

4K60 4:4:4 HDR AV Switchers

The Crestron® [HD-MD4X2-4KZ-E](#) and [HD-MD4X1-4KZ-E](#) AV switchers support 4K60 4:4:4 and HDR video. The HD-MD4X2-4KZ-E includes four HDMI® inputs and two HDMI outputs. The HD-MD4X1-4KZ-E includes four HDMI inputs and one HDMI output.



In the Box

- 1 HD-MD4X2-4KZ-E or HD-MD4X1-4KZ-E AV Switcher

Additional Items

- 2 Bracket, Mounting (2055364)
- 4 Screw, 4-40 x 1/4 in., Pan Head, Phillips (2007158)
- 4 Screw, 6-32 x 3/4 in., Pan Head, Phillips (2007247)
- 4 Anchor, Wall, Plastic, #6 x 1-5/16 in. (2043585)

HD-MD4X2-4KZ-E Only

- 2 Connector, 5-Pin (2003577)

HD-MD4X1-4KZ-E Only

- 1 Connector, 5-Pin (2003577)



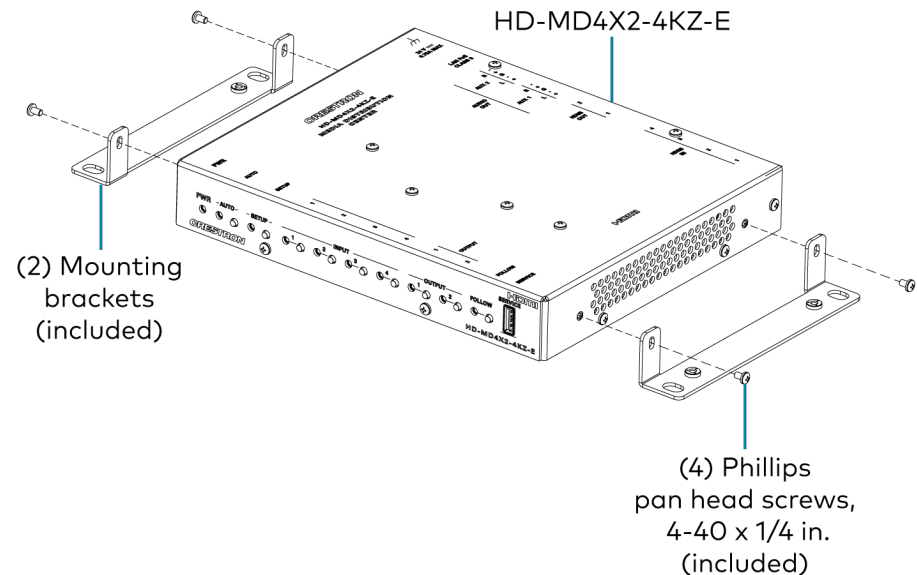
Install the Device

Using the two included mounting brackets, mount the device onto a flat surface such as a wall or the underside of a table. The device can also be mounted to a rack rail.

Attaching Mounting Brackets

Using the four included 4-40 x 1/4 in. Phillips pan head screws, attach the two included mounting brackets to the device.

Bracket Attachment (HD-MD4X2-4KZ-E Shown)

