

ANI-9-MV

9x1 HDMI Seamless Switcher w/ Multi-View





SAFETY INFORMATION



1. To ensure the best results from this product, please read this manual and all other documentation before operating your equipment. Retain all documentation for future reference.
2. Follow all instructions printed on unit chassis for proper operation.
3. To reduce the risk of fire, do not spill water or other liquids into or on the unit, or operate the unit while standing in liquid.
4. Make sure power outlets conform to the power requirements listed on the back of the unit. Keep unit protected from rain, water and excessive moisture.
5. Do not attempt to clean the unit with chemical solvents or aerosol cleaners, as this may damage the unit. Dust with a clean dry cloth.
6. Do not use the unit if the electrical power cord is frayed or broken. The power supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to cords and plugs, convenience receptacles, and the point where they exit from the appliance.
7. Do not force switched or external connections in any way. They should all connect easily, without needing to be forced.
8. Always operate the unit with the AC ground wire connected to the electrical system ground. Precautions should be taken so that the means of grounding of a piece of equipment is not defeated.
9. AC voltage must be correct and the same as that printed on the rear of the unit. Damage caused by connection to improper AC voltage is not covered by any warranty.
10. Turn power off and disconnect unit from AC current before making connections.
11. Never hold a power switch in the "ON" position.
12. This unit should be installed in a cool dry place, away from sources of excessive heat, vibration, dust, moisture and cold. Do not use the unit near stoves, heat registers, radiators, or other heat producing devices.
13. Do not block fan intake or exhaust ports. Do not operate equipment on a surface or in an environment which may impede the normal flow of air around the unit, such as a bed, rug, carpet, or completely enclosed rack. If the unit is used in an extremely dusty or smoky environment, the unit should be periodically "blown free" of foreign dust and matter.
14. To reduce the risk of electric shock, do not remove the cover. There are no user serviceable parts inside. Refer all servicing to qualified service personnel. There are no user serviceable parts inside.
15. When moving the unit, disconnect input ports first, then remove the power cable; finally, disconnect the interconnecting cables to other devices.
16. Do not drive the inputs with a signal level greater than that required to drive equipment to full output.
17. The equipment power cord should be unplugged from the outlet when left unused for a long period of time.
18. Save the carton and packing material even if the equipment has arrived in good condition. Should you ever need to ship the unit, use only the original factory packing.
19. Service Information Equipment should be serviced by qualified service personnel when:
 - A. The power supply cord or the plug has been damaged.
 - B. Objects have fallen, or liquid has been spilled into the equipment.
 - C. The equipment has been exposed to rain.
 - D. The equipment does not appear to operate normally, or exhibits a marked change in performance.
 - E. The equipment has been dropped, or the enclosure damaged.

▶ CONTENTS

CONTENTS1
 FEATURES & SPECIFICATIONS 2
 FRONT & BACK PANELS3
 REMOTE CONTROL4
 DISPLAY MODES5
 APPLICATION EXAMPLE9

DEAR CUSTOMER

Thank you for purchasing this product. For optimum performance and safety, please read these instructions carefully before connecting, operating or adjusting this product. Please keep this manual for future reference.

INTRODUCTION

The ANI-9-MV 9x1 seamless switcher supports (9) HDMI inputs to (1) HDMI output. It allows the user to view up to (9) HD video sources on one display at the same time. Output resolution can be chosen for a supporting legacy display. This switcher is a suitable solution for presentation purposes such as classrooms and conference rooms. This product has a 3 year warranty.

PACKAGE CONTENTS

Before attempting to use this unit, please check the packaging and make sure the following items are contained in the shipping carton:

- ANI-9-MV 9x1 HDMI Seamless Switcher
- 12V/1A Power Adapter
- Remote Control
- Users Guide

SAFETY PRECAUTIONS

Please read all instructions before attempting to unpack, install or operate this equipment and before connecting the power supply. Please keep the following in mind as you unpack and install this equipment:

- Always follow basic safety precautions to reduce the risk of fire, electrical shock and injury to persons.
- To prevent fire or shock hazard, do not expose the unit to rain, moisture or install this product near water.
- Never spill liquid of any kind on or into this product.
- Never push an object of any kind into this product through any openings or empty slots in the unit, as you may damage parts inside the unit.
- Do not attach the power supply cabling to building surfaces.
- Use only the supplied power supply unit (PSU). Do not use the PSU if it is damaged.
- Do not allow anything to rest on the power cabling or allow any weight to be placed upon it or any person walk on it.
- To protect the unit from overheating, do not block any vents or openings in the unit housing that provide ventilation and allow for sufficient space for air to circulate around the unit.

