

DM Lite® Transmitter for HDMI®, IR, and RS-232 Signal Extension over CATx Cable



- Pairs with a DM Lite® or DMPS Lite™ receiver
- Enables extension of HDMI®, RS-232, and IR signals
- Links to the receiver via a single CAT5e (or higher) twisted pair cable
- 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, DVI, and Dual-Mode DisplayPort™ sources
- HDCP 2.2 compliant
- Passes CEC and EDID signals
- Extends bidirectional RS-232 and IR control signals
- USB power port supplies power to USB powered devices
- Low-profile surface mount design
- Universal 100-240V power pack included

The HD-TXC-101-C-E is a DM Lite® surface-mountable transmitter designed to pair with a DM Lite or DMPS Lite™ receiver to form a signal extender for HDMI®, RS-232, and IR signals. The DM Lite family of products offers a versatile solution for extending HD, UHD, 2K, and 4K video signals, with stereo or surround sound audio, over a single CAT5e (or higher) 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-TXC-101-C-E supports the extension of RS-232 and IR control signals in either direction.²

For applications requiring a wall plate version, refer to the [HD-TXC-101-C-1G-E-B-T](#) or [HD-TXC-101-C-1G-E-W-T](#) product page. For applications that do not require IR or RS-232 signal extension, refer to the [HD-TX-101-C-E](#) product page.

The USB power port supplies power only (500 mA maximum) and is suitable for general use to power USB powered devices. No USB data is passed through this connection. It cannot be used to extend USB data, video, or audio signals.

The HD-TXC-101-C-E is designed to mount on a flat surface beneath a table, behind a credenza, or inside a podium. 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-TXC-101-C-E also supplies power to the connected receiver over the link cable. Alternately, a power pack may be connected to the receiver, which in turn supplies power to the HD-TXC-101-C-E over the link cable.²

NOTE: 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 RJ-45 link port on this product is exclusively intended for linking with a single DM Lite or DMPS Lite receiver. It should not be used to connect to any other equipment or network. DM Lite technology is not compatible with PoE, PoDM, DigitalMedia 8G+®, or HDBaseT® technology.

Specifications

Video

Input Signal Types HDMI with Deep Color, 3D, and 4K (DVI and Dual-Mode DisplayPort™ interface compatible³)

Copy Protection HDCP 2.2

Maximum Resolution Common resolutions are listed in the following table.

Scan Type	Resolution	Frame Rate	Color Sampling	Color Depth
Progressive	4096x2160 DCI 4K and 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
Interlaced	1920x1080 HD 1080p	60 Hz	4:4:4	36 bit
		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

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Audio

Input Signal Types	HDMI (Dual-Mode DisplayPort interface compatible ³)
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 transmitter and DM Lite or DMPS Lite receiver only

Connectors

24 VDC 1.25A	(1) 2.1 x 5.5 mm DC power connector; 24 VDC power input; PW-2412WU power pack included;
	NOTE: This connection powers both the transmitter and receiver. ²
TO RX (DM Lite)	(1) 8-pin RJ-45 connector, female, shielded; DM Lite link port for connection to a DM Lite or DMPS Lite receiver ¹
HDMI IN	(1) HDMI Type A connector, female; HDMI digital video/audio input (DVI and Dual-Mode DisplayPort 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 receiver; IR OUT is for connection to an IR emitter (IRP2 , sold separately) and transmits the IR signal from the IR IN port on the receiver; 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 receiver; Supports up to 115.2k baud
POWER ONLY	(1) USB Type A connector, female; USB power port (500 mA maximum output); Supplies power to USB powered device

Indicators

PWR	(1) Green LED, indicates operating power is supplied from the power pack via the 24 VDC input or from the receiver via the DM Lite link
HDMI IN	(1) Green LED, indicates HDMI input signal presence
LINK	(1) Green LED, indicates the DM Lite link status
TO RX (DM Lite)	(2) LEDs on RJ-45 connector, green LED indicates DM Lite link status, amber LED indicates a valid video signal

Power

Power Pack (Included)	Input: 100-240 VAC, 50/60 Hz; Output: 1.25 Amps @ 24 VDC; Model: PW-2412WU
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NOTE: The transmitter and receiver are powered together using a single power pack connected at either the transmitter or receiver.²

