## HD-TXC-101-C-1G-E Series

# DM Lite – HDMI® over CATx Transmitter w/IR & RS-232, Wall Plate

- > Pairs with a DM Lite receiver to provide a simple point-to-point signal extender
- > Enables extension of HDMI®, RS-232, and IR signals
- > Links to the receiver 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, DVI, and Dual-Mode DisplayPort sources [3]
- > Compatible with the Crestron Multihead HD Video Cable (CBL-MULTI-HD-6, sold separately)
- > USB power port supplies power for the Multihead cable and other USB powered devices
- > HDCP 2.2 compliant
- > Passes CEC and EDID signals
- > Extends bidirectional RS-232 and IR control signals
- > Flush wall mount design
- > Installs in a single-gang U.S. electrical box (2-1/4" deep) or plaster ring
- > Decorator style faceplates sold separately
- > Normally powered by the receiver (surface mount) over the link cable [2]
- > Universal 100-240V power pack available separately (coming soon) for use with a wall plate receiver<sup>[2]</sup>

The HD-TXC-101-C-1G-E (-B-T or -W-T) is a wall plate DM Lite transmitter designed to pair with a DM Lite receiver 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-TXC-101-C-1G-E supports the extension of RS-232 and IR control signals in either direction. [1]

For applications requiring a surface mount version, refer to the HD-TXC-101-C-E.

For applications that do not require IR or RS-232 signal extension, refer to the HD-TX-101-C-1G-E-B-T or HD-TX-101-C-1G-E-W-T.

A USB power port is included on the HD-TXC-101-C-1G-E to enable use of a Crestron Multihead HD Video Cable (model CBL-MULTI-HD-6, sold separately). The Multihead cable provides expanded input connectivity to support the connection of a laptop computer or mobile device with HDMI, DisplayPort, Mini DisplayPort, or USB Type- $C^{\text{TM}}$  video output.



Note: 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-1G-E series comes in black or white, and is designed to mount in a single-gang electrical box or plaster ring (not included). It is normally powered by the receiver over the link cable when using a surface mount receiver. If using a wall plate receiver, a single power pack must be purchased (sold separately, model TBA), which may be connected to either the transmitter or receiver.<sup>[2]</sup>

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 receiver. It should not be used to connect to any other equipment or network. DM Lite is not compatible with PoE, PoDM, DigitalMedia  $8G+^{\circ}$  (DM  $8G+^{\circ}$ ), or HDBase $T^{\circ}$ .

## **SPECIFICATIONS**

#### Video

Input Signal Type: HDMI w/Deep Color, 3D, & 4K (DVI & Dual-Mode

DisplayPort 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**

Input Signal Type: HDMI (Dual-Mode DisplayPort 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 TX & RX only

## Connectors

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 RX; IR OUT is for connection to an IR emitter (IRP2, sold separately) and

transmits the IR signal from the IR IN port on the RX;

Supports IR up to 60 kHz

**HDMI IN:** (1) HDMI Type A connector, female;

HDMI digital video/audio input (DVI and Dual-Mode DisplayPort compatible [3])

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 RX;

Supports up to 115.2k baud

POWER ONLY: (1) USB Type A connector, female;

USB power port (500 mA maximum output);

Supplies power for a Crestron Multihead HD Video Cable (CBL-MULTI-HD-6, sold separately) or other USB powered device

TO RX (rear): (1) 8-pin RJ45 connector, female, shielded;

Link port for connection to a DM Lite receiver [1]

24VDC 1.25A (rear): (1) 2-pin 3.5 mm detachable terminal block;

24 Volt DC power input;

Power pack sold separately (if required, model TBA) [2];

Note: This connection powers both the transmitter and receiver; this connection is not normally used when pairing with a surface

mount receiver.[2]

## Indicators

PWR: (1) Green LED, indicates operating power is supplied from the RX via the DM Lite link or from a power pack via the 24VDC input HDMI IN: (1) Green LED, indicates HDMI input signal presence TO RX: (2) LEDs (on RJ45 connector), green LED indicates link status,

amber LED indicates a valid video signal

#### Power

Power Pack (sold separately): Input: 100-240 Volts AC, 50/60 Hz;

Output: 1.25 Amps @ 24 Volts DC;

Model: TBA

Note: This power pack is only required when pairing with a wall plate receiver. When pairing with a surface mount receiver, use the power pack supplied with that receiver. The transmitter and receiver are powered together using a single power pack connected at either the transmitter or receiver (not both).<sup>[2]</sup>

## Environmental

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

## Construction

**Composition:** Metal housing and bracket with black or white polycarbonate front label overlay

**Mounting:** Mounts in a 1-gang (or larger) 2-1/4 inch (57 mm) deep U.S. electrical box or plaster ring (not included)

**Faceplate:** Requires a decorator-style faceplate (FP-G series, sold separately)

#### **Dimensions**

Height: 4.08 in (104 mm) Width: 1.81 in (46 mm) Depth: 1.97 in (50 mm)

#### Weight

5.33 oz (151 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,	
Resolution:	or DM-CBL-8G DM 8G® Cable [1]	
1920x1080 FHD 1080p		
1920x1200 WUXGA		
1600x1200 UXGA	230 ft (70 m)	
2048x1080 DCI 2K		
2048x1152 QWXGA		
2560x1080 UWFHD		
2560x1440 WQHD		
2560x1600 WQXGA	130 ft (40 m)	
3840x2160 4K UHD		
4096x2160 DCI 4K		

## **MODELS & ACCESSORIES**

#### **Available Models**

**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 $^{\odot}$  over CATx Transmitter w/IR & RS-232, Wall Plate, White Textured

## **Available Accessories**

FP-G1-B-T: Decorator Style Faceplate, 1-Gang, Black Textured

FP-G1-W-T: Decorator Style Faceplate, 1-Gang, White Textured

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

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  $8G^{\mathsf{TM}}$  Cable, non-plenum

DM-CBL-8G-P Series: DigitalMedia 8G<sup>™</sup> 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

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

CBL-MULTI-HD-6: Crestron Mercury™ Multihead HD Video Cable, 6 ft (1.8 m)

CNSP-XX: Custom Serial Interface Cable

IRP2: IR Emitter

#### Notes:

- 1. 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.
- 2. When connecting a wall plate transmitter to a surface mount receiver, use the power pack that ships with the receiver. If the transmitter and receiver are both wall plates, a separate power pack must be purchased, which may be connected to either the transmitter or receiver. Only one power pack is required. Do not connect more than one power pack. Please note, the wall plate compatible power pack is not yet available. Please contact Crestron Customer Support for assistance when pairing a wall plate transmitter with a wall plate receiver. DM Lite devices are not compatible with PoE or PoDM.
- The HDMI input requires an appropriate adapter or interface cable to accommodate a DVI or Dual-Mode DisplayPort signal. CBL-HD-DVI and CBL-MULTI-HD-6 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 <a href="https://www.crestron.com/How-To-Buy/Find-a-Representative">https://www.crestron.com/How-To-Buy/Find-a-Representative</a> or by calling 855-263-8754.

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

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

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