

4K/UHD HDMI Multi-Channel Digital to Two-Channel Balanced Analog Audio Converter

AT-UHD-M2C-BAL User Manual



Please check http://www.atlona.com/UHD-M2C-BAL.html for the most recent **firmware update** or **manual**.

Toll free: 1-877-536-3976



Table of Contents

1. Introduction	 3
2. Package Contents	 3
3. Features	 3
4. Panel Descriptions	
a. Front Panel	 4
b. Rear Panel	 4
5. Audio	 5
6. WebGUI	 6-10
7. RS-232	 11-13
8. Specifications	 . 14
8. Safety Information	 15
9. Warranty	 16
10. Atlona Product Registration	 17-18
11. Trademark Acknowledgement	 18

Toll free: 1-877-536-3976



Introduction

The Atlona 4K HDMI Multi-channel to Two Channel Balanced Audio Converter accepts up to Dolby TrueHD and DTS-HD Master Audio then down converts it to two channel or one channel +4dBu balanced audio. With built in RS-232, TCP/IP, and GUI control for audio mode switching, volume, bass, and treble adjustment, the M2C-BAL provides an easy interface to control systems.

Package Contents

- 1 x AT-UHD-M2C-BAL
- 1 x 5 pin female captive screw connector
- 1 x 3.5mm to DB9 adapter
- 1 x Locking 5V DC adapter
- 1 x User Manual

Features

- Converts multi-channel audio into two/one channel audio
- Switch allows volume settings to be externally controlled (adjust) or force volume to factory settings (default= 0 gain and flat EQ)
- RS-232, TCP/IP, and webGUI control options
- +4 dBu balanced analog audio output
- Compatible with all digital audio formats including lossless and lossy
- Audio EDID Replaces the 2Channel audio portion of a display's EDID with EDID that accepts all PCM, LPCM, Dolby® and DTS® audio formats (including Dolby® Digital, Dolby® Digital Plus, Dolby® TrueHD, DTS Digital Surround™ and DTS-HD Master Audio™)

3

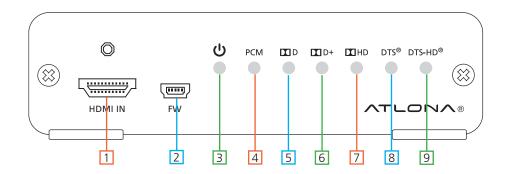
- LED audio status lights for all audio formats to determine incoming audio signals
- Up to 4K/UHD @ 30Hz pass through
- Control volume, bass, and treble using webGUI, TCP/IP, or RS-232
- HDCP management

Toll free: 1-877-536-3976



Panel Description

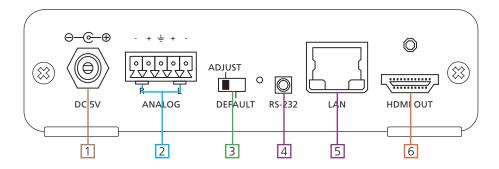
Front Panel



- 1. HDMI Input port: Connect HDMI source here
- 2. Mini USB port: Firmware update port, connect a Mini USB to USB A cable to a computer
- 3. Red LED: Illuminates when receiving power
- 4. Green LED: will illuminate when a PCM audio signal is detected
- 5. Green LED: illuminates when a Dolby® Digital signal is identified
- 6. Green LED: Dolby® Digital Plus signal indicator
- 7. Green LED: illuminates when receiving a Dolby® TrueHD signal
- 8. Green LED: light will illuminate when a DTS Digital Surround™ is present
- 9. Green LED: signal light will turn on when DTS-HD Master Audio™ signal is received

NOTE: LED signifies incoming digital audio signal type only. The M2C-BAL does not decode Dolby or DTS signals on pass through. The M2C-BAL will decode Dolby and DTS, down mix it to one/two channel, and send that signal to either the HDMI output or the analog output.

