



ATLONA

HDMI™ AUDIO DE-EMBEDDER

MODEL: AT-HD577

USER'S MANUAL



REV. 1 006

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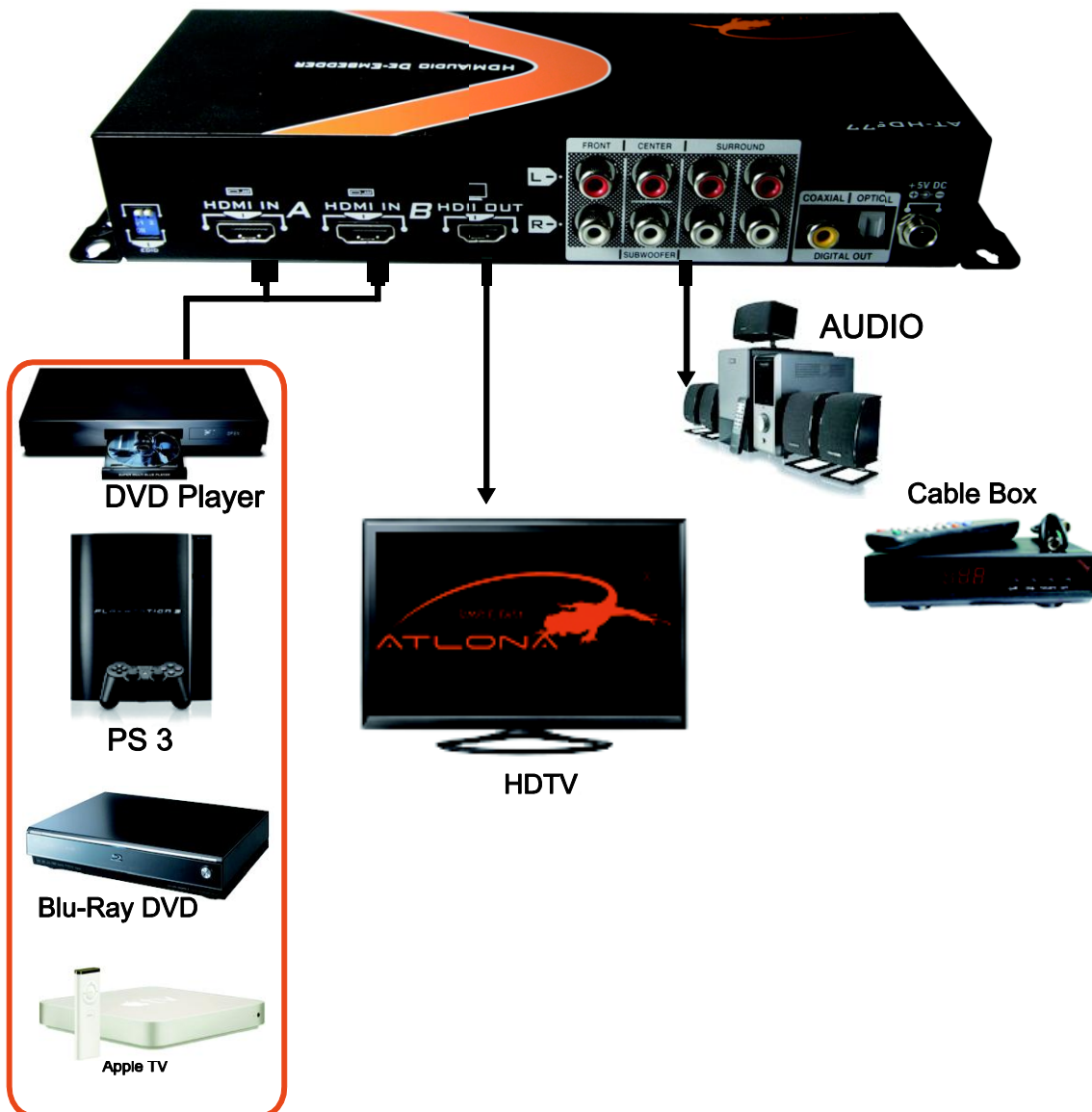
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# INTRODUCTION