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 Version 1.1 JUNE 2019

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FEATURES

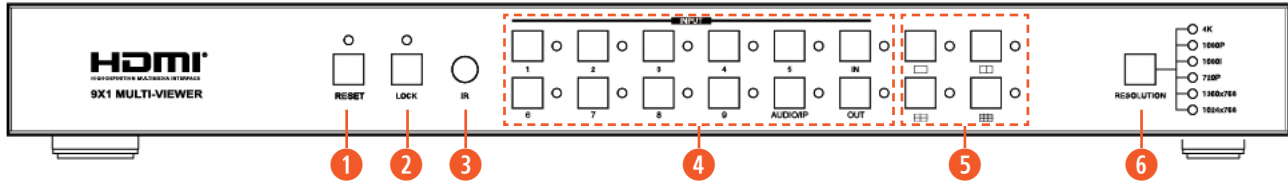
- HDMI 1.4b, HDCP 1.4 compliant.
- Input video resolution up to 1080p@60Hz
- Output video resolution up to 4K2K@30Hz
- (9) HDMI inputs, (1) HDMI and (1) de-embedded analog audio output
- Fast seamless switching with scaling up to 3840x2160p (4K)
- Supports 1/2/4/9 window multi-view modes
- Display full HD signals within one 4K display with pixel-to-pixel quality
- Control is via on-panel button, IR, RS-232, LAN or Web GUI
- 1U rack mounted design

SPECIFICATIONS

- **Inputs:**
 - (9) HDMI Type A [19-pin female]
 - RJ45 [8-pin female]
 - RS-232 [Phoenix jack]
 - USB [USB-A]
 - IR EXT [3.5mm Stereo Mini-jack]
- **Output:**
 - HDMI Type A [19-pin female]
 - Audio Out [3.5mm Stereo Mini-jack]
- **HDMI Compliance:** HDMI 1.4b
- **HDCP Compliance:** HDCP 1.4
- **Video Bandwidth:** 3Gbps
- **Video Resolutions:** 4K2K@30Hz, YUV4:4:4, RGB4:4:4
- **Color Depth:** 8-bit
- **Color Space:** RGB, YUV4:4:4, YUV 4:2:2
- **HDMI Audio Formats:** LPCM 2.0
- **ESD Protection Human Body Model:**
 - ± 8KV (air-gap discharge)
 - ± 4KV (contact discharge)
- **Power Supply:** Input: AC100 - 240V 50/60Hz / Output: DC 12V/1A (US/EU standards, CE/FCC/UL certified)
- **Dimensions (WxDxH):** 17.3 x 7.9 x 1.75 in (440x200x44.5mm)
- **Weight:** 5 lbs / 2.26kg
- **Housing:** Metal Enclosure
- **Color:** Black
- **Operating Temperature:** 0°C~40°C / 32°F~ 104°F
- **Storage Temperature:** -20°C~60°C / -4°F~140°F
- **Relative Humidity:** 20~90% RH (non-condensing)
- **Power Consumption:** 7.8W (Max)

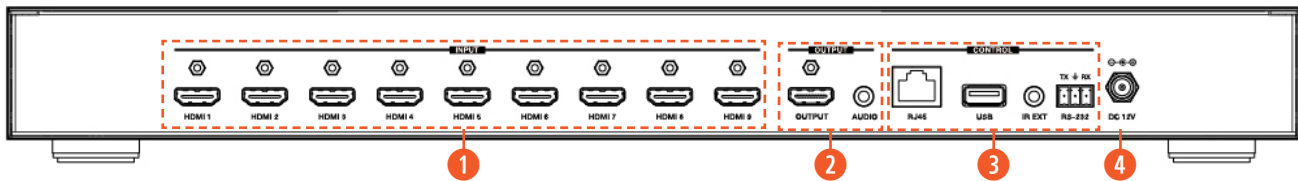
As product improvements are continuous, specifications are subject to change without notice.

