basana kadar HyperDeck Shuttle HD'nizi, tüm klipleri döngüye alacak şekilde ayarlar.

Tek klibi döngüye almak istiyorsanız HyperDeck'inizi 'klip' moduna alın ve oynatmak için bir ve döngüye almak için iki kez 'oynat' butonuna basın.

Tüm klipleri döngüye al	Oynatım sırasında, kaydedilmiş tüm klipleri döngüye almak için 'oynat' butonuna ikinci kez basın
Oynatılan klibi döngüye al	Klip modundayken, oynatılan klibi döngüye almak için 'oynat' butonuna ikinci kez basın

Klip Modu

Klip modu, oynatmayı tek bir kliple sınırlamanıza izin verir. Örneğin, klip modu etkinleştirildiğinde, bir klibe hızlı geçiş yapabilir veya atlayabilirsiniz ve ardından, klip sona erdiğinde oynatımın duracağını bilerek oynat butonuna basabilirsiniz.






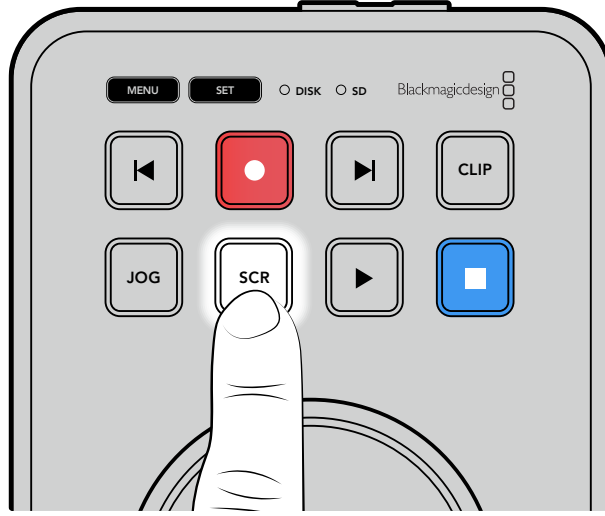
Klip modu seçildiğinde, 'oynat' butonuna ikinci kez basmak oynatılan klibi döngüye alır

Arama Kadranının Kullanımı

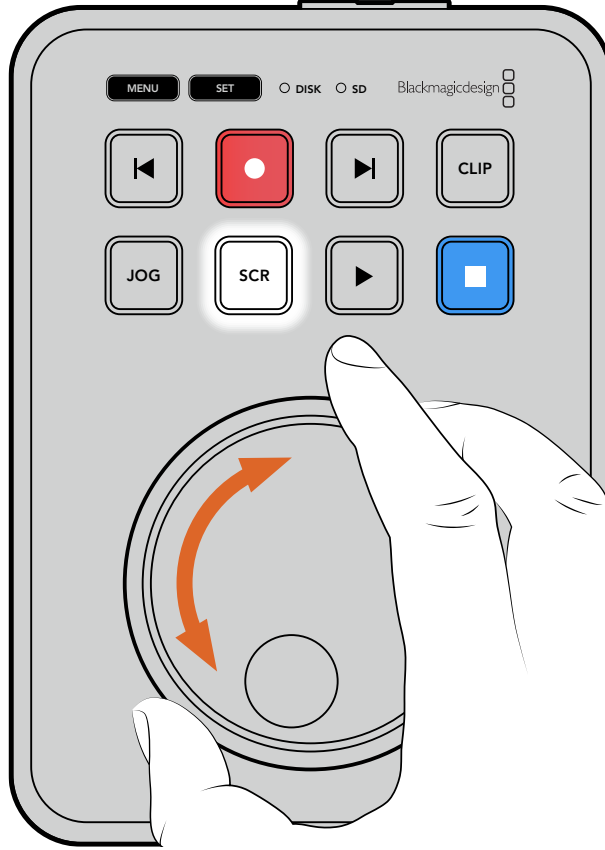
Arama kadranı, kliplerinizin arasında gezinmek ve oynatım için belirli anları seçmek veya kare kare klipleri gözden geçirmek için hızlı bir yöntem sunar. Bu, kadranı çevirdikçe klibi gözünüzle takip ederek belirli bir anı bulmanız gerektiğinde önemli olabilir. Ayrıca, canlı bir yayın sırasında yayına alınacak bir klibin belirli bir noktasında, oynatım çubuğunu bekletmek için de yararlıdır.

Arama kadranı modları arasında; Jog (yavaş oynatım), Scroll (interaktif oynatım) ve Shuttle (hızlı oynatım) bulunur.

	Yavaş Oynatım (Jog)	Klibi kare kare oynatarak hassas kontrol sağlar.
	İnteraktif Oynatım (Scroll)	İnteraktif oynatım modu, tüm kayıtlı medyanız arasında hızla ileri ve geri gitmenizi sağlar. Arama kadranını çevirdikçe, interaktif oynatım modu hareketinize kilitlenir, böylece oynatımı nereden başlatacağınız üzerinde tam kontrole sahip olursunuz.
	Hızlı Oynatım (Shuttle)	Hızlı oynatım moduna girmek için 'jog' ve 'scr' butonlarına eşzamanlı basın. Hızlı oynatım modundayken kadranı sola veya sağa çevirerek, medyanızı geri veya hızlı ileri sarabilirsiniz. Kadranı çevirdikçe, medya maksimum hız olan x50'ye ulaşana kadar daha hızlı oynayacaktır. Hızlı oynatımı yavaşlatarak durdurmak için kadranı tekrar başlangıç konumuna çevirin. Hızlı oynatım esnasında belirli bir noktada durmak için, durdurma butonuna basın veya oynatımı mevcut konumdan devam ettirmek için oynat butonuna basın. Kurulum menüsü kullanılarak maksimum hızlı oynatım hızının düşürülebileceğini belirtmekte fayda var. Daha fazla bilgi için bu kılavuzun ilerleyen bölümlerindeki 'Ayarlar' kısmına bakınız.



Yavaş oynatım ve interaktif oynatım arama modlarını seçmek için özel 'JOG' veya 'SCR' butonlarına basın.

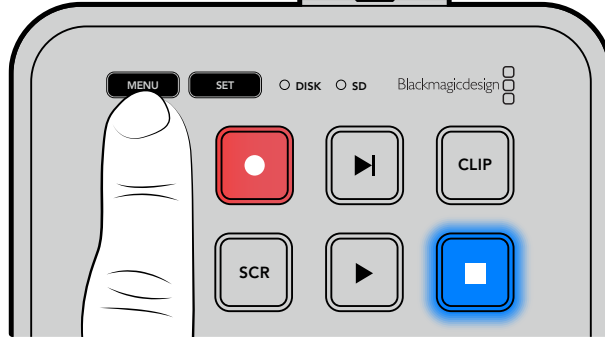


Bir arama modu seçildikten sonra, arama kadranını çevirin

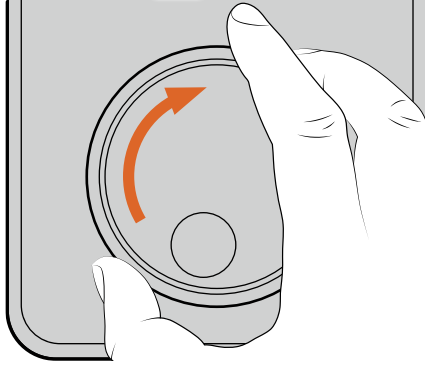
BİLGİ Normal oynatıma geçmek için, 'oynat' veya 'durdur' butonuna basın.

Ayarların Deđiřtirilmesi

'Menu' butonuna basmak, ayarlar menüsünü açar. Bu menü, bađlı HDMI ekranınızın sol alt köşesinde bir video katmanı olarak görüntülenir.



Ayarlar menüsünü açmak için 'menu' butonuna basın



Alt menüye veya ayara gitmek için arama kadranını kullanın

Kayıt	
Giriş	HDMI
Kodek	H.264 Yüksek
Kayıt Tetikleme	Hiçbiri



Alt menüyü veya ayarı seçmek için 'set' butonuna basın

Kayıt	
Giriş	HDMI
Kodek	H.264 Yüksek
Kayıt Tetikleme	Hiçbiri

Arama kadranını ya da ileri ve geri atlama butonlarını kullanarak ayarları düzenleyin. 'Set' butonuna basarak seçimi onaylayın.

Menüden çıkmak üzere seçenekler boyunca geri gelerek ana ekrana dönmek için 'menu' butonuna basın.

BİLGİ Kurulum menüsünü kullanarak, ekranınızın dört köşesinden herhangi birine menüyü yerleřtirebilirsiniz. ATEM Mini Extreme gibi bir HDMI switcher'e bađlandıđında, ayarlarda deđiřiklik yapmayı tamamladıktan sonra, HDMI çıkışındaki sinyalin temiz bir sinyal olduđundan emin olmak için menüyü kapatmanızı tavsiye ederiz.

Ayarlar

Ayarlar menüsü; kayıt, monitör, ses, depolama ve kurulum olarak 5 ayrı bölümde düzenlenmiştir. Bu alt menülerin her biri, HyperDeck Shuttle HD kontrol paneli kullanılarak çoğu ayarlanabilen, ilgili ayarları kapsar. Dosya adı öneki gibi bazı ayarlar gridir ve yalnızca gösterilirler. Bu durumda, HyperDeck Kurulum yardımcı programı aracılığıyla ayar yapılabilir.

Kayıt Menüsü

Kayıt	
Giriş	HDMI
Kodek	H.264 Yüksek
Kayıt Tetikleme	Hiçbiri

Giriş

HyperDeck Shuttle HD HDMI girişini gösterir.

Kodek

HyperDeck Shuttle HD; H.264, Apple ProRes ve DNxHD kodeklerini kullanarak sıkıştırılmış video kaydedebilir. Teleprompter işlevini kullanmak için 'teleprompter'i seçin.

Kayıt Tetikleme

Geçerli olan iki kayıt tetikleme modu vardır; video ile başlat/durdur ve zaman kodu ile tetikle.

Blackmagic Pocket Cinema Camera 4K gibi bazı kameralar, harici kayıt cihazlarında kaydı başlatmak ve durdurmak için HDMI bağlantısı üzerinden bir sinyal gönderir. 'Video ile başlat/durdur' seçeneğini kullanmak, kamerada kayıt düğmesine basıldığında, kaydı başlatması veya durdurması için Hyperdeck'i tetikler.

HDMI girişi üzerinden geçerli bir zaman kodu sinyali aldığında kaydı başlatması için cihazı tetiklemek üzere, 'zaman kodu ile tetikle' seçeneğini kullanın. Sinyal durduğunda, kayıt da durur. 'Hiçbiri' seçeneğini kullanarak kaydı tetiklemeyi etkisiz hale getirin.

NOT Bir HDMI kameradan kayıt yaparken, kameranızın video çıkışında bulunan herhangi bir katman görüntünüzle birlikte kayıt edileceği için çıkışın temiz ve katmanların ise kapalı olduğundan emin olun.

Monitör Menüsü

Monitör	
Teleprompter Düzeni	
Yazı Boyutu	450%
Satır Aralığı	120%
Kenar Boşluğu	%10
Yatay Ters Çevir	Kapalı
Dikey Ters Çevir	Kapalı

Teleprompter Düzeni

HyperDeck Shuttle HD'yi teleprompter olarak kullanmak için gereken tüm ayarlar monitör menüsündedir.

