

## Wall Plate DigitalMedia 8G+™ Transmitter 200

- > DigitalMedia 8G+™ transmitter and multimedia interface
- > Built-in 2x1 AV switcher with auto-switching and analog audio-breakaway
- > QuickSwitch HD® technology achieves fast, reliable switching
- > Connects to a DM® switcher or receiver over a single CAT type twisted pair cable<sup>[1]</sup>
- > Supports cable lengths up to 330 ft (100 m) using DM 8G® cable or CAT5e<sup>[1]</sup>
- > HDBaseT® Certified — Enables direct connection to other HDBaseT certified equipment
- > Provides HDMI® and RGB/component video inputs<sup>[4]</sup>
- > Also supports DVI and DisplayPort Multimode sources<sup>[3]</sup>
- > Handles video resolutions up to Full HD 1080p
- > Handles computer resolutions up to WUXGA
- > Handles Dolby Digital®, DTS®, and uncompressed 7.1 linear PCM audio
- > HDCP compliant
- > Includes a mini-TRS stereo analog audio input
- > Detects and reports detailed video and audio input information
- > Performs automatic AV signal format management via EDID
- > Enables device control via CEC
- > Enables USB HID signal extension for a local keyboard/mouse
- > Allows quick, easy setup and diagnostics
- > 2-gang wall box mount design
- > Also fits in a typical 6" deep floor box
- > Available in black or white finish
- > Powered via the DM connection or local power pack (included)<sup>[5]</sup>

The DM-TX-200-C-2G installs in a double-gang electrical box to provide a convenient interface for computers and high-definition AV sources as part of a complete Crestron® DigitalMedia™ system. It is ideal for wall, lectern, and floor box applications in a boardroom, classroom, auditorium, or residence. It functions as a DM 8G+™ transmitter and switcher, providing HDMI®, VGA, and analog audio inputs along with a USB HID host port. In addition to DM 8G+, it is also compatible with HDBaseT®, allowing it to be connected directly to the input of an HDBaseT certified display device. It connects to the head end or display location using a single CAT type twisted pair 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>



Faceplates not included.

### DigitalMedia 8G+™

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 latest generation of DM is called DigitalMedia 8G™ (DM 8G®). Engineered for ultra high-bandwidth and ultimate scalability, DM 8G provides a true one-wire lossless transport for moving high-definition video, audio, Ethernet, and control signals over a choice of twisted pair or fiber optic cable.

DM 8G over twisted pair copper wire is called DigitalMedia 8G+ (DM 8G+). DM 8G+ handles uncompressed Full HD 1080p video signals with support for HDCP, as well as computer signals up to WUXGA. All signals are transported over a single CAT type cable, supporting distances up to 330 feet (100 m) using Crestron DM 8G Cable or CAT5e.<sup>[1]</sup>

### HDBaseT® Certified

Crestron DigitalMedia 8G+ technology is designed using HDBaseT Alliance specifications, ensuring interoperability with other HDBaseT certified products. Via its DM 8G+ output, the DM-TX-200-C-2G can be connected directly to an HDBaseT compliant device without requiring a DM receiver.

# DM-TX-200-C-2G Wall Plate DigitalMedia 8G+™ Transmitter 200



DM-TX-200-C-2G-B-T – Front and Rear Views

## Multimedia Computer/AV Interface

The DM-TX-200-C-2G provides simple switching between two inputs. The inputs can be configured to switch automatically or be selected through a Crestron control system. Inputs include:

- **HDMI** — Provides a digital multimedia input for mobile devices, computers, and AV sources with resolutions up to HD 1080p60 and WUXGA. Also handles DVI and DisplayPort Multimode signals using an appropriate adapter or interface cable<sup>[3]</sup>.
- **PC** — This VGA type input handles analog RGB signals up to WUXGA 1920x1200 pixels, as well as analog video up to 1080p60<sup>[4]</sup>. A 1/8" (3.5 mm) stereo audio input is included to accommodate the analog audio signal from an unbalanced line-level source or headphone output.

