

HD-RXU-4KZ-101-E

DM Lite® 4K60 4:4:4 Receiver for HDMI®, USB 2.0, and Ethernet Signal Extension over CATx Cable



- DM Lite® receiver functionality designed to interoperate with a DM Lite HD-TXU-4KZ Series transmitter
- Point-to-point extension of an HDMI® AV signal, USB 2.0 data signals, and Ethernet signal over a CAT5e or higher cable
- DM Lite transmission distance up to 130 ft (40 m) for UHD and 4K signals or up to 230 ft (70 m) for 1080p, WUXGA, and 2K signals
- 4K60 4:4:4 capability
- HDR10, HDR10+, and Dolby Vision® video formats
- Ethernet pass-through capability
- Compliance with HDCP 2.3
- CEC (Consumer Electronics Control) pass-through capability
- EDID pass-through capability
- Compact, surface-mountable design
- Power from 24VDC power pack (included) or from remote DM Lite transmitter (surface mountable only)

The HD-RXU-4KZ-101-E is a DM Lite® 4K60 4:4:4 receiver designed to pair with a DM Lite HD-TXU-4KZ Series transmitter. The paired transmitter and receiver enable the extension of an HDMI® AV signal along with USB 2.0 data. This is useful in applications where an AV source is located remotely from its destination, such as a display, projector, or codec solution. A CAT5e or higher twisted pair cable must be used to connect the HD-RXU-4KZ-101-E to the DM Lite transmitter.¹

Interoperability with HD-TXU-4KZ Series Transmitters

For interoperability between the HD-RXU-4KZ-101-E and an HD-TXU-4KZ Series transmitter, the DM Lite input port of the HD-RXU-4KZ-101-E must be connected to the DM Lite output port of the HD-TXU-4KZ Series transmitter.

NOTE: USB 2.0 data extension is not supported if the HD-RXU-4KZ-101-E is paired with a DM Lite transmitter other than an HD-TXU-4KZ Series transmitter or paired with a DMPS Lite™ HD-PS Series switcher.

4K60 4:4:4 and HDR Support

The HD-RXU-4KZ-101-E supports video resolutions up to 4K60 with 4:4:4 color sampling. HDR10, HDR10+, and Dolby Vision® video formats are also supported.²

USB 2.0 Data Extension

Two USB 2.0 host ports are provided on the HD-RXU-4KZ-101-E, enabling connection to a wide variety of supported USB 2.0 peripheral devices.³

Ethernet Pass-Through Capability

The HD-RXU-4KZ-101-E is equipped with a 100/1000 Mbps LAN port that receives an Ethernet signal transmitted over the DM Lite connection from the transmitting endpoint. The LAN port of one endpoint can be connected to an Ethernet network, while the LAN port of the other endpoint can be connected directly to an Ethernet-enabled device such as a PC.

Compact, Surface-Mountable Design

Compact in design, the HD-RXU-4KZ-101-E can be mounted onto a flat surface, such as a wall behind a flat-panel display or a ceiling above a projector. It can also be attached to a single rack rail in the back of an equipment cabinet. The HD-RXU-4KZ-101-E can receive power from the included power pack or from the remote DM Lite transmitter.⁴

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Specifications

Video

Input Signal Type	DM Lite® with HDR10, HDR10+, Dolby Vision®, Deep Color, and 4K60 4:4:4 support ²
Output Signal Type	HDMI® with HDR10, HDR10+, Dolby Vision, Deep Color, and 4K60 4:4:4 support ²
Copy Protection	HDCP 2.3
Resolutions	Common resolutions are listed in the following table.

Scan Type	Resolution	Frame Rate	Color Sampling	Color Depth
Progressive	4096x2160 DCI 4K & 3840x2160 4K UHD	24 Hz	4:4:4	12 bit
		30 Hz	4:4:4	12 bit
		60 Hz	4:2:2	12 bit
		60 Hz	4:4:4	8 bit
	2560x1600 WQXGA	60 Hz	4:4:4	8 bit
Interlaced	1920x1080 FHD 1080p	60 Hz	4:4:4	12 bit
		1920x1080 HD 1080i	30 Hz	4:4:4

NOTE: The maximum supported resolution is 4K60 with 4:4:4 color sampling. Custom resolutions are supported at pixel clock rates up to 600 MHz.

