

- Interoperability with a DM Lite® receiver or DMPS Lite™ switcher
- Point-to-point extension of an HDMI® or USB-C® DisplayPort™ signal over a CAT5e or higher cable
- USB-C input with DisplayPort Alt Mode capability
- DM Lite 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
- Automatic switching of HDMI and USB-C DisplayPort inputs
- CEC (Consumer Electronics Control) pass-through capability
- EDID pass-through capability
- Two-gang wall plate design available in black or white finish
- Decorator style faceplate required (FP-G Series sold separately)
- Power from the remote DM Lite receiver (surface mountable only) or DMPS Lite switcher

The HD-TX-4KZ-211-2G is a DM Lite® 4K60 4:4:4 wall plate transmitter designed to interoperate with a DM Lite® receiver or DMPS Lite™ switcher. The paired transmitter and receiver enable extension of HDMI® or USB-C® DisplayPort™ AV signals. This is useful in applications where an AV source is located remotely from its destination, such as a display, projector, or codec solution. A CAT5e or higher twisted pair cable must used to connect the HD-TX-4KZ-211-2G to the DM Lite receiver or DMPS Lite switcher.¹

The HD-TX-4KZ-211-2G is available in two models: HD-TX-4KZ-211-2G-B (black) and HD-TX-4KZ-211-2G-W (white).

### Interoperability with a DM Lite Receiver or DMPS Lite Switcher

The DM Lite output port of the HD-TX-4KZ-211-2G must be connected to a DM Lite input port of a DM Lite 4K60 4:4:4 receiver, DM Lite 4K60 4:2:0 receiver, or DMPS Lite switcher.

The HD-TX-4KZ-211-2G can be configured and controlled only when it is used with a DMPS Lite switcher. The web interface of the switcher can be used to configure the HD-TX-4KZ-211-2G. In addition, control system programming and .AV Framework™ software support of the HD-TX-4KZ-211-2G is hosted by the switcher.

### 4K60 4:4:4 and HDR Support

The HD-TX-4KZ-211-2G supports video resolutions up to 4K60 with 4:4:4 color sampling. HDR10, HDR10+, and Dolby Vision® video formats are also supported.<sup>2</sup>

### **Automatic Switching of Inputs**

When the HD-TX-4KZ-211-2G is used with a DMPS Lite switcher, the web interface of the switcher or control system programming hosted by the switcher can be used to configure switching behavior. Switching between the HDMI and USB-C DisplayPort inputs occurs based on the last connected input or on the routing priority assigned to each input. In addition, the input selection push button on the front of the HD-TX-4KZ-211-2G enables the desired input to be selected manually.

#### Two-Gang Wall Plate Design

The HD-TX-4KZ-211-2G is designed to mount into a 2-gang U.S. electrical box or plaster ring (not included). The HD-TX-4KZ-211-2G can receive power from the remote DM Lite receiver (surface mountable only) or DMPS Lite switcher.<sup>3</sup>



### **Specifications**

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Input Signal Types HDMI® (DVI and Dual-Mode DisplayPort™ interface compatible<sup>4</sup>) and DisplayPort over USB-C® (DisplayPort Alt Mode) with HDR10, HDR10+, Dolby Vision®, Deep Color, and 4K60

4:4:4 support<sup>2</sup>

Output Signal Type DM Lite® with HDR10, HDR10+, Dolby Vision, Deep Color, and 4K60 4:4:4 support<sup>2</sup>

Copy Protection HDCP 2.3

**Resolutions** Common resolutions are listed in the following table.

Scan Type	Resolution	Frame Rate	Color Sampling	Color Depth
	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
Progressive	2560x1600 WQXGA	60 Hz	4:4:4	8 bit
	1920x1080 FHD 1080p	60 Hz	4:4:4	12 bit
Interlaced (HDMI input only)	1920x1080 HD 1080i	30 Hz	4:4:4	12 bit

### NOTES:

- The maximum supported resolution is 4K60 with 4:4:4 color sampling. Custom resolutions are supported at pixel clock rates up to 600 MHz.
- The USB-C DisplayPort input does not support interlaced video.

### Audio

Input Signal HDMI, DisplayPort over USB-C Types (DisplayPort Alt Mode)

DM Lite

Output Signal Type

**Digital Formats** Dolby Digital®, Dolby Digital EX, Dolby

Doilby Digital Plus, Doilby Bigital EX, Doilby 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
USB-C	HDCP 2.3, EDID, CEC pass-through
DM Lite	HDCP 2.3, EDID pass-through

### Connectors

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

HDMI digital video/audio input;

DVI and Dual-Mode DisplayPort interface

compatible4

**USB IN** (1) USB Type C® connector, female;

Digital video/audio input using

DisplayPort Alt Mode<sup>5</sup>

**DM LITE OUT** (1) 8-pin RJ-45 yellow connector, female,

shielded;

DM Lite output port for connection to a DM Lite receiver or DMPS Lite $^{TM}$  switcher $^{1}$ 

24V 0.7A (1) 2-pin 3.5 mm detachable terminal

block;

24VDC power input;

Power pack sold separately, required only if the HD-TX-4KZ-211-2G is used with a

wall plate receiver<sup>3</sup>

**Ground** (1) Chassis ground lug

### **Controls and Indicators**

**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.

**AUTO** (1) Push button for enabling or disabling

automatic switching of inputs;

