

DM Lite® Transmitter and 3x1 Auto-Switcher for HDMI®, VGA, and Analog Audio Signal Extension over CATx Cable, UK/European Wall Plate



- Pairs with a DM Lite® or DMPS Lite™ receiver
- Enables extension of HDMI® video and audio signals
- Converts and extends VGA and analog audio signals
- Auto-switches between two HDMI inputs and one VGA input
- 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 1.4 compliant
- Passes CEC and EDID signals
- Allows control system integration when paired with an HD-RX-201-C-E or DMPS Lite receiver
- Flush wall mount design
- Installs in a 2-gang UK or European electrical box (45 mm deep, not included)
- FP2 INTENSE VERT and FP2 PURE VERT faceplates sold separately
- Normally powered by the receiver (surface-mountable) over the link cable

The HDI-TX-301-C-2G-E (-B-T or -W-T) is a UK/European wall plate DM Lite® transmitter designed to pair with a DM Lite or DMPS Lite™ receiver to form an extender for HDMI® 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 70 m (230 ft) is supported for HD 1080p, WUXGA, and 2K signals, or up to 40 m (130 ft) for UHD and 4K.¹

The HDI-TX-301-C-2G-E includes two HDMI inputs and one VGA input. The VGA input is accompanied by a stereo analog audio input. Auto-switching between the HDMI and VGA inputs enables 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. However, it cannot be paired with the HDMI video input.

NOTE: When paired with an [HD-RX-201-C-E](#) or DMPS Lite receiver, the local inputs are switched in combination with the HDMI inputs on the receiver, and can also be controlled remotely through integration with a Crestron® control system.

A CAT6a RJ-45 courtesy jack is included to provide a 1000BASE-T network connection for computers and other devices. The front panel jack 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 replace the need for a separate RJ-45 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 HDI-TX-301-C-2G-E series is available in black or white and is designed to mount into a 2-gang UK or European electrical box (not included). When paired with a surface-mountable receiver, the HDI-TX-301-C-2G-E is powered by the receiver over the DM Lite link cable.²

NOTE: This product is not addressable from a control system and offers no programmable functionality except when paired with an [HD-RX-201-C-E](#) or DMPS Lite receiver. Otherwise, AV and CEC signals are simply passed through between the transmitter and receiver. 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.

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Specifications

Video

Switcher	3x1 manual or auto-switching, audio-follow-video
Input Signal Types	HDMI with Deep Color, 3D, and 4K (DVI and Dual-Mode DisplayPort™ interface compatible ³), VGA/RGB (RGBHV, RGBS, RGsB), component (YPbPr) ⁴
Copy Protection	HDCP 1.4
Maximum Resolution	Common resolutions are listed in the following table.

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 HD 1080p	60 Hz	4:4:4	36 bit	
	Interlaced	1920x1080 HD 1080i	30 Hz	4:4:4	36 bit
VGA/RGB	Progressive	1600x1200 UXGA	60 Hz	n/a	n/a
		1920x1200 WUXGA	60 Hz	n/a	n/a
Component	Progressive	1920x1080 HD 1080p	60 Hz	n/a	n/a
	Interlaced	1920x1080 HD 1080i	30 Hz	n/a	n/a

NOTE: Custom resolutions are supported at pixel clock rates up to 300 MHz for HDMI or 165 MHz for VGA.

Audio

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

NOTE: Supports management of HDCP and EDID only when paired with an [HD-RX-201-C-E](#) or DMPS Lite receiver; supports management of CEC between the connected HDMI device and a control system only when paired with an HD-RX-201-C-E or DMPS Lite receiver.

Connectors

HDMI IN 1-2	(2) HDMI Type A connectors, female; HDMI digital video/audio inputs (DVI and Dual-Mode DisplayPort interface compatible ³)
VGA IN	(1) HD15 connector, female; RGB (VGA) or component video input; ⁴ Formats: RGBHV, RGBS, RGsB, and YPbPr
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 RJ-45 connector, female; Passive pass-through to the rear panel LAN jack
LAN (Rear)	(1) 8-pin RJ-45 connector, female; Passive pass-through to the front panel LAN jack; Compatible Cable Standards: CAT5e, CAT6, and CAT6a; Low Level Contact Resistance: 100 mΩ maximum; Insulation Resistance: 500 mΩ minimum at 500 VDC;

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Dielectric Withstanding Voltage: 1000 VAC between contacts and shell;

Voltage Rating: 125 VAC;

Current Rating: 1.5 Amps;

PoE Compatibility: IEEE 802.3at PoE and PoE+;

Insertion Force: 22 N maximum;

Retention Force: 76 N minimum;

24 VDC 1.25A (Rear) (2) Captive screw terminals; 24 VDC 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-mountable receiver.²

TO RX (DM Lite, Rear) (1) 8-pin RJ-45 connector, female, shielded; DM Lite link port for connection to a DM Lite or DMPS Lite receiver.¹