FRONT PANEL



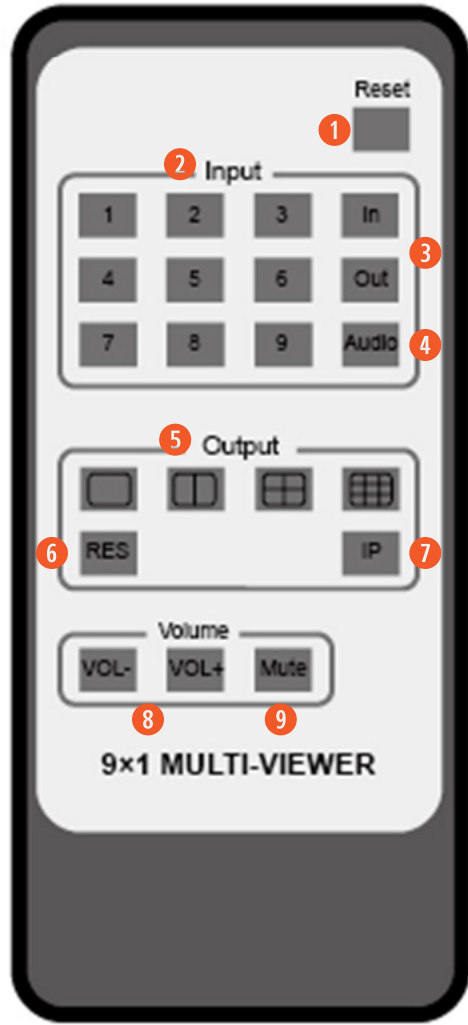
- ① **RESET BUTTON AND LED:** Press and hold this button for 10 seconds to factory reset, the indicator LED will blink 5 times.
- ② **LOCK BUTTON AND LED:** Press this button to lock all buttons on the panel, the indicator LED will illuminate. Press and hold this button again to unlock, the indicator LED will turn off.
- ③ **IR:** IR receiver window receives IR remote control signals.
- ④ **INPUT BUTTON:**
INPUT 1~9 BUTTON: Press this button to select HDMI input source from 1 to 9.
AUDIO/IP BUTTON:
 - a. Select the output audio signal from HDMI input . **For example**, when user wants to select input 1 port audio to output audio port, press **AUDIO/IP button**→**INPUT 1** button. Now the AUDIO/IP indicator LED will blink 3 times.
 - b. Press and hold this button for 6 seconds so it will display the units IP address on the screen display (OSD).**IN/OUT BUTTON:** When the user needs to select a multi-screen output, first the user needs to select the multi-screen mode button, then press **IN**→**x**→**OUT**→**y** to select output screen.
- ⑤ **MULTI-SCREEN MODE BUTTON:** Press these buttons to select the display mode.
- ⑥ **RESOLUTION BUTTON:** Press this button to select the output resolution.


REAR PANEL



- ① **HDMI INPUT AREA:** Connect to the HDMI input source device, such as DVD player or Set top box.
- ② **HDMI OUTPUT AREA:**
HDMI OUTPUT: Connect to the HDMI output device, such as TV or Monitor.
AUDIO OUTPUT: Connect to audio amplifier. This audio volume can be adjusted through the Remote Control or Web GUI software.
- ③ **CONTROL PORTS:**
RJ45: This port is the link for Web GUI or PC control, connect to an active Ethernet link with an RJ45 terminated cable.
USB: Upgrade Firmware only.
IR EXT: IR extend receiver port, connect to IR receiver cable.
RS-232: Connect to a PC or control system for RS-232 commands or upgrade MCU firmware.
- ④ **DC 12V:** Plug the 12V/1A adapter to AC wall outlet for power supply.

