

4K HDR Two / Four-Output HDMI Distribution Amplifier

AT-RON-442 / AT-RON-444



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

AT-RON-442

- 1 x AT-RON-442
- 1 x 5V DC power supply
- 1 x Phoenix terminal block, 2-pin
- 2 x Rack ears
- 4 x Rubber feet
- 4 x Screws
- 1 x Installation guide

AT-RON-444

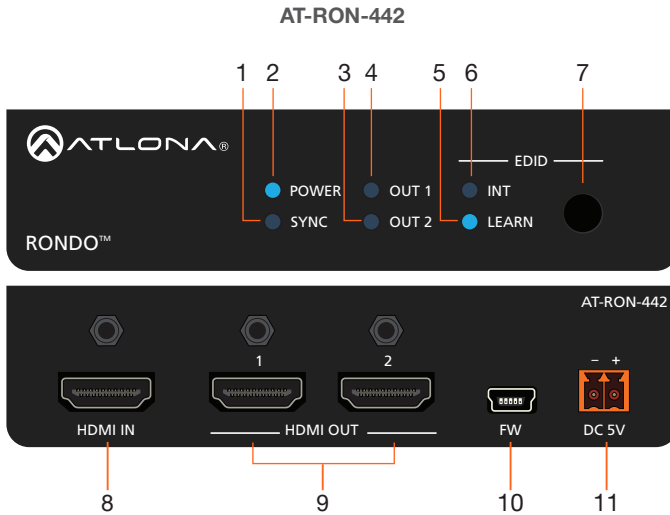
- 1 x AT-RON-444
- 1 x 5V DC power supply
- 1 x Phoenix terminal block, 2-pin
- 2 x Mounting plates
- 1 x Long rack ear
- 1 x Short rack ear
- 4 x Rubber feet
- 4 x Screws
- 1 x Installation guide



IMPORTANT: Visit <http://www.atlona.com/product/AT-RON-442> and <http://www.atlona.com/product/AT-RON-444> for the latest firmware updates.



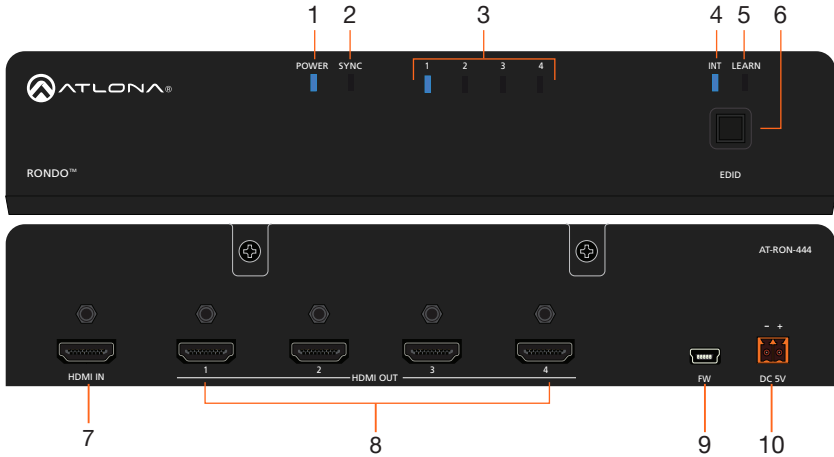
Panel Descriptions



- | | |
|---|---|
| <p>1 POWER
This LED indicator will glow solid blue when the unit is powered.</p> <p>2 SYNC
This LED indicator will glow solid blue when an active source is detected on the HDMI IN port.</p> <p>3 OUT 1
This LED indicator will glow solid blue when a display or other sink device is connected to the HDMI OUT 1 port.</p> <p>4 OUT 2
This LED indicator will glow solid blue when a display or other sink device is connected to the HDMI OUT 2 port.</p> <p>5 LEARN
This LED indicator glows solid blue when the unit is in LEARN mode.</p> <p>6 INT
This LED indicator glows solid blue when the unit is using the built-in EDID.</p> | <p>7 EDID button
Press this button to switch between INT and LEARN modes.</p> <p>8 HDMI IN
Connect an HDMI cable from this port to a UHD/HD source.</p> <p>9 HDMI OUT 1/2
Connect an HDMI cable from each of these ports to a display or other sink device.</p> <p>10 FW
Connect a mini USB cable to this port to update the firmware.</p> <p>11 DC 5V
Connect the included 5V DC power supply to this port.</p> |
|---|---|



AT-RON-444



1 POWER

This LED indicator will glow solid blue when the unit is powered.

