

HD-RXC-101-C-E

DM Lite – HDMI® over CATx Receiver w/IR & RS-232, Surface Mount

- > Pairs with a DM Lite transmitter to provide a simple point-to-point signal extender
- > Enables extension of HDMI®, RS-232, and IR signals
- > Links to the transmitter via a single CAT5e (or better) twisted pair cable^[1]
- > Supports 4K and UHD at up to 130 ft (40 m)
- > Supports HD 1080p, WUXGA, and 2K at up to 230 ft (70 m)
- > Handles 4K video resolutions up to 4K60 4:2:0 and 4K30 4:4:4
- > Handles 3D video and Deep Color
- > Supports Dolby® TrueHD, Dolby Atmos®, DTS HD®, DTS:X®, and uncompressed 7.1 linear PCM audio
- > Compatible with HDMI and DVI display devices^[3]
- > HDCP 2.2 compliant
- > Passes CEC and EDID signals
- > Extends bidirectional RS-232 and IR control signals
- > Low-profile surface mount design
- > Universal 100-240V power pack included^[2]

The HD-RXC-101-C-E is a surface-mountable DM Lite receiver designed to pair with a DM Lite transmitter to form a point-to-point signal extender for HDMI®, RS-232, and IR signals. The DM Lite family of products offers a very simple and versatile solution for extending HD, UHD, 2K, and 4K video signals, with stereo or surround sound audio, over a single CAT5e (or better) cable. A cable length of up to 230 ft (70 m) is supported for HD 1080p, WUXGA, and 2K signals, or up to 130 ft (40 m) for UHD and 4K. In addition to video and audio, the HD-RXC-101-C-E supports the extension of RS-232 and IR control signals in either direction.^[1]

For applications requiring a wall plate version, refer to the HD-RXC-101-C-1G-E-B-T.

For applications that do not require IR or RS-232 signal extension, refer to the HD-RX-101-C-E.

The HD-RXC-101-C-E is designed to mount on a wall behind a flat-panel display, on the ceiling above a projector, or on any other flat surface. It can also be attached to a single rack rail in the back of an equipment cabinet. When powered using the provided wall mount power pack, the HD-RXC-101-C-E also supplies power to the connected transmitter over the link cable. Alternately, a power pack may be connected to the transmitter, which in turn supplies power to the HD-RXC-101-C-E over the link cable.^[2]

Important: This product is not addressable from a control system and offers no programmable functionality. AV, CEC, IR, and RS-232 signals are simply passed through between a single transmitter and receiver pair. The RJ45 link port on this product is exclusively intended for linking with a single DM Lite transmitter. It should not be used to connect to any other equipment or network. DM Lite is not compatible with PoE, PoDM, DigitalMedia 8G+® (DM 8G+®), or HDBaseT®.



SPECIFICATIONS

Video

Output Signal Type: HDMI w/Deep Color, 3D, & 4K (DVI compatible^[3])

Copy Protection: HDCP 2.2

Maximum Resolutions:

Scan Type	Resolution	Frame Rate	Color Sampling	Color Depth
Progressive	4096x2160 DCI 4K & 3840x2160 4K UHD	24 Hz	4:4:4	30 bit
		30 Hz	4:4:4	24 bit
		30 Hz	4:2:2	36 bit
	60 Hz	4:2:0	24 bit	
	2560x1600 WQXGA	60 Hz	4:4:4	36 bit
1920x1080 HD1080p	60 Hz	4:4:4	36 bit	
Interlaced	1920x1080 HD1080i	30 Hz	4:4:4	36 bit

NOTE: Common resolutions are shown; other custom resolutions are supported at pixel clock rates up to 300 MHz

Audio

Output Signal Type: HDMI

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 2.2, EDID, CEC pass-through

RS-232: 2-way serial pass-through up to 115.2k baud (TD/RD only)

IR: Bidirectional IR signal pass-through up to 60 kHz

DM Lite Link: Proprietary link for connection between one DM Lite TX & RX only

HD-RXC-101-C-E DM Lite – HDMI® over CATx Receiver w/IR & RS-232

Connectors

24VDC 1.25A: (1) 2.1 x 5.5 mm DC power connector;
24 Volt DC power input;

PW-2412WU power pack included;

Note: This connection powers both the receiver and transmitter^[2]

FROM TX: (1) 8-pin RJ45 connector, female, shielded;
Link port for connection to a DM Lite transmitter^[1]

HDMI OUT: (1) HDMI Type A connector, female;
HDMI digital video/audio output (DVI compatible^[3])

IR IN/OUT: (1) 4-pin 3.5 mm detachable terminal block;
Comprises (1) IR input port and (1) IR output port;
IR IN is for connection from a Crestron IR control port or other IR signal source and passes the IR input signal to the IR OUT port on the TX;
IR OUT is for connection to an IR emitter (**IRP2**, sold separately) and transmits the IR signal from the IR IN port on the TX;
Supports IR up to 60 kHz

COM: (1) 3-pin 3.5 mm detachable terminal block;
Bidirectional RS-232 port;
Passes RS-232 TD/RD data to/from the COM port on the TX;
Supports up to 115.2k baud

Indicators

PWR: (1) Green LED, indicates operating power is supplied from the power pack via the 24VDC input or from the TX via the DM Lite link

HDMI OUT: (1) Green LED, indicates HDMI output signal presence

LINK: (1) Green LED, indicates the DM Lite link status

FROM TX: (2) LEDs (on RJ45 connector), green LED indicates link status, amber LED indicates a valid video signal

Power

Power Pack (included): Input: 100-240 Volts AC, 50/60 Hz;
Output: 1.25 Amps @ 24 Volts DC;
Model: **PW-2412WU**