Back Panel



- 1. DC 5V: Connect included locking 5V DC power supply here.
- 2. L/R audio port: Connect to an amplifier, mixer, DSP, or other audio input
- 3. Control Switch: Switch between adjust and default modes

Adjust - Allows the M2C-BAL volume to be controlled through RS-232 or TCP/IP Default - Factory neutral settings, volume cannot be controlled by RS-232 or TCP/IP *Gain will be set to 0 and EQ will be flat

- 4. RS-232 port: Connect control system to RS-232 port
 - 3.5mm pin out Tip: 2 (TX), Ring: 3(RX), Sleeve: 5 (Ground)
- 5. LAN port: Connect network switch or router to this port for TCP/IP or WebGUI control
- 6. HDMI out port: Connect to an HDMI display, extender, or switcher

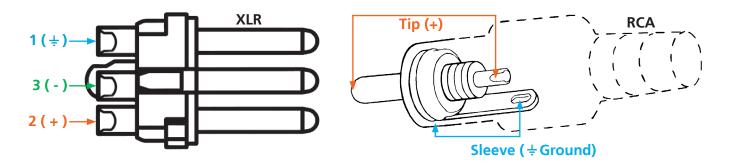
Toll free: 1-877-536-3976



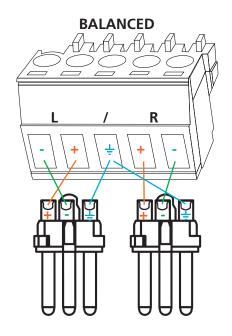
Analog Audio

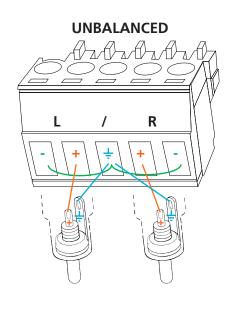
A captive screw analog audio connector is provided to ensure a more reliable and secure connection. The captive screw connector supports balanced and unbalanced audio output.

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 **Note:** Set the unbalanced output level in the webGUI to reduce or prevent distortion



TCP/IP

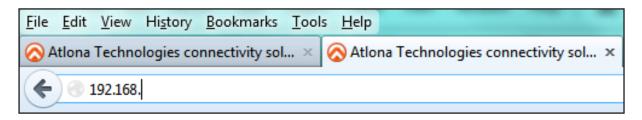
For convenience, the M2C-BAL comes with DHCP on. This enables the switcher to be connected to a network or network device the preset IP matches. If your network does not allow dynamic IP addresses, this feature may be turned off and set using RS-232 commands.

TCP/IP WebGUI

Atlona has created an easy to use WebGUI for initial setup and later changes to the configuration of the M2C-BAL.

To begin, plug a LAN cable into the LAN port of the M2C-BAL and your network, then type the IP address of the M2C-BAL 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"



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.



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 12). The username will always remain "root".

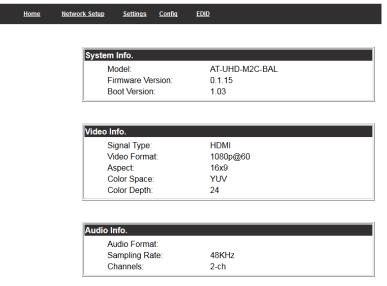
Toll free: 1-877-536-3976

atlona.com 6 Local: 1-408-962-0515





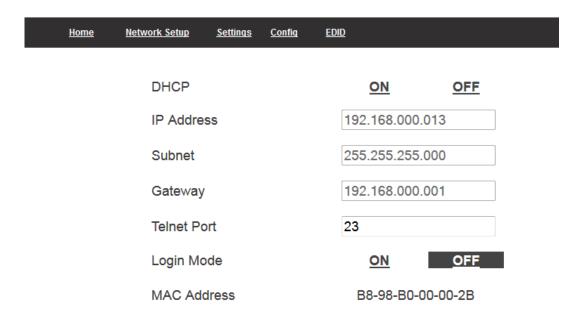
AT-UHD-M2C-BAL



The home screen tab will display the general system information.



AT-UHD-M2C-BAL Setup



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 M2C-BAL 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.





AT-UHD-M2C-BAL Settings

Home Network Setup	Settings Config	<u>EDID</u>	
Audio Settings			
HDMI Output Audio		Pass-Through	Insert
Audio Adjust Mode	Default		Adjust
Volume Mute Control	Mute		Output UnMute
Audio Output Mode	Stereo		Mono
Defaulte Mode Audio out		Balance	UnBalance
Volume		0 dB	
Bass		0 dB	
Treble		0 dB	

- 1. HDMI Output Audio Sets what audio is outputted on the HDMI port Pass through - Passes multi-channel audio to the HDMI port (input audio) Insert - Embeds the down mixed audio onto the HDMI output signal
- 2. Audio Adjust Mode
 - Default Factory neutral settings, cannot be controlled by RS-232 or TCP/IP *Output gain will be 0 and EQ flat
 - Adjust Allows the M2C-BAL output volume and EQ to be controlled through RS-232 or TCP/IP
- 3. Volume Mute Control Mutes or unmutes the output audio
- 4. Audio Output Mode Switch between 2 channel and 1 channel audio output