REMOTE CONTROL



- 1 **RESET:** Press and hold for 10 seconds to reset to factory presets.
- 2 **INPUT 1~9:** Press these buttons to select input source.
- 3 **IN/OUT:** When the user needs Output multi-screen, select the remote control Output multi-screen mode button, then press **In**→**x**→**Out**→**y** to select the output screen.
- 4 **AUDIO:** Select output audio signal from HDMI input port. *For example*, when user wants to select input 1 port audio to output audio port, press **AUDIO/IP button**→**INPUT 1** button.
- 5  : Press these button to select the display mode.
- 6 **RES:** Cycles through the resolution outputs.
(1024x768/1360x768/720p/1080i/1080p/4K)
- 7 **IP:** Press this button, the output screen left top corner will display the unit IP address.
- 8 **VOL-/VOL+:** Adjust audio volume output.
- 9 **MUTE:** No volume output.

IR Codes

CUSTOM CODE: 08F7

Reset:	08F7	0B		Input8:	08F7	19		Volume:		
Input:				Input9:	08F7	0F		VOL+:	08F7	13
In:	08F7	42						VOL-:	08F7	12
Out:	08F7	43		Output:				Mute:	08F7	15
Audio:	08F7	03		Mode1:	08F7	4C				
Input1:	08F7	09		Mode2:	08F7	0D				
Input2:	08F7	54		Mode3:	08F7	56				
Input3:	08F7	47		Mode4:	08F7	16				
Input4:	08F7	08		Resolution:	08F7	40				
Input5:	08F7	48		IP:	08F7	53				
Input6:	08F7	4B								
Input7:	08F7	0C								

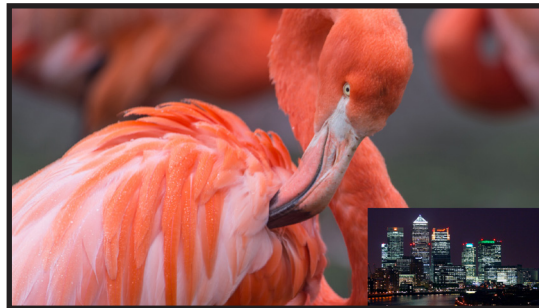
DESCRIPTION OF DISPLAY MODE

The ANI-9-MV 9x1 HDMI Seamless Switcher has (4) display modes.





MODE 1: This mode will display (9) HDMI inputs separately. Switch via the front panel or remote control MODE button.


Operating Example: Select **MODE 1 button**→select **HDMI input source button** [**MODE 1 button** ()→x].



MODE 2: This mode displays two images, either in PiP or PbP.

Depress  button once to display PiP, depress  button twice for PiP. You can select which input signal to display in each window.



Operating Example: Press **MODE 2 button** (If you want to output PiP display mode, please press this button two times continuously.)→press **IN button**→press **HDMI input source button**→press **OUT button**→press **HDMI input source button** (**MODE 2 button**→IN→x→OUT→y).

For example, if user needs the second screen from the third HDMI input port [**MODE 2 button** ()→IN→3→OUT→2].

DESCRIPTION OF DISPLAY MODE



MODE 3: This mode divides (4) HD inputs and display on a single screen.

Depress  button once to display equal quad screen. Repeatedly depressing  button will cycle through all (4) screen options as shown above.

Operating Example: Press **MODE 3 button** (If you want to output another display mode, please press this button continuously.) → **press IN button** → **press HDMI input source button** → **press OUT button** → **press HDMI input source button (MODE 3 button → IN → x → OUT → y).**

For example, if user needs the fourth screen from the third HDMI input port [**MODE 3 button () → IN → 3 → OUT → 4**].



