

4K/UHD 5 Input HDMI Switcher with Mirrored HDMI and HDBaseT Outputs and PoE

AT-UHD-SW-52ED

User Manual



Please check <http://www.atlona.com/UHD-SW-52ED.html>
for the most recent **firmware update** or **manual**.

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Introduction

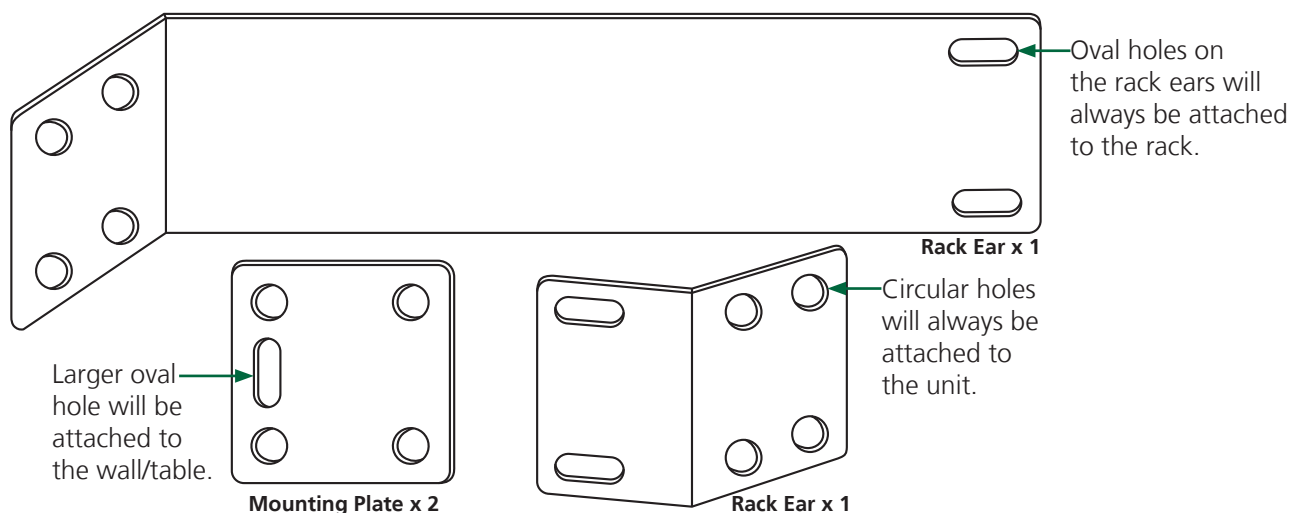
The 4K/UHD 5 input HDMI switcher is an affordable 5-input, 2-output switcher with 4K @ 60Hz, IR, RS-232, and TCP/IP control, EDID and HDCP management, and mirrored HDMI and HDBaseT outputs. The UHD-SW-52ED provides an easy to install solution for home and small offices.

Package Content

- 1 x UHD-SW-52ED
- 1 x 48V DC power supply
- 4 x Female captive screw connector (5pin: analog audio and IR, 3 pin: RS-232, and 2 pin: power)
- 1 x Short rack ear
- 1 x Long rack ear
- 2 x Mounting plates
- 1 x Remote control
- 1 x Rubber feet
- 1 x User Manual

Features

- Mirrored HDMI and HDBaseT outputs
- +4 dBu balanced analog audio output
- Control volume using webGUI, IR, TCP/IP, or RS-232
- Smart switching with auto-detect (5V and signal detect) for inputs (activated through RS-232 or TCP/IP)
- HDCP management
- Supports resolutions up to 4K (UHD) 60Hz @ chroma sub-sampling 4:2:0 8-bit
- Supports Dolby® TrueHD and DTS-HD Master Audio™ when using an HDMI cable
- Digital audio de-embedding through the S/PDIF output for up to DTS 5.1™ and Dolby® Digital
- Analog audio de-embedding through captive screw connector
- EDID management
- Easy to use webGUI through TCP/IP connection
- Half-rack size
- Comes with rack mount ears and mounting plates



The SW-52ED can be mounted in three ways: as a single unit in a rack, with a second unit in a rack, or against a wall/table using the mounting plates.

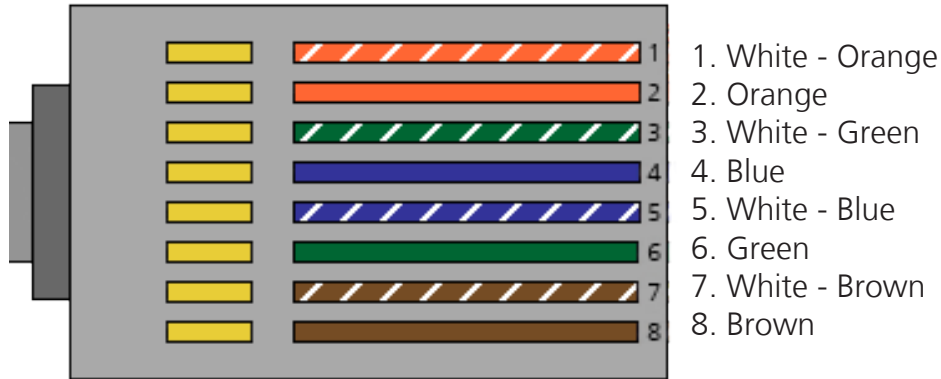
Single unit mounting will use the long rack ear and short rack ear to affix the unit to the rack.

Two unit mounting will use two short rack ears (the second will be in the box with the second unit) and two mounting plates to affix the two units together inside the rack.

Wall/table mounting will use both mounting plates to affix the unit to a table or wall.

Category Cable

For the category cables used in the installation of these products, please be sure to use a 568B termination as pictured below:



Use the table below to verify the best category cable for the installation.

| Performance Rating | | Type of LAN cable | |
|---|--------------------|---|---------|
| Wiring | Shielding | CAT5e/6 | CAT6a/7 |
| Solid | Shielded (STP/FTP) | *** | **** |
| | UnShielded (UTP) | ** | N/A |
| Stranded - Patch cable (Not recommended) | Unshielded (UTP) | * | N/A |
| | Shielded (STP/FTP) | * | N/A |
| Termination | | Please use EIA/TIA-568-B termination | |

Important! 4K (UHD) signals are sensitive to cable quality and installation technique. It is recommended to use CAT6a/7 solid core cables for best results.

Note: For cable distances see the specifications on page 10

Connector

Connector type and size is very important to ensure extenders work correctly. Please use the matching cable type with the correct RJ45 connector.