Yazı Boyutu

Yazı boyutu seçeneğini belirleyip 'set' butonuna basarak metnin boyutunu ayarlayın. Yazı boyutunu artırmak için saat yönünde veya azaltmak için saat yönünün tersine kadranı çevirin.

Satır Aralığı

Satır aralığını artırmak veya azaltmak için kadranı çevirin.

Kenar Boşluğu

Teleprompter ekranının her iki tarafındaki kenar boşluklarının genişliklerini ayarlayın.

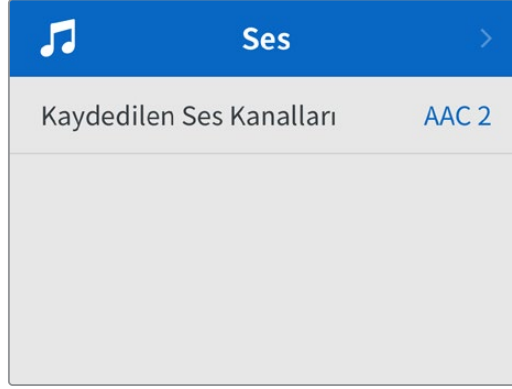
Ters Çevir

Teleprompter monitörünüz, bir kameranın önü veya bir podyumdaki konuşmacının önü gibi bir cam üzerine yansıtılacak şekilde ayarlanmışsa sunumu yapan kişi için okunabilir hale getirmek üzere 'ters çevirme' ayarlarını kullanmanız gerekecektir. Kullanabileceğiniz iki ters çevirme modu vardır:

Yatay Ters Çevir - Bunu, teleprompter monitörünün alt kısmı, camın tabanına en yakın monte edildiğinde kullanın.

Dikey Ters Çevir - Bunu, teleprompter monitörünün alt kısmı, camın tabanından uzağa monte edildiğinde kullanın.

Ses Menüsü



Kaydedilen Ses Kanalları

HyperDeck Shuttle HD, bir seferde 8 kanala kadar PCM ses kaydedebilir. Kaydedilen kanal sayısını seçmek için, kaydedilen ses kanalları listesini genişletin ve 2, 4 veya 8 kanal seçin.

Kodek, H.264 olarak ayarlanmışsa 2 kanal AAC sesi de seçebilirsiniz, böylece kayıtları doğrudan YouTube'ye yükleyebilirsiniz.

Depolama Menüsü



Bağlanan ortam, depolama ayarlarında belirir. Ortam 1, takılan SD kartın adını listeler ve ortam 2, harici disk bağlantısına takılan herhangi bir USB flaş diski gösterir. Blackmagic MultiDock 10G gibi bir USB çoğaltıcı kullanıyorsanız, aktif olan disk görüntülenir.

Kaydı USB'ye Geçir Ayarı

'Harici disk' usb bağlantısı üzerinden birden fazla diski bağlamak için bir Blackmagic MultiDock 10G veya benzer bir cihaz kullanıyorsanız kaydı USB'ye geçir ayarını açmak, kaydın bir harici diskten diğerine geçmesini sağlar.

Ortamı Formatla

Kartlar ve arkadaki harici disk bağlantısı üzerinden bağlı ortam, doğrudan cihazda veya bir Mac veya Windows bilgisayar üzerinden formatlanabilir.

HyperDeck Shuttle HD'de Ortamın Hazırlanması:

- 1 Arama kadrını ve 'SET' butonunu kullanarak, 'Ortamı Formatla' seçeneğini seçin.
- 2 Formatlamak için listeden ortamı seçin ve 'SET' butonuna basın.
- 3 Formatı seçin ve 'SET' butonuna basın.

- 4 Hangi kartın formatlanacağını ve seçilen format seçeneğini ayrıntılı olarak gösteren bir onay penceresi görünecektir. Formatla komutunu seçin.
- 5 Bir formatlama penceresi görünecektir. Formatlama biter bitmez 'Tamam' butonuna basın.

Aynı zamanda Mac OS X Extended olarak da bilinen HFS+ formatı, 'journaling' (günlükleme) işlemini desteklediğinden, tavsiye edilen formattır. Depolama ortamınızda nadiren olabilecek bozulmalarda, 'journaled' isimli günlük ortamdaki verilerin, geri getirilmeleri daha muhtemeldir. HFS+ yerel olarak Mac tarafından desteklenir. ExFAT, ek yazılıma gerek kalmadan Mac ve Windows tarafından yerel olarak desteklenir, ama günlüklemeyi desteklemez.

Bir Mac veya Windows bilgisayarda ortamı formatlamak için, bu kılavuzdaki ortamın formatlanması bölümüne bakın.

Kurulum Menüsü

Dil seçimi ve varsayılan format gibi ayarları kapsayan kurulum menüsü ayrıca; menü ekranı, ağ ayarları ve zaman kodu seçenekleri için bölümler içerir.

Kurulum	
İsim	HyperDeck Shuttle HD
Dil	Türkçe
Tarih	16 Mayıs 2022
Saat	14:32
Zaman Dilimi	UTC±11:00
Yazılım	8.1
Kamera	A
Varsayılan Format	1080p30
Azami Sarım Hızı	x50

İsim

Ağinizda birkaç HyperDeck Shuttle HD olduğunda, farklı cihazları tanımak için onlara ayrı ayrı isimler vermeyi isteyebilirsiniz. Bu, Blackmagic HyperDeck Setup yazılımı üzerinden veya bir terminal uygulaması kullanılarak Blackmagic Hyperdeck Ethernet Protokolü ile yapılabilir. Ad, kurulum menüsünde görünür.

Dil

HyperDeck Shuttle HD 13 dili destekler. Desteklenen diller arasında; İngilizce, Çince, Japonca, Korece, İspanyolca, Almanca, Fransızca, Rusça, İtalyanca, Portekizce, Türkçe, Ukraynaca ve Polonyaca bulunur.

Dili seçmek için:

- 1 Kurulum menüsü seçiliyken, 'set' butonuna basın.
- 2 Dili seçmek için arama kadraniyla menüde ilerleyin ve 'set' butonuna basın.

- 3 Arama kadranını kullanarak dili seçin ve 'set' butonuna basın. Dil seçilir seçilmez, otomatik olarak kurulum menüsüne dönersiniz.

Tarih

Tarihi ayarlamak için, tarih alanını seçin ve 'set' butonuna basın. Arama kadranını kullanarak, gün, ay ve yılı seçebilirsiniz. Seçildiğinde, dosya adı tarih ekini doldurur.

Saat

Saati ayarlamak için, saati seçin ve 'set' butonuna basın. Saat ve dakika ayarını yapmak için arama kadranını kullanın. HyperDeck Shuttle HD'nin saati 24 saate ayarlıdır.

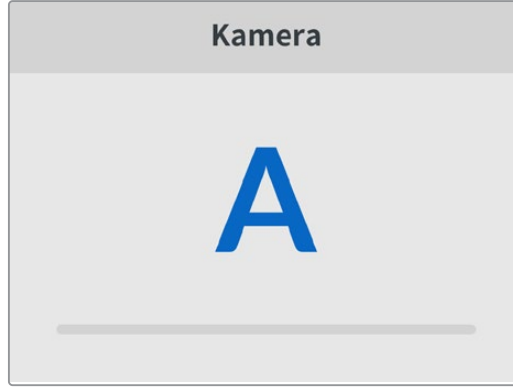
Yazılım

Mevcut yazılım sürümünü görüntüler.

Kamera

Bu ayar; HyperDeck'i birkaç kameradan ISO kayıt, yani ayrı dosyalar kaydetmek için kullanırken ve daha sonra onları DaVinci Resolve'de çok kameralı bir zaman çizelgesinde kurgulamak için faydalıdır.

Her bir kamerayı temsilen kimlik harfleri, dosyaların metaverilerinde görünerek, Senkron Bin özelliğini kullanırken, DaVinci Resolve'nin her bir kamerayı kolaylıkla belirlemesini sağlar.



A-Z arasında harfleri veya 1-9 arasında rakamları kullanarak kameranıza bir kimlik verin.

Varsayılan Format

HyperDeck Shuttle HD, kullanmak istediğiniz video formatını bazen bilemez. Bu ayar, en sık kullanmayı istediğiniz video formatını HyperDeck'in bilmesini sağlar.

Bir HyperDeck Shuttle HD'yi açtığınızda, bağlı video sinyali yoksa ve 2 farklı video formatına sahip dosyalar içeren bir disk yerleştirdiyse, buna iyi bir örnektir. HyperDeck'in hangi video formatını oynatması gerekir? Varsayılan video formatı, hangi video formatını tercih ettiğiniz konusunda cihazı yönlendirir ve cihaz, o formata geçerek dosyaları oynatır.

HyperDeck Shuttle HD'yi ilk açtığınızda, bir video giriş sinyalinin ve takılı bir diskin olmadığına da varsayılan video formatı kullanışlıdır. Bu durumda HyperDeck, monitör çıkışı için hangi video formatını kullanacağını bilmez. Varsayılan video formatı, ne yapacağı konusunda cihazı yönlendirir.

Bunların yanında, varsayılan video formatı yalnızca bir kılavuzdur. Hiçbir şeyi geçersiz kılmaz. Yani, üzerinde sadece 1 tip video dosyası bulunan bir medya diskiniz varsa ve oynat düğmesine basarsanız HyperDeck disk kaydedici o video formatına geçer ve videoyu oynatır. Bu durumda, varsayılan video formatını yok sayar, çünkü yalnızca diskteki dosyaları oynatmak istediğiniz açıktır.

Kayıt için de benzer bir durum söz konusudur. Kayıt butonuna bastığınızda, HyperDeck, video girişine bağlı olan video formatında kayıt yapar. Üstelik, kayıt tamamlandıktan sonra, diskte varsayılan video formatıyla eşleşen başka dosyalar olsa bile, HyperDeck Shuttle HD diskteki aynı formattaki video dosyalarını oynatır. Biraz önce kayıt işlemi kullandığınız video formatını oynatmak istediğiniz varsayılır. Medya diskini cihazdan çıkartır ve tekrar takarsanız, sadece bu durumda hangi tip dosyaların oynatılacağını seçmek için varsayılan video formatını kullanılır.

Varsayılan video formatı, sadece HyperDeck Shuttle HD ne yapacağı konusunda emin olmadığında karar vermesine yardımcı olan bir kılavuздur. Deck'in belirli bir şekilde davranmasını zorlayan bir geçersiz kılma işlemi değildir.

Hızlı Oynatım Azami Hızı

HyperDeck Shuttle HD'deki hızlı oynatımın azami hızı, 50 kat hızındadır. Bu hızı düşürmek isterseniz farklı hız ön ayarlarından birini seçebilirsiniz.

Menü Ayarları

Menü ayarlarını kullanarak, menünün bağlı olan HDMI ekranındaki yerini ve görünümünü ayarlayabilirsiniz.

Menü	
Görünüm	Açık
Görünürlük	%100
Konum	Sol Alt

Görünüm

HyperDeck'inizin ekranı üzerindeki menüyü, koyu veya açık moda ayarlayın. Açık mod, medya koyu olduğunda ya da teleprompter modundayken daha yüksek kontrast sunar.

Menü	
Görünüm	Açık
Görünürlük	%100
Konum	Sol Alt

Menü	
Görünüm	Koyu
Görünürlük	%100
Konum	Sol Alt

Görünürlük

Bağlı ekrandaki menü katmanının görünürlüğü varsayılan seviye olan %100'den %20'ye kadar düşürmek için seviyeleri ayarlayın.

