

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^[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 VGA, RGBHV, RGBS, RGsB, and YPbPr component sources up to HD 1080p and WUXGA^[4]
- > 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^[2]
- > Universal 100-240V power pack available separately (coming soon) for use with a wall plate receiver^[2]

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.^[1]

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.^[2]

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®.

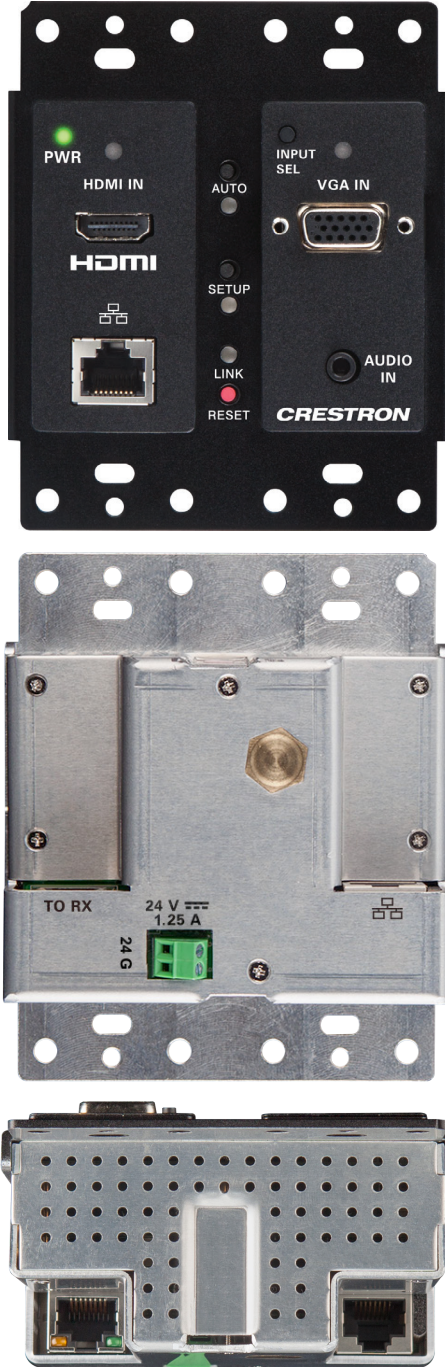
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SPECIFICATIONS

Video

Switcher: 2x1 manual or auto-switching, audio-follow-video
Input Signal Types: HDMI w/Deep Color, 3D, & 4K (DVI & Dual-Mode DisplayPort compatible^[3]), VGA/RGB (RGBHV, RGBS, RGsB), component (YPbPr)^[4]
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	
		60 Hz	4:4:4	36 bit	
	Interlaced	1920x1080 HD1080p	60 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^[3]), 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 ±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^[3])
VGA IN: (1) HD15 connector, female;
 RGB (VGA) or component video input^[4];
 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^[1]

24VDC 1.25A (Rear): (2) Captive screw terminals;
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]*

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 (Rear): (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).^[2]

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: 2.07 in (53 mm)

Weight

8.9 oz (252 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	130 ft (40 m)
2560x1080 UWFHD	
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.

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>.

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