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 HDMI IN

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

8 HDMI OUT 1/2/3/4

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

9 FW

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

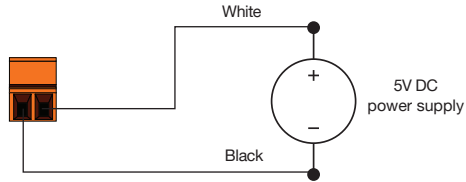
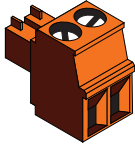
10 DC 5V

Connect the included 5V DC power supply to this port.



Power Connector

Locate the included orange Phoenix terminal block, and wire the included power supply to the block as shown below. Do not use high-torque devices, when securing the wires, as this may damage the screws and/or connector block.



Installation

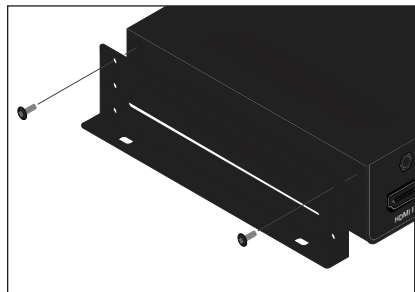
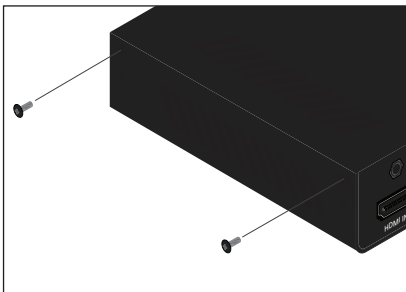
1. Connect an HDMI cable from the UHD/HD source to the **HDMI IN** port on the AT-RON-442/AT-RON-444.
2. Connect display/sink devices to the AT-RON-442/AT-RON-444 to the **HDMI OUT** ports. The AT-RON-442 supports up to two outputs. The AT-RON-444 supports up to four outputs.
3. Connect the included power supply to the **DC 5V** Phoenix connector.

Mounting Instructions

The AT-RON-442 and AT-RON-444 each include two mounting brackets, which can be used to attach the unit to any flat surface.

AT-RON-442

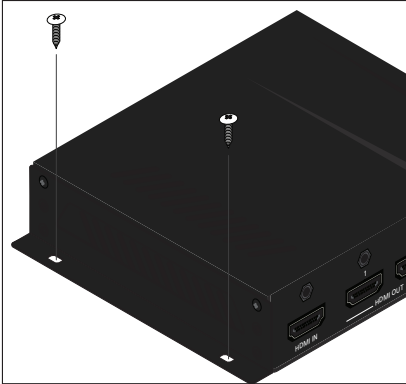
1. Using a small Phillips screwdriver, remove the two screws from the left side of the enclosure.
2. Position one of the mounting brackets, as shown below, aligning the holes on the side of the enclosure with one set of holes on the mounting bracket.



3. Use the enclosure screws to secure the mounting bracket to the enclosure.



4. Repeat steps 1 through 3 to attach the second mounting bracket to the opposite side of the unit.
5. Mount the unit using the oval-shaped holes, on each mounting bracket. If using a drywall surface, a #6 drywall screw is recommended.



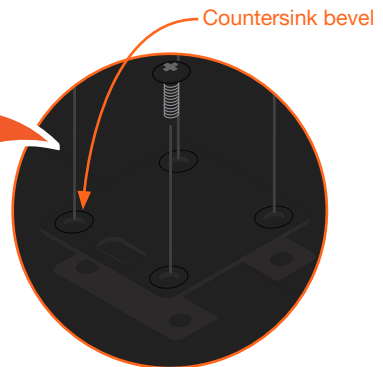
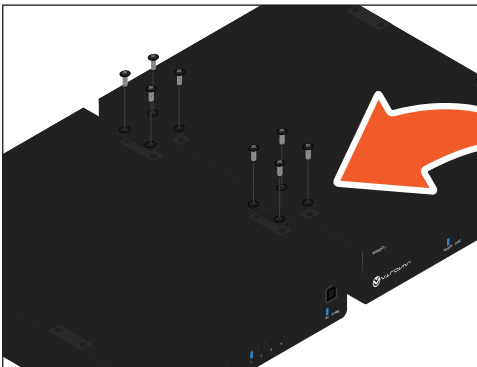
NOTE: Mounting brackets can also be inverted to mount the unit under a table or other flat surface.

