# DM-TX1-1G

## Wall Plate DigitalMedia™ CAT Transmitter

The DM-TX1-1G is a DM® CAT transmitter that installs in a single-gang electrical box to provide a convenient interface for computers and high-definition AV sources as part of a complete Crestron® DigitalMedia™ system. The DM-TX1-1G is ideal for wall, lectern, and floor box applications in a boardroom, classroom, auditorium, or residence. It provides a single HDMI® input and connects to the head end using a single Crestron DM cable<sup>[1]</sup>. Standard gang-box mounting allows for installation adjacent to an Ethernet jack (Crestron MP-WP183 or equivalent) for a total connectivity solution<sup>[2]</sup>.

Note: the DM-TX1-1G has a reduced feature set relative to other DM transmitters. It must be connected directly to a DM-MD series switcher and does not support the use of repeaters. Please refer to the Crestron DigitalMedia Design Guide, Doc. #4546 for a full overview of the complete DM product line.

#### DigitalMedia™

As the leader in HDMI and control system technologies, Crestron developed DigitalMedia (DM) to deliver the first complete HD AV distribution system to take HDMI to a higher level. DigitalMedia allows virtually any mix of HDMI and other AV sources to be distributed throughout a home, office, school, or virtually any other facility. The DM-TX1-1G distributes uncompressed digital video and audio signals up to 175 feet (53 m) using Crestron DM cable<sup>[1]</sup>.

#### **Multimedia Computer/AV Interface**

Via its HDMI input, the DM-TX1-1G handles HD 1080p60 video and WUXGA computer signals with HDCP, 3D, and multi-channel HD lossless audio. It can also handle DVI and DisplayPort Multimode signals using an appropriate adapter or interface cable<sup>[3]</sup>.

A single DM CAT output is provided for connection to a DM switcher. 
[1] As part of a complete DM system, multiple DM-TX1-1Gs may be installed to enable the distribution of several sources at different locations to feed multiple displays throughout any room or larger facility.

### Simple Wall Box Mounting

The DM-TX1-1G is designed to be installed using a 1-gang electrical box or plaster ring, or attached to a single rack rail in the back of an equipment cabinet. It also fits a 1-gang opening in a typical 6" deep floor box. The DM cable is terminated to the rear of the transmitter using screw terminals. The unit is powered via the DMNet® connection.

Please refer to the DigitalMedia Resources Webpage at http://www.crestron.com/dmresources/ for additional design tools and reference documents.

- > DigitalMedia™ CAT transmitter and HDMI® interface
- > DM® CAT output supports up to 175 ft (53 m) cable length<sup>[1]</sup>
- > Provides a single HDMI digital video/audio input
- > Also supports DVI and DisplayPort Multimode sources[3]
- > Handles HD video with 3D and HDCP
- > Handles Dolby® TrueHD, DTS-HD Master Audio™, and uncompressed 7.1 linear PCM audio





- > Compact 1-gang wall box mount design
- > Also fits in a typical 6" deep floor box
- > Available in black or white finish
- > Powered over the DMNet® connection

#### **SPECIFICATIONS**

#### **Video**

Input Signal Type: HDMI®, DVI $^{[3]}$ , DisplayPort Multimode $^{[3]}$  Output Signal Type: DM® CAT (DigitalMedia $^{\text{TM}}$  over twisted-pair copper

wire

Formats: HDMI with 3D, DVI, HDCP content protection support Input Resolutions, Progressive: 640x480@60Hz, 720x480@60Hz (480p), 720x576@50Hz (576p), 800x600@60Hz, 848x480@60Hz, 852x480@60Hz, 854x480@60Hz, 1024x768@60Hz, 1024x852@60Hz, 1024x1024@60Hz, 1280x720@50Hz (720p50), 1280x720@60Hz (720p60), 1280x768@60Hz, 1280x800@60Hz, 1280x960@60Hz, 1280x1024@60Hz, 1360x768@60Hz, 1365x1024@60Hz, 1366x768@60Hz, 1400x1050@60Hz, 1440x900@60Hz, 1600x900@60Hz, 1600x1200@60Hz, 1680x1050@60Hz,

1920x1080@24Hz (1080p24), 1920x1080@25Hz (1080p25), 1920x1080@50Hz (1080p50), 1920x1080@60Hz (1080p60),

1920x1200@60Hz, 2048x1080@24Hz, 2048x1152@60Hz, plus any other resolution allowed by HDMI up to 165MHz pixel clock

Input Resolutions, Interlaced: 720x480@30Hz (480i), 720x576@25Hz (576i), 1920x1080@25Hz (1080i25), 1920x1080@30Hz (1080i30), plus any other resolution allowed by HDMI up to 165MHz pixel clock

Output Resolutions: Matched to input

## <u>Audio</u>

Input Signal Type: HDMI, DisplayPort Multimode[3]

**Output Signal Type: DM CAT** 

**Formats:** Dolby Digital®, Dolby Digital EX, Dolby Digital Plus, Dolby® TrueHD, DTS®, DTS-ES, DTS 96/24, DTS-HD High Res, DTS-HD Master

Audio™, Up to 8ch PCM

#### Communications

DigitalMedia: DM CAT, DMNet®



## DM-TX1-1G Wall Plate DigitalMedia™ CAT Transmitter

#### **Connectors - Front**

HDMI IN: (1) 19-pin Type A HDMI female;

HDMI digital video/audio input;

