

4K HDR Eight-Output HDMI Distribution Amplifier

AT-RON-448



The Atlona **Rondo™** series are HDMI distribution amplifiers for high dynamic range (HDR) formats. They are HDCP 2.2 compliant and support 4K/UHD video @ 60 Hz with 4:4:4 chroma sampling, as well as HDMI data rates up to 18 Gbps. The Rondo series are ideal for applications requiring the latest as well as emerging 4K/UHD and HDR sources and displays. They are compatible with all video resolutions, audio formats, and color space formats supported in the HDMI 2.0a specification, plus the ability to pass metadata for HDR content. The Rondo Series HDMI distribution amplifiers include EDID management features, front panel LED indicators for power and signal status, and the capability to cascade several units without compromising performance.

Package Contents

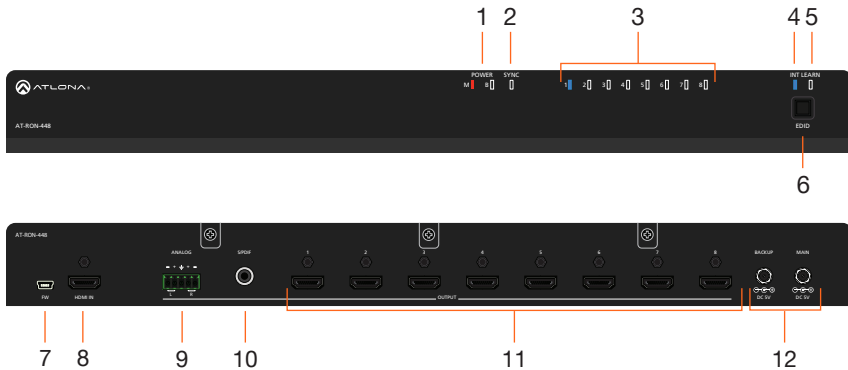
- 1 x AT-RON-448
- 1 x 5 V DC power supply
- 1 x Captive screw connector, 5-pin
- 2 x Rack ears
- 4 x Rubber feet
- 4 x Screws
- 1 x Installation guide



IMPORTANT: Visit <http://www.atlona.com/product/AT-RON-448> for the latest firmware updates.



Panel Descriptions



1 POWER

This **M** LED indicator will glow solid red when the **MAIN** power supply is connected. The **B** LED indicator will glow solid red when a backup power supply is connected to the **BACKUP** power receptacle.

2 SYNC

This LED indicator will glow solid blue when an active source is detected on the **HDMI IN** port.

3 Output Indicators

These LED indicator will glow solid blue when a display or other sink device is connected to the **HDMI OUT** ports.

4 INT

This LED indicator glows solid blue when the unit is using the built-in EDID.

5 LEARN

This LED indicator glows solid blue when the unit is in “EDID learn” mode.

6 EDID button

Press this button to switch between “internal” and “learn” modes.

7 FW

Connect a mini USB cable to this port to update the firmware.

8 HDMI IN

Connect an HDMI cable from this port to a UHD/HD source.

9 ANALOG

Connect the included 5-pin captive screw connector to this port to de-embed the input audio to an analog output device.

10 SPDIF

Connect an RCA-type cable from this port to de-embed the input audio to a digital output device.

11 HDMI OUT 1 - 8

Connect an HDMI cable from each of these ports to a display or other sink device.

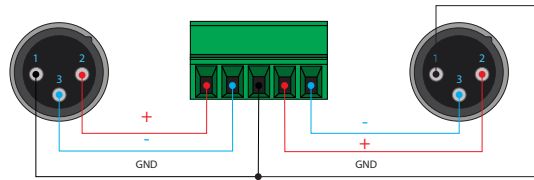
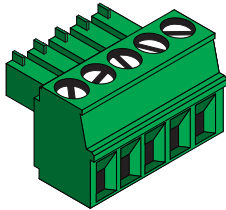
12 DC 5V

Two power receptacles are provided: **BACKUP** and **MAIN**. If not using power supply redundancy, connect the included power supply to the **MAIN** power receptacle. If using a backup power supply (not included), then connect the backup power supply from the **BACKUP** power receptacle to an electrical outlet that is on a different circuit than the main power supply. Additional power supplies can be purchased through Atlona.

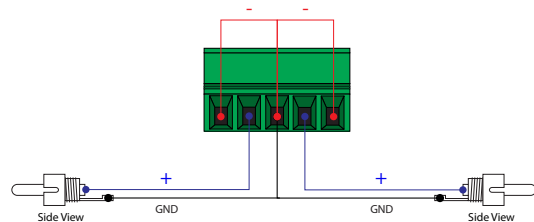
Analog Audio De-Embedding

The AT-RON-448 provides the ability to de-embed two-channel balanced or unbalanced analog audio on the **ANALOG** port, using the included 5-pin captive screw connector. This step is optional.

Use wire strippers to remove enough insulation to allow each wire to be securely fastened to each terminal of the captive screw connector block and connect the wires as shown.



Balanced



Unbalanced

Installation

1. Connect an HDMI cable from the UHD/HD source to the **HDMI IN** port on the AT-RON-448.
2. Connect up to eight display/sink devices to the **HDMI OUT** ports on the rear panel of the AT-RON-448.
3. OPTIONAL: Connect the included 5-pin captive screw connector from the **ANALOG** port to the input of an analog output device. Refer to the wiring instructions in the diagram above.
4. OPTIONAL: Connect an RCA-type cable from the SPDIF connector to the digital input of output device.
5. Connect the included power supply to the **DC 5V** power receptacle.