AT-RON-444

Two AT-RON-444 units can be connected to one another and installed in a 19" rack, using the included mounting brackets. Alternatively, a single AT-RON-444 can be mounted in the rack using the included spacer bracket.

Dual-unit rack installation

1. Turn the unit upside-down on a flat surface.
2. Position the included mounting brackets over the pre-drilled holes on the bottom of the enclosure. When attaching mounting brackets, the countersink bevels on the mounting bracket should face upward.





3. Turn the attached units over and install the included rack ears to one side of each enclosure using the included screws.



Single-unit rack installation only

1. Attach the small rack ear to one side of the AT-RON-444, using the included screws.
2. Attach the longer rack ear to the opposite side of the AT-RON-444 using the included screws.



EDID

The AT-RON-442 and AT-RON-444 provide 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-442 / AT-RON-444 will build an EDID, based on the capabilities of each display that is connected.

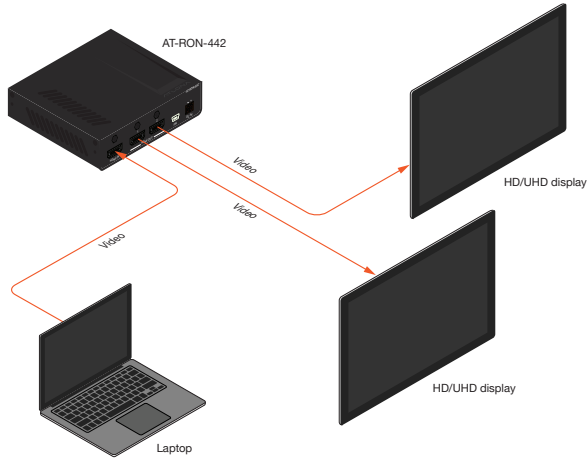
LEARN mode will copy the EDID information of the display/sink connected to the **HDMI OUT 1** port.

To switch between internal and learn modes, press and hold the **EDID** button. While EDID is being learned, the **LEARN** LED will blink. EDID learn is complete when the **LEARN** LED goes solid.

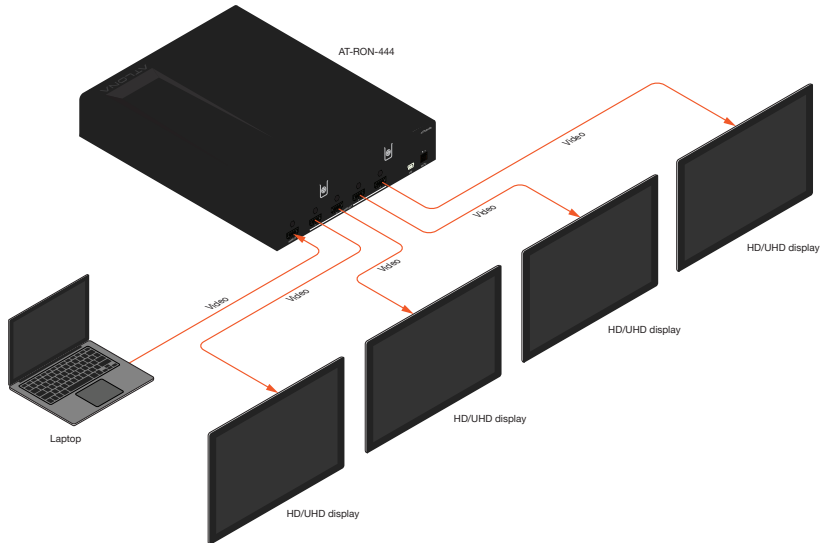


Connection Diagrams

AT-RON-442



AT-RON-444





Troubleshooting

Problem	Solution
<p>How do I perform a firmware update on the AT-RON-442 / AT-RON-444?</p>	<p>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.</p> <p>http://www.atlona.com/product/AT-RON-442 http://www.atlona.com/product/AT-RON-444</p>
<p>Does the Rondo series provide external automation control?</p>	<p>No.</p>
<p>3D content is not being displayed.</p>	<ul style="list-style-type: none"> • 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.