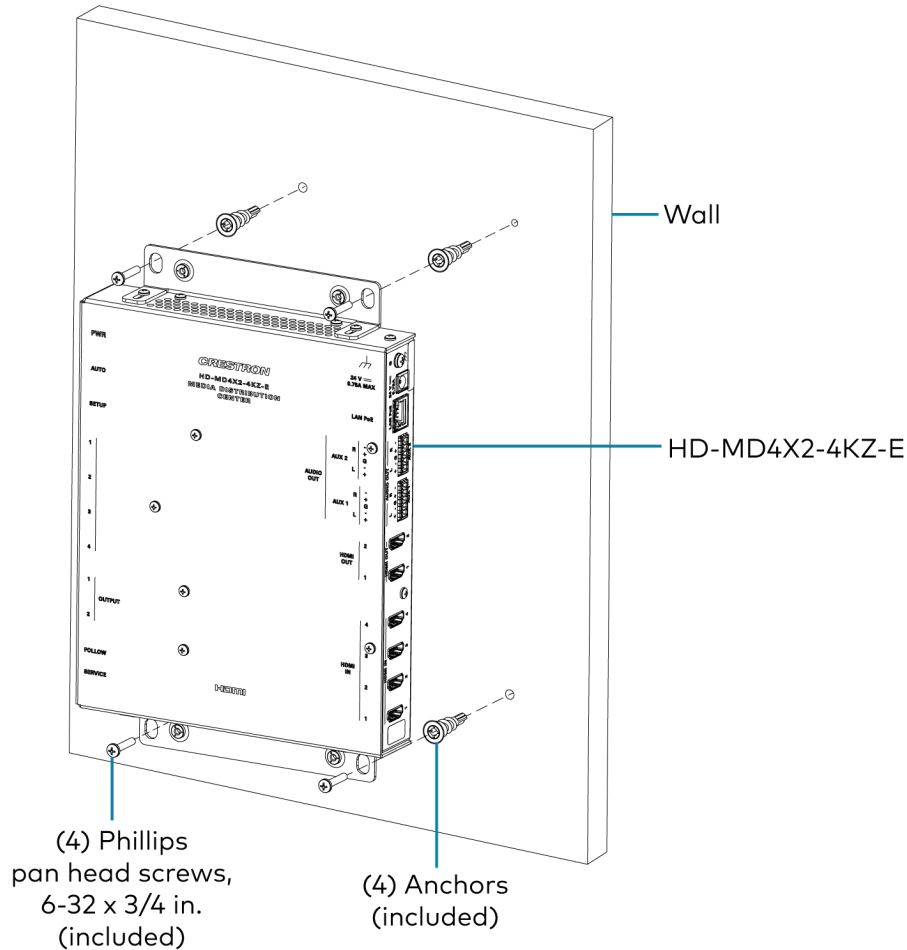


4K60 4:4:4 HDR AV Switchers

Mounting onto a Wall

To mount the device onto a wall, use the four included anchors and 6-32 x 3/4 in. Phillips pan head screws.

Wall Mounting (HD-MD4X2-4KZ-E Shown)

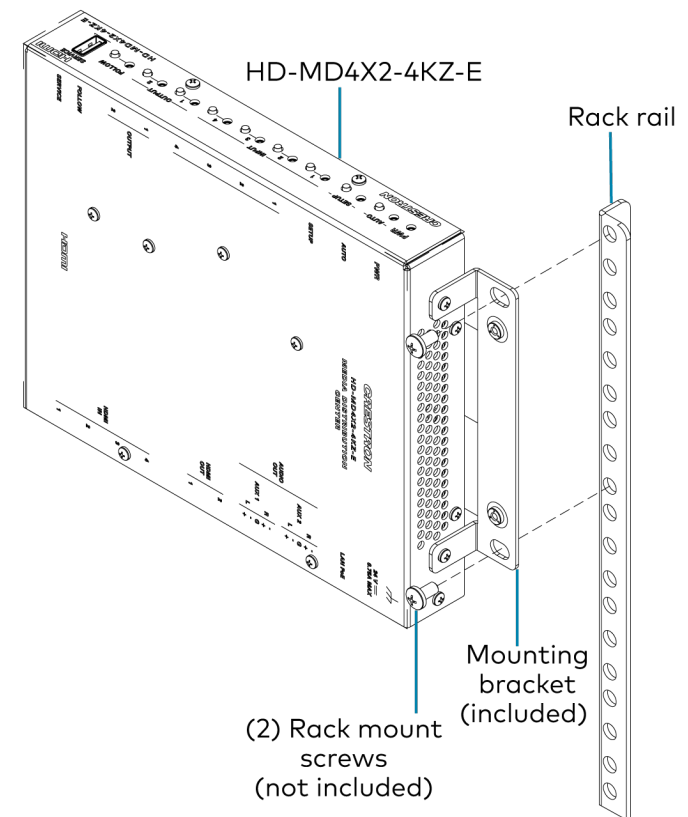


Mounting onto a Rack Rail

To mount the device onto a front or rear rack rail:

1. Position one of the mounting brackets so that the holes align with the holes in the rack rail.
2. Secure the device to the rack rail using two rack mount screws (not included).