Controls and Indicators

PWR	(1) Bi-color green/amber LED, indicates operating power is supplied from the receiver via the DM Lite link or from a power pack via the 24 VDC input, turns amber while booting and green when operating
HDMI IN 1-2	(2) Bi-color green/amber LEDs, each indicates input selection and signal presence for the corresponding HDMI input
INPUT SEL	(1) Push button for manual input selection, cycles through all the available inputs on both the transmitter and receiver
VGA IN	(1) Bi-color green/amber LED, indicates input selection and signal presence for the VGA input
AUTO	(1) Push button to enable/disable auto-switching mode, and (1) green LED to indicate auto-switching mode is enabled
SETUP	(1) Push button and (1) red LED for Ethernet setup (only when paired with an HD-RX-201-C-E or DMPS Lite receiver)
RESET	(1) Push button for hardware reset (Resets both the transmitter and receiver when paired with an HD-RX-201-C-E or DMPS Lite receiver)
LINK	(1) Green LED, indicates the DM Lite link status

TO RX (DM Lite, Rear) (2) LEDs on RJ-45 connector, green LED indicates DM Lite link status, amber LED indicates a valid video signal

Power

Power Pack (sold separately) Input: 100-240 VAC, 50/60 Hz; Output: 1.25 Amps @ 24 VDC; Model: TBA

NOTE: This power pack is required only when the HDI-TX-301-C-2G-E is paired with a wall plate receiver. When the HDI-TX-301-C-2G-E is paired with a surface-mountable receiver, the power pack included with and connected to the receiver is used to power both the receiver and the HDI-TX-301-C-2G-E.²

Environmental

Temperature 0° to 40° C (32° to 104° F)
Humidity 20% to 90% RH (non-condensing)
Heat Dissipation 22.2 BTU/hr

Construction

Composition Metal housing and bracket with black or white polycarbonate front label overlays
Mounting Mounts in a 2-gang, 45 mm (1-25/32 inch) deep UK or European electrical box (not included)
Faceplate Requires a Crestron FP2 INTENSE VERT or FP2 PURE VERT series faceplate (sold separately)

Dimensions

Height 73 mm (2.88 in)
Width 132.5 mm (5.22 in)
Depth 44 mm (1.74 in)

Weight

375 g (13.23 oz)

Compliance

Regulatory Models HDI-TX-301-C-2G-E-B-T, HDI-TX-301-C-2GE-W-T
 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	70 m (230 ft)
1920x1200 WUXGA	
1600x1200 UXGA	
2048x1080 DCI 2K	
2048x1152 QWXGA	
2560x1080 UWFHD	40 m (130 ft)
2560x1440 WQHD	
2560x1600 WQXGA	
3840x2160 4K UHD	
4096x2160 DCI 4K	

Models

HDI-TX-301-C-2G-E-B-T

DM Lite® Transmitter and 3x1 Auto-Switcher for HDMI®, VGA, and Analog Audio Signal Extension over CATx Cable, UK/European Wall Plate, Black Textured

HDI-TX-301-C-2G-E-W-T

DM Lite® Transmitter and 3x1 Auto-Switcher for HDMI®, VGA, and Analog Audio Signal Extension over CATx Cable, UK/European Wall Plate, White Textured

Available Accessories

FP2-120-INTENSE-VERT

Dual gang Vertical faceplate Intense - White

FP2-122-INTENSE-VERT

Dual gang Vertical faceplate Intense - Anthracite

FP2-150-PURE-VERT

Dual gang Vert faceplate Niko Pure - Stainl Steel on Anthrac

FP2-152-PURE-VERT

Dual gang Vertical faceplate Pure - Natural red

FP2-154-PURE-VERT

Dual gang Vertical faceplate Pure - White Steel

FP2-155-PURE-VERT

Dual gang Vertical faceplate Pure - Alu Grey

FP2-156-PURE-VERT

Dual gang Vertical faceplate Pure - Bamboo

FP2-157-PURE-VERT

Dual gang Vertical faceplate Niko Pure - Champagne Steel

FP2-158-PURE-VERT

Dual gang Vertical faceplate Pure - Alu Black

FP2-159-PURE-VERT

Dual gang Vertical faceplate Pure - Natural Soft Grey

FP2-161-PURE-VERT

Dual gang Vertical faceplate Pure - Black Steel

FP2-200-PURE-VERT

Dual gang Vertical faceplate Pure - Bakelite Piano Black

FP2-220-PURE-VERT

Dual Gang Vertical Faceplate Pure - Alu Steel Grey

FP2-221-PURE-VERT

Dual Gang Vertical Faceplate Pure - Alu Gold

FP2-241-PURE-VERT

Dual gang Vertical faceplate Pure - Liquid Snow White

FP2-250-PURE-VERT

Dual gang Vertical faceplate Pure - Stainless Steel on White

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

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

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

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

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

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

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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

CBL-VGA-6

VGA Cable, 6 ft

CBL-VGA-AUD-6

VGA Cable w/Mini-TRS Stereo Audio, 6 ft

CBL-AUDIO-6

Mini-TRS Stereo Audio Cable, 6 ft

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 higher). The maximum cable length is 70 m (230 ft) for resolutions up to 2K or 40 m (130 ft) for higher resolution signals up to 4K. Refer to the "Maximum DM Lite Link Cable Lengths" table for a 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.

2. When connecting a wall plate transmitter to a surface-mountable 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. Note that the wall plate compatible power pack is not yet available. 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 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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