

# HD-TX-201-C-2G-E Series

## DM Lite – HDMI® over CATx Transmitter & 2x1 Auto-Switcher w/VGA & Analog Audio, Wall Plate

- > Pairs with a DM Lite receiver to provide a simple point-to-point signal extender and switcher
- > Enables extension of HDMI® video and audio signals
- > Also converts and extends VGA and analog audio signals
- > Auto-switches between one HDMI input and one VGA input
- > Links to the receiver via a single CAT5e (or better) twisted pair cable<sup>[1]</sup>
- > 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<sup>[3]</sup>
- > Compatible with VGA, RGBHV, RGBS, RGsB, and YPbPr component sources up to HD 1080p and WUXGA<sup>[4]</sup>
- > HDCP 1.4 compliant
- > Passes CEC and EDID signals
- > Allows control system integration when paired with an HD-RX-201-C-E receiver
- > Courtesy LAN jack
- > Flush wall mount design
- > Installs in a 2-gang U.S. electrical box (2-1/4" deep) or plaster ring
- > Decorator style faceplates sold separately (type FP-G2-DM only)
- > Normally powered by the receiver (surface mount) over the link cable<sup>[2]</sup>
- > Universal 100-240V power pack available separately (coming soon) for use with a wall plate receiver<sup>[2]</sup>



The HD-TX-201-C-2G-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® 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.<sup>[1]</sup>

In addition to its HDMI input, the HD-TX-201-C-2G-E also includes a VGA input accompanied by a stereo analog audio input. Auto-switching between HDMI and VGA affords plug-and-play simplicity. Manual input selection is also available using the front panel “INPUT SEL” button. The VGA input can accept RGB and component video signals by using an appropriate breakout cable or adapter (not included). The audio input is selected in tandem with the VGA input, and can be used by itself with no video source connected. It cannot be paired with the HDMI video input however.

*Note: When paired with an HD-RX-201-C-E receiver, the local inputs are switched in combination with the HDMI input on the receiver, and can also be controlled remotely through integration with a Crestron® control system.*

A CAT6a RJ45 courtesy jack is included to provide a 1000Base-T network connection for computers and other devices. The front panel jack simply passes through to a parallel jack on the rear, which connects to an available port on the customer’s LAN. This LAN jack is provided as a convenience to supplant the need for a separate RJ45 wall jack. It does not interface with the DM Lite system and cannot be used to extend Ethernet signals or interface with a control system.

The HD-TX-201-C-2G-E series comes in black or white, and is designed to mount in a 2-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 except when paired with an HD-RX-201-C-E receiver. Otherwise, AV and CEC signals are simply passed through between the transmitter and receiver. 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+® (DM 8G+®), or HDBaseT®.*

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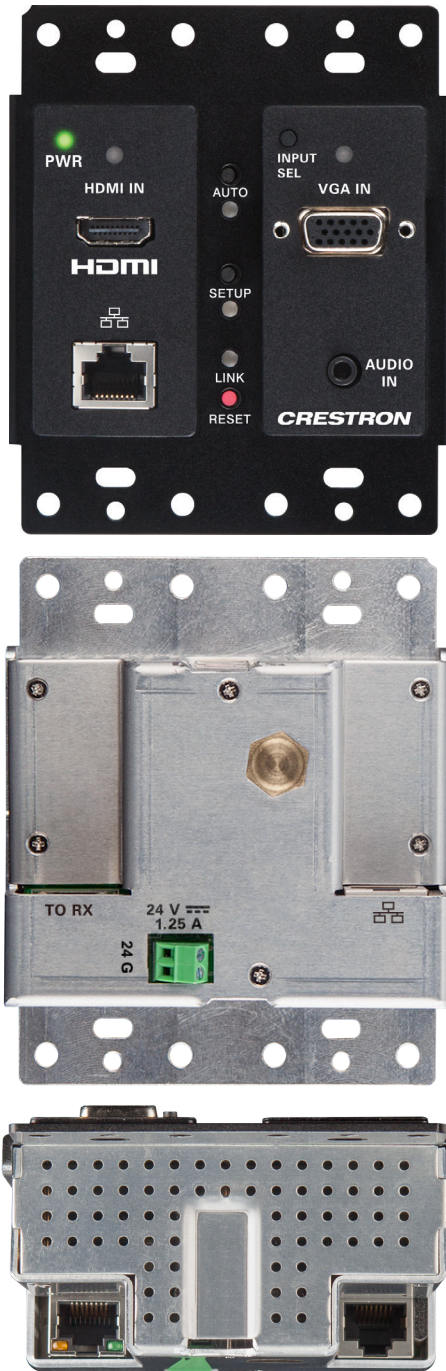
## SPECIFICATIONS

