HD-TXC-4KZ-101-1G

DM® Essentials 4K60 4:4:4 Transmitter for HDMI®, RS-232, and IR Extension over CATx Cable, Wall Plate

- *Point-to-point extension of HDMI®, RS-232, and IR signals over CAT5e or higher cable*
- *DM® Essentials transmission distance up to 130 ft (40 m) for UHD and 4K signals or up to 230 ft (70 m) for 1080p, WUXGA, and 2K signals*
- *4K60 4:4:4 capability*
- *HDR10, HDR10+, and Dolby Vision® video formats*
- *Compliance with HDCP 2.3*
- *CEC (Consumer Electronics Control) pass-through capability*
- *Bidirectional RS-232 and IR pass-through capability*
- *EDID pass-through capability*
- *One-gang wall plate design available in black or white finish*
- *Decorator style faceplate required (FP-G Series sold separately)*
- *Power from the remote DM Essentials receiver (surface mountable only) or DMPS Essentials switcher*

The HD-TXC-4KZ-101-1G is a DM® Essentials 4K60 4:4:4 wall plate transmitter designed to interoperate with a DM® Essentials receiver or DMPS Essentials switcher for the transmission of HDMI®, RS-232, and IR signals. A CAT5e or higher twisted pair cable (Crestron DM-CBL-8G or DM-CBL-ULTRA sold separately) is needed to connect the HD-TXC-4KZ-101-1G to the DM Essentials receiver or DMPS Essentials switcher. For 1080p, WUXGA, and 2K signals, a cable length of up to 230 ft (70 m) is supported. For UHD and 4K signals, a cable length of up to 130 ft (40 m) is supported.[1]

The HD-TXC-4KZ-101-1G is available in two models: HD-TXC-4KZ-101-1G-B (black) and HD-TXC-4KZ-101-1G-W (white).

Interoperability with a DM Essentials Receiver or DMPS Essentials Switcher

The DM Essentials output port of the HD-TXC-4KZ-101-1G must be connected to a DM Essentials input port of a DM Essentials receiver or DMPS Essentials switcher. Examples of supported DM Essentials 4K60 4:4:4 receivers are the HD-RXC-4KZ-101 and HD-RXCA-4KZ-101. Supported DMPS Essentials switchers are the HD-PS622, HD-PS621, HD-PS402, HD-PS401, and HD-RX-4K-210-C-E.

The HD-TXC-4KZ-101-1G can be configured and controlled only when it is used with a DMPS Essentials switcher. The web interface of the switcher can be used to configure the HD-TXC-4KZ-101-1G. In addition, control system programming and .AV Framework™ software support of the HD-TXC-4KZ-101-1G is hosted by the switcher.

4K60 4:4:4 and HDR Support

The HD-TXC-4KZ-101-1G supports video resolutions up to 4K60 with 4:4:4 color sampling. HDR10, HDR10+, and Dolby Vision® video formats are also supported.[2]

One-Gang Wall Plate Design

The HD-TXC-4KZ-101-1G is designed to mount into a 1-gang U.S. electrical box or plaster ring (not included). The HD-TXC-4KZ-101-1G can receive power from the remote DM Essentials receiver (surface mountable only) or DMPS Essentials switcher.[3]

Specifications

Video

Input Signal Type	HDMI® with HDR10, HDR10+, Dolby Vision®, Deep Color, and 4K60 4:4:4 support[2] (DVI and Dual-Mode DisplayPort™ interface compatible[4])
Output Signal Type	DM® Essentials with HDR10, HDR10+, Dolby Vision, Deep Color, and 4K60 4:4:4 support[2]
Copy Protection	HDCP 2.3
Resolutions	Common resolutions are listed in the following table.

Scan Type	Resolution	Frame Rate	Color Sampling	Color Depth
Progressive	4096x2160 DCI 4K & 3840x2160 4K UHD	24 Hz	4:4:4	12 bit
		30 Hz	4:4:4	12 bit
		60 Hz	4:2:2	12 bit
		60 Hz	4:4:4	8 bit
	2560x1600 WQXGA	60 Hz	4:4:4	8 bit
	1920x1080 FHD 1080p	60 Hz	4:4:4	12 bit
Interlaced	1920x1080 HD 1080i	30 Hz	4:4:4	12 bit

NOTE: The maximum supported resolution is 4K60 with 4:4:4 color sampling. Custom resolutions are supported at pixel clock rates up to 600 MHz.

Audio

Input Signal Type	HDMI
Output Signal Type	DM Essentials
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

Communications

HDMI	HDCP 2.3, EDID, CEC pass-through
DM Essentials	HDCP 2.3, EDID 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

Connectors

IR IN/OUT	(1) 4-pin 3.5 mm detachable terminal block; Comprised of (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 DM Essentials 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 DM Essentials 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 a DM Essentials receiver; Supports up to 115.2k baud
HDMI IN	(1) HDMI Type A connector, female; HDMI digital video/audio input; DVI and Dual-Mode DisplayPort™ interface compatible[4]
DM OUT	(1) 8-pin RJ-45 yellow connector, female, shielded; DM Essentials output port for connection to a DM Essentials receiver or DMPS Essentials switcher[1]
24V 0.75A	(1) 2-pin 3.5 mm detachable terminal block; 24VDC power input; Optional power pack (sold separately, required only if the HD-TXC-4KZ-101-1G is used with a wall plate receiver)[3]
Ground	(1) Chassis ground lug

Controls and Indicators

LINK	(1) Green LED, indicates that a DM Essentials link is established.
PWR	(1) LED, indicates that power is being applied to the device. Amber indicates that the device is booting. Green indicates that the device is operational.
HDMI IN	(1) Green LED, indicates that the device is receiving an HDMI signal

HDMI

Specifications are subject to change without notice.

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