Note: The receiver and transmitter are powered together using a single power pack connected at either the receiver or transmitter (not both).^[2]

Environmental

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

Construction

Chassis: Metal, black finish, with (2) integral mounting flanges, vented sides

Mounting: Freestanding, surface mount, or attach to a single rack rail

Dimensions

Height: 1.26 in (32 mm)
Width: 4.21 in (107 mm)
Depth: 4.07 in (104 mm)

Weight

9.95 oz (282 g)

Compliance

UL Listed for US & Canada, CE, IC, FCC Part 15 Class B digital device

Maximum DM Lite Link Cable Lengths

Cable Type:	CAT5e (or better), DM-CBL-ULTRA DM® Ultra Cable, or DM-CBL-8G DM 8G® Cable ^[1]
Resolution:	
1920x1080 FHD 1080p	230 ft (70 m)
1920x1200 WUXGA	
1600x1200 UXGA	
2048x1080 DCI 2K	
2048x1152 QWXGA	
2560x1080 UWFHD	130 ft (40 m)
2560x1440 WQHD	
2560x1600 WQXGA	
3840x2160 4K UHD	
4096x2160 DCI 4K	

MODELS & ACCESSORIES

Available Models

HD-RXC-101-C-E: DM Lite – HDMI® over CATx Receiver w/IR & RS-232, Surface Mount

Included Accessories

PW-2412WU: Wall Mount Power Pack, 24VDC, 1.25A, 2.1mm, Universal (Qty. 1 included)

Available Accessories

HD-TXC-101-C-1G-E-B-T: DM Lite – HDMI® over CATx Transmitter w/IR & RS-232, Wall Plate, Black Textured

HD-TXC-101-C-1G-E-W-T: DM Lite – HDMI® over CATx Transmitter w/IR & RS-232, Wall Plate, White Textured

HD-TXC-101-C-E: DM Lite – HDMI® over CATx Transmitter w/IR & RS-232, Surface Mount

DM-CBL-ULTRA-PC Series: DigitalMedia™ Ultra Patch Cables

DM-CONN-ULTRA-RECP Series: DigitalMedia™ Ultra Keystone RJ45 Jacks

DM-RPP-K24: DigitalMedia™ 24-Port Keystone Patch Panel

DM-CBL-8G-NP Series: DigitalMedia 8G™ Cable, non-plenum

DM-CBL-8G-P Series: DigitalMedia 8G™ Cable, plenum

DM-8G-CONN-WG: Connector with Wire Guide for DM-CBL-8G

DM-8G-CRIMP-WG: Crimping Tool for DM-8G-CONN-WG

DM-CBL-ULTRA-NP Series: DigitalMedia™ Ultra Cable, Non-Plenum Type CMR

DM-CBL-ULTRA-P Series: DigitalMedia™ Ultra Cable, Plenum Type CMP

HD-RXC-101-C-E DM Lite – HDMI® over CATx Receiver w/IR & RS-232



DM-CBL-ULTRA-LSZH Series: DigitalMedia™ Ultra Cable, Low Smoke Zero Halogen (Available only in Europe)

DM-CONN-20: Connectors for DM-CBL-ULTRA DigitalMedia Ultra Cable

CBL Series: Crestron® Certified Interface Cables

CNSP-XX: Custom Serial Interface Cable

IRP2: IR Emitter

Notes:

- For the DM Lite link cable, use Crestron **DM-CBL-8G** DigitalMedia 8G™ cable, Crestron **DM-CBL-ULTRA** DigitalMedia™ Ultra cable, or third-party CAT5e (or better). The maximum cable length is 230 ft (70 m) for resolutions up to 2K or 130 ft (40 m) for higher resolution signals up to 4K. Refer to the "Maximum DM Lite Link Cable Lengths" table for a more detailed overview. Shielded cable and connectors are required when bundling multiple cables in a wire run, and are recommended for all applications to safeguard against unpredictable environmental electrical noise which may impact performance at resolutions above 1080p. All wire and cables are sold separately. DM Lite devices are not compatible with DigitalMedia 8G+ (DM 8G+), HDBaseT, PoE, PoDM, or any other CATx based interface or network.

- The power pack may be connected to either the receiver or transmitter. Only one power pack is required. Do not connect more than one power pack. DM Lite devices are not compatible with PoE or PoDM.
- The HDMI output requires an appropriate adapter or interface cable to accommodate a DVI signal. **CBL-HD-DVI** interface cables are available separately.

This product may be purchased from an authorized Crestron dealer. To find a dealer, please contact the Crestron sales representative for your area. A list of sales representatives is available online at <https://www.crestron.com/How-To-Buy/Find-a-Representative> or by calling 855-263-8754.

The specific patents that cover this and other Crestron products are listed online at <https://www.crestron.com/legal/patents>.

Certain Crestron products contain open source software. For specific information, please visit <https://www.crestron.com/opensource>.

Crestron, the Crestron logo, DigitalMedia, DigitalMedia 8G, DigitalMedia 8G+, DM, DM 8G, and DM 8G+ are either trademarks or registered trademarks of Crestron Electronics, Inc. in the United States and/or other countries. Dolby, Dolby Atmos, and Dolby Digital are either trademarks or registered trademarks of Dolby Laboratories in the United States and/or other countries. DTS, DTS HD, and DTS:X are either trademarks or registered trademarks of DTS, Inc. in the United States and/or other countries. HDBaseT is either a trademark or registered trademark of HDBaseT Alliance 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. Specifications are subject to change without notice. ©2018 Crestron Electronics, Inc.