Stereo - 2 Channel audio

Mono - 1 Channel audio

5. Default Mode Audio Out - Adjust audio output between balanced and unbalanced values Balanced - +4 dBu balanced audio out

Unbalanced - Default is -10 dBu

- 6. Volume Set output volume level
 - Range from -80 to 6

7. Bass - Set bass boost or cut Range from -15 to 15

8. Treble - Set treble boost or cut

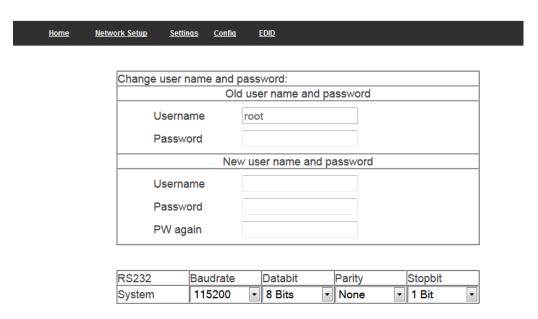
Range from -15 to 15

Toll free: 1-877-536-3976



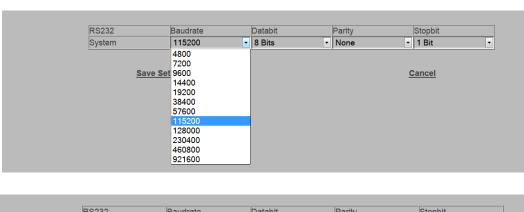


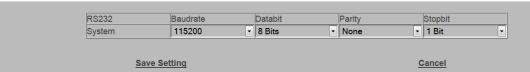
AT-UHD-M2C-BAL Config



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

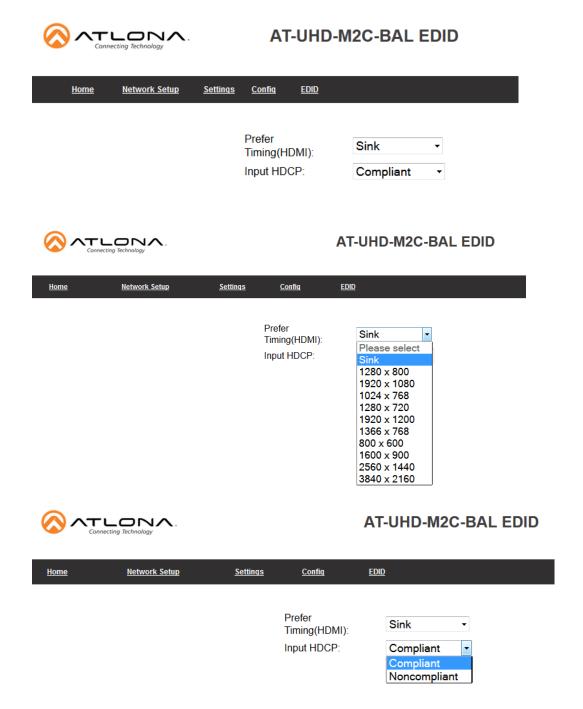
Note: User information will display for the admin only. Up to 3 users other than admin can be added. **Note:** Only the admin password can be changed. The username will always remain "root". If the admin password is lost the system must be returned to factory settings and setup repeated.





Toll free: 1-877-536-3976





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

- *Sink selects the preferred video resolution from the display to the source
- *The preferred timings all include multichannel audio

Note: M2C-BAL 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 M2C-BAL.

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

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

Toll free: 1-877-536-3976



RS-232

Connection

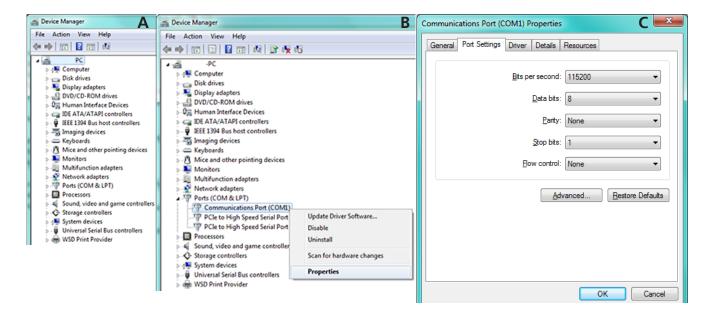
RS-232 is connected through a 3.5mm to 9-pin female D connector (DB9). The 3.5mm connector pin out is pin 2 (tip/TX), pin 3 (ring/RX), and pin 5 (sleeve/ground).