CAT5e and CAT 6 cables should use only CAT5e RJ45 connectors

CAT6a cables should use only CAT6a connectors

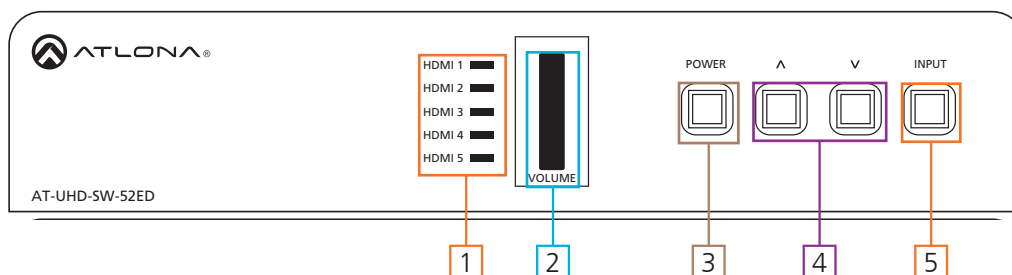
CAT7 cables should use only CAT7 connectors

Using the wrong size of connectors may result in interference causing loss of signal.

Important! "EZ RJ45 connectors" are not recommended with HDBaseT extenders. Doing so may result in stray EMI/RFI signals to be picked up and interfere with audio and video transmission.

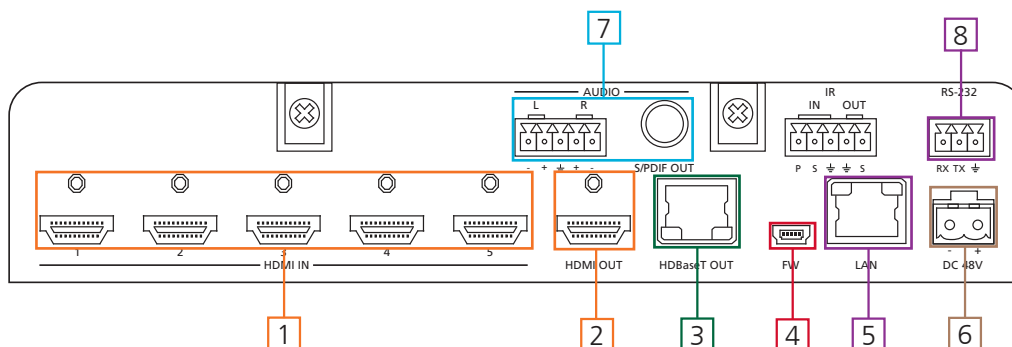
Panel Descriptions

Front Panel



1. HDMI LEDs - Illuminates to indicate the selected source
2. Volume LEDs - Displays the volume level
3. Power Button - Turns switcher on or places it in standby mode
4. Volume up/down - Adjusts output volume
5. Input Button - Switches between HDMI inputs

Back Panel

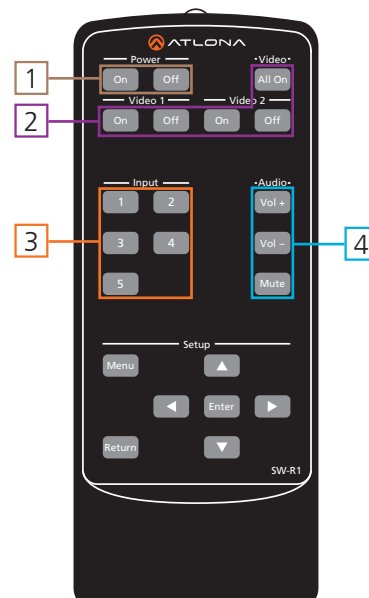


1. HDMI IN - Connect sources here
2. HDMI OUT - Connect to an HDMI display, extender, or switcher
3. HDBaseT OUT - Connect to an HDBaseT PoE receiver (ex. AT-UHD-EX-70C-RX or AT-UHD-EX-100CE-RX)
4. Mini USB port: Firmware update port, connect a Mini USB to USB A cable to a computer
5. LAN port - Connect network switch or router to this port for TCP/IP or webGUI control
6. DC 48V: Connect included captive screw, 48V DC power supply here
7. Audio output - Connect to an amplifier, mixer, DSP, audio receiver, or other audio device
8. RS-232 port - Connect control system to RS-232 port

Remote Control

1. Power On/Off: Turn switcher power on and off
2. Video On/Off: Turns video output off and on
3. Input selection: Selects source
4. Audio control: Adjust volume up/down
Mute: Mute output volume

Note: Setup buttons are not functional for the UHD-SW-52ED switcher

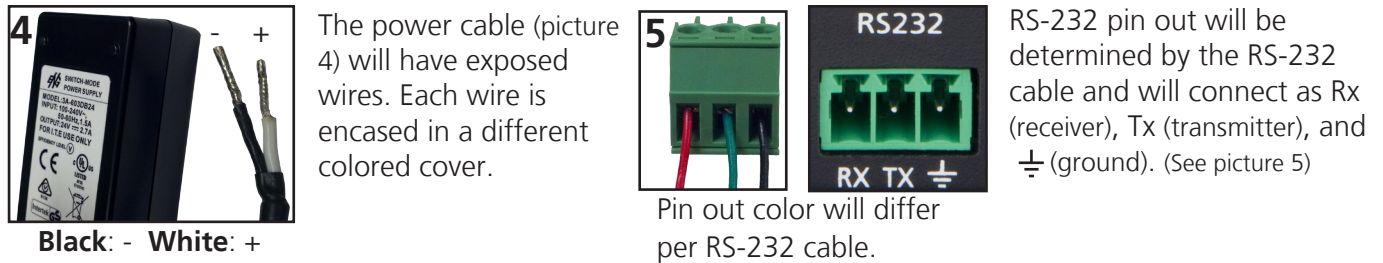
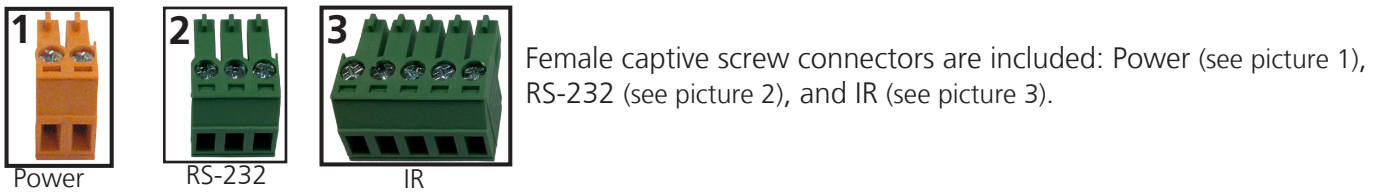


Captive Screw

Captive screw connectors are an added feature on the UHD-SW. The Captive screw connectors allow you to cut cables down to a suitable length, reducing cable clutter while providing a more reliable connection.