Konum

Menü katmanı, varsayılan olarak ekranın sol alt köşesindedir. Menüyü farklı bir yere taşımak için 'konum'u seçin ve 'SET' butonuna basın. Artık ekranın sol üst, sağ üst, sol alt veya sağ alt köşesini seçebilirsiniz.

Ağ Ayarları

Ağ	
Protokol	Statik IP
IP Adresi	192.168.24.100
Alt Ağ Maskesi	255.255.255.0
Ağ Geçidi	192.168.24.1

Protokol

Blackmagic Hyperdeck, DHCP'ye ayarlanmış olarak gelir, yani bir kez bağlandıktan sonra, ağ sunucunuz otomatik olarak bir IP adresi atayacaktır ve başka bir ağ ayarının yapılması gerekmez. Manuel bir adres belirlemeniz gerekiyorsa, statik bir IP üzerinden bağlanabilirsiniz.

Menüye erişmek için 'protokol' seçiliyken 'set' butonuna basın, 'Statik IP' seçeneğine gidin ve tekrar 'set' butonuna basın.

IP Adresi, Alt Ağ Maskesi, Ağ Geçidi, Birincil DNS ve İkincil DNS

Statik IP seçildikten sonra, ağ bilgilerinizi manuel olarak girebilirsiniz.

IP adresini değiştirmek için:

- 1 Arama kadranını kullanarak 'IP Adresi' seçeneğini vurgulayın ve HyperDeck'inizin kontrol panelindeki 'set' butonuna basın.
- 2 Arama kadranını kullanarak IP adresini ayarlayın, IP adresinizi ayarlamak için arama kadranını döndürün, bir sonraki basamağı ayarlamadan önce, girdiğiniz değeri teyit etmek üzere 'set' butonuna basın.
- 3 Yaptığınız değişikliği onaylamak için 'set' butonuna basın ve bir sonraki basamağa ilerleyin.

IP adresini girme işlemi tamamladığınızda, alt ağ maskesini ve ağ geçidini ayarlamak için bu adımları tekrarlayabilirsiniz. İşlemler tamamlandığında, menüden çıkmak ve ana ekrana geri dönmek için 'menü' butonuna basın.

Zaman Kodu Ayarları

Kaynak zaman kodunu kaydetme, sistem saati zaman kodunu kaydetme veya zaman kodunuzu manuel olarak ayarlama arasında seçim yapmak da dahil olmak üzere, zaman kodu giriş ve çıkış seçeneklerinizi ayarlayın.

Zaman Kodu	
Giriş	Video Girişi
Kare Düşürme	Varsayılan
Önayar	00:00:00:00
Çıkış	Zaman Çizelgesi

Giriş

Kayıt yaparken, dört tane zaman kodu girişi seçeneği vardır.

Video Girişi	Video girişinin seçilmesi, SMPTE RP 188 metaveri içeren HDMI kaynaklarından, gömülü zaman kodunu alır. Bu, HDMI kaynağınız ile HyperDeck Shuttle HD'de kaydedilen dosya arasındaki senkronu muhafaza eder.
Dahili	Dahili zaman kodu üretici aracılığıyla günlük saat zaman koduyla kaydetmek için, bu seçeneği kullanın.
Son Klipten Al	Zaman kodu girişiniz için 'son klipten al' opsiyonunu seçtiğinizde, dosyaların her biri bir önceki klipin en son karesinden bir kare sonra başlar. Örneğin, ilk klipiniz 10:28:30:10'da bitiyorsa bir sonraki klipin zaman kodu 10:28:30:11'de başlayacaktır.
Önayar	Zaman kodunu manuel olarak ayarlamak istiyorsanız önayar seçeneğini belirleyin. Kaydedilen klipler, bu bölümün ilerleyen sayfalarında gösterildiği üzere 'önayar' ayarı aracılığıyla düzenlenen zaman kodunda başlar.

Kare Düşüren

29.97 veya 59.94 kare hızlarındaki NTSC kaynaklar için, 'kare düşüren' veya 'kare düşürmeyen' zaman kodunu seçebilirsiniz. Kaynağın ne olduğu bilinmiyorsa 'varsayılan'ı seçin. Bu işlem, girişin standardını muhafaza eder veya geçerli bir zaman kodu olmadığında, varsayılan ayar olarak kare düşüren moda geçer.

Önayar

Zaman kodunuzu; 'set' butonuna basarak ve arama kadranı ile 'set' butonunu kullanmak suretiyle başlangıç zaman kodunu girerek, manuel olarak ayarlayabilirsiniz. Giriş menüsünde 'önayar'ın seçildiğinden emin olun.

Çıkış

Çıkışlarınız için zaman kodu seçeneklerinizi belirleyin.

Zaman Çizelgesi	Bir kart veya diskte kayıtlı tüm klipler için kesintisiz bir zaman kodu çıkarmak üzere zaman çizelgesini seçin.
Klip	Klip seçeneği, her bir klibe ait zaman kodunu çıkarır.

Dosya Ayarları

Dosya Ayarları	
Dosya Adı Ön Eki	HyperDeck
Dosya Adına Tarih Ekleme	Kapalı

Dosya Adı Öneki

Kurulumunu ilk yaptığınızda, HyperDeck Shuttle HD cihazınız aşağıdaki dosya adı düzenini kullanarak, klipleri SD kartınıza veya USB Flaş diskinize kaydeder.

HyperDeck_0001

HyperDeck_0001

Ön Ek

HyperDeck_0001

Klip Numarası

Dosya adı öne ekini, HyperDeck Setup yardımcı yazılımı ile değiştirebilirsiniz. Daha fazla bilgi için, bu kılavuzun ilerleyen kısımlarındaki 'Blackmagic HyperDeck Kurulumu' bölümüne bakın.

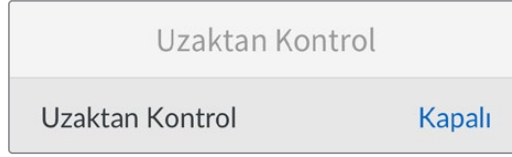
Dosya Adı Tarih Eki

Dosya adına eklenen tarih bilgisi, fabrika ayarı olarak kapalı durumdadır. Dosya adına tarih ve saat bilgilerinin kaydedilmesini istiyorsanız, 'dosya adı tarih eki' seçeneğini etkin hale getirin.

HyperDeck_2201061438_0001	
HyperDeck_2201061438_0001	Dosya Adı Öneki
HyperDeck_ 22 01061438_0001	Yıl
HyperDeck_220 1 061438_0001	Ay
HyperDeck_2201 06 1438_0001	Gün
HyperDeck_220106 14 38_0001	Saat
HyperDeck_22010614 38 _0001	Dakika
HyperDeck_2201061438_ 0001	Klip Numarası

Uzaktan Kontrol Ayarları

Uzaktan kontrol ayarı, HyperDeck'in diğer video ekipmanları, örneğin bir ATEM Mini Extreme switcher tarafından uzaktan kontrol edilmesini sağlar.



Uzaktan Kontrol

Ethernet üzerinden uzaktan kontrolü etkinleştirmek için 'uzaktan kontrol' modunu seç. Cihazı yerel olarak kontrol etmek için uzaktan kontrol seçimini kaldırın.

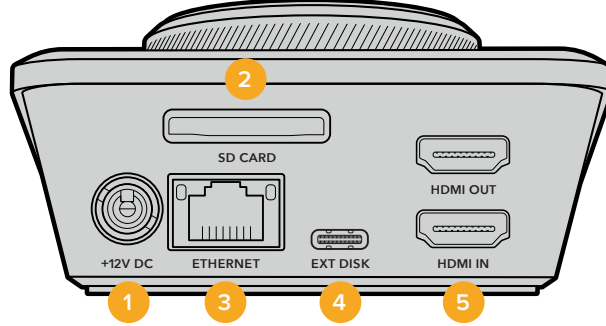
Sıfırlama Ayarları



Fabrika Ayarlarına Sıfırla

HyperDeck'inizi fabrika ayarlarına geri döndürmek için kurulum menüsünde 'fabrika ayarlarına sıfırla'yı vurgulayın. 'Set' butonuna basar basmaz, sizden seçiminizi onaylamanız istenir.

Arka Panel



1 Güç

HyperDeck Shuttle HD, bir AC adaptör ile çalışır. Cihaz ile gelen güç kablosu, güç kesintisini önlemek için kilitlenebilir bir konektöre sahiptir fakat, HyperDeck Shuttle HD'yi çalıştırmak için herhangi bir 36W 12V güç kablosunu da kullanabilirsiniz.

2 SD Kart

Kayıt ve oynatım için SD kartları yuvaya yerleştirin.

3 Ethernet

Ethernet portu, HyperDeck Ethernet Protocol'ü kullanarak, hızlı ftp aktarımları için ağınıza bağlanmayı veya cihazı uzaktan kontrol etmeyi mümkün kılar. Bir FTP istemcisi aracılığıyla dosyaların aktarılması hakkında daha fazla bilgi için, bu kılavuzdaki 'Bir Ağ Üzerinde Dosyaların Aktarımı' bölümüne bakın.

Bir ATEM switcher'in bağlı olduğu aynı ağı paylaştığında, ATEM switcher veya ATEM donanım paneli kullanarak da HyperDeck'inizi kontrol edebilirsiniz.

4 Harici Disk

Harici disklerle 5Gb/sn'ye kadar hızlarda kayıt yapmak için, USB-C konektöre bir flaş disk bağlayın. Bir veya daha çok sayıda SSD bağlamak üzere çok portlu USB-C hub cihazlarını veya Blackmagic MultiDock 10G'yi bağlayabilirsiniz.

5 HDMI

HDMI çıkışı; HDMI televizyonlara, monitörlere ve hatta ATEM Mini Extreme gibi bir switcher'e bağlayın. HDMI çıkışı, menü katmanını görüntülemek için de kullanılır.

Depolama Ortamı

SD Kart

Yüksek kalitede HD kayıt için yüksek hızlı UHS-I SD kartları öneriyoruz. Ultra HD 2160p60'a kadar kaydedebilmesi için bu kartların, 220MB/sn'nin üzerinde bir yazma hızına sahip olmaları gerekir.

Ancak, daha yüksek sıkıştırma ile daha düşük bit hızında kayıt yapıyorsanız, daha yavaş kartlar kullanabilirsiniz. Genel olarak, kartlarınız ne kadar hızlıysa o kadar iyidir.

Daha güncel bilgiler için düzenli olarak bu kılavuzun en güncel sürümüne bakmanızda fayda vardır ve her zaman www.blackmagicdesign.com/tr/support adresindeki Blackmagic Design internet sitesinden indirilebilir.

HyperDeck Shuttle HD ile hangi SD kartları kullanmalıyım?

60 fps'ye kadar 1080p için, aşağıdaki SD Kartlar önerilir.

