

Atlona HDMI Multichannel to 2Channel Converter

AT-HD-M2C



User Manual

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Introduction

With so many digital audio format options out there, it's hard to ensure all devices receive a compatible audio signal. BluRay players, STBs, and game consoles can output multichannel audio, but often displays cannot support them. The AT-HD-M2C provides the answer to this by converting multichannel audio to a 2Channel stereo format that is compatible with your TV and legacy devices (such as audio receivers). The AT-HD-M2C doesn't stop there, it also has multiple audio output ports allowing audio to pass to amplifiers and legacy AVRs (that don't support HDMI) while still passing video and 2Ch audio to an HDMI display. With the AT-HD-M2C, enjoy the best audio available without compromising.

Package Contents

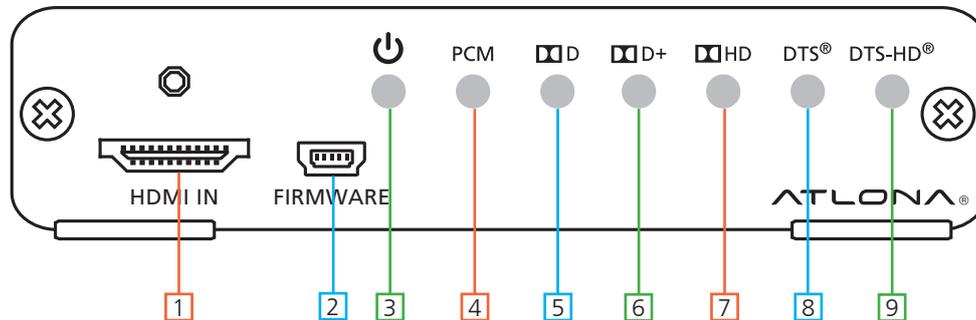
- 1 x AT-HD-M2C
- 1 x Locking 5V DC Adapter
- 1 x User Manual

Features

- Converts multichannel audio into 2Channel audio
- Compatible with all digital audio formats including Lossless and Lossy.
- L/R - Connect to 2Ch amplifiers (such as AT-PA100-G2)
- (Digital) Coaxial/Optical - Connect to older AVRs with no HDMI support
- HDMI - Outputs 2Channel audio
- Audio EDID - Replaces the 2Channel audio portion of a display's EDID with its own that accepts all 5.1 Dolby[®] and DTS[®] audio formats (including Dolby[®] Digital, Dolby[®] Digital Plus, Dolby[®] TrueHD, DTS Digital Surround[™] and DTS-HD Master Audio[™]).
- LED audio status lights for all audio formats to determine incoming audio signals
- Supports pass through of resolutions up to 1080p, 1920x1200 and 3D
- Plug and play
- HDCP Compliant

Panel Description

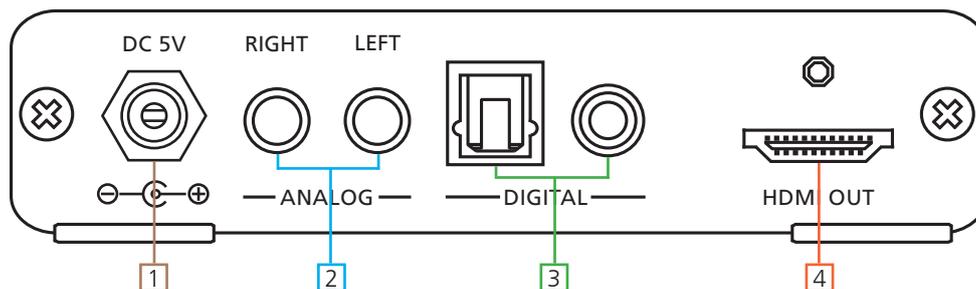
Front Panel



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 Power LED**: Illuminates when receiving power.
4. **Green Signal LED**: will illuminate when a PCM audio signal is detected.
5. **Green Signal LED**: Lights up when receiving a Dolby® Digital signal.
6. **Green Signal LED**: Dolby® Digital Plus signal indicator.
7. **Green Signal LED**: Illuminates when receiving a Dolby® TrueHD signal.
8. **Green Signal LED**: Light will illuminate when a DTS Digital Surround™ is present.
9. **Green Signal LED**: Signal light will turn on when DTS-HD Master Audio™ signal is received.

NOTE: LED signifies incoming digital audio signal type only. The HD-M2C does not decode Dolby or DTS signals. It will down convert and pass 2 channel audio only to all outputs.

Back Panel



1. DC 5V: Connect included locking 5V DC adapter here.
 2. L/R audio port: Connect to an amplifier (ex. AT-PA100-G2).
 3. Digital audio port: Digital Optical/Coaxial out to connect to an AVR with no HDMI support.
- NOTE:** Audio output is 2CH only, multichannel audio is not passed through these ports.
4. HDMI out port: Connect to an HDMI display.