MODE 4: This mode divides nine HD inputs with same size and display on a screen. Select input signal source to different display screen. For example, i

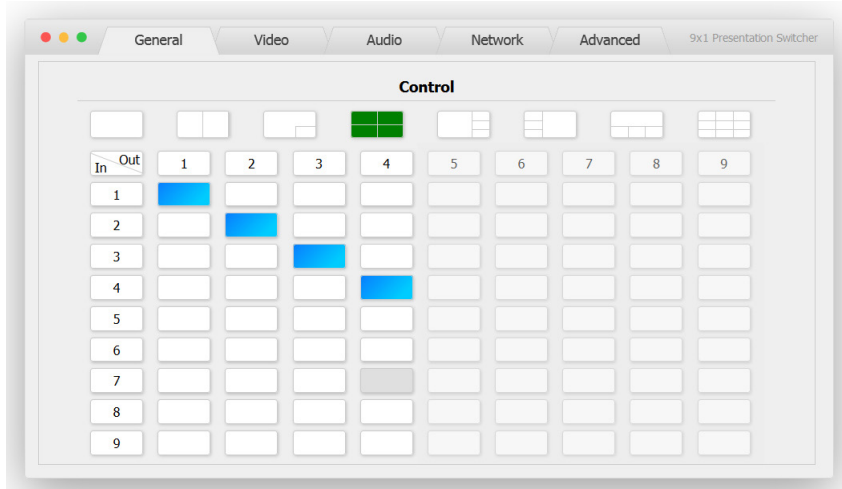
Operating Example: Press **MODE 4 button** → **press IN button** → **press HDMI input source button** → **press OUT button** → **press HDMI input source button (MODE 4 button → IN → x → OUT → y).**

For example, if user need the sixth screen from the first HDMI input port [**MODE 4 button () → IN → 1 → OUT → 6**].

WEB GUI USER GUIDE

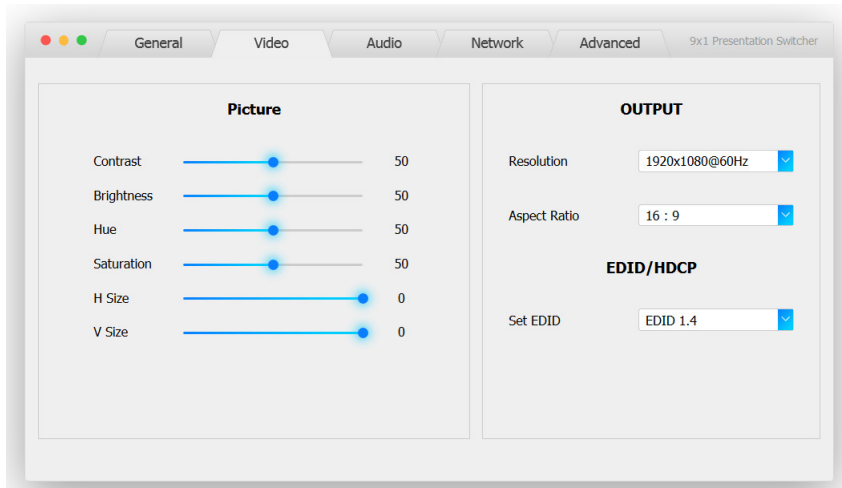
The ANI-9-MV can be controlled via the built-in Web-GUI through the RJ45 port. The ANI-9-MV is set to DHCP. You can connect to the Web-GUI through its IP address. If you don't know dynamic IP address, press and hold the AUDIO/IP button for 6 seconds, the output screen in the top left corner will display the IP address. Then you should set the IP address on your web browser to access the switchers control panel.

GENERAL MODE



- 1 Select output screen mode.
- 2 When you have selected output screen mode, then you can select output screen corresponding input signal source. (The order is from left to right and from top to bottom.)