Rack Rail Mounting Example (HD-MD4X2-4KZ-E Shown)



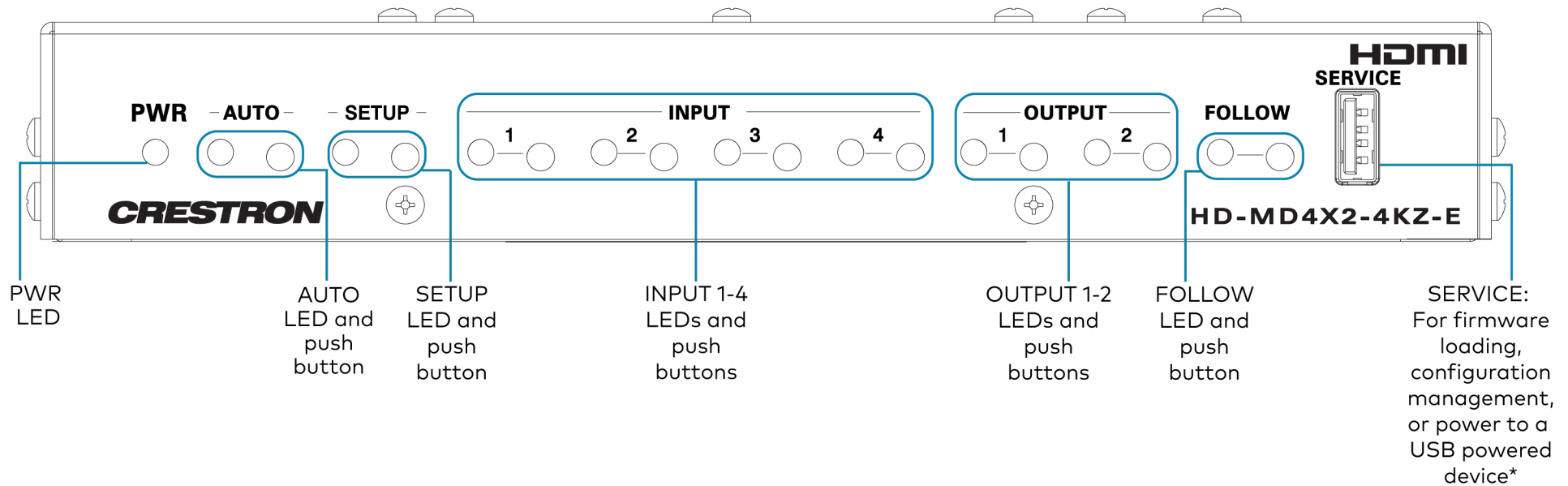
4K60 4:4:4 HDR AV Switchers



Connect the Device

Connect the front and rear panels of the device as required for the application.

Front Panel Connection (HD-MD4X2-4KZ-E Shown)