Note: Audio breakaway capability enables the analog audio input to be used with either video input.

A single CAT type cable connects the DM-TX-200-C-2G to a DM switcher or receiver, or to an HDBaseT device, transporting video, audio, control, networking, and power signals all through one simple RJ45 connection.<sup>[2,5]</sup> Used with a single DM 8G+ Receiver/Room Controller and optional Crestron control system, the DM-TX-200-C-2G affords a simple solution for extending a computer or AV signal to a single display. As part of a larger system using a DM-MD series switcher, multiple DM-TX-200-C-2Gs may be installed to enable the distribution of several sources at different locations to feed multiple displays throughout any room or larger facility.

## USB HID Signal Extension

The DM-TX-200-C-2G functions as a keyboard/mouse extender, allowing a USB HID-compliant keyboard and/or mouse to be connected at the wall plate and used to control a computer or other component located at the central equipment rack or some other location.

## CEC Embedded Device Control

The primary objective of every Crestron system is to enable precisely the control desired for a seamless user experience. DigitalMedia provides an alternative to conventional IR and RS-232 device control by harnessing the CEC (Consumer Electronics Control) signal embedded in HDMI. Through its connection to the control system, the DM-TX-200-C-2G provides a gateway for controlling the connected source device right through the HDMI connection, potentially eliminating the need for any dedicated control wires or IR emitters.

## Simple Wall Box Mounting

The DM-TX-200-C-2G is designed to be installed using a 2-gang electrical box or plaster ring. It also fits a 2-gang opening in a typical 6" deep floor box. The DM cable connects to the rear of the transmitter via a shielded RJ45 DM port. The unit can be powered using the wall mount power pack (included), or via PoDM (Power over DigitalMedia) for a true one-wire solution<sup>[5]</sup>. An array of indicators is provided for easy setup and troubleshooting.

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

## SPECIFICATIONS

### Video

**Switcher:** 2x1 combination digital/analog switch, Crestron QuickSwitch HD®

**Input Signal Types:** HDMI®, DVI<sup>[3]</sup>, DisplayPort Multimode<sup>[3]</sup>, RGB/VGA, component<sup>[4]</sup>, S-Video<sup>[4]</sup>, composite<sup>[4]</sup>

**Output Signal Types:** DM 8G+™ (DigitalMedia™ over one CAT type twisted pair copper wire), HDBaseT®<sup>[1]</sup>

**Formats:** DM 8G+, HDBaseT, HDMI, DVI, HDCP content protection support, RGBHV, RGBS, RGsB, YPbPr, Y/C, NTSC, PAL

# DM-TX-200-C-2G Wall Plate DigitalMedia 8G+™ Transmitter 200

**Input Resolutions, HDMI & DVI, 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, HDMI & DVI, 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

**Input Resolutions, RGB:** 640x480@60Hz, 720x480@60Hz (480p), 720x576@50Hz (576p), 800x600@60Hz, 848x480@60Hz, 1024x768@60Hz, 1280x720@50Hz (720p50), 1280x720@60Hz (720p60), 1280x768@60Hz, 1280x800@60Hz, 1280x960@60Hz, 1280x1024@60Hz, 1360x768@60Hz, 1366x768@60Hz, 1400x1050@60Hz, 1440x900@60Hz, 1600x1200@60Hz, 1680x1050@60Hz, 1920x1080@50Hz (1080p50), 1920x1080@60Hz (1080p60), 1920x1200@60Hz, 2048x1152@60Hz

**Input Resolutions, Component<sup>[4]</sup>:** 480i, 576i, 480p, 576p, 720p50, 720p60, 1080p24, 1080i25 (1125 lines), 1080i30, 1080p30, 1080p50 (1125 lines), 1080p60