Marka	Model	Kapasite
Angelbird	AV PRO SD UHS-II 300MB/s V90 SDXC	256GB
Angelbird	AV PRO SD UHS-II 260MB/s V60 SDXC	128GB
Angelbird	AV PRO SD UHS-II 260MB/s V60 SDXC	64GB
SanDisk	Extreme Pro UHS-I 95MB/s SDXC	64GB
Wise	SD2-64U3 UHS-II 285MB/s SDXC	64GB
Lexar	Professional 1000x UHS-II 150MB/s SDXC	128GB
SONY	Tough SF-G128T	128GB
Kingston	CANVAS GO! Plus 170MB/s V30	64GB
Kingston	CANVAS GO! Plus 170MB/s V30	128GB
Kingston	CANVAS GO! Plus 170MB/s V30	512GB
ProGrade Digital	SDXC UHS-II V90 300R	64GB
ProGrade Digital	SDXC UHS-II V90 300R	128GB
SONY	Tough SF-G64T UHS-II SDXC	64GB
Delkin Devices	Black UHS-II V90 SDXC	256GB
Delkin Devices	Power UHS-II V90 SDXC	128GB
Delkin Devices	Power UHS-II V90 SDXC	256GB
Delkin Devices	Black UHS-II V90 SDXC	128GB
Exascend	Essential SDXC UHS-II V90 R 300MB/s	64GB
Exascend	Essential SDXC UHS-II V90 R 300MB/s	128GB
Exascend	Catalyst SDXC UHS-II V90 R 300MB/s	64GB

Harici Disk

Tüm HyperDeck modelleri, doğrudan USB-C flaş disklerle kayıt yapabilir. Bu hızlı ve yüksek kapasiteli diskler, uzun süreler boyunca video kaydetmenize olanak verir. Sonra, aynı flaş diski bilgisayarınıza takabilir ve doğrudan bu diskten kurgulama yapabilirsiniz!

Daha da yüksek depolama kapasiteleri için bir USB-C docking istasyonu veya harici bir sabit disk bağlayabilirsiniz. Blackmagic MultiDock 10G'nizi veya USB-C flaş diskinizi bağlamak için, USB-C'ye bağlı olan cihazdan HyperDeck'nizin arka panelindeki 'ext disk' (harici disk) portuna bir kablo bağlayın.

HyperDeck Shuttle HD ile hangi USB-C diskleri kullanmalıyım?

60 fps'ye kadar 1080p ProRes HQ için, aşağıdaki USB-C diskler önerilir.

Marka	Model	Kapasite
Wise	PTS-256 Portable SSD 4K	256GB
OWC	Envoy Pro Ex	240GB
BUFFALO	SSD-PHE500U3-BA	500GB

60 fps'ye kadar 1080p DNxHR HQX için, aşağıdaki USB-C diskler önerilir.

Marka	Model	Kapasite
OWC	Envoy Pro Ex	240GB

60 fps'ye kadar 1080p H.264 için, aşağıdaki USB-C diskler önerilir.

Marka	Model	Kapasite
OWC	Envoy Pro Ex	240GB

Ortamın Formatlanması

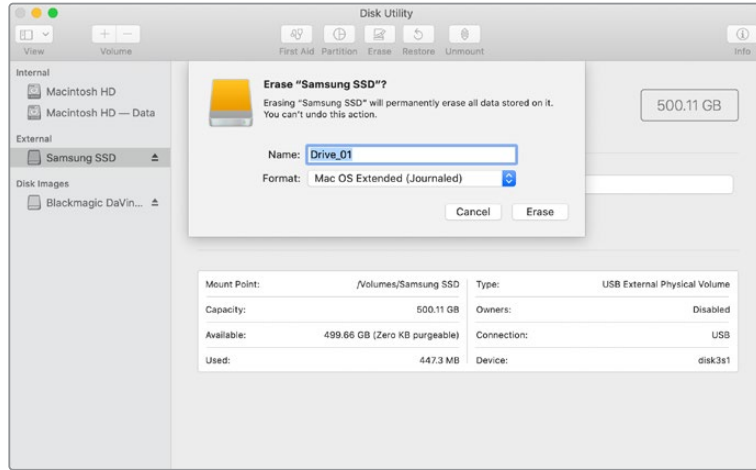
Ortamın bir Bilgisayar Üzerinde Hazırlanması

Bir Mac Bilgisayarda Ortamın Formatlanması

Mac ile gelen Disk Utility uygulaması, bir sürücüyü HFS+ veya exFAT formatlarında formatlayabilir.

Diskte bulunan önemli dosyalarınızı yedeklediğinizden emin olun, çünkü formatlama yapıldığında, diskteki her şey silinecektir.

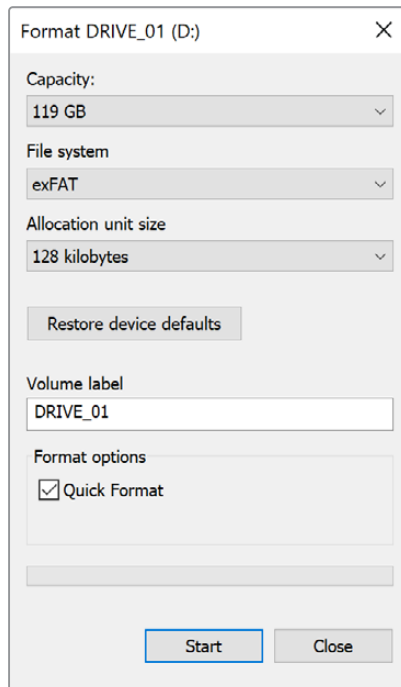
- 1 Harici bir dock veya bir kablo adaptörü ile bilgisayarınıza bir USB flaş disk bağlayın ve Time Machine yedeklemesi için SSD'nizi kullanma taleplerini içeren mesajları reddedin. SD kartları, harici bir kart okuyucu üzerinden bilgisayarınıza bağlayın.
- 2 Uygulamalar/yardımcı yazılımlar sekmesine girin ve Disk Utility uygulamasını başlatın.
- 3 SD kart veya USB flaş diskinizin disk simgesini tıklayın ve sonra 'erase' (sil) sekmesine tıklayın.
- 4 Formatı 'Mac OS Extended (Journaled)' veya 'exFAT' olarak ayarlayın.
- 5 Yeni disk bölümü için bir isim girin ve sonra 'sil' üzerine tıklayın. Ortamınız hızla formatlanacaktır ve HyperDeck ile kullanıma hazır hale getirilecektir.



Ortamın bir Windows Bilgisayarda Formatlanması

'Format' diyalog kutusu, bir Windows PC üzerindeki bir disk exFAT formatında formatlayabilir. SSD veya SD kartınızda bulunan önemli dosyalarınızı yedeklediğinizden emin olun, çünkü formatlama yapıldığında hepsi silinecektir.

- 1 Harici bir dock veya kablo adaptörüyle, bilgisayarınıza bir USB flaş disk bağlayın. SD kartları, harici bir kart okuyucu üzerinden bilgisayarınıza bağlayın.
- 2 Başlat menüsünü veya başlat ekranını açın ve bilgisayarım sekmesini seçin. USB flaş diskinize veya SD kartınıza sağ tıklayın.
- 3 İçerik menüsünden 'format' ibaresini seçin.
- 4 Dosya sistemini 'exFAT' olarak ve birim ayırma boyutunu da 128 kilobyte olarak ayarlayın.
- 5 Bir disk bölümü adı girin, 'quick format' (hızlı format) ibaresini seçin ve 'start' üzerine tıklayın.
- 6 Ortamınız hızla formatlanacaktır ve HyperDeck ile kullanıma hazır hale getirilecektir.



Teleprompter Fonksiyonunun Kullanımı

Standart bir RTF dosyası kullanarak, Blackmagic HyperDeck Shuttle HD'yi teleprompter olarak kullanabilirsiniz. Dosyanızı TextEdit veya WordPad'de oluşturun ve desteklenen 13 dilden herhangi birinde, zengin metin formatı dosyası olarak kaydedin. HyperDeck Shuttle HD ile açıldıktan sonra, komut dosyanızın yazı tipi boyutunu ve satır aralığını ayarlayabilirsiniz.

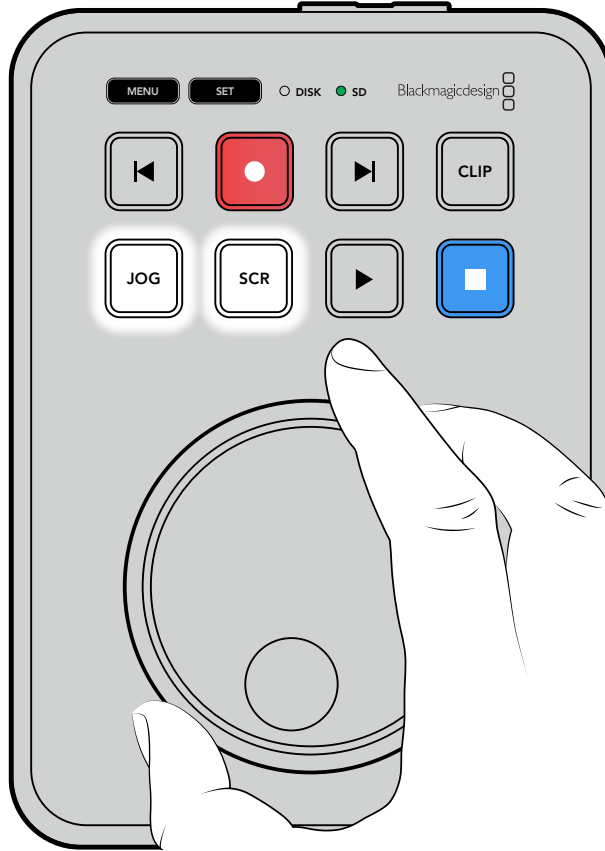
Teleprompteri kullanmak için:

- 1 HyperDeck Shuttle HD'nin HDMI çıkışını, kullanmak istediğiniz HDMI ekranına bağlayın.
- 2 Bir SD kart takın veya komut dosyanızı içeren harici bir USB flaş disk bağlayın.
- 3 Kayıt menüsünden kodek seçeneğini seçin. 'Teleprompter' ayarına gidin ve 'ayarla'ya basın.

Komut dosyası ekranınızda görünecektir. Oynatım butonunu kullanarak, oynatımı otomatik olarak buradan başlatabilir veya ek kontrol için kadranı kullanabilirsiniz.

Teleprompter oynatım hızını kontrol etme

HyperDeck Shuttle HD üzerindeki büyük kadrana, medya oynatımı için olduğu gibi teleprompter modundayken, oynatımı kontrol etmek için de kullanılabilir. Bir komut dosyası yüklediğinde, değişken hızlı oynatımı açmak için "jog" ve "scr" düğmelerine birlikte basın. Seçildikten sonra kadrana çevirin. Komut dosyası, kadranın hareketine göre bir hızda hareket edecektir. Örneğin, kadrana ne kadar hızlı çevrilirse, komut dosyası o kadar hızlı ilerler.



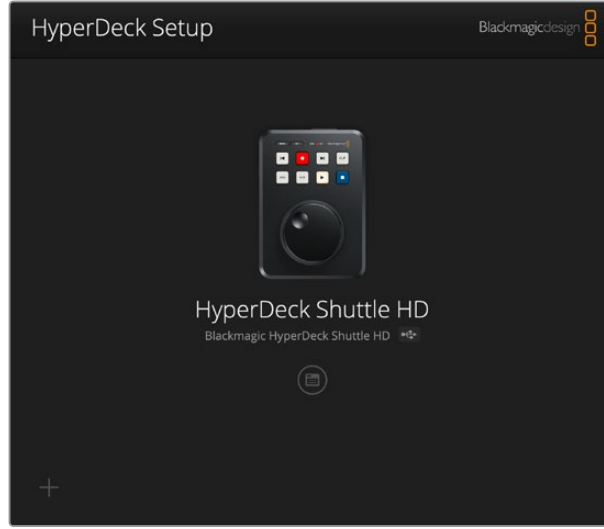
Sabit hızlar için, yavaş oynatım ve interaktif oynatım butonlarını ayrı ayrı kullanabilirsiniz. Bir kez seçildiğinde, kadrana çevirmek komut dosyasını yavaş oynatım modunda sabit bir düşük hızda veya interaktif oynatım modunda daha yüksek bir hızda hareket ettirir.