Set Up

To set up the RS-232 hyperterminal (if not using 3rd party software) use the following steps:

- 1. Connect the M2C-BAL to a PC using a 9 pin to USB converter
- 2. Go to the Device Manager folder (see picture A).
- 3. Find the M2C-BAL COM port and right click with a mouse and select properties (see picture B) NOTE: If unsure which COM port is the M2C-BAL, unplug the cable and plug it back in. It will disappear and reappear on the COM port list.
- 4. Under the properties menu select the port settings tab and update the menu to the **M2C-BAL default settings of**: Bits Per Second: 115200, Data Bits: 8, Parity: None, Stop Bits: 1 and Flow Control: None. (see picture C)

Set up is done and any hyperterminal program may be used to control the M2C-BAL.



Toll free: 1-877-536-3976

atlona.com



Commands

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

Command	Feedback	Description
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]
Туре		Displays the model information
Mreset	Mreset	Reset device to manufacture default
HDCPSet1 X Ex. HDCPSet1 on	HDCPSet1 X ex. HDCPSet1 on	Set HDCP reporting mode of the HDMI input X= on/off/sta
PrefTimg1 X	PrefTimg1 X	Set preferred timing X= 0-10
PrefTimg sta	PrefTimg1 X	Displays the currently selected preferred timing
SetMono1 X Ex. SetMono1 on	SetMono1 X Ex. SetMono1 on	Switch between stereo and mono analog audio output X= on (mono), off (stereo), sta
VOUT1 +	VOUT1 XX	Increases volume output by 1
VOUT1 -	VOUT1 XX	Decreases volume output by 1
VOUT1 XX Ex. VOUT1 -60	VOUT1 XX Ex. VOUT1 -60	Set volume output to a specific value XX= -80 to 6
VOUT1 sta	VOUT1 XX	Displays current volume output
VOUTMute1 X	VOUTMute1 X	Mute or unmute the output volume X= on (mute), off (unmute), sta
BASS1 +	BASS1 XX	Increase bass level by 1
BASS1 -	BASS1 XX	Decrease bass level by 1
BASS1 XX Ex. BASS1 -10	BASS1 XX BASS1 -10	Set bass level to a specific value XX= -15 to 15
TREBLE1 +	TREBLE1 XX	Increase treble level by 1
TREBLE1 -	TREBLE1 XX	Decrease treble level by 1
TREBLE1 XX Ex. TREBLE1 -8	TREBLE1 XX Ex. TREBLE1 -8	Set treble level to a specific value XX= -15 to 15
AnalogOut X Ex. AnalogOut bal	AnalogOut X Ex. AnalogOut bal	Set the analog audio to balanced or unbalanced output X= bal (balanced), unbal (unbalanced), sta
SetHDMIPass X Ex. SetHDMIPass on	SetHDMIPass X	Set the HDMI port to output multichannel or 2Ch audio X= on (multichannel), off (2Ch PCM), sta
UnBalLevel XX Ex. UnBalLevel -20	UnBalLevel XX Ex. UnBalLevel -20	Set the default unbalanced output audio level

Each command or feedback is terminated with a carriage return.

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

[X] preferred timing -

0	Sink (pass through)	1	1280x800	2	1920x1080
3	1024x768	4	1280x720	5	1920x1200
6	1366x768	7	800x600	8	1600x900
9	2560x1440	10	3840x2160		

