



Introduction

The Atlona **Rondo™ 448 (AT-RON-448)** is a 1x8 HDMI distribution amplifier for high dynamic range (HDR) formats. It is HDCP 2.2 compliant and supports 4K/UHD video @ 60 Hz with 4:4:4 chroma sampling, as well as HDMI data rates up to 18 Gbps. The Rondo 448 is ideal for applications requiring the latest as well as emerging 4K/UHD and HDR sources and displays. It is compatible with all video resolutions, audio formats, and color space formats supported in the HDMI 2.0b specification, plus the ability to pass metadata for HDR content. This Rondo Series HDMI distribution amplifier includes EDID management features, front panel LED indicators for power and signal status, audio de-embedding to analog and coaxial S/PDIF audio outputs, and the capability to cascade several units without compromising performance.

Applications

- **Residential installations**
The Rondo 448 is designed for AV systems with the latest UHD and HDR sources such as Ultra HD Blu-ray players, plus compatible televisions and projectors.
- **TV showrooms**
The Rondo 448 can be used for reliable content distribution to televisions, to properly demonstrate the quality and appeal of 4K and HDR programming.
- **Professional AV applications**
Atlona 4K HDR products are ideal for full-motion, highly detailed 4K graphics presentations for visualization, 3D renderings, simulations, and more.

Key Features

1x8 HDMI distribution amplifier

- Delivers high performance, reliable HDMI signal distribution.
- Easy to install and deploy in commercial and residential applications.

4K/UHD capability @ 60 Hz with 4:4:4 chroma sampling, plus support for HDR formats

- Ideal for new and emerging 4K/UHD and HDR-capable sources and displays.
- Fully supports video resolutions, audio formats, and color space formats in the HDMI 2.0b specification.

HDCP 2.2 compliant

- Adheres to latest specification for High-bandwidth Digital Content Protection.
- Allows protected content stream to pass between devices.

EDID management

- Manages EDID communications with the source through a display's EDID or internally stored EDID.
- Ensures desired audio formats and video resolutions are provided to the AV system.

Supports cascading up to eight units

- Combine multiple Rondo 448 and other Rondo Series distribution amplifiers without compromising performance or reliability.
- System designs and configurations can easily be adapted or modified as needed.

HDMI audio de-embedding

- Extracts HDMI two-channel PCM audio to the unbalanced analog stereo output, and two-channel PCM or multi-channel bitstream audio to the coaxial S/PDIF digital output.
- Provides an additional integration option for AV receivers and whole-house audio systems.

Front panel power and signal status LEDs

- LED indicators provide power and HDMI input / output signal status information.
- Provides easy setup and troubleshooting.

Specifications

Video		
Signal	Input - HDMI Output - HDMI	
Copy Protection	HDCP 2.2	
Bandwidth	18 Gbps	
UHD/HD/SD	4096x2160 (DCI) @ 24/25/30/50/60 Hz 720x576p @ 50 Hz 3840x2160 (UHD) @ 24/25/30/50/60 Hz 720x576i @ 25/50 Hz 1920x1080p @ 720x480p @ 60 Hz 23.97/24/25/29.97/30/50/60 Hz 640x480p @ 60 Hz 1920x1080i @ 50/60 Hz 640x480i @ 60 Hz 1280x720p @ 30/50/60 Hz	
VESA All resolutions are 60 Hz	2560x2048 1366x768 2560x1600 1360x768 2048x1536 1280x1024 1920x1200 1280x800 1680x1050 1280x768 1600x1200 1152x768 1600x900 1024x768 1440x900 800x600 1400x1050 640x480	
Color Space	YUV, RGB	
Chroma Subsampling	4:4:4, 4:2:2, 4:2:0	
Color Depth	8-bit, 10-bit, 12-bit	
HDR	HDR10, Hybrid-Log Gamma (HLG), and Dolby® Vision™ @ 60 Hz	

Audio			
HDMI Pass-Through Formats	LPCM 2.0 LPCM 5.1 LPCM 7.1	Dolby® Digital Dolby Digital Plus™ Dolby TrueHD Dolby Atmos®	DTS® Digital Surround™ DTS-HD Master Audio™ DTS:X®
S/PDIF	LPCM 2.0	Dolby® Digital	DTS® Digital Surround™
Bit Depth	Up to 24 bits		
Analog Audio			
Format	Stereo 2-Channel		
Balanced Output	+4 dBu nominal gain, +19 dB headroom		
Frequency Response	20 Hz to 20 kHz, ± 0.5 dB		
THD+N	< 0.006% at 20 Hz to 20 kHz		
SNR	> 105 dB at 1 kHz, zero clipping @ 0 dBFS, unweighted		
Sample Rate	32 kHz, 44.1 kHz, 48 kHz, 88.2 kHz, 96 kHz, 176.4 kHz, 192 kHz		

Resolution / Distance	4K/UHD - Feet / Meters		1080p - Feet / Meters	
HDMI IN/OUT	15	5	30	10

Buttons and Indicators

Control Buttons: EDID	1 - momentary, tact-type
Indicators: POWER, SYNC 1, 2, 3, 4, 5, 6, 7, 8, INT, LEARN	2 - LED, red 10 - LED, blue

Connectors

HDMI IN	1 - Type A, 19-pin female
HDMI OUT	8 - Type A, 19-pin female
ANALOG OUT	1 - 5-pin captive screw
SPDIF OUT	1 - RCA-type, female
FW	1 - Mini USB, Female
PWR - MAIN	1 - locking connector, female
PWR - BACKUP	1 - locking connector, female

Temperature	Fahrenheit	Celsius
Operating	32 to 122	0 to 50
Storage	-4 to 140	-20 to 60
Humidity (RH)	20% to 90%, non-condensing	

Power	
Consumption	6.75W
BTU/h	23
Supply	Input: AC100-240V ~ 50/60Hz Output: DC 5V

Dimensions	Inches	Millimeters
H x W x D	1.73 x 17.07 x 10.03	44 x 433.8 x 255

Weight	Pounds	Kilograms
Device	5.70	2.61

Certification	
Device	CE, FCC
Power Supply	CE, FCC, Level VI, RoHS, cULus, RCM, CCC

Warranty	
Device	To view the product warranty, use the following link: https://atlona.com/warranty

Accessories

SKU	Description
AT-LC-H2H-1M	LinkConnect HDMI to HDMI 1 Meter Cable
AT-LC-H2H-2M	LinkConnect HDMI to HDMI 2 Meter Cable
AT-LC-H2H-3M	LinkConnect HDMI to HDMI 3 Meter Cable

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