Atlona Technologies AT-HD577 HDMI™ Audio De-Embedder offers the highest compatibility to HDMI™ 1.3 in the market. This unique device supports the separation of high quality audio from the incoming HDMI™ signal and make HDMI™ audio more friendly to your expensive audio systems. Plus, the high bit rate HDMI™ 1.3 data can be scaled down the color depth, which is compliant to HDMI™ 1.2 and DVI 1.1, to ease the limitation of the transmission distance and gain higher compatibility to the display without noticeable video degradation. To broaden the spectrum of HDMI™ audio output, high quality 7.1 channel analog audio outputs and stereo S/PDIF in both Toslink and RCA connectors are seamlessly integrated in AT-HD577.

AT-HD577 is designed to enrich your full digital video and audio experiences at the least expense in a smoothest way. With built-in HDMI switch, it can serve as a 2x1 HDMI™ switch to easily switch between HDMI™ home theater systems and PC HDMI™ /DVI devices.

## AT-HD577



# FEATURES

- ★ Silicon Image Chip-Sets allow 99.99% compatibility with all the AV gear (we only use Best)
- ★ HDMI™ 1.3c and HDCP compliant
- ★ 3D Capable
- ★ Built-in 2x1 HDMI™ switch
- ★ HDMI video supports up to 1080p@36 bit RGB/YCbCr
- ★ Scalable HDMI 1.2/1.3 output with HDMI 1.3 input
- ★ Maximum video output bus width 36-bit, no scaling
- ★ Loop through HDMI output
- ★ Supports LPCM 7.1/5.1/2 channels output through multi-channel output ports
- ★ Supports digital Dolby 5.1/2 and LPCM 2 channels output through optical fiber
- ★ Supports CEC bypass in HDMI™ input A port and HDMI™ output port
- ★ Supports uncompressed digital LPCM 7.1, 5.1 or 2 channels and compressed digital Bit-Stream (Dolby TrueHD, Dolby Digital Plus and DTS-HD Master Audio) through HDMI™ input and output ports
- ★ EDID learning ability to support all HDMI™ displays

# PACKAGE CONTENTS

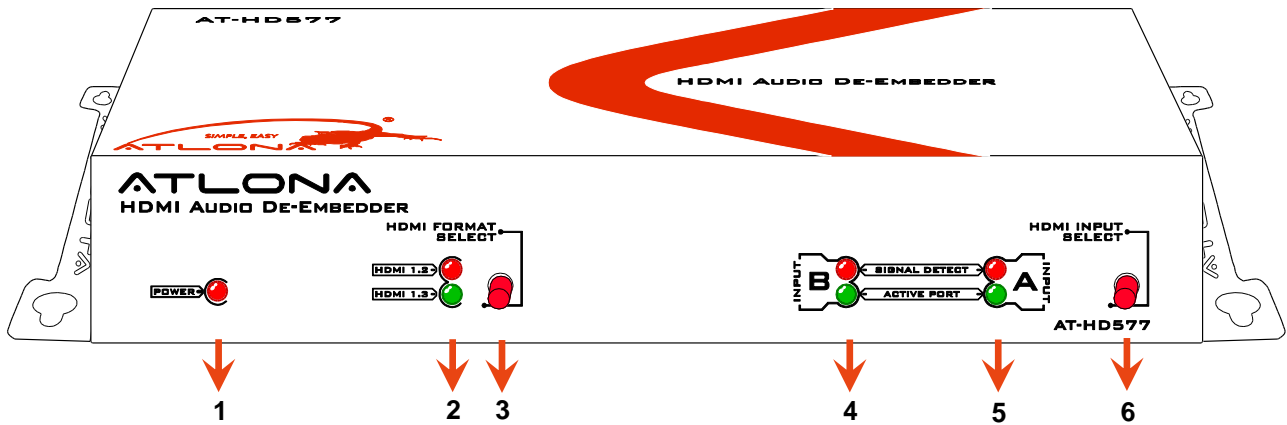
- ★ 1x AT-HD577
- ★ 1x 5V power supply unit
- ★ 1x User's manual