(1) LED, green indicates that automatic

switching of inputs is enabled

**SETUP** (1) Push button for Ethernet setup

(applicable only when used with a DMPS

Lite switcher);

(1) LED, red indicates that the SETUP

push button is pressed

**LINK** (1) LED, green indicates that a DM Lite

link is established

**INPUT** (1) Push button for manual input

selection

**HDMI IN** (1) LED, green indicates that the HDMI

input is routed to an output, and amber indicates that a source is detected but is

not routed to an output



**USB IN** (1) LED, green indicates that the USB-C

DisplayPort input is routed to an output, and amber indicates that a source is detected but is not routed to an output

**RESET** (1) Push button for restoring the device to

factory default settings

**DM LITE OUT** (2) LEDs on RJ-45 connector.

Green indicates that a DM Lite link is

established.

Flashing amber indicates non-HDCP video, and solid amber indicates HDCP

video.

Power

Power Pack Input: 100-240VAC

Output: 24VDC 0.75A

Model: <u>PW-2407WUL</u> (sold separately, required only if the HD-TX-4KZ-211-2G is

used with a wall plate receiver)3

**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 (or larger) 2-inch

(51 mm) deep U.S. electrical box or

plaster ring (not included)

**Faceplate** Requires a decorator style faceplate

(<u>FP-G2-DM</u> Series, sold separately)

**Dimensions** 

 Height
 4.12 in. (105 mm)

 Width
 3.57 in. (91 mm)

 Depth
 1.66 in. (42 mm)

Weight

7.33 oz (208 g)

### Compliance

### Regulatory Model: M202046004

Intertek® Listed for US and Canada, CE, IC, FCC Part 15 Class A digital device

To search for product certificates, refer to support.crestron.com/app/certificates.

### Models

### HD-TX-4KZ-211-2G-B

DM Lite® 4K60 4:4:4 Transmitter and 2x1 Auto-Switcher for HDMI® and USB-C® DisplayPort™ Signal Extension over CATx Cable, Wall Plate, Black

#### HD-TX-4KZ-211-2G-W

DM Lite® 4K60 4:4:4 Transmitter and 2x1 Auto-Switcher for HDMI® and USB-C® DisplayPort™ Signal Extension over CATx Cable, Wall Plate, White

### **Available Accessories**

For a list of available accessories, visit the HD-TX-4KZ-211-2G-B or HD-TX-4KZ-211-2G-W product page.

#### Notes

 For DM Lite connections, use Crestron DM-CBL-8G, Crestron DM-CBL-ULTRA, or third-party CAT5e or higher cable. For information about the maximum transmission distance for each cable type, refer to Online Help Answer ID 1001567.

To safeguard against unpredictable environmental electrical noise that may impact performance at resolutions above 1080p, shielded cable and connectors are recommended for all applications and are required when bundling multiple cables in a wire run. Cables are sold separately.

For HDMI inputs, 4K60 4:4:4 performance and HDR support require the use
of HDMI cables and couplers with a minimum TMDS bandwidth of
18 Gbps. If 4K60 4:2:0 or 4K30 4:4:4 performance is acceptable, cables and
couplers with a minimum bandwidth of 10.2 Gbps may be used. Bandwidth
loss is cumulative; therefore, performance may be reduced when inserting
multiple cables and couplers inline.

For USB-C DisplayPort inputs, 4K60 4:4:4 performance and HDR support require the use of USB 3.2 Gen 1 (5 Gbps) cables with support for DisplayPort Alt Mode (DisplayPort 1.4 video, 4K60 4:4:4, 2 lanes). Cables are sold separately.

 When a DM Lite wall plate transmitter is paired with a DM Lite surface-mountable receiver, the power pack included with the receiver is used to power both devices.

When a DM Lite transmitter is paired with a DMPS Lite switcher, the switcher provides power to the DM Lite transmitter.

If a DM Lite wall plate transmitter is paired with a DM Lite wall plate receiver, the devices must be powered independently by a PW-2407WUL power pack (sold separately) for each device. A wall plate transmitter and wall plate receiver cannot provide power to the remote device with which it is paired.

- 4. The HDMI input requires an appropriate adapter or interface cable to accommodate a Dual-Mode DisplayPort or DVI signal. CBL-HD-DVI interface cables are sold separately.
- 5. CBL-USB3G1-C-C-6 and CBL-USB3G2-C-C-3 cables are sold separately.

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 <a href="https://www.crestron.com/How-To-Buy/Find-a-Representative">www.crestron.com/How-To-Buy/Find-a-Representative</a> or contact us for additional information by visiting <a href="https://www.crestron.com/contact/our-locations">www.crestron.com/contact/our-locations</a> for your local contact.

The original language version of this document is U.S. English. All other languages are a translation of the original document.

The product warranty can be found at www.crestron.com/warranty.

The specific patents that cover Crestron products are listed online at patents.crestron.com.



### Digital Media \*\*

### HD-TX-4KZ-211-2G

DM Lite® 4K6O 4:4:4 Transmitter and 2x1 Auto-Switcher for HDMI® and USB-C® DisplayPort™ Signal Extension over CATx Cable, Wall Plate

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### HDMI

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