AT-ROND-H2212 / AT-ROND-H2214

Rondo 1x2 and 1x4 Distribution Amplifiers

Instructions for Use

Version 1.0



Table of Contents

Version Information....3
Sales & Customer Support....3
Warranty....3
Important Safety Information....4
FCC Compliance....4
Introduction....5
Overview....5
Features....5
Package Contents....6
AT-ROND-H2212....6
AT-ROND-H2214....6
Panel Description....7
AT-ROND-H2212 Front and Rear Panel....7
AT-ROND-H2214 Front and Rear Panel....8
Connection Diagrams....9
AT-ROND-H2212 Connection Diagram....9
AT-ROND-H2214 Connection Diagram....9
Operating Instructions....10
EDID....10
HDCP....10
HDR....10
Specifications....11
Trademarks....12

Version Information

This section lists document revisions.

Version	Date	Notes
1.0	October 16, 2026	Initial release.

Sales & Customer Support

Main Office (US)	Hall Research, 1234 Lakeshore Dr Suite #150, Coppell, TX 75019
Support Hours	Monday – Friday, 8:00 a.m. – 6:00 p.m. (CST)
Website	https://www.hallresearch.com
Product Page (1x2)	https://www.hallresearch.com/product/AT-ROND-H2212
Product Page (1x4)	https://www.hallresearch.com/product/AT-ROND-H2214

IMPORTANT: Visit https://www.hallresearch.com/product/AT-ROND-H2212 or https://www.hallresearch.com/product/AT-ROND-H2214 for the latest firmware updates and Instructions for Use.

Warranty

To view the product warranty, use the following link: https://hallresearch.com/warranty

Important Safety Information

CAUTION: Risk of electric shock. Do not open the enclosure or expose it to rain or moisture. No user-serviceable parts inside. Refer servicing to qualified service personnel.

- Do not expose this apparatus to rain, moisture, dripping, or splashing, and do not place objects filled with liquids, such as vases, on the apparatus.
- Do not install or place this unit in a bookcase, built-in cabinet, or other confined space. Ensure the unit is well ventilated.
- To prevent the risk of electric shock or fire from overheating, do not obstruct the ventilation openings with newspapers, tablecloths, curtains, or similar items.
- Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
- Do not place sources of naked flames, such as lighted candles, on the unit.
- Clean this apparatus only with a dry cloth.
- Unplug this apparatus during lightning storms or when unused for long periods of time.
- Protect the power cord from being walked on or pinched, particularly at plugs.
- Only use attachments and accessories specified by the manufacturer.
- Refer all servicing to qualified service personnel.

FCC Compliance

This hardware device complies with Part 15 of the FCC rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Introduction

Overview

The Rondo family of HDMI distribution amplifiers sends a single HDMI source to two (AT-ROND-H2212) or four (AT-ROND-H2214) displays at the same time. The products support 18 Gbps bandwidth, full HDMI 2.0, and HDCP 2.2 with video resolutions up to 4K@60Hz 4:4:4. The products also support simultaneous routing to 4K and 1080p displays via downscaling.

Features

- Simultaneously displays a 4K source on multiple displays:
  - AT-ROND-H2212: two displays
  - AT-ROND-H2214: four displays
- Supports resolutions up to 4K@60Hz 4:4:4.
- Supports three different EDID handling modes.
- Supports HDCP 2.2/1.4 and HDR.
- 18 Gbps bandwidth.
- Supports LPCM 7.1, Dolby® TrueHD, Dolby Digital® Plus, and DTS-HD® Master Audio™.