SD kartınızdaki veya harici diskinizdeki rtf dosyaları arasında gezinmek için ileri ve geri tuşlarına basın.

Teleprompter; dosyadan kalın yazı tipinin ayarlanıp ayarlanmadığını, yazı tipi boyutunu ve rengini tanıyacaktır. Buna ek olarak, monitör menüsünü kullanarak, ekranı teleprompter camına yansıtırken, ekranı yatay veya dikey olarak çevirebilir veya yazı tipi boyutunu, satır aralığını ve kenar boşluklarını değiştirebilirsiniz. Daha fazla bilgi için, bu kılavuzun daha önceki kısımlarındaki 'menü ayarları' bölümüne bakın.

Blackmagic HyperDeck Kurulumu

Blackmagic HyperDeck Setup, ayarları değiştirmek ve HyperDeck'inizdeki dahili yazılımı güncellemek için kullanabileceğiniz bir yardımcı yazılımdır.

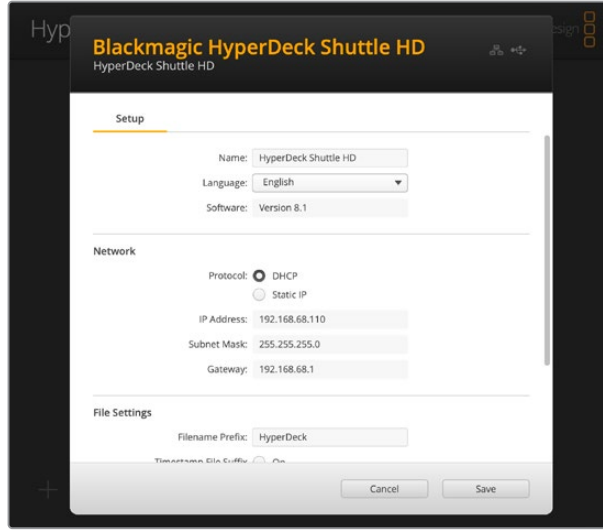


Yazılımı yüklemek için:

- 1 www.blackmagicdesign.com/tr/support adresinden, en son Blackmagic HyperDeck Setup yükleyici sürümünü indirin.
- 2 Bilgisayarınızda Blackmagic HyperDeck Kurulum yükleyicisini çalıştırın ve ekran talimatlarını takip edin.
- 3 Yükleme tamamlandıktan sonra, HyperDeck Shuttle HD'nizi arka panelindeki USB veya Ethernet bağlantısı aracılığıyla bilgisayara bağlayın.
- 4 Blackmagic HyperDeck Setup yazılımını başlatın ve dahili yazılımı güncellemek için ekrandaki komutları takip edin. Herhangi bir komut belirmezse, bu dahili yazılımın güncel olduğunu işaret eder ve yapmanız gereken başka bir şey yoktur.

Ayarlar menüsü açmak için HyperDeck görüntüsünü veya ayarlar simgesini tıklayın.

Ana ekran, HyperDeck Shuttle HD'nizi ve cihazın adını gösterecektir. Bu ad, bilgisayarınıza birden fazla HyperDeck bağlandığında cihazı tanımlamaya yardımcı olur ve yardımcı yazılımın ayarlar menüsü kullanılarak düzenlenebilir.



Ağ

Network

Protocol: DHCP
 Static IP

IP Address: 192.168.68.110

Subnet Mask: 255.255.255.0

Gateway: 192.168.68.1

Protokol

HyperDeck Shuttle HD cihazınızı ATEM switcher'lerle kontrol etmek veya HyperDeck Ethernet Protokolü aracılığıyla uzaktan kontrol etmek için sabit bir IP adresini manuel olarak ekleyerek veya DHCP kullanarak, HyperDeck Shuttle HD'yi diğer ekipmanlarınızla aynı ağa bağlamalısınız.

DHCP	HyperDeck Shuttle HD disk kaydedicileri, varsayılan olarak DHCP'ye ayarlanmış olarak gelir. Dinamik ana bilgisayar yapılandırma protokolü veya diğer adıyla DHCP, HyperDeck disk kaydedicinizi otomatikman tespit eden ve IP adresi atayan, ağ sunucularında bir hizmettir. DHCP, Ethernet üzerinden ekipmanların bağlanmasını ve IP adreslerinin birbirleriyle çakışmasını önlemeyi kolaylaştıran harika bir hizmettir. Bilgisayarların ve ağ switcher'lerinin çoğu DHCP'yi destekler.
Statik IP	'Statik IP' seçildiğinde, ağ detaylarınızı manuel olarak girebilirsiniz. Tüm ünitelerin birbirleriyle iletişim kurabilmesi için IP adreslerini manuel olarak ayarlarken, bunların aynı altağ maskesi ve ağ geçidi ayarlarını paylaşıyor olması lazım. Bunların yanında, panelin IP adresindeki rakamların ilk üç hanesinin aynı olması gerekir.

Ağda, IP adreslerinde aynı tanımlama numarasına sahip başka cihazlar olduğunda, bir çelişki ortaya çıkar ve cihazlar ağa bağlanmaz. Bir uyumsuzlıkla karşılaştığınızda, cihazın IP adresindeki tanımlayıcı numarayı değiştirmeniz yeterlidir.

Dosya Ayarları

File Settings

Filename Prefix:

Timestamp File Suffix On
 Off

İlk kurulduğunda HyperDeck Shuttle HD'niz, ön ek olarak 'HyperDeck'i kullanarak klipleri SD kartınıza veya USB flaş diskinize kaydeder. Ön eki değiştirmek için yeni bir dosya adı yazın.

Dosya adına eklenen tarih bilgisi, fabrika ayarı olarak kapalı durumdadır. Dosya adınıza tarih ve saatin kaydedilmesini istiyorsanız bu işlemi etkinleştirin. Dosya adı ön eki ve zaman bilgisi ayarları, HyperDeck Shuttle HD'deki ekran menüsü aracılığıyla da yapılabilir.

Bir Ağ Üzerinden Dosyaların Aktarımı

HyperDeck disk kaydediciniz, dosya transfer protokolü veya diğer adıyla ftp üzerinden, dosya aktarma işlemi destekler. Bu güçlü özellik, bir ağ aracılığıyla dosyaları doğrudan bilgisayarınızdan HyperDeck'inize, yerel bir ağın sağlayabileceği yüksek hızlarda kopyalamanızı sağlar. Örneğin, dijital tabela için uzak bir yerde bulunan bir HyperDeck cihazına, yeni dosya kopyalıyor olabilirsiniz.

HyperDeck Shuttle HD'ye Bağlanma

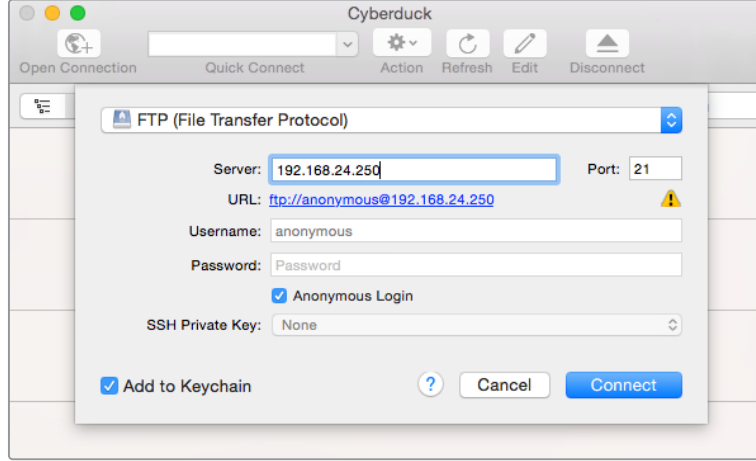
Bilgisayarınız ve HyperDeck Shuttle HD aynı ağ üzerindeyken, tek ihtiyacınız olan bir ftp istemcisi ve HyperDeck Shuttle HD'nizin IP adresidir.

- 1 HyperDeck'inizi bağlamak istediğiniz bilgisayara bir FTP istemcisi indirin ve yükleyin. Cyberduck, FileZilla veya Transmit'i tavsiye ediyoruz ama FTP uygulamalarının çoğu çalışacaktır. Cyberduck ve FileZilla'yı ücretsiz olarak indirebilirsiniz.
- 2 HyperDeck Shuttle HD'nizi bir Ethernet kablosu kullanarak ağınıza bağlayın ve IP adresini not edin. IP adresine erişmek için 'menü' butonuna basın ve 'ağ' ekranına erişmek için arama kadrantını çevirin. HyperDeck cihazınızın IP adresini, bu ekranın alt kısmında göreceksiniz.

Ağ	
Protokol	Statik IP
IP Adresi	192.168.24.100
Alt Ağ Maskesi	255.255.255.0
Ağ Geçidi	192.168.24.1

HyperDeck Shuttle HD'nizin IP adresini kurulum menüsünün ağ bölümünde bulabilirsiniz.

- 3 HyperDeck'nizin IP adresini, TCP uygulamasının bağlantı diyaloguna girin. Bu kutunun ismi ve konumu uygulamalar arasında değişebilir, fakat genellikle 'server' veya 'host' olarak adlandırılır. FTP programınızda bir 'anonymous login' (isimsiz giriş) varsa işaretlendiğinden emin olun.



HyperDeck Shuttle HD'ye bağlanırken, kullanıcı adı ve şifre girmenize gerek yoktur. Sadece disk kaydedicinizin IP adresini, FTP uygulamanızın 'server' veya 'host' alanına girin ve varsa 'anonymous login' (isimsiz giriş) onay kutusunu işaretleyin.

Dosya Transferi

HyperDeck'e bağlandığınızda, ftp uygulama ile normalde yaptığınız gibi, dosyaları aktarabilirsiniz. FTP uygulamalarının çoğunda 'sürükle ve bırak' arayüzü vardır ancak, uygun metodun ne olduğunu tespit etmek için uygulamanızı inceleyin.

Herhangi bir dosyayı, HyperDeck cihazınıza ya da HyperDeck cihazınızdan aktarabilirsiniz fakat, HyperDeck Shuttle HD'den oynatmayı düşündüğünüz dosyaların, HyperDeck'inizin desteklediği kodlarla ve çözünürlüklerle uyumlu olması gerektiğini belirtmemizde fayda var.

BİLGİ HyperDeck cihazınız kayıt yaparken, bir ağ üzerinden dosyaları transfer edebilirsiniz. Kayıt işleminin etkilenmemesi için aktarım hızlarını HyperDeck cihazı otomatikman ayarlayacaktır.