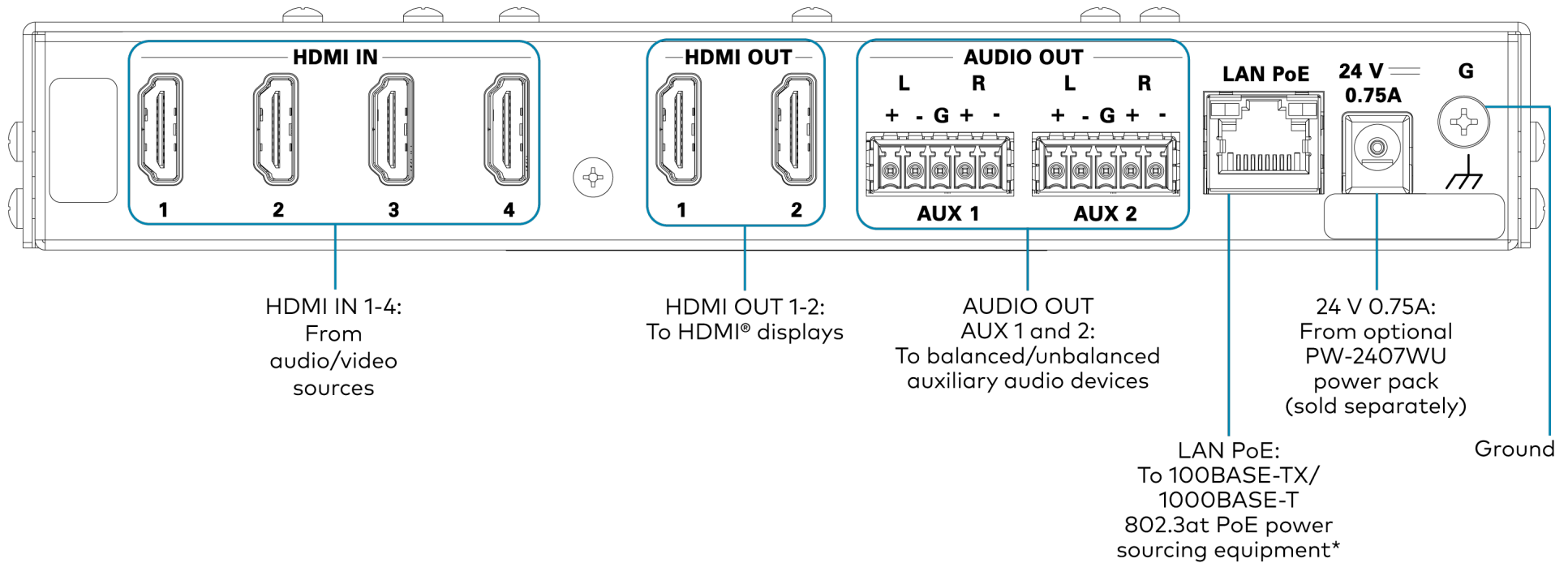


*The SERVICE port can provide up to 5 V 500 mA power to a USB powered device.

The SERVICE port is disabled by default. For all functionality with the exception of providing power to a USB powered device, the SERVICE port must be enabled in order to be operational.

4K60 4:4:4 HDR AV Switchers

Rear Panel Connections (HD-MD4X2-4KZ-E Shown)



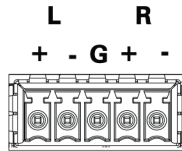
*The LAN PoE port is a PoE PD (powered device) port. In order for the port to receive PoE, it must be connected to a PoE PSE (power sourcing equipment) port of a PoE switch. Wiring that connects to a PoE PSE port is designed for intrabuilding use only.

To comply with the European Directive (CE), it is recommended that high-quality solid-core CAT5e (or higher) shielded twisted pair (STP) cable be used.

4K60 4:4:4 HDR AV Switchers

The AUDIO OUT connector uses a 5-pin terminal block for balanced or unbalanced analog audio output. The HD-MD4X2-4KZ-E includes two AUDIO OUT connectors (AUX 1 and AUX 2). The HD-MD4X1-4KZ-E includes one AUDIO OUT (AUX) connector.

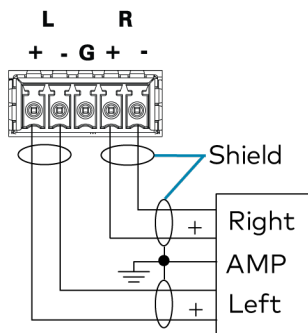
AUDIO OUT Connector



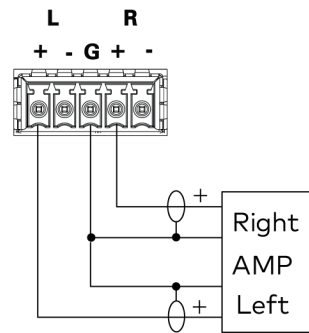
Refer to the following table and diagrams for analog audio output pin assignments and connection information.