Package Contents

AT-ROND-H2212

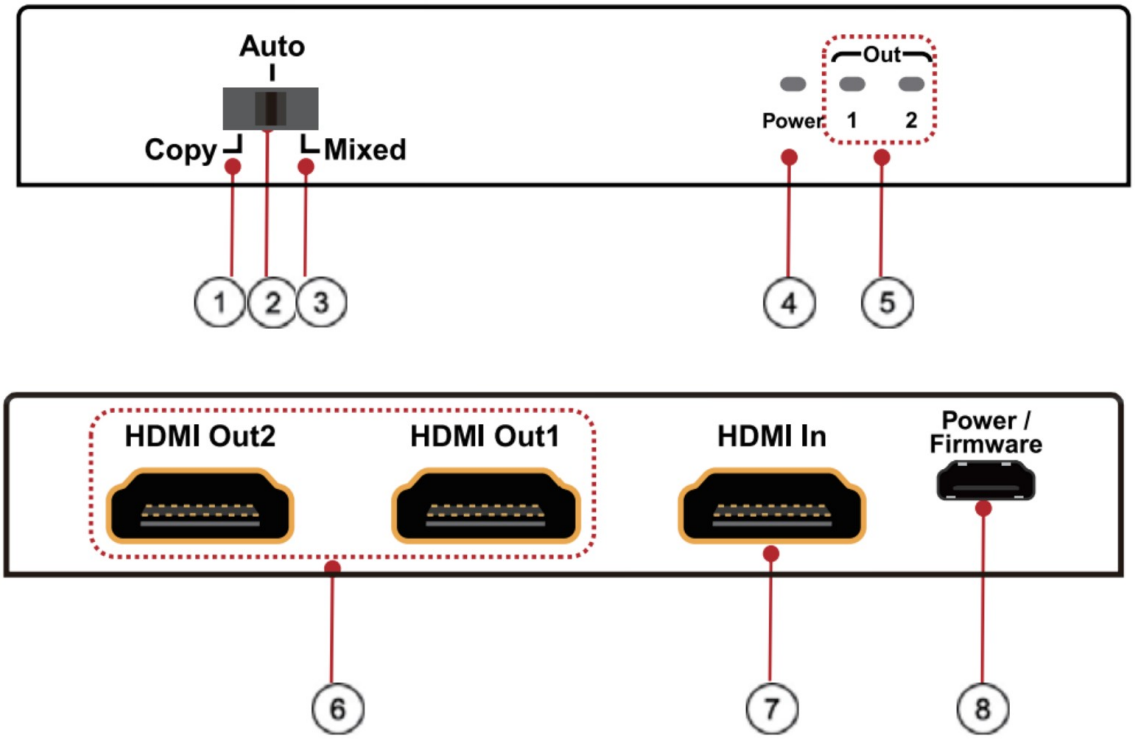
- 1 x AT-ROND-H2212 1x2 Distribution Amplifier
- 1 x 5V/1A AC adapter