NOTE: If not using power supply redundancy, connect the included power supply to the **MAIN** power receptacle. If using a backup power supply (not included), then connect the backup power supply from the **BACKUP** power receptacle to an electrical outlet that is on a different circuit than the main power supply. Additional power supplies can be purchased through Atlona.

EDID

The AT-RON-448 provides two EDID modes: internal (**INT**) and **LEARN**. Internal mode selects the highest common resolution and audio between the source and all displays.



NOTE: 4K, 3D, and multichannel audio may not be available when using **INT** (internal) EDID mode. When using this mode, the AT-RON-448 will build an EDID, based on the capabilities of each display that is connected.

LEARN mode will copy the EDID information of the display/sink connected to the **HDMI OUT 1** port.

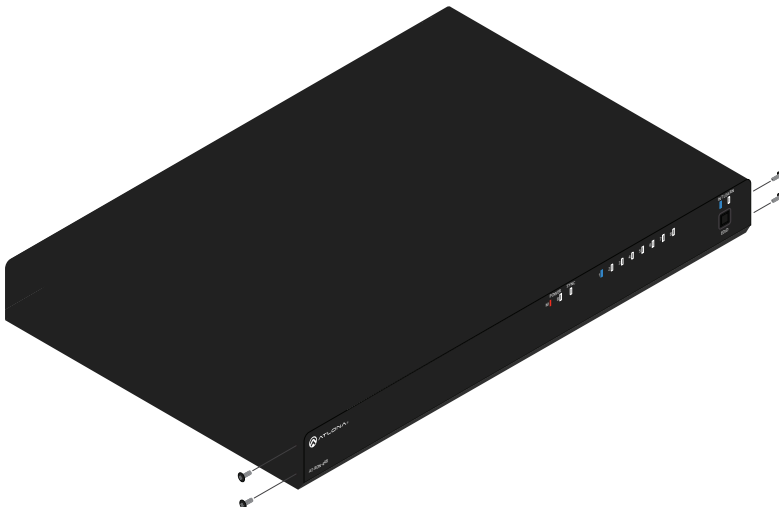
To learn and EDID from the connected sink, press and hold the **EDID** button. While the EDID is being learned, the **LEARN** LED will blink. EDID learn is complete when the **LEARN** LED glows solid blue.

Mounting Instructions

The AT-RON-448 provides two rack ears, which can be used to mount the unit in a standard rack unit.

Rack installation

1. Remove the front two case screws from the sides of the case.



2. Attach the included rack ears to each side of the AT-RON-448 using the case screws.



3. Install the AT-RON-448 into a rack, using four rack screws.



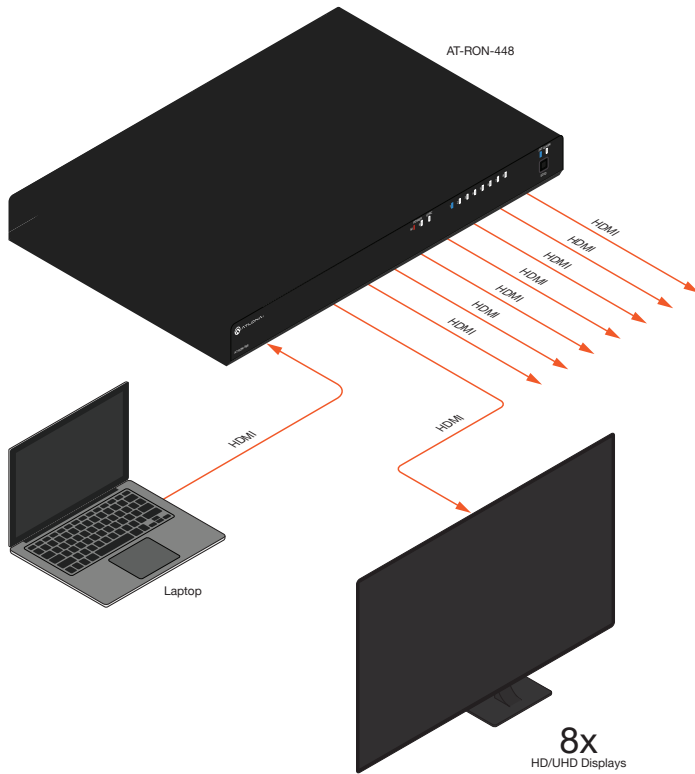
Free-standing

The AT-RON-448 can be placed freestanding on top of a desk, a table, or in a cabinet. To prevent damage to the surfaces or unnecessary movement of the unit, four feet have been included.

1. Turn the unit upside down.
2. Install each foot using the included foot screws, the rubber grips of the feet should be facing up during installation.
3. Turn the unit right-side up and place it in the desired location.



Connection Diagram



Troubleshooting

Version 1

Problem	Solution
How do I perform a firmware update on the AT-RON-448	If updated firmware is available, both firmware and update instructions can be found under the Firmware tab of each of the following links. Note that if new firmware is not available, then the Firmware tab will not be displayed. http://www.atlona.com/product/AT-RON-448
Does the Rondo series provide external automation control?	No.
3D content is not being displayed.	• If using INT (internal) EDID mode, all connected displays must be able to display 3D content. If only one of the connected displays is not 3D-capable, then none of the displays will show 3D content. • To pass 3D content when not all displays support 3D, connect a 3D display to Output 1, then use the “learn EDID” procedure.