atlona.com

Toll free: 1-877-536-3976

Local: 1-408-962-0515



IP Commands

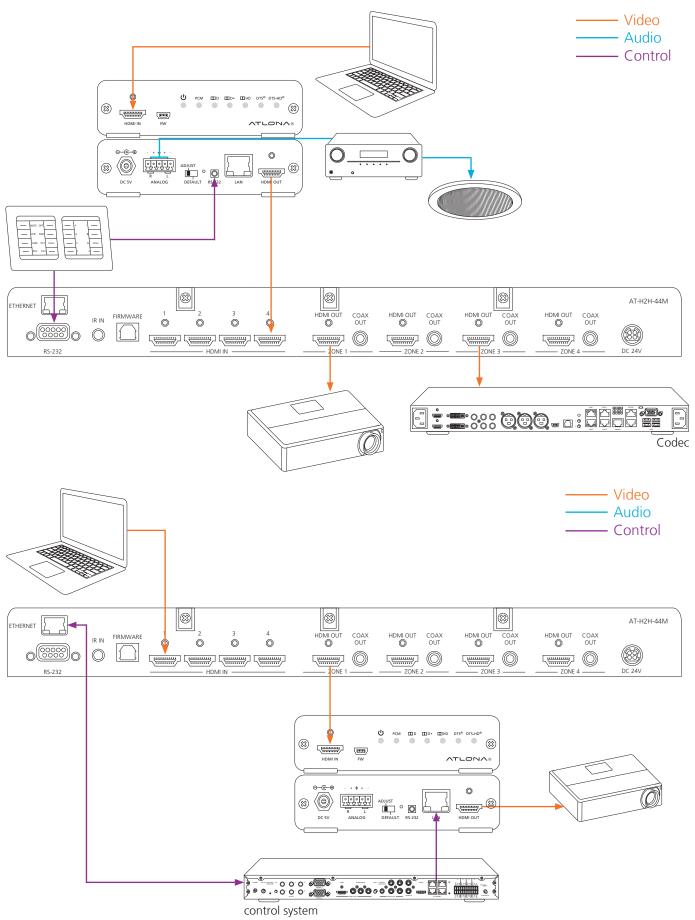
Command	Feedback	Description
IPCFG	IP Addr:x.x.x.x Netmask:x.x.x.x Gateway:x.x.x.x IP Port:x	Displays IP address configuration
IPQuit	IPQuit	Logs out of TCP/IP Connection
IPAddUser X Y Ex. IPAddUser Atlona 1234	TCP/IP user was added	Adds a user for TCP/IP control X= user and Y= Password
IPAddUser sta	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 will be "Command FAILED"



Connection Diagram





Specifications

Video Resolutions

Video 4096x2160@24/25/30Hz, 3840x2160@24/25/30Hz, 2048x1080p,

1080p@23.98/24/25/29.97/30Hz, 1080i@50/59.94/60Hz,

720p@50/59.94/60Hz, 576p, 576i, 480p,

480i

VESA 2560x2048, 2560x1600, 2048x1536, 1920x1200, 1680x1050,

1600x1200, 1440x900, 1400x1050, 1366x768, 1360x768,

1280x1024, 1280x800, 800x600, 640x480

Colorspace YUV, RGB Chroma Subsampling 4:4:4, 4:2:2

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

Format - Captive screw Balanced +4 dBu, 2 Ch

Sample Rate 32kHz, 44.1 kHz, 48 kHz, 88.2 kHz, 96 kHz, 176.4 kHz, 192 kHz

Total Harmonic Distortion 0.0008% (dB, sample frequency: 48kHz)

Signal/Noise Ratio 142dB

Frequency Range 20Hz to 20kHz +/-.1dB

Crosstalk <-103dB

Bass 15dB to -15dB @ 500Hz Treble 15dB to -15dB @ 2kHz

Distance (per port)

HDMI @ 1080p 10 meters 30 feet HDMI @ 4K 5 meters 15 feet

Signal

Bandwidth 10.2 Gbps CEC Pass through

HDCP Switchable - Complaint / Non-compliant

Temperature

Operating $0^{\circ}\text{C to }50^{\circ}\text{C}$ $32^{\circ}\text{F to }122^{\circ}\text{F}$ Storage $-20^{\circ}\text{C to }60^{\circ}\text{C}$ $-4^{\circ}\text{F to }140^{\circ}\text{F}$

Humidity 20 to 90% non-condensing

Power

Consumption 7W

Supply Input: AC 100-240V ~ 50/60Hz

Output: DC 5V / 2.6A

Dimension

H x W x D 30 x 125 x 110 (mm) 1.18 x 4.92 x 4.33 (inch)

Weight

Device 0.28 kg 0.61 lbs

Certification

Power Supply CE, FCC, cULus, RCM

Product CE, FCC

atlona.com

Toll free: 1-877-536-3976

Local: 1-408-962-0515



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.

Toll free: 1-877-536-3976

atlona.com



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
- 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
- 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.

Toll free: 1-877-536-3976 Local: 1-408-962-0515

atlona.com



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

Trademark Acknowledgement

<u>Dolby</u>®

Manufactured under license from Dolby Laboratories. Dolby and the double-D symbol are registered trademarks of Dolby Laboratories.

DTS®

Manufactured under license under U.S. Patent Nos: 5,956,674; 5,974,380; 6,487,535 & other U.S. and worldwide patents issued & pending. DTS, the Symbol, & DTS and the Symbol together are registered trademarks & DTS 2.0 Channel is a trademark of DTS, Inc. Product includes software. © DTS, Inc. All Rights Reserved.

atlona.com

Toll free: 1-877-536-3976

Local: 1-408-962-0515