# SPECIFICATIONS

Model Name		AT-HD577
<b>Technical</b>		
Role of usage		Audio de-embedder & 2x1 switch
HDMI™ compliance		HDMI™ 1.3c
HDCP compliance		Yes
Video bandwidth		Single-link 225MHz (6.75Gbps)
Video support		480i / 480p / 720p / 1080i / 1080p60 24/30/36-bit color
Audio support		DTS-HD Master Audio & Dolby TrueHD [pass-through] Dolby Digital, DTS, DVD-Audio, LPCM, SACD, MPCM [de-embedded]
Max. TMDS input clock		225MHz
Max. output pixel clock		165MHz
Input TMDS signal		1.2 Volts (peak-to-peak)
Input DDC signal		5 Volts (peak-to-peak, TTL)
Input		2x HDMI™ (7.1ch audio & video)
Output		1x HDMI™ (7.1ch audio and video) 8x RCA analog (7.1ch audio) 1x RCA (digital audio) 1x Optical (digital audio)
HDMI™ connector		Type A (19-pin female)
RCA connector		Red / White – individual channel of 7.1ch analog audio Yellow – Coaxial S/PDIF digital stereo audio
Optical fiber connector		TOSLINK (S/PDIF digital stereo audio)
DIP switch		For EDID selection
Push-in button		[1] For selection between HDMI™ input A and input B [2] For selection between HDMI™ 1.2 and 1.3 output
<b>Mechanical</b>		
Housing		Metal enclosure
Dimensions (LxWxH)	Model	223 x 82 x 40mm (8.8" x 3.2" x 1.6")
	Package	330 x 200 x 95mm (1'1" x 7.9" x 3.7")
Weight	Model	576g (1.3 lbs)
	Package	1000g (2.2 lbs)
Fixedness		Wall-mounting case & latch-locking power supply
Power supply		5V 4A DC
Power consumption		4.5 Watts (max)
Operation temperature		0~40°C (32~104°F)
Storage temperature		-20~60°C (-4~140°F)
Relative humidity		20~90% RH (no condensation)

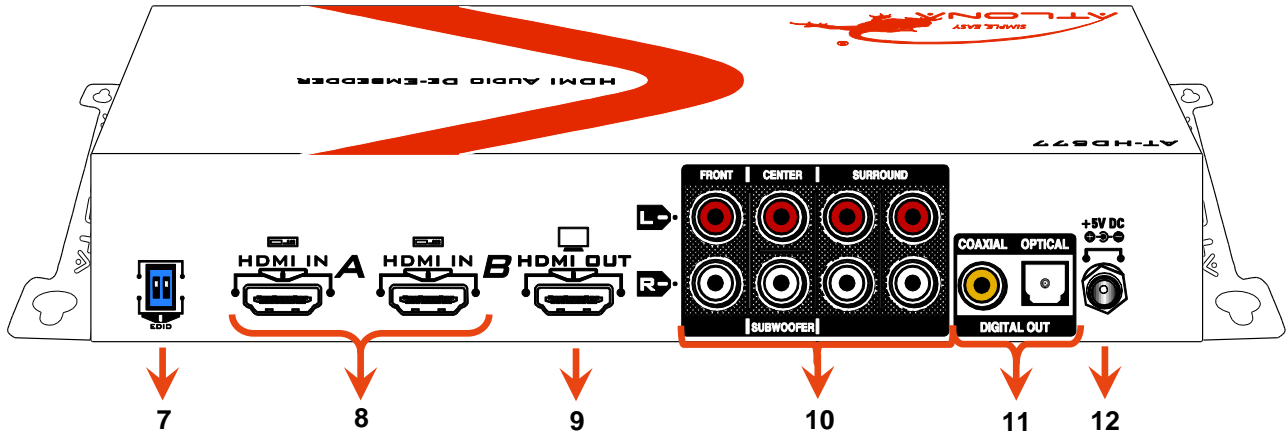
# PANEL DESCRIPTION

## Front Panel



1. Power on/off indicator
2. Red light – HDMI™ 1.2 signal output; green light – HDMI™ 1.3 signal output
3. Push-in button for enforcing HDMI™ output format selection between HDMI™ 1.2 and HDMI™ 1.3
4. Red light – HDMI™ signal detected on input B; green light – Input B is selected as the active port
5. Red light – HDMI™ signal detected on input A; green light – Input A is selected as the active port
6. Push-in button for selecting the active port between input A and input B