Developer Information

Blackmagic HyperDeck Ethernet Protocol

The Blackmagic HyperDeck Ethernet Protocol is a text based protocol accessed by connecting to TCP port 9993 on HyperDeck models that have a built in Ethernet connection. If you are a software developer, you can use the protocol to construct devices that integrate with our products. Here at Blackmagic Design our approach is to open up our protocols and we eagerly look forward to seeing what you come up with!

Protocol Commands

Command	Command Description
help or ?	Provides help text on all commands and parameters
commands	return commands in XML format
device info	return device information
disk list	query clip list on active disk
disk list: slot id: {n}	query clip list on disk in slot {n}
quit	disconnect ethernet control
ping	check device is responding
preview: enable: {true/false}	switch to preview or output
play	play from current timecode
play: speed: {-5000 to 5000}	play at specific speed
play: loop: {true/false}	play in loops or stop-at-end
play: single clip: {true/false}	play current clip or all clips
playrange	query playrange setting
playrange set: clip id: {n}	set play range to play clip {n} only
playrange set: clip id: {n} count: {m}	set play range to {m} clips starting from clip {n}
playrange set: in: {inT} out: {outT}	set play range to play between: - timecode {inT} and timecode {outT}
playrange set: timeline in: {in} timeline out: {out}	set play range in units of frames between: - timeline position {in} and position {out} clear/reset play range setting
playrange clear	clear/reset play range setting
play on startup	query unit play on startup state
play on startup: enable: {true/false}	enable or disable play on startup
play on startup: single clip: {true/false}	play single clip or all clips on startup
play option	query play options
play option: stop mode: {lastframe/nextframe/black}	set output frame when playback stops
record	record from current input
record: name: {name}	record named clip

Command	Command Description
record spill	spill current recording to next slot
record: spill: slot id: {n}	spill current recording to specified slot use current id to spill to same slot
stop	stop playback or recording
clips count	query number of clips on timeline
clips get	query all timeline clips
clips get: clip id: {n}	query a timeline clip info
clips get: clip id: {n} count: {m}	query m clips starting from n
clips get: version: {1/2}	query clip info using specified output version: version 1: id: name startT duration version 2: id: startT duration inT outT name
clips add: name: {name}	append a clip to timeline
clips add: clip id: {n} name: {name}	insert clip before existing clip {n}
clips add: in: {inT} out: {outT} name: {name}	append the {inT} to {outT} portion of clip
clips remove: clip id: {n}	remove clip {n} from the timeline (invalidates clip ids following clip {n})
clips clear	empty timeline clip list
transport info	query current activity
slot info	query active slot
slot info: slot id: {n}	query slot {n}
slot select: slot id: {n}	switch to specified slot
slot select: video format: {format}	load clips of specified format
slot unblock	unblock active slot
slot unblock: slot id: {n}	unblock slot {n}
cache info	query cache status
dynamic range	query dynamic range settings
dynamic range: playback override: {off/Rec709/Rec2020_SDR/HLG/ ST2084_300/ST2084_500/ ST2084_800/ST2084_1000/ ST2084_2000/ST2084_4000/ST2084}	set playback dynamic range override
dynamic range: record override: {off/Rec709/Rec2020_SDR/HLG/ ST2084_300/ST2084_500/ ST2084_800/ST2084_1000/ ST2084_2000/ST2084_4000/ST2048}	set record dynamic range override
notify	query notification status
notify: remote: {true/false}	set remote notifications
notify: transport: {true/false}	set transport notifications
notify: slot: {true/false}	set slot notifications
notify: configuration: {true/false}	set configuration notifications

Command	Command Description
notify: dropped frames: {true/false}	set dropped frames notifications
notify: display timecode: {true/false}	set display timecode notifications
notify: timeline position: {true/false}	set playback timeline position notifications
notify: playrange: {true/false}	set playrange notifications
notify: cache: {true/false}	set cache notifications
notify: dynamic range: {true/false}	set dynamic range settings notifications
notify: slate: {true/false}	set digital slate notifications
notify: clips: {true/false}	set timeline clips notifications where two types of changes can occur: add: partial update with list of clips and insert positions snapshot: complete update of all clips on timeline
notify: disk: {true/false}	set disk clips notifications where two types of changes can occur: add: partial update with list of clips and insert positions snapshot: complete update of all clips on timeline
goto: clip id: {start/end}	goto first clip or last clip
goto: clip id: {n}	goto clip id {n}
goto: clip id: +{n}	go forward {n} clips
goto: clip id: -{n}	go backward {n} clips
goto: clip: {n}	goto frame position {n} within current clip
goto: clip: +{n}	go forward {n} frames within current clip
goto: clip: -{n}	go backward {n} frames within current clip
goto: clip: {start/end}	goto start or end of clip
goto: timeline: {n}	goto frame position {n} within timeline
goto: timeline: +{n}	o forward {n} frames within timeline
goto: timeline: -{n}	go backward {n} frames within timeline
goto: timeline: {start/end}	goto start or end of timeline
goto: timecode: {timecode}	goto specified timecode
goto: timecode: +{timecode}	go forward {timecode} duration
goto: timecode: -{timecode}	go backward {timecode} duration
goto: slot id: {n}	goto slot id {n}
jog: timecode: {timecode}	jog to timecode
jog: timecode: +{timecode}	jog forward {timecode} duration
jog: timecode: -{timecode}	jog backward {timecode} duration
shuttle: speed: {-5000 to 5000}	shuttle with speed
remote	query unit remote control state
remote: enable: {true/false}	enable or disable remote control
remote: override: {true/false}	session override remote control
configuration	query configuration settings
configuration: video input: SDI	switch to SDI input

Command	Command Description
configuration: video input: HDMI	switch to HDMI input
configuration: video input: component	switch to component input
configuration: audio input: embedded	capture embedded audio
configuration: audio input: XLR	capture XLR audio
configuration: audio input: RCA	capture RCA audio
configuration: file format: {format}	switch to specific file format
configuration: audio codec: PCM	switch to PCM audio
configuration: audio codec: AAC	switch to AAC audio
configuration: timecode input: {external/embedded/internal/preset/clip}	change the timecode input
configuration: timecode output: {clip/timeline}	change the timecode output
configuration: timecode preference: {default/dropframe/nondropframe}	whether or not to use drop frame timecodes when not otherwise specified
configuration: timecode preset: {timecode}	set the timecode preset
configuration: audio input channels: {n}	set the number of audio channels recorded to {n}
configuration: record trigger: {none/recorderbit/timecoderun}	change the record trigger
configuration: record prefix: {name}	set the record prefix name (supports UTF-8 name)
configuration: append timestamp: {true/false}	append timestamp to recorded filename
configuration: xlr input id: {n} xlr type: {line/mic}	configure xlr input type multiple xlr inputs can be configured in a single command
configuration: genlock input resync: {true/false}	enable or disable genlock input resync
uptime	return time since last boot
format: slot id: {n} prepare: {exFAT/HFS+} name: {name}	prepare a disk formatting operation to filesystem {format}
format: confirm: {token}	perform a pre-prepared formatting operation using token
identify: enable: {true/false}	identify the device
watchdog: period: {period in seconds}	client connection timeout
reboot	reboot device
slate clips	slate clips information
slate project	slate project information
slate lens	slate lens information

Multiline commands:	Command Description
slate clips↵	set slate clips information:
reel: {n}	slate reel number, where {n} is in [1, 999]
scene id: {id}	slate scene id value, where {id} is a string
shot type: {WS/MS/BCU/MCU/ECU/none}	slate shot type
take: {n}	slate take number, where {n} is in [1, 99]
take scenario: {PU/VFX/SER/none}	slate take scenario
take auto inc: {true/false}	slate take auto increment
good take: {true/false}	slate good take
environment: {interior/exterior}	slate environment
day night: {day/night}	slate day or night
slate project:↵	set slate project information:
project name: {name}	project name (can be empty, supports UTF-8)
camera: {index}	set camera index e.g. A
director: {name}	director (can be empty, supports UTF-8)
camera operator: {name}	camera operator (can be empty, supports UTF-8)
slate lens:↵	set lens information:
lens type: {type}	lens type (can be empty, supports UTF-8)
iris: {type}	camera iris (can be empty, supports UTF-8)
focal length: {length}	focal length (can be empty, supports UTF-8)
distance: {distance}	lens distance (can be empty, supports UTF-8)
filter: {filter}	lens filter (can be empty, supports UTF-8)

Command Combinations

You can combine the parameters into a single command, for example:

```
play: speed: 200 loop: true single clip: true
```

Or for configuration:

```
configuration: video input: SDI audio input: XLR
```

Or to switch to the second disk, but only play NTSC clips:

```
slot select: slot id: 2 video format: NTSC
```

Protocol Details

Connection

The HyperDeck Ethernet server listens on TCP port 9993.

Basic syntax

The HyperDeck protocol is a line oriented text protocol. Lines from the server will be separated by an ascii CR LF sequence. Messages from the client may be separated by LF or CR LF.

New lines are represented in this document as a "↵" symbol.

Single line command syntax

Command parameters are usually optional. A command with no parameters is terminated with a new line:

```
{Command name}↵
```

If parameters are specified, the command name is followed by a colon, then pairs of parameter names and values. Each parameter name is terminated with a colon character:

```
{Command name}: {Parameter}: {Value} {Parameter}: {Value} ...↵
```

Multiline command syntax

The HyperDeck protocol also supports an equivalent multiline syntax where each parameter-value pair is entered on a new line. E.g.

```
{Command name}:↵  
{Parameter}: {Value}↵  
{Parameter}: {Value}↵  
↵
```

Response syntax

Simple responses from the server consist of a three digit response code and descriptive text terminated by a new line:

```
{Response code} {Response text}↵
```

If a response carries parameters, the response text is terminated with a colon, and parameter name and value pairs follow on subsequent lines until a blank line is returned:

```
{Response code} {Response text}:↵  
{Parameter}: {Value}↵  
{Parameter}: {Value}↵  
...  
↵
```

Successful response codes

A simple acknowledgement of a command is indicated with a response code of 200:

```
200 ok↵
```

Other successful responses carry parameters and are indicated with response codes in the range of 201 to 299.

Failure response codes

Failure responses to commands are indicated with response codes in the range of 100 to 199:

```
100 syntax error
101 unsupported parameter
102 invalid value
103 unsupported
104 disk full
105 no disk
106 disk error
107 timeline empty
108 internal error
109 out of range
110 no input
111 remote control disabled
112 clip not found
120 connection rejected
150 invalid state
151 invalid codec
160 invalid format
161 invalid token
162 format not prepared
163 parameterized single line command not supported
```

Asynchronous response codes

The server may return asynchronous messages at any time. These responses are indicated with response codes in the range of 500 to 599:

```
5xx {Response Text}:↵
{Parameter}: {Value}↵
{Parameter}: {Value}↵
↵
```

Connection response

On connection, an asynchronous message will be delivered:

```
500 connection info:↵
protocol version: {Version}↵
model: {Model Name}↵
↵
```

Timecode syntax

Timecodes are expressed as non-drop-frame timecode in the format:

```
HH:MM:SS:FF
```

Handling of deck "remote" state

The "remote" command may be used to enable or disable the remote control of the deck. Any attempt to change the deck state over ethernet while remote access is disabled will generate an error:

```
111 remote control disabled↵
```

To enable or disable remote control:

```
remote: enable: {"true", "false"} ↵
```

The current remote control state may be overridden allowing remote access over ethernet irrespective of the current remote control state:

```
remote: override: {"true", "false"} ↵
```

The override state is only valid for the currently connected ethernet client and only while the connection remains open.