EDID

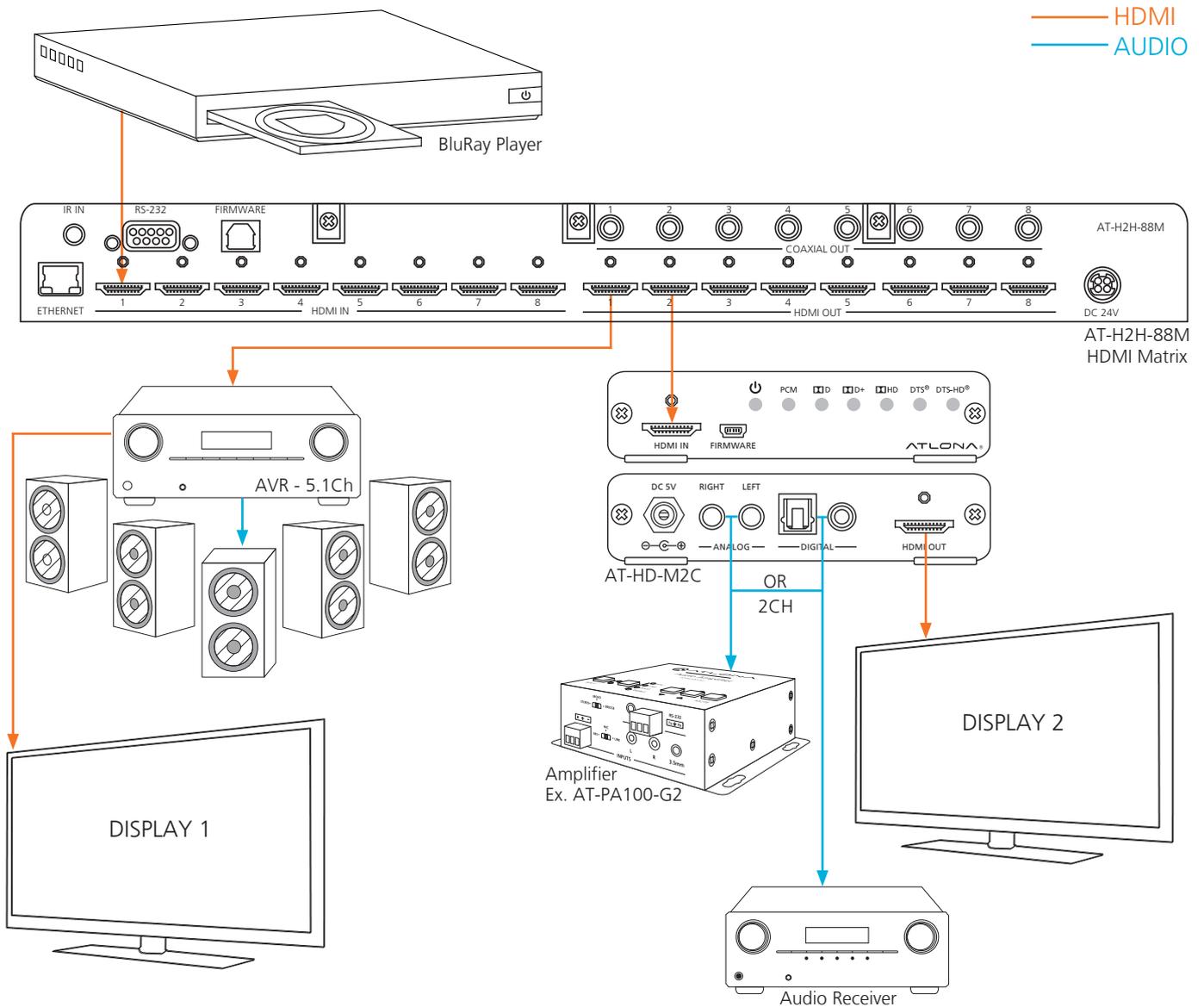
Audio

To ensure the highest audio signal is passed, the AT-HD-M2C has an internal multi-channel audio EDID. The Internal EDID supports: PCM2.0, LPCM5.1, LPCM7.1, Dolby® Digital, Dolby® Digital Plus, Dolby® TrueHD, DTS Digital Surround™, and DTS-HD Master Audio™.

Video

The AT-HD-M2C supports Video EDID pass through to ensure the display will receive the highest possible resolution up to 1080p, 1920x1200 (reduced blanking), and 3D.

Connection Diagram



Specifications

Bandwidth	6.75Gbps	
Ports	Video/Audio input 1 x HDMI Video/Audio output 1 x HDMI Audio output 1 x L/R Analog Audio 1 x Optical Digital Audio 1 x Coaxial Digital Audio Firmware update 1 x mini USB Power 1 x DC 5V	
Power Consumption	3.9W	
Audio	Accepts up to Dolby TrueHD or DTS-HD Master Audio Outputs 2Ch audio	
Resolution	Video: up to 1080p VESA: up to 1920x1200	
Dimensions	1.18 x 4.92 x 4.33 in 30 x 125 x 110 mm	
Weight	0.57 lbs 0.03 kg	
Temperature	Operating 32°F to 104°F 0°C to 40°C	Storage -4°F to 140°F 20°C to 60°C
Certifications	CE, FCC, RoHS, cULus for power supply	

Audio

Total Harmonic Distortion	0.0025% (-92dB, sample frequency: 48Khz)
Signal/Noise Ration	106dB
Gain	0
Frequency Range	20Hz to 20Khz

	Audio Type	Channels	Audio Type	Channels	Audio Type	Channels
HDMI In Signal ▶	PCM	2	Dolby® Digital	5.1	DTS Digital Surround™	5.1
	LPCM	5.1	Dolby® Digital Plus	5.1	DTS-HD Master Audio™	7.1
	LPCM	7.1	Dolby® TrueHD	7.1		
Output Signal ▶	HDMI	PCM	2			
	Optical	PCM	2			
	Coaxial	PCM	2			
	Analog (Left/Right)	Analog	2			

*Dolby Digital Plus 7.1 is not supported

Safety Information

Safeguards



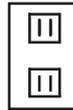
To reduce the risk of electric shock, do not expose this product to rain or moisture



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



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



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>

Trademark Acknowledgement

Dolby®

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.