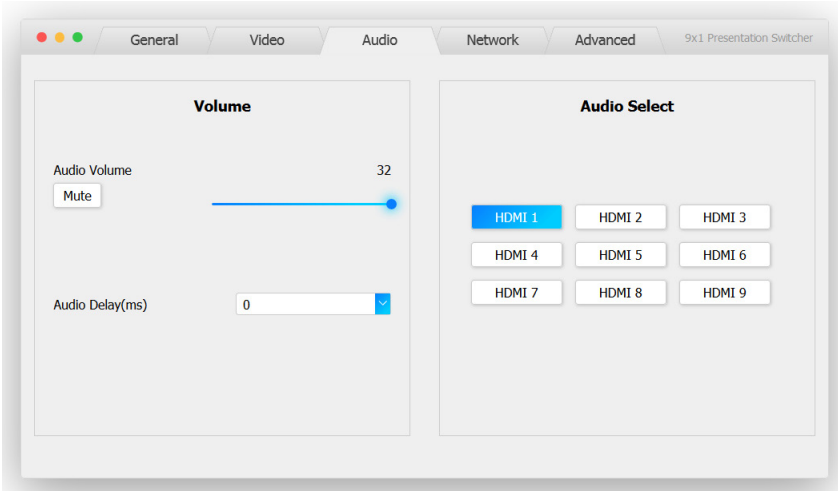
VIDEO MODE



- 1 Set the video picture interface, it contains Contrast set, Brightness set, Hue set, Saturation set, H Size set and V Size set.
- 2 Select output Resolution and Aspect Ratio.
- 3 Set EDID.

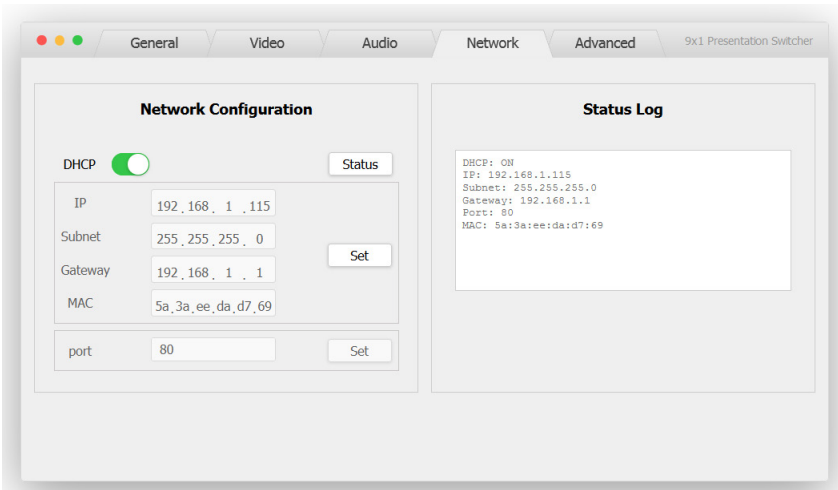
WEB GUI USER GUIDE

AUDIO MODE



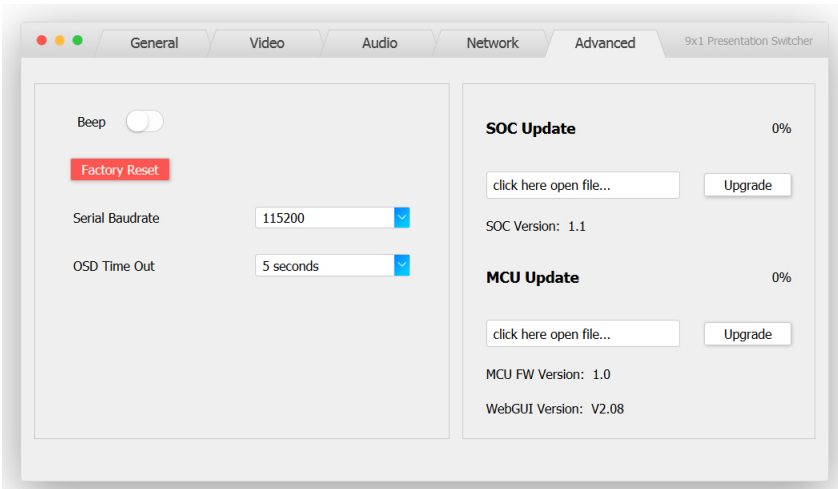
- ① **SET VOLUME:** Adjust the volume or select the audio delay (ms).
- ② **AUDIO SELECT:** Select the output audio corresponding HDMI input signal source.