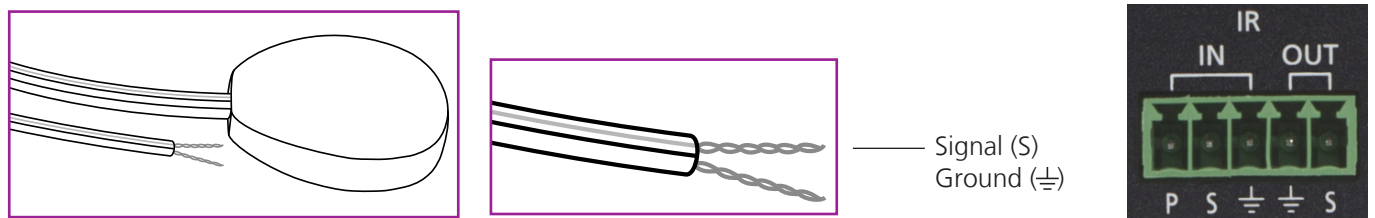
Connecting

When connecting the cables to the female captive screw connector it is important that the wires be terminated correctly. The female captive screw connector has a contact plate at the top and must have the wires touching it for signal to pass. When wired correctly (see picture A) the signal will pass, incorrectly (see picture B) no signal will pass.

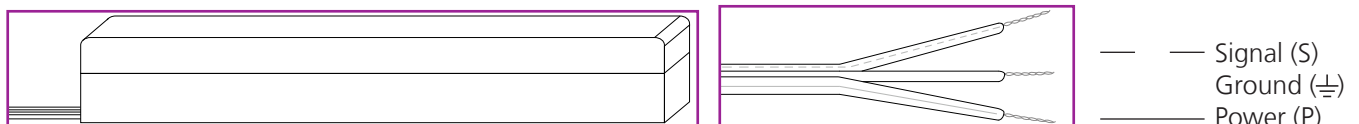


Note: The IR receiver and IR transmitter is optional for the UHD-SW-52ED. The compatible IR receiver (AT-IR-CS-RX) and IR transmitter (AT-IR-CS-TX) can be purchased through atlona.com.

The wires of the emitter and receiver have been marked to differentiate the pin outs.



The included IR emitter has two wires: signal and ground. Signal will have a solid line and ground will be blank. The IR emitter will plug into the IR OUT ports.

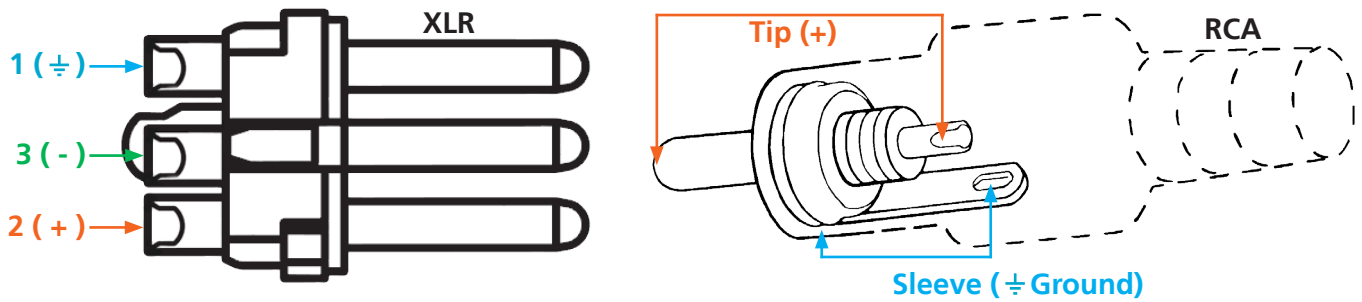


There are three wires on the IR receiver (sold separately): signal, ground, and power. Signal has a dotted line, ground will be blank, and power will have a solid line. The IR receiver will plug into the IR IN ports.

Analog Audio

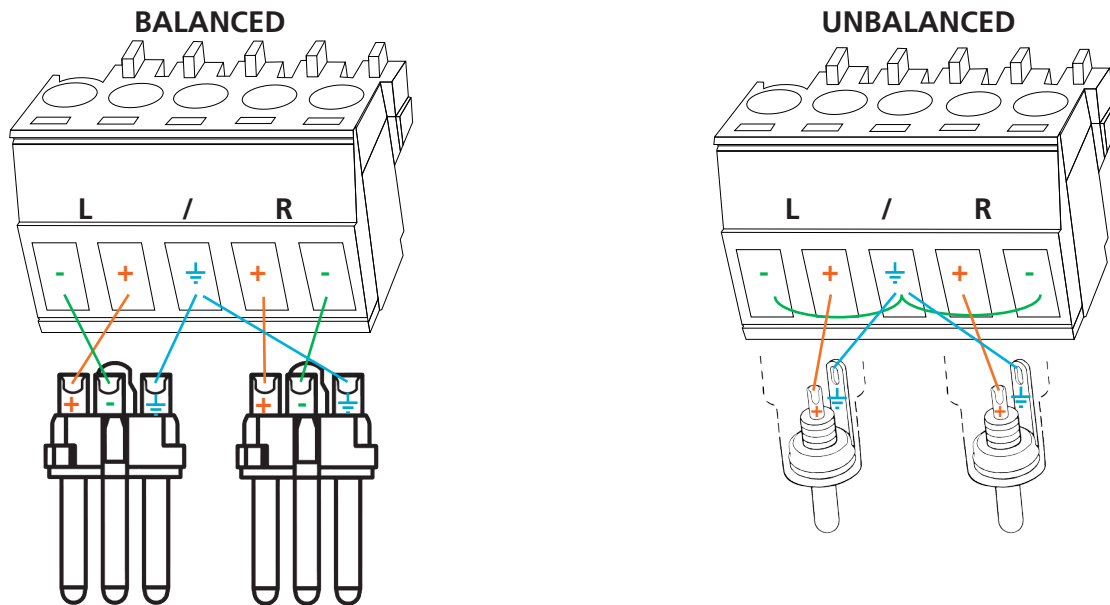
A captive screw analog audio connector is provided to ensure a more reliable and secure connection. The captive screw connector supports balanced and unbalanced audio output.

Balanced audio connections use two signal wires and a ground to ensure the least amount of interference to an audio signal over longer cable runs. Unbalanced audio connections use two wires for shorter audio runs.



Note: Pin outs may vary, please refer to the audio device's manual to ensure a correct connection.

Important! When terminating cables, please ensure exposed adjacent wires do not touch. This may result in a short that can damage connected devices.



Important! With unbalanced connections a jumper is needed between ground and negative to reduce noise

TCP/IP

For convenience, the UHD-SW comes with DHCP on. This enables the switcher to be connected to a network without knowing available IP addresses. If your network does not allow dynamic IP addresses or if you are using the UHD-SW with a TCP/IP control system, this feature may be turned off and the IP address set using RS-232 commands or the webGUI.