Audio

Input Signal Type	DM Lite
Output Signal Type	HDMI
Digital Formats	Dolby Digital®, Dolby Digital EX, Dolby Digital Plus, Dolby® TrueHD, Dolby Atmos®, DTS®, DTS ES, DTS 96/24, DTS HD® High Res, DTS-HD Master Audio, DTS:X®, LPCM up to 8 channels

Communications

HDMI	HDCP 2.3, EDID, CEC pass-through
DM Lite	HDCP 2.3, EDID pass-through; USB 2.0 up to 300 Mbps

USB	USB signal extension via USB 2.0 host ports; USB host for one TT-100 series cable caddy (sold separately) via SERVICE port
Ethernet	100/1000 Mbps pass-through

Connectors

HDMI OUTPUT	(1) HDMI Type A connector, female; HDMI digital video/audio output; DVI compatible ⁵
DM LITE IN	(1) 8-pin RJ-45 yellow connector, female, shielded; DM Lite input port for connection to the DM Lite output port of a DM Lite transmitter ¹
LAN	(1) 8-pin RJ-45 connector, female; 100BASE-TX/1000BASE-T Ethernet port; Receives Ethernet signal from an HD-TX-4KZ-111-E over the DM Lite connection
24V 1.4A	(1) 2.1 x 5.5 mm DC power connector; 24VDC power input; PW-2420RU power pack included ⁴
HOST	(2) USB Type-A connectors, female; USB 2.0 host ports; USB signal extender ports for connection to USB mice, keyboards, or other USB 2.0 peripheral devices; ³ Available Power: 500 mA @ 5VDC per port
SERVICE	(1) USB 2.0 Type-A connector, female; Used for firmware loading, configuration management, or as a USB host port for one TT-100 series cable caddy (sold separately); Can also provide up to 5V 500 mA power to a USB powered device
Ground	(1) Chassis ground lug

Controls and Indicators

PWR	(1) LED, indicates that power is being applied to the device. Amber indicates that the device is booting. Green indicates that the device is operational.
OUTPUT	(1) Green, indicates that the device is transmitting an HDMI signal
DM LITE IN	(2) LEDs on RJ 45 connector. Green indicates that a DM Lite link is established. Flashing amber indicates non-HDCP video, and solid amber indicates HDCP video.

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LAN (2) LEDs on RJ-45 connector. Green indicates that a 100 Mbps link is established. Solid amber indicates that a 1000 Mbps link is established. Flashing amber indicates 1000 Mbps Ethernet activity.

Power

Power Pack (Included) Input: 100-240VAC
Output: 24VDC 2.5A
Model: [PW-2420RU](#)⁴

Environmental

Temperature 32° to 104°F (0° to 40°C)
Humidity 20% to 90% RH (non-condensing)

Enclosure

Chassis Metal, black finish, vented top and sides, 2 mounting brackets included
Mounting Freestanding, surface mountable, or attachment to a single rack rail

Dimensions

Height 1.20 in. (30 mm)
Width 4.19 in. (106 mm)
Depth 7.94 in. (202 mm)

Weight

1.19 lb (0.54 kg)

Compliance

Regulatory Model: M202047006

Intertek® Listed for US and Canada, CE, IC, FCC Part 15 Class B digital device

To search for product certificates, refer to support.crestron.com/app/certificates.

Model

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Included Accessory

PW-2420RU
Desktop Power Pack, 24VDC, 2.5A, 2.1 mm

Available Accessories

For a list of available accessories, visit the [HD-RXU-4KZ-101-E](#) product page.

Notes:

- For DM Lite connections, use Crestron DM-CBL-8G, Crestron DM-CBL-ULTRA, or third-party CAT5e or higher cable. For information about the maximum transmission distance for each cable type, refer to [Online Help Answer ID 1001567](#).

To safeguard against unpredictable environmental electrical noise that may impact performance at resolutions above 1080p, shielded cable and connectors are recommended for all applications and are required when bundling multiple cables in a wire run. Cables are sold separately.
- 4K60 4:4:4 performance and HDR support require the use of cables and couplers with a minimum TMDS bandwidth of 18 Gbps. If 4K60 4:2:0 or 4K30 4:4:4 performance is acceptable, cables and couplers with a minimum bandwidth of 10.2 Gbps may be used. Bandwidth loss is cumulative; therefore, performance may be reduced when inserting multiple cables and couplers inline.
- The HD-RXU-4KZ-101-E is engineered to deliver maximum compatibility with the widest possible range of USB devices. Crestron does not guarantee that all USB devices are compatible with the HD-RXU-4KZ-101-E.
- When a surface-mountable DM Lite receiver is paired with a surface-mountable DM Lite transmitter, either the power pack included with the receiver or the transmitter can be used to power both devices. A power pack must not be connected to both devices simultaneously.

When a surface-mountable DM Lite receiver is paired with a wall plate DM Lite transmitter, the power pack included with the receiver must be used to power both devices.
- The HDMI output requires an appropriate adapter or interface cable to accommodate a DVI signal. CBL-HD-DVI interface cables are sold separately.

This product may be purchased from select authorized Crestron dealers and distributors. To find a dealer or distributor, please contact the Crestron sales representative for your area. A list of sales representatives is available online at www.crestron.com/How-To-Buy/Find-a-Representative or contact us for additional information by visiting www.crestron.com/contact/our-locations for your local contact.

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

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

The specific patents that cover Crestron products are listed online at patents.crestron.com.

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HDMI

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