AT-ROND-H2214

- 1 x AT-ROND-H2214 1x4 Distribution Amplifier
- 1 x 5V/1A AC adapter

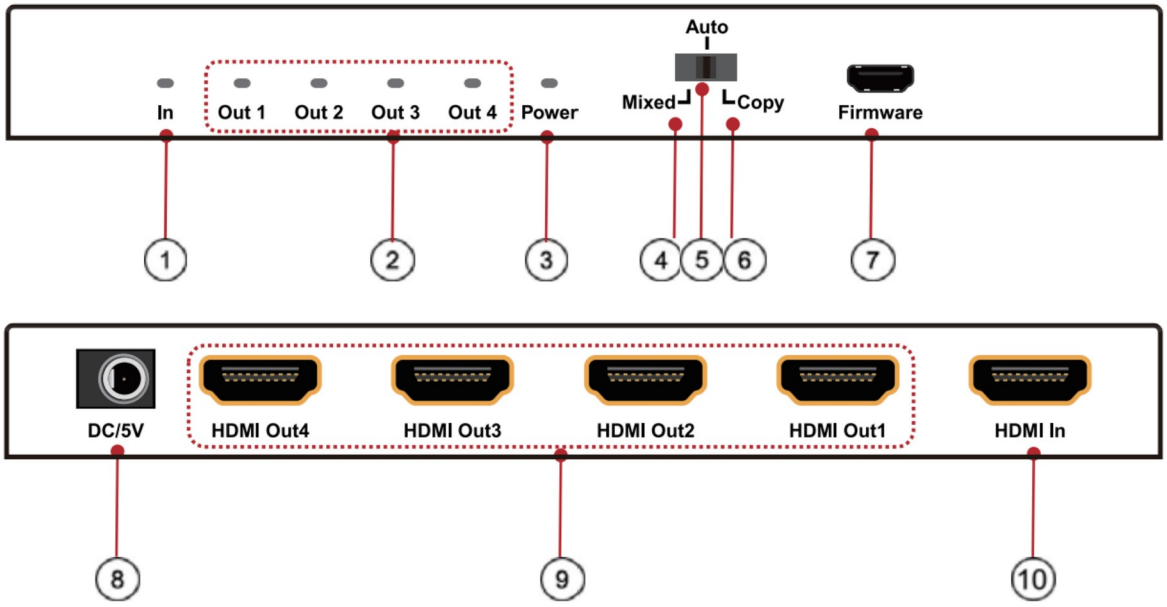
Panel Description

AT-ROND-H2212 Front and Rear Panel



#	Name	Description
1	COPY	Switch to “Copy EDID” mode. • When Output 1 is connected to a display and another display is connected to Output 2, Output 2 will follow the resolution of Output 1. • When Output 1 is disconnected, Output 2 will output 4K@60Hz. **Note:** Output 1 is the priority port.
2	AUTO	Switch to “Auto EDID” mode. Default is 4K@60Hz.
3	MIXED	Switch to “Mixed EDID” mode. In this mode, EDID always follows the lowest resolution of the 2 outputs in order to support all displays.
4	POWER	LED power indicator
5	OUT	LED indicators of connected outputs
6	HDMI OUT	HDMI output ports
7	HDMI IN	HDMI input port
8	POWER/FIRMWARE	Power / firmware port

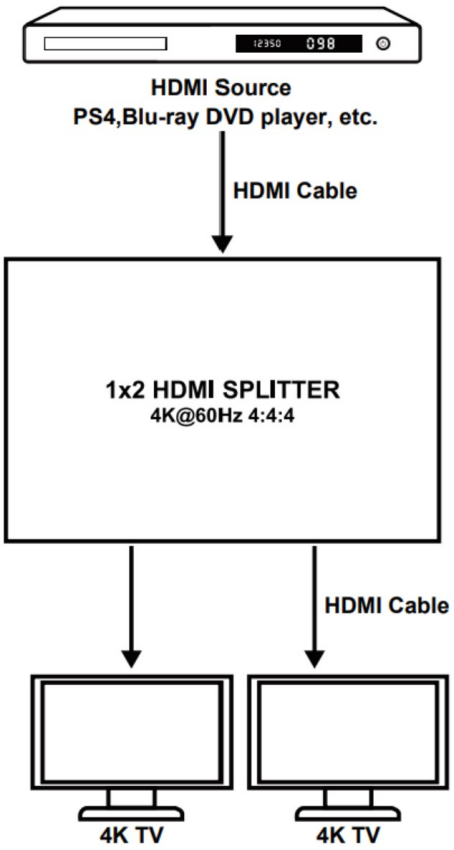
AT-ROND-H2214 Front and Rear Panel



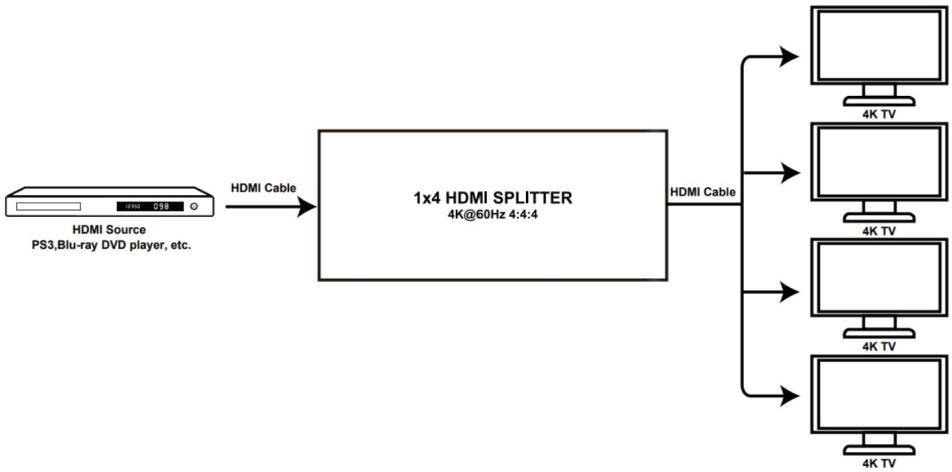
#	Name	Description
1	IN	LED indicator of connected input
2	OUT	LED indicators of connected outputs
3	POWER	LED power indicator
4	MIXED	Switch to “Mixed EDID” mode. In this mode, EDID always follows the lowest resolution of the 4 outputs in order to support all displays.
5	AUTO	Switch to “Auto EDID” mode. Default is 4K@60Hz.
6	COPY	Switch to “Copy EDID” mode. • When Output 4 is connected to a display and other displays are connected to the other outputs, the other outputs will follow the resolution of Output 4. • When Output 4 is disconnected, the other outputs will output 4K@60Hz. **Note:** Output 4 is the priority port.
7	Firmware	Firmware port
8	DC/5V	Power input port
9	HDMI OUT	HDMI output ports
10	HDMI IN	HDMI input port