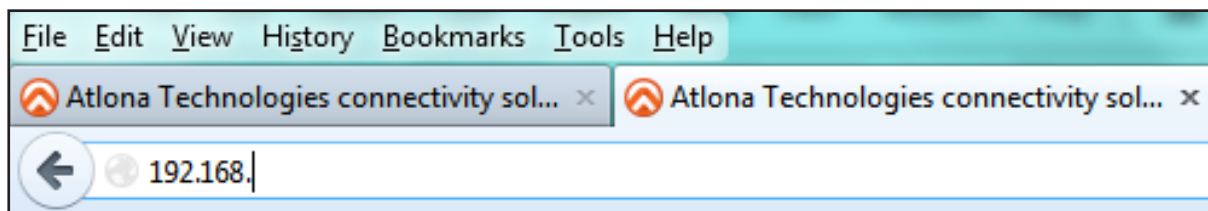
TCP/IP WebGUI

Atlona has created an easy to use WebGUI for initial setup and later changes to the configuration of the UHD-SW.

To begin, plug a LAN cable into the LAN port of the UHD-SW and your network, then type the IP address of the UHD-SW into a web browser of a PC connected to the same network (as seen below).

To find the switcher IP: use RS-232 command "IPCFG".

Note: IP addresses may also be found using common free IP scanner software such as "Advanced IP Scanner"



Important: If any stability issues are experienced, disable any anti-virus or firewall that may interfere with network communication to the switcher. Once set up is done and the switcher GUI is no longer used, the firewall and anti-virus can be re-enabled.



AT-UHD-SW-52ED Login



Please input username and password.

Username:

Password:

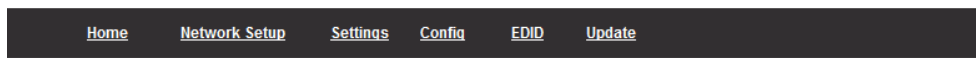
[Login](#)

[Clear](#)

A login screen will appear (this is the same log in for admin and general users). For the first log in (and future admin changes) the username is "root" and password is "Atlona".

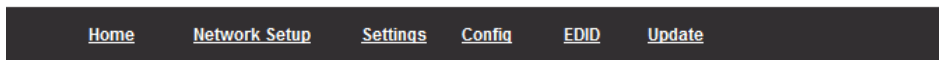
Note: Only the admin password can be changed (see page 9). The username will always remain "root".

The home screen tab will display the general system information.



| System Info. | |
|-------------------|---------------|
| Model: | AT-UHDSW-52ED |
| Firmware Version: | 0.2.0 |
| On-Time(h-m): | 0:03 |

| Video Info. | |
|---------------|-------|
| Active Input: | HDMI2 |
| Signal Type: | -- |
| Video Format: | -- |
| Aspect: | -- |
| Color Space: | -- |
| Color Depth: | -- |



| | | |
|-------------|--|---|
| DHCP | <input checked="" type="checkbox"/> ON | <input type="checkbox"/> OFF |
| IP Address | <input type="text" value="192.168.000.078"/> | |
| Subnet | <input type="text" value="255.255.255.000"/> | |
| Gateway | <input type="text" value="192.168.000.001"/> | |
| Telnet Port | <input type="text" value="23"/> | |
| Login Mode | <input type="checkbox"/> ON | <input checked="" type="checkbox"/> OFF |
| MAC Address | B8-98-B0-00-00-09 | |

The network set up page will allow the IP information to be changed. When a change is made the screen will grey and the ability to save or cancel will display at the bottom.


Note: When DHCP is on, the IP address cannot be configured. Turn DHCP off to enable IP configuration.

Note: For a stable connection when using a control system, it is best to set up a static IP. As you select an IP address, make certain no other devices on your network are using that IP address.

Login Mode has been added to provide a secure telnet login. Once Login Mode has been turned on a username and password will be required on all IP connections to the switcher.

Note: Login mode should be in off position when the UHD-SW is used with control systems that do not support passwords. If your control system supports password protection, you can turn login mode on. The GUI always requires a password.

Note: The username and password used in IP Login Mode will be the same login information as the WebGUI.

[Home](#) [Network Setup](#) [Settings](#) [Config](#) [EDID](#) [Update](#)**System Settings**Auto Switch **Video Settings**Source **Audio Settings**Volume dB [Factory Default](#)

System Settings

Auto Switch - Turn auto switching on/off. Default is off.

Video Settings

Source - Select one of the five inputs to be routed to the output.

Audio Settings

Volume - Adjust output volume up or down

| | |
|--------------------------------|-----------------------------------|
| Change user name and password: | |
| Old user name and password | |
| Username | <input type="text" value="root"/> |
| Password | <input type="password"/> |
| New user name and password | |
| Username | <input type="text"/> |
| Password | <input type="password"/> |
| PW again | <input type="password"/> |

| No. | Username | Password | Delete |
|--------|----------|----------|------------------------|
| User 1 | | | Delete |
| User 2 | | | Delete |
| User 3 | | | Delete |

| RS-232 | Baudrate | Databit | Parity | Stopbit |
|--------|----------|---------|--------|---------|
| System | 115200 | 8 Bits | None | 1 Bit |
| Zone 1 | 115200 | 8 Bits | None | 1 Bit |

The config page will allow the admin password to be changed, users to be added, and the RS-232 port to be configured.

Note: User information will display for the admin only. Up to 3 users other than admin can be added.

Note: Only the admin password can be changed. The username will always remain "root". If the admin password is lost the system must be returned to factory settings and setup repeated.

| RS232 | Baudrate | Databit | Parity | Stopbit |
|--------|----------|---------|--------|---------|
| System | 115200 | 8 Bits | None | 1 Bit |

| |
|--------|
| 2400 |
| 4800 |
| 9600 |
| 14400 |
| 19200 |
| 38400 |
| 57600 |
| 115200 |
| 230400 |
| 460800 |
| 921600 |

| EDID Settings | |
|---------------|-------|
| Input 1: | STD ▾ |
| Input 2: | STD ▾ |
| Input 3: | STD ▾ |
| Input 4: | STD ▾ |
| Input 5: | STD ▾ |

| HDCP Settings | |
|---------------|-------------|
| Input 1: | Compliant ▾ |
| Input 2: | Compliant ▾ |
| Input 3: | Compliant ▾ |
| Input 4: | Compliant ▾ |
| Input 5: | Compliant ▾ |

| EDID Saved | | |
|------------|---------|-----------------|
| Output 1: | save to | Please select ▾ |
| Output 2: | save to | Please select ▾ |

The EDID page enables the input preferred timing to be selected and HDCP compliance reporting to be set.