NETWORK MODE

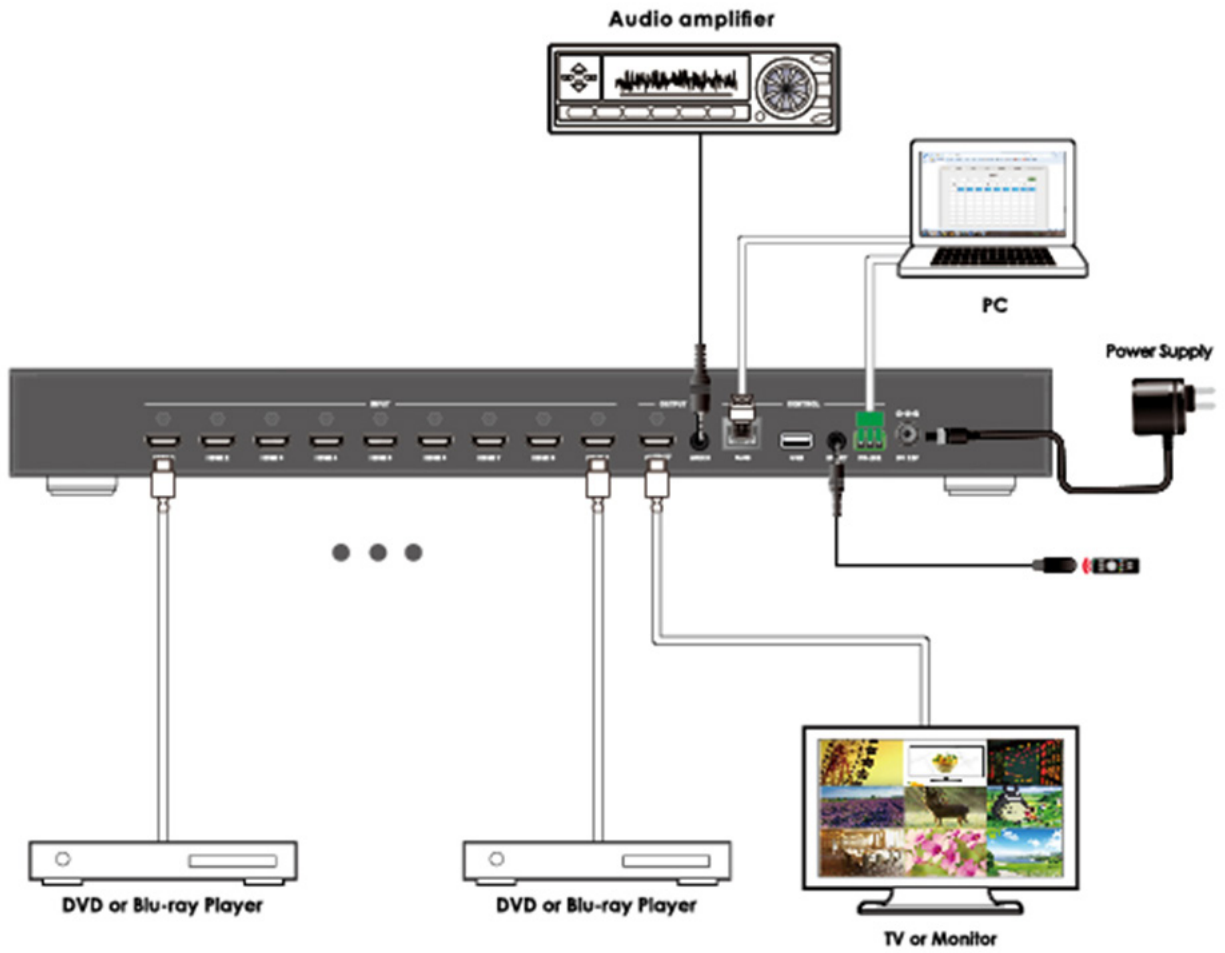


- ① **NETWORK CONFIGURATION DHCP SWITCH, STATUS BUTTON:** Obtain the network configuration information, including IP address, Subnet, Gateway and MAC address.
- ② **SET PORT:** Set TCP/IP port.
- ③ **STATUS LOG:** Display the Network Configuration information.

ADVANCED MODE



- ① **BEEP:** Buzzer switch.
- ② **FACTORY RESET:** Click this button to reset to factory default.
- ③ **SERIAL BAUDRATE:** Select the serial baudrate.
- ④ **OSD TIME OUT:** Select the OSD display time.
- ⑤ **SOC UPDATE:** SOC chip update.
- ⑥ **MCU UPDATE:** MCU version update.



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