The "remote" command may be used to query the remote control state of the deck by specifying no parameters:

```
remote↵
```

The deck will return the current remote control state:

```
210 remote info:↵  
enabled: {"true", "false"}↵  
override: {"true", "false"}↵  
↵
```

Asynchronous remote control information change notification is disabled by default and may be configured with the "notify" command. When enabled, changes in remote state will generate a "510 remote info:" asynchronous message with the same parameters as the "210 remote info:" message.

Closing connection

The "quit" command instructs the server to cleanly shut down the connection:

```
quit↵
```

Checking connection status

The "ping" command has no function other than to determine if the server is responding:

```
ping↵
```

Getting help

The "help" or "?" commands return human readable help text describing all available commands and parameters:

```
help↵
```

Or:

```
?↵
```

The server will respond with a list of all supported commands:

```
201 help:↵  
{Help Text}↵  
{Help Text}↵  
↵
```

Switching to preview mode

The "preview" command instructs the deck to switch between preview mode and output mode:

```
preview: enable: {"true", "false"}↵
```

Playback will be stopped when the deck is switched to preview mode. Capturing will be stopped when the deck is switched to output mode.

Controlling device playback

The "play" command instructs the deck to start playing:

```
play↵
```

The play command accepts a number of parameters which may be used together in most combinations.

By default, the deck will play all remaining clips on the timeline then stop.

The "single clip" parameter may be used to override this behavior:

```
play: single clip: {"true", "false"}↵
```

By default, the deck will play at normal (100%) speed. An alternate speed may be specified in percentage between -5000 to 5000:

```
play: speed: {% normal speed}↵
```

By default, the deck will stop playing when it reaches to the end of the timeline. The "loop" parameter may be used to override this behavior:

```
play: loop: {"true", "false"}↵
```

The "playrange" command instructs the deck to play all the clips. To override this behavior: and select a particular clip:

```
playrange set: clip id: {Clip ID}↵
```

To only play a certain timecode range:

```
playrange set: in: {in timecode} out: {out timecode}↵
```

To clear a set playrange and return to the default value:

```
playrange clear↵
```

The "play on startup" command instructs the deck on what action to take on startup. By default, the deck will not play. Use the "enable" command to start playback after each power up.

```
play on startup: enable {"true", "false"}↵
```

By default, the unit will play back all clips on startup. Use the "single clip" command to override.

```
play on startup: single clip: {"true", "false"}↵
```

Stopping deck operation

The "stop" command instructs the deck to stop the current playback or capture:

```
stop↵
```

Changing timeline position

The "goto" command instructs the deck to switch to playback mode and change its position within the timeline.

To go to the start of a specific clip:

```
goto: clip id: {Clip ID}↵
```

To move forward/back {count} clips from the current clip on the current timeline:

```
goto: clip id: +/-{count}↵
```

Note that if the resultant clip id goes beyond the first or last clip on timeline, it will be clamp at the first or last clip.

To go to the start or end of the current clip:

```
goto: clip: {"start", "end"}↵
```

To go to the start of the first clip or the end of the last clip:

```
goto: timeline: {"start", "end"}↵
```

To go to a specified timecode:

```
goto: timecode: {timecode}↵
```

To move forward or back a specified duration in timecode:

```
goto: timecode: {"+", "-"}{duration in timecode}↵
```

To specify between slot 1 and slot 2:

```
goto: slot id: {Slot ID}↵
```

Note that only one parameter/value pair is allowed for each goto command.

Enumerating supported commands and parameters

The "commands" command returns the supported commands:

```
commands↵
```

The command list is returned in a computer readable XML format:

```
212 commands:
<commands>↵
  <command name="..."><parameter name="..."/>...</command>↵
  <command name="..."><parameter name="..."/>...</command>↵
  ...
</commands>↵
↵
```

Controlling asynchronous notifications

The "notify" command may be used to enable or disable asynchronous notifications from the server.

To enable or disable transport notifications:

```
notify: transport: {"true", "false"}↵
```

To enable or disable slot notifications:

```
notify: slot: {"true", "false"}↵
```

To enable or disable remote notifications:

```
notify: remote: {"true", "false"}↵
```

To enable or disable configuration notifications:

```
notify: configuration: {"true", "false"}↵
```

Multiple parameters may be specified. If no parameters are specified, the server returns the current state of all notifications:

```
209 notify:↵
transport: {"true", "false"}↵
slot: {"true", "false"}↵
remote: {"true", "false"}↵
configuration: {"true", "false"}↵
dropped frames: {"true", "false"}↵
display timecode: {"true", "false"}↵
timeline position: {"true", "false"}↵
playrange: {"true", "false"}↵
cache: {"true", "false"}↵
dynamic range: {"true", "false"}↵
slate: {"true", "false"}↵
clips: {"true", "false"}↵
disk: {"true", "false"}↵
↵
```

Retrieving device information

The "device info" command returns information about the connected deck device:

```
device info↵
```

The server will respond with:

```
204 device info:↵
protocol version: {Version}↵
model: {Model Name}↵
unique id: {unique alphanumeric identifier}↵
slot count: {number of storage slots}↵
software version: {software version}↵
↵
```


Retrieving slot information

The "slot info" command returns information about a slot. Without parameters, the command returns information for the currently selected slot:

```
slot info↵
```

If a slot id is specified, that slot will be queried:

```
slot info: slot id: {Slot ID}↵
```

The server will respond with slot specific information:

```
202 slot info:↵
slot id: {Slot ID}↵
status: {"empty", "mounting", "error", "mounted"}↵
volume name: {Volume name}↵
recording time: {recording time available in seconds}↵
video format: {disk's default video format}↵
blocked: {"true", "false"}↵
↵
```

Asynchronous slot information change notification is disabled by default and may be configured with the "notify" command. When enabled, changes in slot state will generate a "502 slot info:" asynchronous message with the same parameters as the "202 slot info:" message.

Retrieving clip information

The "disk list" command returns the information for each playable clip on a given disk. Without parameters, the command returns information for the current active disk:

```
disk list↵
```

If a slot id is specified, the disk in that slot will be queried:

```
disk list: slot id: {Slot ID}↵
```

The server responds with the list of all playable clips on the disk in the format of: Index, name, formats, and duration in timecode:

```
206 disk list:↵
slot id: {Slot ID}↵
{clip index}: {name} {file format} {video format} {Duration
timecode}↵
{clip index}: {name} {file format} {video format} {Duration
timecode}↵
...
↵
```

Note that the *clip index* starts from 1.

Retrieving clip count

The "clips count" command returns the number of clips on the current timeline:

```
clips count ↵
```

The server responds with the number of clips:

```
214 clips count: ↵
clip count: {Count}↵
```

Retrieving timeline information

The "clips get" command returns information for each available clip on the current timeline. Without parameters, the command returns information for all clips on timeline:

```
clips get↵
```

The server responds with a list of clip IDs, names and timecodes:

```
205 clips info:↵  
clip count: {Count}↵  
{Clip ID}: {Start timecode} {Duration timecode} {In timecode}  
{Out timecode} {Name}↵  
{Clip ID}: {Start timecode} {Duration timecode} {In timecode}  
{Out timecode} {Name}↵  
...  
↵
```

Retrieving transport information

The "transport info" command returns the state of the transport:

```
transport info ↵
```

The server responds with transport specific information:

```
208 transport info:  
status: {"preview", "stopped", "play", "forward", "rewind",  
"jog", "shuttle","record"}↵  
speed: {Play speed between -5000 and 5000 %}↵  
slot id: {Slot ID or "none"}↵  
clip id: {Clip ID or "none"}↵  
single clip: {"true", "false"}↵  
display timecode: {timecode}↵  
timecode: {timecode}↵  
video format: {Video format}↵  
loop: {"true", "false"}↵  
timeline: {n}↵  
input video format: {Video format}↵  
dynamic range: {"off", "Rec709", "Rec2020_SDR", "HLG",  
"ST2084_300", "ST2084_500", "ST2084_800", "ST2084_1000",  
"ST2084_2000", "ST2084_4000", "ST2048" or "none"}↵  
↵
```

The "timecode" value is the timecode within the current timeline for playback or the clip for record. The "display timecode" is the timecode displayed on the front of the deck. The two timecodes will differ in some deck modes.

Asynchronous transport information change notification is disabled by default and may be configured with the "notify" command. When enabled, changes in transport state will generate a "508 transport info:" asynchronous message with the same parameters as the "208 transport info:" message.

Video Formats

The following video formats are currently supported on HyperDeck Shuttle:

720p50, 720p5994, 720p60

1080p23976, 1080p24, 1080p25, 1080p2997, 1080p30, 1080p60

1080i50, 1080i5994, 1080i60

Video format support may vary between models and software releases.

File Formats

All HyperDeck models currently support the following file formats:

H.264High

H.264Medium

H.264Low

QuickTimeProResHQ

QuickTimeProRes

QuickTimeProResLT

QuickTimeProResProxy

QuickTimeDNxHD220x

DNxHD220x

QuickTimeDNxHD145

DNxHD145

QuickTimeDNxHD45

DNxHD45

Supported file formats may vary between models and software releases.

Querying and updating configuration information

The "configuration" command may be used to query the current configuration of the deck:

```
configuration↵
```

The server returns the configuration of the deck:

```
211 configuration:↵
audio input: {"embedded", "XLR", "RCA"}↵
audio mapping: {n}↵
video input: {"SDI", "HDMI", "component", "composite"}↵
file format: {format}↵
audio codec: {"PCM", "AAC"}↵
timecode input: {"external", "embedded", "preset", "clip"}↵
timecode output: {"clip", "timeline"}↵
timecode preference: {"default", "dropframe", "nondropframe"}↵
timecode preset: {timecode}↵
audio input channels: {n}↵
record trigger: {"none", "recordbit", "timecoderun"}↵
record prefix: {name}↵
append timestamp: {"true", "false"}↵
genlock input resync: {"true", "false"}↵
↵
```

One or more configuration parameters may be specified to change the configuration of the deck.

To change the current video input:

```
configuration: video input: {"SDI", "HDMI", "component"}↵
```

Valid video inputs may vary between models. To configure the current audio input:

```
configuration: audio input: {"embedded", "XLR", "RCA"}↵
```

Valid audio inputs may vary between models.

To configure the current file format:

```
configuration: file format: {File format}↵
```

Note that changes to the file format may require the deck to reset, which will cause the client connection to be closed. In such case, response code 213 will be returned (instead of 200) before the client connection is closed:

```
"213 deck rebooting"
```

Asynchronous configuration information change notification is disabled by default and may be configured with the "notify" command. When enabled, changes in configuration will generate a "511 configuration:" asynchronous message with the same parameters as the "211 configuration:" message.

Selecting active slot and video format

The "slot select" command instructs the deck to switch to a specified slot, or/and to select a specified output video format.

To switch to a specified slot:

```
slot select: slot id: {slot ID}↵
```

To select the output video format:

```
slot select: video format: {video format}↵
```

Either or all slot select parameters may be specified. Note that selecting video format will result in a rescan of the disk to reconstruct the timeline with all clips of the specified video format.

