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 signalstatus LEDs

• LED indicators provide power and HDMI input / output signal status information.

• Provides easy setup and troubleshooting.

Specifications

Video	
HDMI Specification	HDMI 2.0, HDCP 2.2
Maximum TMDS Clock	600 MHz
UHD/HD	4096×2160(DCI)@60/30/24 Hz, 3840×2160(UHD)@60/50/24/25/30 Hz, 1080p@23.98/24/25/29.97/30/50/59.94/60 Hz, 1080i@25/29.97/30 Hz, 720p@30/50/59.94/60 Hz
VESA	2560×2048, 2560×1600, 2048×1536, 1920×1200, 1680×1050, 1600×1200, 1600×900, 1440×900, 1400×1050, 1366×768, 1360×768, 1280×1024, 1280×800 1280×768, 1152×768, 1024×768, 800×600, 640×480
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™ @ 60Hz

Audio	
Pass-through	PCM 2Ch, LPCM 5.1, LPCM 7.1, Dolby® Digital, DTS® 5.1, Dolby Digital Plus, Dolby TrueHD, DTS-HD Master Audio™, Dolby Atmos®, DTS:X
Sample Rate	32 kHz, 44.1 kHz, 48 kHz, 88.2 kHz, 96 kHz, 176.4 kHz, 192 kHz
Bit Depth	Up to 24-bit

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

Indicators and Controls	
Power LED indicators	2 - LED, red (M, B)
Output LED indicators	8 - LED, blue (1 - 8)
EDID LED indicators	2 - LED, blue (INT, LEARN)
EDID	1 - momentary, tact-type

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

Power		
Power	Input: AC100-240V ~ 50/60Hz Output: DC 5V	
Consumption	6.75 W	
Safety	CE, FCC, cULus	

Environmental	
Operating Temperature	32 to +122 °F 0 to +50 °C
Storage Temperature	-4 to +140 °F -20 to +60 °C
Operating Humidity (RH)	20% to 90%, non-condensing

Chassis	
Dimensions (H x W x D)	1.73 in x 17.07 in x 10.03 in 44 mm x 433.8 mm x 255 mm
Weight	5.7 lbs / 2.61 kg
Safety	CE, RoHS, FCC