Internal EDIDs -

| | | |
|--------------------------------|-----------------------------|-----------------------------|
| STD Sink (pass through) | Int_1 1080P 2Ch | Int_2 1080P MCh |
| Int_3 1080P DD | Int_4 1080P 3D 2Ch | Int_5 1080P 3D MCh |
| Int_6 1080P 3D DD | Int_7 720P 2CH | Int_8 720P DD |
| Int_9 1280x800 2Ch | Int_10 1366x768 2Ch | Int_11 1080P DVI |
| Int_12 1280x800 DVI | Int_13 3840x2160 2Ch | Int_14 3840x2160 MCh |

Note: Internal EDIDs include audio EDIDs as well. 2Ch is two channel audio, MCh is multi-channel audio (including up to Dolby TrueHD or DTS-HD Master Audio), DD is Dolby Digital, and DVI does not include audio.

Note: UHD-SW-52ED protects HDCP encoded content and will not pass HDCP content to a non-HDCP compliant device.

Note: Some devices flag all content as protected when connected to an HDCP compliant display. This prevents what should be non-protected content from reaching devices (i.e. teleconference system) through the UHD-SW-52ED.

Note: When HDCP reports as non-compliant, only user created content is transmitted. Protected content from all sources (ex. Blu-ray, AppleTV, etc) is blocked.

This function is controllable through RS-232 and TCP/IP.

EDID Saved

Save the current output's EDID to memory. There are eight total EDID memories to save to.

Firmware Update
 No file selected.

0%

Valens Tx Update
 No file selected.

0%

Download the latest firmware from <http://www.atlona.com/UHD-SW-52ED.html> then update the unit using the browse and upload buttons.

Click the browse button and select the firmware to be loaded. Once selected, press the upload button. The progress bar will display the progress of the firmware update.

The HDBaseT port has a separate firmware to be updated. This firmware can be found at <http://www.atlona.com/UHD-SW-52ED.html>

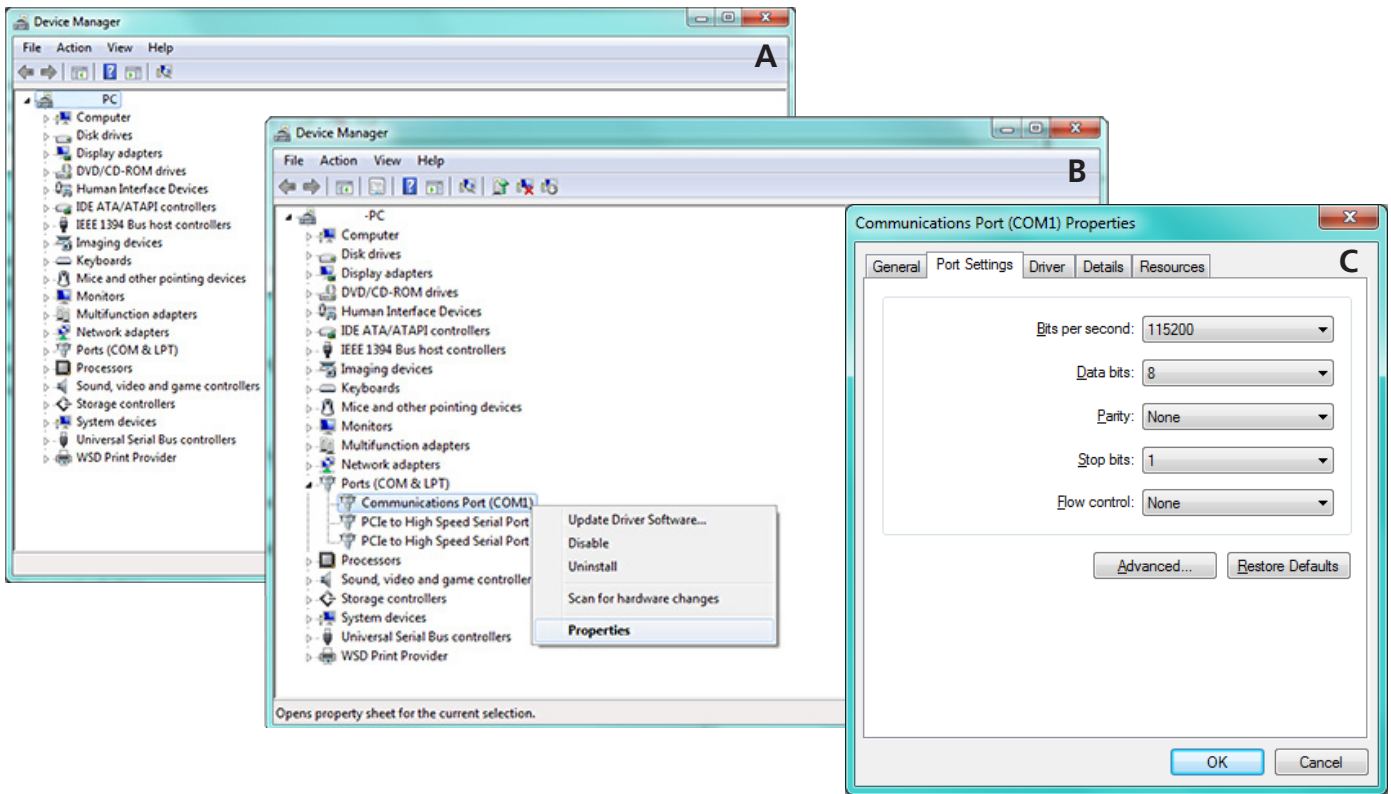
Click the browse button and select the Valen's firmware to be loaded. Once selected, press the upload button, the progress bar will display the progress of the firmware update.

RS-232

Hyperterminal

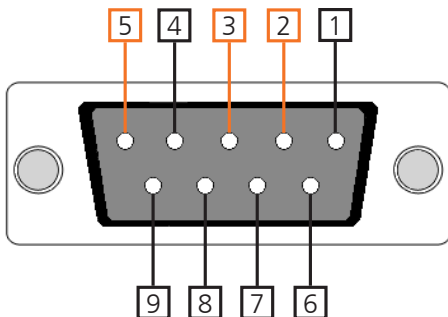
To set up the RS-232 hyperterminal the first thing needed is to find the RS-232 communications port under the computer's device manager. Once there right click the port and select properties. Under the properties menu select the port settings tab and update the menu to the switcher default:

Bits Per Second: 115200, Data Bits: 8, Parity: None, Stop Bits: 1 and Flow Control: None.