### Video

**Switcher:** 2x1 manual or auto-switching, audio-follow-video

**Input Signal Types:** HDMI w/Deep Color, 3D, & 4K (DVI & Dual-Mode DisplayPort compatible<sup>[3]</sup>), VGA/RGB (RGBHV, RGBS, RGsB), component (YPbPr)<sup>[4]</sup>

**Copy Protection:** HDCP 1.4



HD-TX-201-C-2G-E Transmitter – Front, Rear, and Top Views  
Black version shown with no faceplate

### Maximum Resolutions:

Input Type	Scan Type	Resolution	Frame Rate	Color Sampling	Color Depth
HDMI	Progressive	4096x2160 DCI 4K or 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
VGA/RGB	Progressive	1600x1200 UXGA	60 Hz	n/a	
		1920x1200 WUXGA	60 Hz	n/a	
Component	Progressive	1920x1080 HD1080p	60 Hz	n/a	
	Interlaced	1920x1080 HD1080i	30 Hz	n/a	

**NOTE:** Common resolutions are shown; other custom resolutions are supported at pixel clock rates up to 300 MHz for HDMI, or 165 MHz for VGA

### Audio

**Input Signal Type:** HDMI (Dual-Mode DisplayPort compatible<sup>[3]</sup>), analog stereo

**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

**Analog Formats:** Stereo 2-channel

**Analog-To-Digital Conversion:** 24-bit 48 kHz

**Analog Performance:**

**Frequency Response:** 20 Hz to 20 kHz  $\pm 0.75$  dB;

**S/N Ratio:** >90 dB, 20 Hz to 20 kHz A-weighted;

**THD+N:** <0.006% @ 1 kHz;

**Stereo Separation:** >80 dB

### Communications

**HDMI:** HDCP 1.4, EDID, CEC pass-through

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

**Note:** Supports management of HDCP and EDID only when paired with an HD-RX-201-C-E; supports management of CEC between the connected HDMI device and a control system only when paired with an HD-RX-201-C-E

### Connectors

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

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

**VGA IN:** (1) HD15 connector, female;

RGB (VGA) or component video input<sup>[4]</sup>;

Formats: RGBHV, RGBS, RGsB, YPbPr

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**AUDIO IN:** (1) 3.5 mm TRS mini phone jack;  
Unbalanced stereo line-level audio input;  
Maximum Input Level: 2 Vrms;  
Input Impedance: 44k Ohms

**LAN (Front):** (1) 8-pin RJ45 connector, female;  
Passive pass-through to the rear panel LAN jack;  
See “LAN (Rear)” specifications below

**SERVICE (Right Side):** (1) USB Type A connector, female;  
For factory use only

**TO RX (rear):** (1) 8-pin RJ45 connector, female, shielded;  
Link port for connection to a DM Lite receiver<sup>[1]</sup>

**24VDC 1.25A (rear):** (2) Captive screw terminals;  
24 Volt DC power input;  
Power pack sold separately (if required, model TBA)<sup>[2]</sup>;  
*Note: This connection powers both the transmitter and receiver;  
this connection is not normally used when pairing with a surface  
mount receiver.<sup>[2]</sup>*