Also supports DVI and DisplayPort Multimode[3]

#### Connectors - Rear

**D, M:** (1) DM CAT output composed of (16) captive screw terminals with (2) grounded strain reliefs:

Connects to DM CAT input of a DM switcher via DM-CBL cable<sup>[1]</sup> **G B A 24:** (1) DMNet port composed of (4) captive screw terminals; Connects to DMNet port of a DM switcher via DM-CBL cable<sup>[1]</sup>

G: (1) Flying lead, chassis ground connection

## **DM Cable Length**

Cable Type:

**DM-CBL** DigitalMedia CableMaximum length<sup>[1]</sup>:

- 175 ft (53 m) for 720p, 1080i, 1080p24
- 175 ft (53 m) for 1024x768 @75Hz
- 125 ft (38 m) for 1080p60
- 125 ft (38 m) for 1280x1024 @75Hz
- 125 ft (38 m) for 1920x1200 @60Hz
- 100 ft (30 m) for 1600x1200 @60Hz

#### **Controls & Indicators**

**PWR/LINK:** (1) dual-color amber/green LED, amber indicates operating power supplied via DMNet, green indicates HDMI input signal presence/lock status **RESET:** (1) miniature recessed pushbutton for hardware reset

SW1, SW2 (rear): (2) Toggle switches, used to enable DMNet slave mode to allow firmware update directly from a control system

## **Power Requirements**

DMNet Power Usage: 4 Watts (0.17 Amps @ 24 Volts DC)

#### **Environmental**

**Temperature**: 32° to 104°F (0° to 40°C) **Humidity**: 10% to 90% RH (non-condensing)

**Heat Dissipation:** 14 BTU/Hr

### **Enclosure**

Construction: Metal

Flush Mount: Mounts in a 1-gang electrical box or in a 1-gang opening in a typical 6 inch deep floor box, 2.5 inch minimum mounting depth required, decorator style faceplate not included

**Rack Mount:** Mountable to a single 19-inch EIA rack rail

Dimensions

Height: 4.12 in (105 mm) Width: 1.72 in (44 mm) Depth: 2.09 in (53 mm)

## **Weight**

5.9 oz (166 g)

**Available Models** 

DM-TX1-1G: Wall Plate DigitalMedia™ CAT Transmitter, Black Textured DM-TX1-1G-W-T: Wall Plate DigitalMedia™ CAT Transmitter, White Textured

#### **Available Accessories**

**DM-CBL-NP-SP500:** DigitalMedia<sup>™</sup> Cable, non-plenum, 500 ft spool **DM-CBL-P-SP500:** DigitalMedia<sup>™</sup> Cable, plenum-rated, 500 ft spool

CBL-HD-LOCK-2: Locking High-Speed HDMI® Cable, 2 ft

CBL-HD-LOCK-4: Locking High-Speed HDMI® Cable, 4 ft

CBL-HD-LOCK-8: Locking High-Speed HDMI® Cable, 8 ft

CBL-HD-LOCK-16: Locking High-Speed HDMI® Cable, 16 ft

CBL-HD-1.5: Crestron® Certified HDMI® Interface Cable, 1.5 ft

 $\textbf{CBL-HD-3: Crestron} \& \ \ \textbf{Certified HDMI} \& \ \ \textbf{Interface Cable, 3 ft}$ 

 $\textbf{CBL-HD-6:} \ \ \textbf{Crestron} \\ \textbf{@} \ \ \textbf{Certified} \ \ \textbf{HDMI} \\ \textbf{@} \ \ \textbf{Interface} \ \ \textbf{Cable}, \ \textbf{6} \ \ \textbf{ft}$ 

**CBL-HD-12:** Crestron® Certified HDMI® Interface Cable, 12 ft

CBL-HD-20: Crestron® Certified HDMI® Interface Cable, 20 ft CBL-HD-30: Crestron® Certified HDMI® Interface Cable, 30 ft

CBL-HD-DVI-1.5: Crestron® Certified HDMI® to DVI Interface Cable, 1.5 ft

CBL-HD-DVI-3: Crestron® Certified HDMI® to DVI Interface Cable, 3 ft

CBL-HD-DVI-6: Crestron® Certified HDMI® to DVI Interface Cable, 6 ft

CBL-HD-DVI-12: Crestron® Certified HDMI® to DVI Interface Cable, 12 ft

CBL-HD-DVI-20: Crestron® Certified HDMI® to DVI Interface Cable, 20 ft

**CBL-HD-DVI-30:** Crestron® Certified HDMI® to DVI Interface Cable, 30 ft

MP-WP183-B: Media Presentation Wall Plate - Ethernet, Black MP-WP183-W: Media Presentation Wall Plate - Ethernet, White

#### Notes:

1. For DigitalMedia CAT wiring, use DM-CBL DigitalMedia Cable. DM CAT Repeaters (Model DM-DR) are not supported. Refer to the Crestron DigitalMedia Design Guide, Doc. #4546 for complete system design guidelines.

2. The DM-TX1-1G does not include an external Ethernet port. Local Ethernet connectivity for external devices requires a MP-WP183 or equivalent Ethernet jack with a dedicated LAN connection.

3. HDMI requires an appropriate adapter or interface cable to accommodate a DVI or DisplayPort Multimode signal. CBL-HD-DVI interface cables available separately.

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 www.crestron. com/salesreps or by calling 800-237-2041.

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