Connection

RS-232 is connected through a 9-pin female D connector. The pins will have functions associated with them, some will be unassigned.



| No. | Pin | Function |
|-----|-----|----------|
| 1 | --- | Not used |
| 2 | Tx | Transmit |
| 3 | Rx | Receive |
| 4 | --- | Not used |
| 5 | Gnd | Ground |
| 6 | --- | Not used |
| 7 | --- | Not used |
| 8 | --- | Not used |
| 9 | --- | Not used |

Commands (TCP/IP and RS-232)

The command codes are case sensitive, do not change capitalization, spacing, or lettering.

| Command | Feedback | Description |
|--------------------------------------|--------------------------------------|--|
| PWON | PWON | Turns switcher on |
| PWOFF | PWOFF | Turns switcher off |
| PWSTA | PWSTA | Displays power status |
| VersionX Ex. Version OSD | VersionX Ex. Version x.x.xx | Displays the software versions: ex. VersionMCU firmware [MCU] OSD menu [OSD] DSP [DSP] FPGA [FPGA] |
| Type | AT-UHD-SW-52ED | Displays the model information |
| Mreset | Mreset | Reset device to manufacture default |
| Lock | Lock | Locks the front panel buttons |
| Unlock | Unlock | Unlocks the front panel buttons |
| x3AVx1 | x3AVx1 | Switch inputs Ex. Switch output 1 to input 4= x4AVx1 |
| Status | x2AVx1, x3AVx2 | Displays what input is connected to the what output |
| x1\$ X | x1\$ on | Turns on/off output channel (X= on, off, sta) Ex. x2\$ off - Turns output 2 off |
| AutoSW X | AutoSW on | Turns auto switching on/off (X= on, off, sta) |
| IRON | IRON | Turns on the IR receiver window |
| IROFF | IROFF | Turns off the IR receiver window |
| EDIDCopyX memY Ex. EDIDCopy1 mem2 | EDIDCopyX memY Ex. EDIDCopy1 mem2 | Save the EDID of output X (1 or 2) to memory Y (1-8) Ex. Copy EDID of output 2 to memory 5 = EDIDCopy2 mem5 |
| EDIDMSetX default | EDIDMSetX default | Set the EDID of the input to the default EDID |
| EDIDMSetX saveY | EDIDMSetX saveY | Set the EDID of an input to the previously saved EDID memory Ex. EDIDMset3 save1 - sets input 3 to EDID memory 1 |
| EDIDMSetX intY | EDIDMSetX intY | Sets the EDID of an input to one of the internal EDIDs Ex. EDIDMSet2 int3 - Sets input 3 to internal EDID 3 |
| HDCPSetX Y Ex. HDCPSet1 on | HDCPSetX Y Ex. HDCPSet1 on | Set HDCP reporting mode of the HDMI input (X= 1-5)(Y= on, off, sta) Ex. Input 3 to report HDCP non-compliant = HDCPSet3 off |
| AudioOutX Y | AudioOutX on | Turns the HDMI audio of each output (X= 1, 2) on/off (Y= on, off, sta) Ex. Turn Output 2 HDMI audio off = AudioOut2 off |
| VOUT1 + | VOUT1 XX | Increases volume output by 1 |
| VOUT1 - | VOUT1 XX | Decreases volume output by 1 |
| VOUT1 YY Ex. VOUT1 -60 | VOUT1 XX Ex. VOUT1 -60 | Set volume output to a specific value (XX= -80 to 6) |
| VOUT1 sta | VOUT1 YY | Displays current volume output |
| VOUTMute1 X | VOUTMute1 X | Mute or unmute the output volume (X= on, off, sta) |

Each command or feedback is terminated with a carriage return.

Note: If the command fails or is incorrect the feedback is "Command FAILED"

[Y] preferred timing -

| | | | | |
|--------------------------------|-----------|---------------|-----------|---------------|
| STD Sink (pass through) | 1 | 1080P 2Ch | 2 | 1080P MCh |
| 3 1080P DD | 4 | 1080P 3D 2Ch | 5 | 1080P 3D MCh |
| 6 1080P 3D DD | 7 | 720P 2CH | 8 | 720P DD |
| 9 1280x800 2Ch | 10 | 1366x768 2Ch | 11 | 1080P DVI |
| 12 1280x800 DVI | 13 | 3840x2160 2Ch | 14 | 3840x2160 MCh |

Note: Preferred timings include audio EDIDs as well. 2Ch is two channel audio, MCh is multi-channel audio (including up to Dolby TrueHD or DTS-HD Master Audio), DD is Dolby Digital, and DVI does not include audio.

IP Commands

| Command | Feedback | Description |
|--|--|--|
| IPCFG | IP Addr : x.x.x.x Netmask : x.x.x.x Gateway : x.x.x.x IP Port : x | Displays IP address configuration |
| IPQuit | IPQuit | Logs out of TCP/IP Connection |
| IPAddUser X Y Ex. IPAddUser Atlona 1234 | TCP/IP user was added | Adds a user for TCP/IP control X= user and Y= Password |
| IPAddUser | username password username password username password | Displays a list of users and passwords |
| IPDelUser X | TCP/IP user was deleted | Delete a user from TCP/IP X= username |
| IPDHCP X | IPDHCP X | Turns HDCP on or off X= on, off, sta |
| IPStatic X Y Z Ex. IPStatic 192.168.1.1 255.255.255.0 192.168.1.200 | IPStatic X Y Z Ex. IPStatic 192.168.1.1 255.255.255.0 192.168.1.200 | Sets static IP address IPStatic Address(X) Netmask(Y) Gateway(Z) |
| IPPort X | IPPort X | Set the TCP/IP Port |
| IPLogin X Ex. IPLogin off | IPLogin X Ex. IPLogin off | Enables IP Login X= on, off, sta |
| Broadcast X Ex. Broadcast on | Broadcast X Ex. Broadcast on | Sets broadcast mode on or off X= on, off, sta |
| IPTimeout XX Ex. IPTimeout 300 | IPTimeout XX Ex. IPTimeout300 | Determines amount of seconds of inactivity before TCP/IP disconnects |

Each command or feedback is terminated with a carriage return.

Note: If the command fails or is incorrect the feedback is "Command FAILED"

Baud Rate

Default baud rate to control the switcher is 115200 and default baud rate to control the display or projector is 9600.

Note: For the display's actual baud rate, refer to the owner's manual

To change the baud rate of the switcher (for switcher control) or the zone output (for display/projector control), the commands below will be needed

Switcher baud command

CSpara[baudrate,data-length,parity,stop-bit] (data-length, parity, and stop-bit for switcher must be 8,0,1)

Example: To change the baud rate to 38400 use **CSpara[38400,8,0,1]**

Note: Use this command if the connected control system does not output 115200

Zone output baud commands (for display control)

RS232para1[baudrate,data-length,parity,stop-bit]