Signal Name	Balanced Audio Output	Unbalanced Audio Output
+	L+	L+ Out
-	L-	Open
G	Shield/ground	Common ground
+	R+	R+ Out
-	R-	Open

Balanced Output



Unbalanced Output



Upgrade the Firmware

Before using the device, upgrade the firmware. The latest firmware can be downloaded from the [HD-MD4X2-4KZ-E](#) or [HD-MD4X1-4KZ-E](#) product page on the Crestron website (www.crestron.com).



Configure the Device

Configure the device using the web interface. To access the web interface, open a web browser and then go to the IP address of the device.

If no account has been created, create an account by entering a user name and password. After an account is created, log in to the web interface by entering the user name and password.

4K60 4:4:4 HDR AV Switchers



Connect to the Cloud

The XiO Cloud® service allows supported Crestron devices across an enterprise to be managed and configured from one central and secure location in the cloud. Supported devices are preconfigured to connect to the service. Use of the service requires a registered XiO Cloud account.

To connect the device to the XiO Cloud service:

1. Record the MAC address and serial number that are labeled on the shipping box or rear panel of the device. The MAC address and serial number are required in order to add the device to the XiO Cloud environment.
2. Do either of the following:
 - If you have an XiO Cloud account, go to <https://portal.crestron.io> to access the XiO Cloud service.
 - If you do not have an XiO Cloud account, go to www.crestron.com/xiocloud to register for an account.

For detailed information about using the XiO Cloud service, refer to the [XiO Cloud Provisioning and Management Service User Guide](#) (Doc. 8214).



Observe the LED Indicators

Refer to the following table for information about the LED indicators on the device.

LED Indicator	Color	Meaning
PWR	Amber	Power is being applied to the device. The device is booting.
	Green	Power is being applied to the device. The device is operational.
AUTO	Green	Automatic switching is enabled.
SETUP	Red	The SETUP button is pressed.
INPUT 1-4	Green	The corresponding input is routed to the output.
	Amber	The corresponding input is detected but is not routed to the output.
OUTPUT 1-2 (HD-MD4X2-4KZ-E Only)	Green	The corresponding output is transmitting video.
	Amber	The corresponding output is detected but no video is routed.
FOLLOW (HD-MD4X2-4KZ-E Only)	Green	Follow Output mode is enabled, which causes the selected HDMI input to be routed to both HDMI outputs simultaneously.
Ethernet	Green	A 100BASE-TX link is established.
	Amber	A 1000BASE-T link is established.
	Flashing amber	Data activity is occurring on the Ethernet link.

4K60 4:4:4 HDR AV Switchers



Visit the Product Page

Scan the QR code to visit the product page.

HD-MD4X2-4KZ-E



www.crestron.com/model/6511307

HD-MD4X1-4KZ-E



www.crestron.com/model/6511306

Additional Information

Original Instructions

The U.S. English version of this document is the original instructions. All other languages are a translation of the original instructions.

Regulatory Model: M201946001

Crestron product development software is licensed to Crestron dealers and Crestron Service Providers (CSPs) under a limited nonexclusive, nontransferable Software Development Tools License Agreement. Crestron product operating system software is licensed to Crestron dealers, CSPs, and end-users under a separate End-User License Agreement. Both of these Agreements can be found on the Crestron website at www.crestron.com/legal/software_license_agreement.

The product warranty can be found at www.crestron.com/warranty.

The specific patents that cover Crestron products are listed at www.crestron.com/legal/patents.

Certain Crestron products contain open source software. For specific information, visit www.crestron.com/opensource.

Crestron, the Crestron logo, and XiO Cloud are either trademarks or registered trademarks of Crestron Electronics, Inc. in the United States and/or other countries. HDMI and the HDMI logo are either trademarks or registered trademarks of HDMI Licensing LLC in the United States and/or other countries. Other trademarks, registered trademarks, and trade names may be used in this document to refer to either the entities claiming the marks and names or their products. Crestron disclaims any proprietary interest in the marks and names of others. Crestron is not responsible for errors in typography or photography.

HDMI

©2020 Crestron Electronics, Inc.

Doc. 8770A

10/27/20