## Rear Panel



### 7. 2-pin DIP switch

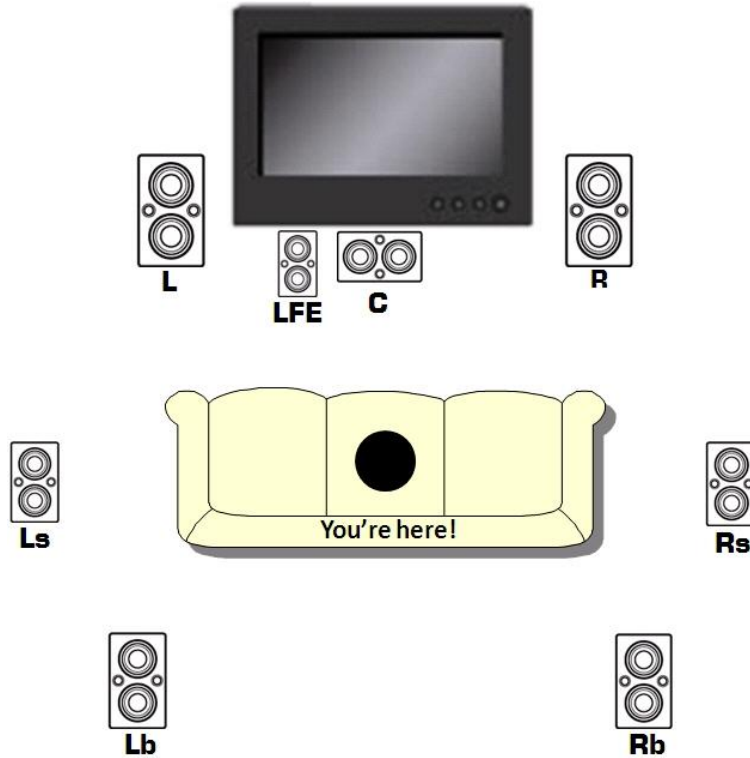
Pin Position	Off-Off (↑↑)	Off-On (↑↓]	On-Off (↓↑)	On-On (↓↓)
Input A EDID	Default EDID	Default EDID	Display's EDID	Display's EDID
Input B EDID	Default EDID	Display's EDID	Default EDID	Display's EDID

8. Connect HDMI™ source devices to HDMI™ IN A and B ports
9. Connect a HDMI™ display to the HDMI™ OUT port
10. Connect each analog audio channel to an AV receiver or a speaker
11. Connect to an AV receiver or a speaker for either coaxial or optical S/PDIF audio
12. Connect to a 5V DC power supply unit