Clearing the current timeline

The "clips clear" command instructs the deck to empty the current timeline:

```
clips clear↵
```

The server responds with

```
200 ok↵
```

Adding a clip to the current timeline

The "clips add:" command instructs the deck to add a clip to the current timeline:

```
clips add: name: {clip name}↵
```

The server responds with

```
200 ok↵
```

or in case of error

```
lxx {error description}↵
```

Configuring the watchdog

The "watchdog" command instructs the deck to monitor the connected client and terminate the connection if the client is inactive for at least a specified period of time.

To configure the watchdog:

```
watchdog: period: {period in seconds}↵
```

To avoid disconnection, the client must send a command to the server at least every {period} seconds. Note that if the period is set to 0 or less than 0, connection monitoring will be disabled.

Yardım

Yardım İçin

Yardım almanın en hızlı yolu, Blackmagic Design online destek sayfalarına girip, Blackmagic HyperDeck disk kaydedici için mevcut olan en son destek kaynaklarını incelemenizdir.

Blackmagic Design Online Destek Sayfaları

En güncel kılavuz, yazılım ve destek notlarına, www.blackmagicdesign.com/tr/support adresindeki BlackmagicDesign destek merkezinden ulaşılabilir.

Blackmagic Design Forum

İnternet sitemizdeki Blackmagic Design forum sayfası, daha fazla bilgi ve yaratıcı fikirler için ziyaret edebileceğiniz faydalı bir kaynaktır. Burası, yardım almanız için daha hızlı bir yol olabilir çünkü, sorularınız için, başka deneyimli kullanıcılar ya da Blackmagic Design çalışanları tarafından verilen yanıtları bulabilir ve böylelikle çalışmalarınıza devam edebilirsiniz. Foruma <https://forum.blackmagicdesign.com> adresinden ulaşabilirsiniz.

Blackmagic Design Destek Hizmetiyle İrtibat

Aradığınız yardımı destek kaynaklarında ya da forum'da bulamadığınız durumda, lütfen destek sayfamıza girerek "Bize e-posta gönderin" butonunu tıklayarak e-post yoluyla destek talebinde bulunun. Bunun yerine, destek sayfasındaki "Yerel destek ekibini arayın" butonunu tıklayabilir ve size en yakın olan Blackmagic Design destek ofisini arayabilirsiniz.

Yüklü Olan Yazılım Sürümünün Kontrol Edilmesi

Bilgisayarınızda Blackmagic HyperDeck yazılımının hangi sürümünün yüklü olduğunu kontrol etmek için, 'Blackmagic HyperDeck Setup Hakkında' penceresini açın.

- Mac OS'te, Blackmagic HyperDeck Setup yazılımını, 'Uygulamalar' (Applications) dosyasından açın. Sürüm numarasını görüntülemek için, uygulamalar menüsünden 'About Blackmagic HyperDeck Setup' sekmesini seçin.
- Windows bilgisayarlarda, başlat menüsündeki veya başlangıç ekranındaki Blackmagic HyperDeck Setup yardımcı yazılımını açın. Sürüm numarasını görüntülemek için 'Help' (Yardım) menüsünü tıklayın ve 'About Blackmagic HyperDeck Setup' ibaresini seçin.

En Son Yazılım Güncellemelerine Erişim

Bilgisayarınızda yüklü olan Blackmagic HyperDeck Setup yazılımının sürümünü gözden geçirdikten sonra, en son güncellemeleri incelemek üzere, www.blackmagicdesign.com/tr/support adresinden, Blackmagic Design destek merkezine bakın. En son güncellemelerle çalışmak faydalı olsa da, yazılımı önemli bir projenin ortasındaiken güncellemekten kaçınmanızda yarar vardır.

Mevzuata İlişkin Bildirimler

Avrupa Birliği Dahilinde Elektrikli ve Elektronik Ekipman Atıklarının Bertaraf Edilmesi.



Ürün üzerindeki sembol, bu ekipmanın başka atık malzemelerle bertaraf edilmemesi şartını belirler. Atık ekipmanlarınızı bertaraf edebilmeniz için, geri dönüşümünü sağlamak üzere, belirlenmiş toplama noktasına teslim edilmeleri gerekmektedir.

Bertaraf anında atık cihazlarınızın ayrı olarak toplanması ve geri dönüşümü, doğal kaynakların korunmasına yardımcı olacaktır ve insan sağlığını ve çevreyi koruyucu bir şekilde geri dönüşümünü sağlayacaktır. Atık ekipmanlarınızı geri dönüşüm için nereye teslim edebileceğiniz konusunda daha fazla bilgi için, lütfen yerel belediyenizin geri dönüşüm şubesini ya da ürünü satın aldığınız satış bayisini arayınız.



Bu cihaz, test edilmiş ve Federal İletişim Komisyonu (FCC) koşullarının 15. bölümü doğrultusunda A Sınıfı dijital cihazların sınırlarıyla uyumlu olduğu tespit edilmiştir. İlgili sınırlar, bu cihaz ticari bir ortamda çalıştırıldığında, zararlı müdahalelere karşı makul koruma sağlaması amacıyla tasarlanmıştır. Bu ekipman, radyo frekans enerjisi üretir, kullanır ve saçabilir ve talimatlar doğrultusunda kurulmadığı ve kullanılmadığı takdirde, radyo iletişimlerine zararlı müdahaleye yol açabilir. Bu ürünün bir yerleşim bölgesinde çalıştırılması zararlı müdahaleye yol açabilir. Bu durumda, müdahalenin düzeltilmesi için ilgili maliyeti kullanıcı karşılamak zorundadır.

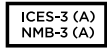
Bu cihazın çalıştırılması aşağıdaki iki şarta bağlıdır:

- 1 Bu cihaz, zararlı müdahaleye sebebiyet vermemelidir.
- 2 Bu cihaz, arzu edilmeyen bir çalışma şekline yol açacak müdahale de dahil olmak üzere maruz kaldığı her türlü müdahaleyi kabul etmelidir.



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ISED Kanada Beyannamesi



Bu cihaz, A Sınıfı dijital cihazlar için Kanada standartlarıyla uyumludur.

Bu cihaza yapılacak herhangi bir değişiklik veya kullanım amacı dışında kullanılması, bu standartlara uyumluluğunu hükümsüz kılabilir.

HDMI arayüzlerine bağlantı, yüksek kaliteli korumalı HDMI kablolarıyla yapılmalıdır.

Bu cihaz, ticari ortamda kullanım amacına uygunluk için test edilmiştir. Cihaz ev ortamında kullanıldığında, radyo parazitine neden olabilir.

Güvenlik Bilgileri

Bu ürün çevresel ısı 40° C'ye kadar olan tropikal ortamlarda kullanılmaya uygundur.

Bu ürünün çevresinde yeterli havalandırma olduğundan ve hava akımının kısıtlanmadığından emin olun.

Ürünün içinde, kullanıcı tarafından tamir edebilecek hiçbir parça bulunmamaktadır. Gerekli tamiratları yerel Blackmagic Design servis merkezine yönlendirin.



Deniz seviyesinden yüksekliđin 2000m'yi aşmadığı yerlerde kullanın.

Kaliforniya Eyaleti Beyannamesi

Bu ürün; plastik parçaları dahilinde, eser miktarda polibromine bifenil gibi kimyasal maddelere sizi maruz bırakabilir. Kaliforniya eyaletinde, bu maddelerin kansere, doğum kusurlarına veya başka üreme bozukluklarına sebebiyet verdiği bilinmektedir.

Daha fazla bilgi için www.P65Warnings.ca.gov adresini ziyaret ediniz.

Garanti

12 Ay Sınırlı Garanti

Blackmagic Design şirketi, bu ürünün satın alındığı tarihten itibaren malzeme ve işçilik bakımından 12 ay boyunca kusursuz ve arızasız olacağını garanti eder. Bu garanti süresi içinde üründe bir arıza ve kusur söz konusu olursa, Blackmagic Design kendi seçimi doğrultusunda, arızalı ürünü parça ve işçilik bedeli talep etmeksizin tamir edecektir veya yenisiyle değiştirecektir.

Bu garanti kapsamındaki hizmetten yararlanmak için, kusur ve hataya ilişkin garanti süresi sona ermeden, Müşteri Blackmagic Design'i bilgilendirmeli ve söz konusu hizmetin sağlanması için uygun düzenlemeleri yapmalıdır. Blackmagic Design tarafından özel belirlenmiş ve yetkilendirilmiş bir hizmet merkezine arızalı ürünün ambalajlanarak nakliyesi, Müşteri'nin sorumluluğudur ve nakliye ücretleri, peşin ödenmiş olmalıdır. Herhangi bir sebepten dolayı bize iade edilen ürünlerin; tüm nakliye, sigorta, gümrük vergileri, vergi ve tüm diğer masrafların ödenmesi, Müşteri sorumluluğu altındadır.

Bu garanti; yanlış kullanım ya da yanlış veya kusurlu bakımdan kaynaklanan herhangi bir arızayı, bozukluğu ya da hasarı kapsamaz. Blackmagic Design, burada açıklanan durumlarda bu garanti kapsamında hizmet sağlamak zorunda değildir: a) Blackmagic Design temsilcileri haricindeki başka personelin ürünü kurma, tamir etme ya da bakımını yapma girişimlerinden kaynaklanan hasarın tamiri, b) uygun olmayan kullanım veya uyumlu olmayan ekipmanlara bağlamaktan kaynaklanan hasarın tamiri, c) Blackmagic Design ürünü olmayan parçaların ya da malzemenin kullanımından kaynaklanan hasarın ya da arızanın tamiri ya da d) Modifiye veya başka ürünlerle entegre edilmiş bir ürünü; söz konusu modifikasyon ya da entegrasyonun, gereken tamiratın süresini uzattığı ya da ürün bakımını zorlaştırdığı durumlarda tamir edilmesi. BU GARANTİ, BLACKMAGIC DESIGN TARAFINDAN VERİLMİŞTİR VE AÇIK YA DA ZİMNİ, HERHANGİ BİR GARANTİNİN YERİNİ TUTAR. BLACKMAGIC DESIGN VE SATICILARI, ZİMNİ TİCARİ UYGUNLUK GARANTİSİNİ YA DA ÖZEL BİR AMACA UYGUNLUK GARANTİSİNİ KABUL ETMEZ. KUSURLU BİR ÜRÜNÜN TAMİRİ VEYA DEĞİŞTİRİLMESİ, BLACKMAGIC DESIGN'İN MÜŞTERİLERİNE SUNDUĞU TAM VE MÜNHASİR ÇÖZÜMDÜR. BLACKMAGIC DESIGN YA DA SATICILARININ OLABİLECEK HASARLAR HAKKINDA ÖNCEDEN BİLGİSİ OLMASINI GÖZETMEKSİZİN, ÜRÜNDE DOLAYLI, ÖZEL, TESADÜFİ YA DA NETİCE OLARAK ORTAYA ÇIKAN HERHANGİ BİR HASAR İÇİN, BLACKMAGIC DESIGN SORUMLU DEĞİLDİR. BLACKMAGIC DESIGN, MÜŞTERİLER TARAFINDAN EKİPMANIN YASAL OLMAYAN HERHANGİ BİR KULLANIMINDAN SORUMLU DEĞİLDİR. BLACKMAGIC DESIGN, BU ÜRÜNÜN KULLANIMINDAN KAYNAKLANAN HERHANGİ BİR HASARDAN SORUMLU DEĞİLDİR. BU ÜRÜNÜN ÇALIŞTIRILMASINDAN DOĞAN RİSK, KULLANICININ KENDİSİNE AİTTİR.

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