Example: To change the output baud rate to 19200 use **RS232para1[19200,8,0,1]**

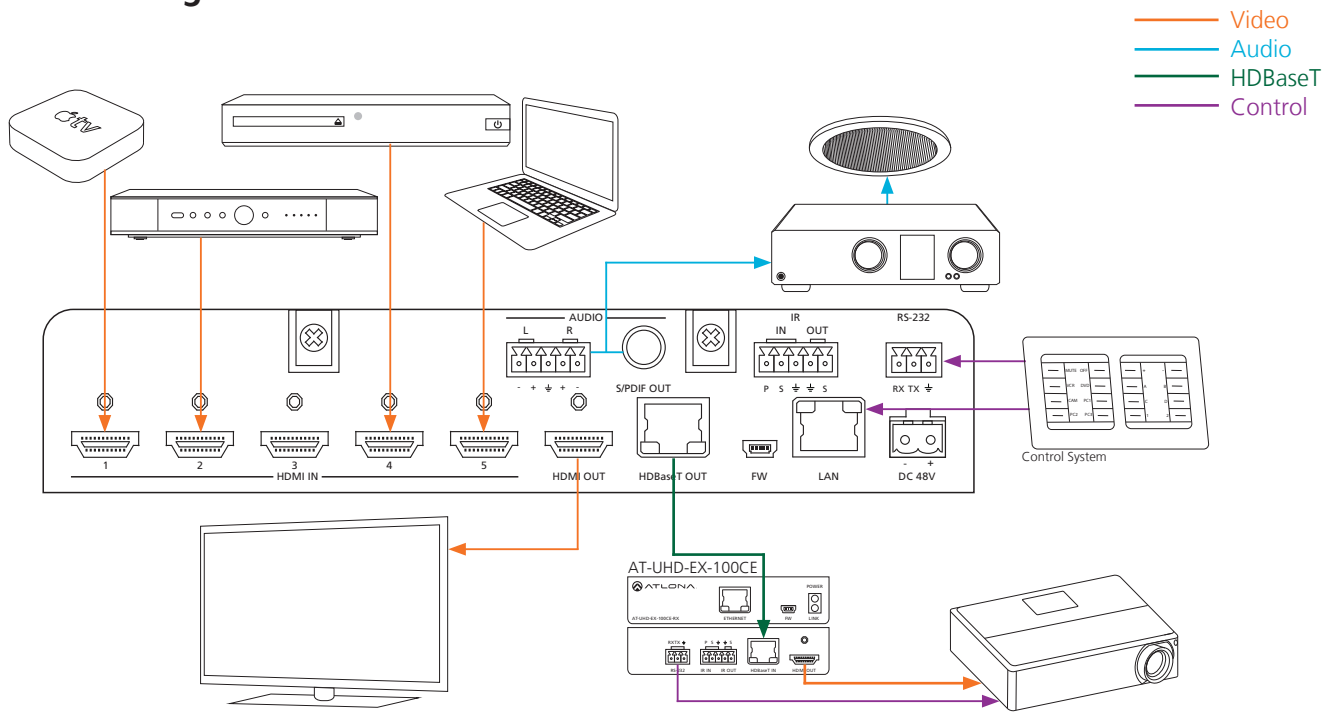
Note: Use this command if the connected display uses a different baud rate

RS232zone1[command]

Once the switcher and zone output have been set up for the best communication, commands can be sent to control the display. The commands will come from the user manual of the display or projector. The commands and any carriage returns/line feeds in the commands will need to be placed in the bracket.

Example: To turn the display or projector on if the command is PWRON carriage return, use the command:
RS232zone1[PWRON carriage return]

Connection Diagram



Specifications

Resolutions

| | | |
|---------------------|--|--|
| Video | 4096x2160@24/25/30/50*/60Hz*, 3840x2160@24/25/30/50*/60Hz* (UHD), 2048x1080p, 1080p@23.98/24/25/29.97/30/50/59.94/60Hz, 1080i@50/59.94/60Hz, 720p@50/59.94/60Hz, 576p, 576i, 480p, 480i | |
| VESA | 2560x2048, 2560x1600, 2048x1536, 1920x1200, 1680x1050, 1600x1200, 1600x900, 1440x900, 1400x1050, 1366x768, 1360x768, 1280x1024, 1280x800, 1280x768, 1152x864, 1024x768, 800x600, 640x480 | |
| Colorspace | YUV, RGB | |
| Chroma Sub-sampling | 4:4:4, 4:2:2, 4:2:0 | |
| Color depth | 8-bit, 10-bit, 12-bit | |

Audio

| | | |
|------------------------|---|--|
| Formats - HDMI IN/OUT | PCM 2 Ch, LPCM 5.1, LPCM 7.1, Dolby Digital, DTS 5.1, Dolby Digital Plus, Dolby TrueHD, DTS-HD Master Audio | |
| Formats - S/PDIF | PCM 2 Ch, LPCM 5.1, LPCM 7.1, Dolby Digital, DTS 5.1 | |
| Format - captive screw | max analog output: balanced +4dBu nominal, +18dBu @ 0 dB fs, 2Ch PCM | |
| Sample rate | 32 kHz, 44.1 kHz, 48 kHz, 88.2 kHz, 96 kHz, 176.4 kHz, 192 kHz | |

Distance (per port)

| | | |
|---------------------|------------|--------------|
| CAT5e/6 @ 4K | up to 70M | up to 230 ft |
| CAT5e/6 @ 1080p | up to 100M | up to 328 ft |
| CAT6a/7 @ 4K | up to 100M | up to 328 ft |
| HDMI IN/OUT @ 4K | up to 5M | up to 15 ft |
| HDMI IN/OUT @ 1080p | up to 10M | up to 30 ft |

Signal

| | | |
|-----------|--|--|
| Bandwidth | 10.2 Gbps | |
| CEC | Pass through | |
| HDCP | Switchable - Complaint / Non-compliant | |

Temperature

| | | |
|-----------|--------------------------|---------------|
| Operating | 0°C to 50°C | 32°F to 122°F |
| Storage | -20°C to 60°C | -4°F to 140°F |
| Humidity | 20 to 90% non-condensing | |

Power

| | | |
|------------------|--|--|
| Consumption | 22W | |
| Idle Consumption | 9.06W | |
| Supply | Input: AC 100~240V 50/60Hz Output: DC 48V/0.83A | |

Dimension

| | | |
|-----------|------------------------|----------------------------|
| H x W x D | 44 x 222.25 x 261 (mm) | 1.73 x 8.75 x 10.28 (inch) |
| Rack size | 1/2 rack, 1RU | |

Weight

| | | |
|--------|---------|----------|
| Device | 3.15 kg | 1.44 lbs |
|--------|---------|----------|

Certification

| | | |
|--------------|---------------------|--|
| Power Supply | CE, FCC, cULus, RCM | |
| Product | CE, FCC | |

**4096x2160@50/60Hz & 3840x2160@50/60Hz supported @ chroma subsampling 4:2:0 8-bit only

Safety Information

Safeguards



To reduce the risk of electric shock, do not expose this product to rain or moisture



Do not modify the wall plug. Doing so will void the warranty and safety features.



If the wall plug does not fit into your local power socket, hire an electrician to replace your obsolete socket.



This equipment should be installed near the socket outlet and the device should be easily accessible in the case it requires disconnection.

Precautions

FCC regulations state that any unauthorized changes or modifications to this equipment, not expressly approved by the manufacturer, could void the user's authority to operate this equipment.

Operate this product using only the included external power supply. Use of other power supplies could impair performance, damage the product, or cause fires.