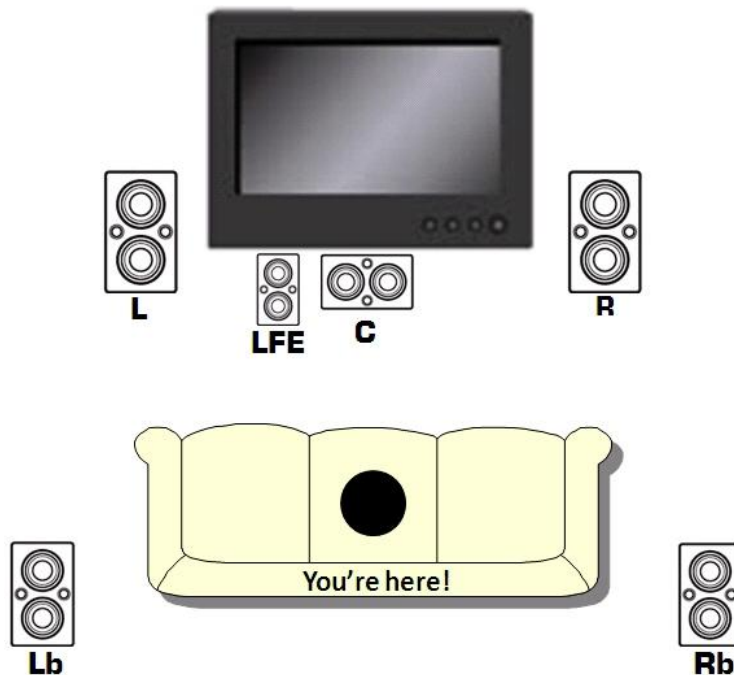
# INSTALLATION

1. Connect your HDMI™ sources to the HDMI™ input ports.
2. Connect your HDMI™ display to the HDMI output port.
3. Connect your stereo S/PDIF AV receiver into the RCA output ports.
4. Connect your 7.1ch or 5.1ch speakers into the RCA output ports.
5. Power up the AT-HD577.

## 7.1 channel audio layout and speaker setup



## 5.1 channel audio layout and speaker setup





## EDID LEARNING

1. Power up the AT-HD577. Connect to **HDMI OUT** with the display you want the AT-HD577 to learn its EDID.
2. To learn the display's EDID for source device connected to **HDMI IN A** to play normally, pull DIP switch pin-1 up-and-down to stay at ON (↓) and wait for about 5 seconds to complete the EDID learning process. You DON'T NEED to pull up the DIP switch again unless you want to learn another display's EDID by pulling DIP switch pin-1 up-and-down once more.
3. To learn the display's EDID for source device connected to **HDMI IN B** to play normally, pull DIP switch pin-2 up-and-down to stay at ON (↓) and wait for about 5 seconds to complete the EDID learning process. You DON'T NEED to pull up the DIP switch again unless you want to learn another display's EDID by pulling DIP switch pin-2 up-and-down once more.

## OUTPUT FORMAT SELECTION

When input signal exists, the output format LED turns on. If the input HDMI™ source is HDMI 1.3 format, you can set the output format to HDMI™ 1.2 mode and red LED will be on. If the input HDMI™ source is HDMI 1.2, the output format is always set to HDMI™ 1.2. The main purpose of lower the HDMI™ 1.3 resolution (36~48-bit color depth) to HDMI™ 1.2 (24-bit color depth) is to increase the transmission distance without creating noticeable video quality distortion still at 1080p. By pressing the push-in button, users can enforce the HDMI output at HDMI™ 1.2 format for longer transmission to the display. The AT-HD577 cannot upgrade the HDMI™ 1.2 source content to become HDMI™ 1.3 format.

## NOTICE

1. Depends upon the HDMI™ source content, analog stereo audio output can support up to 7.1-channel audio.
2. S/PDIF audio output supports main 2 channel audio output only.
3. The main purpose of lower the HDMI™ 1.3 resolution to HDMI™ 1.2 is to increase the transmission distance without creating noticeable video quality distortion.

# 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 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 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. Do not use cleaning fluid or aerosols, which could enter the unit and cause damage, fire or electrical shock. Some substances may also mar the finish of the product.

Never open or 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 AT-HD577. Opening the product will void the warranty.

Do not attempt to service the unit. Instead disconnect it and contact your Authorized ATLONA reseller or contact ATLONA directly.

# WARRANTY

## 1. LIMITED WARRANTY

Atlona Technologies warrants that (a) its products (the "Product") will perform substantially in accordance with the accompanying written materials for a period of 3 years from the date of receipt and (b) that the Product will be free from defects in materials and workmanship under normal use and service for a period of 3 years. In the event applicable law imposes any implied warranties, the implied warranty period is limited to 3 years from the date of receipt. Some jurisdictions do not allow such limitations on duration of an implied warranty, so the above limitation may not apply to Customer.

## 2. CUSTOMER REMEDIES

Atlona Technologies and its suppliers' entire liability and Customer's exclusive remedy shall be, at Atlona Technologies' option, either return of the price paid for the Product, or repair or replacement of the Product that does not meet this Limited Warranty and which is returned to Atlona Technologies with a copy of Customer's receipt. This Limited Warranty is void if failure of the Product has resulted from accident, abuse, or misapplication. Any replacement Product will be warranted for the remainder of the original warranty period or 3 year, whichever is longer.

## 3. NO OTHER WARRANTIES

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