**LAN (Rear):** (1) 8-pin RJ45 connector, female;  
Passive pass-through to the front panel LAN jack;  
Compatible Cable Standards: CAT5e, CAT6, CAT6a;  
Low Level Contact Resistance: 100 mΩ maximum;  
Insulation Resistance: 500 mΩ minimum at 500 Volts DC;  
Dielectric Withstanding Voltage: 1000 Volts AC between contacts and shell;  
Voltage Rating: 125 Volts AC;  
Current Rating: 1.5 Amps;  
PoE Compatibility: IEEE 802.3at PoE & PoE+;  
Insertion Force: 22 N maximum;  
Retention Force: 76 N minimum

## Controls & Indicators

**PWR:** (1) Bi-color green/amber LED, indicates operating power is supplied from the RX via the DM Lite link or from a power pack via the 24VDC input, turns amber while booting and green when operating

**HDMI IN:** (1) Bi-color green/amber LED, indicates HDMI input selection and signal presence

**VGA IN:** (1) Bi-color green/amber LED, indicates VGA input selection and signal presence

**INPUT SEL:** (1) Pushbutton for manual input selection, cycles through all available inputs on both the TX and RX

**AUTO:** (1) Pushbutton to enable/disable auto-switching mode, and (1) green LED to indicate auto-switching mode is enabled

**SETUP:** (1) Red LED and (1) recessed pushbutton for Ethernet setup (only when paired with an HD-RX-201-C-E receiver)

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

**RESET:** (1) Pushbutton for hardware reset (Resets both the TX and RX when paired with an HD-RX-201-C-E receiver)

**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 2-gang, 2-1/4 inch (57 mm) deep U.S. electrical box or plaster ring (not included)

**Faceplate:** Requires a Crestron [FP-G2-DM-B-T](#) or [FP-G2-DM-W-T](#) faceplate (sold separately, other faceplates are incompatible)

## Dimensions

**Height:** 4.19 in (107 mm)  
**Width:** 3.50 in (89 mm)  
**Depth:** 1.92 in (49 mm)

## Weight

8.9 oz (252 g)

## Compliance

CE, IC, FCC Part 15 Class B digital device

## Maximum DM Lite Link Cable Lengths

Cable Type:	CAT5e (or better), <a href="#">DM-CBL-ULTRA</a> DM® Ultra Cable, or <a href="#">DM-CBL-8G</a> DM 8G® Cable <sup>[1]</sup>
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	



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## MODELS & ACCESSORIES

### Available Models

**HD-TX-201-C-2G-E-B-T:** DM Lite – HDMI® over CATx Transmitter & 2x1 Auto-Switcher w/VGA & Analog Audio, Wall Plate, Black Textured

**HD-TX-201-C-2G-E-W-T:** DM Lite – HDMI® over CATx Transmitter & 2x1 Auto-Switcher w/VGA & Analog Audio, Wall Plate, White Textured

### Available Accessories

**FP-G2-DM-B-T:** Decorator Style Faceplate for HD-TX-201-C-2G-E Series, 2-Gang, Black Textured

**FP-G2-DM-W-T:** Decorator Style Faceplate for HD-TX-201-C-2G-E Series, 2-Gang, White Textured

**HD-RX-101-C-1G-E-B-T:** DM Lite – HDMI® over CATx Receiver, Wall Plate, Black Textured

**HD-RX-101-C-E:** DM Lite – HDMI® over CATx Receiver, Surface Mount

**HD-RX-201-C-E:** DM Lite – HDMI® over CATx Receiver, Room Controller, 2x1 Auto-Switcher, HD Scaler, 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

**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

### 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.
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.
4. The VGA input requires an appropriate breakout cable or adapter to accommodate an RGB or component video signal.

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.

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