In the event of an electrostatic discharge this device may automatically turn off. If this occurs, unplug the device and plug it back in.

Protect and route power cords so they will not be stepped on or pinched by anything placed on or against them. Be especially careful of plug-ins or cord exit points from this product.

Avoid excessive humidity, sudden temperature changes or temperature extremes.

Keep this product away from wet locations such as bathtubs, sinks, laundries, wet basements, fish tanks, and swimming pools.

Use only accessories recommended by Atlona to avoid fire, shock, or other hazards.

Unplug the product before cleaning. Use a damp cloth for cleaning and not cleaning fluid or aerosols. Such products could enter the unit and cause damage, fire, or electric shock. Some substances may also mar the finish of the product.

Never open, remove unit panels, or make any adjustments not described in this manual. Attempting to do so could expose you to dangerous electrical shock or other hazards. It may also cause damage to your product. Opening the product will void the warranty.

Do not attempt to service the unit. Disconnect the product and contact your authorized Atlona reseller or contact Atlona directly.

Atlona, Inc. ("Atlona") Limited Product Warranty Policy

Coverage

Atlona warrants its products will substantially perform to their published specifications and will be free from defects in materials and workmanship under normal use, conditions and service.

Under its Limited Product Warranty, Atlona, at its sole discretion, will either:

- A) repair or facilitate the repair of defective products within a reasonable period of time, restore products to their proper operating condition and return defective products free of any charge for necessary parts, labor and shipping
- OR**
- B) replace and return, free of charge, any defective products with direct replacement or with similar products deemed by Atlona to perform substantially the same function as the original products
- OR**
- C) refund the pro-rated value based on the remaining term of the warranty period, not to exceed MSRP, in cases where products are beyond repair and/or no direct or substantially similar replacement products exist.

Repair, replacement or refund of Atlona's products is the purchaser's exclusive remedy and Atlona's liability does not extend to any other damages, incidental, consequential or otherwise.

This Limited Product Warranty extends to the original end-user purchaser of Atlona's products and is non-transferrable to any subsequent purchaser(s) or owner(s) of these products.

Coverage Periods

Atlona's Limited Product Warranty Period begins on the date of purchase by the end-purchaser. The date contained on the end-purchaser's sales or delivery receipt is the proof purchase date.

Limited Product Warranty Terms – New Products

- 10 years from proof of purchase date for hardware/electronics products purchased on or after June 1, 2013
- 3 years from proof of purchase date for hardware/electronics products purchased before June 1, 2013
- Lifetime Limited Product Warranty for all cable products

Limited Product Warranty Terms – Refurbished (B-Stock) Products

- 3 years from proof of purchase date for all Refurbished (B-Stock) hardware and electronic products purchased on or after June 1, 2013

Remedy

Atlona recommends that end-purchasers contact their authorized Atlona dealer or reseller from whom they purchased their products. Atlona can also be contacted directly. Visit www.atlona.com for Atlona's contact information and hours of operation. Atlona requires that a dated sales or delivery receipt from an authorized dealer, reseller or end-purchaser is provided before Atlona extends its warranty services. Additionally, a return merchandise authorization (RMA) and/or case number, is required to be obtained from Atlona in advance of returns.

Atlona requires that products returned are properly packed, preferably in the original carton, for shipping. Cartons not bearing a return authorization or case number will be refused. Atlona, at its sole discretion, reserves the right to reject any products received without advanced authorization. Authorizations can be requested by calling 1-877-536-3976 (US toll free) or 1-408-962-0515 (US/international) or via Atlona's website at www.atlona.com.

Exclusions

This Limited Product Warranty excludes:

- Damage, deterioration or malfunction caused by any alteration, modification, improper use, neglect, improper packing or shipping (such claims must be presented to the carrier), lightning, power surges, or other acts of nature.
- Damage, deterioration or malfunction resulting from the installation or removal of this product from any installation, any unauthorized tampering with this product, any repairs attempted by anyone unauthorized by Atlona to make such repairs, or any other cause which does not relate directly to a defect in materials and/or workmanship of this product.
- Equipment enclosures, cables, power supplies, batteries, LCD displays, and any accessories used in conjunction with the product(s).
- Products purchased from unauthorized distributors, dealers, resellers, auction websites and similar unauthorized channels of distribution.

Disclaimers

This Limited Product Warranty does not imply that the electronic components contained within Atlona's products will not become obsolete nor does it imply Atlona products or their electronic components will remain compatible with any other current product, technology or any future products or technologies in which Atlona's products may be used in conjunction with. Atlona, at its sole discretion, reserves the right not to extend its warranty offering in instances arising outside its normal course of business including, but not limited to, damage inflicted to its products from acts of god.

Limitation on Liability

The maximum liability of Atlona under this limited product warranty shall not exceed the original Atlona MSRP for its products. To the maximum extent permitted by law, Atlona is not responsible for the direct, special, incidental or consequential damages resulting from any breach of warranty or condition, or under any other legal theory. Some countries, districts or states do not allow the exclusion or limitation of relief, special, incidental, consequential or indirect damages, or the limitation of liability to specified amounts, so the above limitations or exclusions may not apply to you.

Exclusive Remedy

To the maximum extent permitted by law, this limited product warranty and the remedies set forth above are exclusive and in lieu of all other warranties, remedies and conditions, whether oral or written, express or implied. To the maximum extent permitted by law, Atlona specifically disclaims all implied warranties, including, without limitation, warranties of merchantability and fitness for a particular purpose. If Atlona cannot lawfully disclaim or exclude implied warranties under applicable law, then all implied warranties covering its products including warranties of merchantability and fitness for a particular purpose, shall provide to its products under applicable law. If any product to which this limited warranty applies is a "Consumer Product" under the Magnuson-Moss Warranty Act (15 U.S.C.A. §2301, ET SEQ.) or other applicable law, the foregoing disclaimer of implied warranties shall not apply, and all implied warranties on its products, including warranties of merchantability and fitness for the particular purpose, shall apply as provided under applicable law.

Other Conditions

Atlona's Limited Product Warranty offering gives legal rights, and other rights may apply and vary from country to country or state to state. This limited warranty is void if (i) the label bearing the serial number of products have been removed or defaced, (ii) products are not purchased from an authorized Atlona dealer or reseller. A comprehensive list of Atlona's authorized distributors, dealers and resellers can be found at www.atlona.com.

Atlona Product Registration

Thank you for purchasing this Atlona product. - We hope you enjoy it and will take an extra few moments to register your new purchase.

Registration creates an ownership record if your product is lost or stolen and helps ensure you'll receive notification of performance issues and firmware updates.

At Atlona, we respect and protect your privacy, assuring you that your registration information is completely secure. Atlona product registration is completely voluntary and failure to register will not diminish your limited warranty rights.

To register go to: <http://www.atlona.com/registration>