Environmental

Temperature	32° to 104° F (0° to 40° C)
Humidity	20% to 90% RH (non-condensing)
Heat Dissipation	13.2 BTU/hr

Construction

Chassis	Metal, black finish, with (2) integral mounting flanges, vented sides
Mounting	Freestanding, surface-mountable, 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

Regulatory Model	HD-TXC-101-C-E
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UL® Listed for US and Canada, CE, IC, FCC Part 15 Class B digital device

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Maximum DM Lite Link Cable Length

Resolution	CAT5e (or higher), DM-CBL-ULTRA DM® Ultra Cable , or DM-CBL-8G DM 8G® Cable ¹
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

HD-TXC-101-C-E

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Available Accessories

PW-2412WU

Wall Mount Power Pack, 24VDC, 1.25A, 2.1mm, Universal (Quantity 1 included)

HD-RXC-101-C-1G-E-B-T

DM Lite – HDMI® over CATx Receiver w/IR & RS-232, Wall Plate, Black Textured

HD-RXC-101-C-E

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

HD-RX-4K-210-C-E

DMPS Lite™ 4K Multiformat 2x1 AV Switch and Receiver

HD-RX-4K-410-C-E

DMPS Lite™ 4K Multiformat 4x1 AV Switch and Receiver

HD-RX-4K-410-C-E-SW4

DMPS Lite™ 4K Multiformat 4x1 AV Switch and Receiver with 4-Port Ethernet Switch

HD-RX-4K-510-C-E

DMPS Lite™ 4K Multiformat 5x1 AV Switch and Receiver

HD-RX-4K-510-C-E-SW4

DMPS Lite™ 4K Multiformat 5x1 AV Switch and Receiver with 4-Port Ethernet Switch

DM-CBL-ULTRA-PC-5

DigitalMedia™ Ultra Patch Cable, 5 ft (1.5 m)

DM-CBL-ULTRA-PC-50

DigitalMedia™ Ultra Patch Cable, 50 ft (15 m)

DM-CONN-ULTRA-RECP-20

DigitalMedia™ Ultra Keystone RJ-45 Jack, 20-Pack w/Termination Tool

DM-RPP-K24

DigitalMedia™ 24-Port Keystone Patch Panel

DM-CBL-8G-NP-SP1000

DigitalMedia 8G™ Cable, Non-Plenum, 1000 ft spool

DM-CBL-8G-P-SP1000

DigitalMedia 8G™ Cable, Plenum, 1000 ft spool

DM-8G-CONN-WG-100

Connectors with Wire Guide for DM-CBL-8G DigitalMedia 8G™ Cable, 100-Pack

DM-8G-CRIMP-WG

Crimping Tool for DM-8G-CONN-WG-100

DM-CBL-ULTRA-NP-SP1000

DigitalMedia™ Ultra Cable, Non-Plenum Type CMR, 1000 ft spool

DM-CBL-ULTRA-P-SP1000

DigitalMedia™ Ultra Cable, Plenum Type CMP, 1000 ft spool

DM-CBL-ULTRA-LSZH-SP1000

DigitalMedia™ Ultra Cable, Low Smoke Zero Halogen, 1000 ft spool (Available only in Europe)

DM-CONN-20

Connectors for DM-CBL-ULTRA DigitalMedia™ Ultra Cable, 20-Pack

CBL-HD-6

High-Speed HDMI® Cable, 18 Gbps, 6 ft (1.8 m)

CBL-HD-LOCK-8

Locking High-Speed HDMI® Cable, 10.2 Gbps, 8 ft (2.4 m)

CBL-HD-DVI-6

HDMI® to DVI Interface Cable, 6 ft

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 higher). 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. Wire and cables are sold separately. DM Lite devices are not compatible with DigitalMedia 8G+, HDBaseT, PoE, PoDM, or any other CATx based interface or network.
- The power pack may be connected to either the transmitter or receiver. Only one power pack is required. Do not connect more than one power pack. DM Lite devices are not compatible with PoE or PoDM.

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3. The HDMI input requires an appropriate adapter or interface cable to accommodate a DVI or Dual-Mode DisplayPort signal. [CBL-HD-DVI](#) interface cables are available 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 by calling 855-263-8754.

This product is covered under the Crestron standard limited warranty. Refer to www.crestron.com/warranty for full details.

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

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

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HDMI

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