Connection Diagrams

AT-ROND-H2212 Connection Diagram



AT-ROND-H2214 Connection Diagram



Operating Instructions

EDID

See the Panel Description section for each model to learn how the “Copy EDID”, “Auto EDID” and “Mixed EDID” settings work.

HDCP

The HDCP version has priority over EDID. When the source is HDCP 2.2 and the connected display supports HDCP 2.2, the output will be 4K@60Hz; if the connected display does not support HDCP 2.2, the output will be 1080p. See the table below:

Input Source	HDMI Display (Supports HDCP 2.2)	HDMI Display (Does not support HDCP 2.2)
HDCP 2.2 | 4K@60Hz	HDCP 2.2 | 4K@60Hz	HDCP 1.4 | 1080p@60Hz
HDCP 2.2 | 4K@24Hz	HDCP 2.2 | 4K@24Hz	HDCP 1.4 | 1080p@60Hz
HDCP 1.4 | 4K@24Hz	HDCP 1.4 | 4K@24Hz	HDCP 1.4 | 4K@24Hz

HDR

Support for HDR (High Dynamic Range) video can be accessed in “Copy EDID” and “Mixed EDID” modes.

Specifications

Technical	
Signal Input	HDMI
Signal Output	HDMI
HDMI Compliance	HDMI 2.0
Copy Protection	HDCP 2.2 / 1.4
Bandwidth	18 Gbps
Resolution	Up to 4K@60Hz 4:4:4
HDR	Supported (Copy EDID and Mixed EDID modes)
Downscaling	4K to 1080p for a connected 1080p display
EDID Modes	Copy, Auto (default 4K@60Hz), Mixed
Audio Formats	LPCM 7.1, Dolby® TrueHD, Dolby Digital® Plus, DTS-HD® Master Audio™
Transmission Distance	49 ft (15 m) over standard HDMI cable (26 AWG)
Operating Temperature	+23° to +104°F (-5° to +40°C)
Humidity (RH)	5% to 90%, non-condensing
Certifications	FCC, CE, RoHS
Warranty	To view the product warranty, visit: hallresearch.com/warranty

AT-ROND-H2212	
HDMI IN	1× HDMI Type A, 19-pin female
HDMI OUT	2× HDMI Type A, 19-pin female
POWER / FIRMWARE	1× power / firmware port (5V DC)
Power Supply	5V/1A AC adapter (included)
Consumption	1 W (max)
Dimensions (L × W × H)	3.7 × 2.4 × 0.6 in. (93.6 × 61 × 15 mm)
Weight	0.26 lbs (0.12 kg)

AT-ROND-H2214	
HDMI IN	1× HDMI Type A, 19-pin female
HDMI OUT	4× HDMI Type A, 19-pin female
DC/5V	1× DC power jack (5V)
Firmware	1× firmware port
Power Supply	5V/1A AC adapter (included)
Consumption	2 W (max)
Dimensions (L × W × H)	5.9 × 2.5 × 0.7 in. (150 × 64.2 × 17 mm)
Weight	0.54 lbs (0.245 kg)

Trademarks

HDMI, the HDMI logo, and High-Definition Multimedia Interface are trademarks or registered trademarks of HDMI Licensing Administrator, Inc.

Dolby, Dolby Digital Plus, and Dolby TrueHD are trademarks of Dolby Laboratories Licensing Corporation.

DTS-HD Master Audio is a trademark of DTS, Inc.