**Input Resolutions, Composite and S-Video<sup>[4]</sup>:** 480i, 576i

**Output Resolutions:** Matched to inputs

**Analog-To-Digital Conversion:** 10-bit 165 MHz per each of 3 channels

## Audio

**Switcher:** 2x1 combination digital/analog switch

**Input Signal Types:** HDMI, DisplayPort Multimode<sup>[3]</sup>, analog stereo

**Output Signal Types:** DM 8G+, HDBaseT

**Formats, HDMI:** Dolby Digital®, Dolby Digital EX, DTS®, DTS-ES, DTS 96/24, up to 8ch PCM

**Formats, Analog:** Stereo 2-channel

**Analog-To-Digital Conversion:** 24-bit 48 kHz

**Performance (analog):** Frequency Response: 20Hz to 20kHz ±0.75dB;

S/N Ratio: >90dB, 20Hz to 20kHz A-weighted;

THD+N: <0.05% @ 1kHz;

Stereo Separation: >90dB

## Communications

**USB:** Supports signal extension of USB HID class devices

**DigitalMedia:** DM 8G+, HDCP, EDID, CEC, PoDM, Ethernet

**HDBaseT:** HDCP, EDID, PoH, Ethernet

**HDMI:** HDCP, EDID, CEC

**NOTE:** Supports management of HDCP and EDID; supports management of CEC between the connected HDMI device and a control system

## Connectors – Front

**AUDIO IN:** (1) 3.5mm TRS mini phone jack;

Unbalanced stereo line-level audio input;

Input Level: 2 Vrms maximum;

Input Impedance: 10k Ohms

**USB HID:** (1) USB Type A female; USB 2.0 host port for connection of a mouse/keyboard or other USB HID-compliant device

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

HDMI digital video/audio input;

Also supports DVI and DisplayPort Multimode<sup>[3]</sup>

**PC IN:** (1) DB15HD female;

RGB (VGA), component, S-Video, or composite video input<sup>[4]</sup>;

Formats: RGBHV, RGBS, RGsB, YPbPr, Y/C, NTSC, PAL;

Input Levels: 0.5 to 1.5 Vp-p with built-in DC restoration;

Input Impedance: 75 Ohms;

Sync Input Type: Autodetect RGBHV, RGBS, RGsB, YPbPr;

Sync Input Level: 3 to 5 Vp-p;

Sync Input Impedance: 1k Ohms

## Connectors – Rear

**DM OUT:** (1) 8-pin RJ45 female, shielded;

DM 8G+ output, HDBaseT compliant;

PoDM and PoH PD (Powered Device) port<sup>[5]</sup>;

Connects to the DM 8G+ input of a DM switcher, receiver/room controller,

or other DM device, or to a HDBaseT device, via CAT5e or Crestron

DM-CBL-8G cable<sup>[1]</sup>;

Note: RJ45 jack is recessed to accommodate long male cable connectors

**24VDC 0.7A:** (1) 2-pin captive screw terminal block;

24 Volt DC power input;

PW-2407WUL power pack included

**G:** (1) 6-32 screw, chassis ground lug

## Controls & Indicators

**PWR:** (1) green LED, indicates operating power supplied via PoDM, PoH, or power pack

**RESET:** (1) miniature recessed pushbutton for hardware reset

**SETUP:** (1) red LED and (1) miniature recessed pushbutton for Ethernet setup

**8G LINK:** (1) green LED, indicates DM link status

**8G ACTV:** (1) yellow LED, indicates video and HDCP signal presence

**HDMI:** (1) green LED, indicates HDMI input is selected

**PC:** (1) green LED, indicates PC input is selected

**DM OUT (rear):** (2) LEDs, green LED indicates DM link status, amber LED indicates video and HDCP signal presence

## Power Requirements

**Power Pack:** 0.75 Amps @ 24 Volts DC;

100-240 Volts AC, 50/60 Hz power pack, model PW-2407WUL included

# DM-TX-200-C-2G Wall Plate DigitalMedia 8G+™ Transmitter 200

**Power over DM (PoDM):** PoDM PD (Powered Device), capable of being powered by a PoDM PSE (Power Sourcing Equipment), conforms to IEEE 802.3af (802.3at Type 1) Class 3 (12.95W)<sup>[6]</sup>

**Power over HDBaseT (PoH):** PoH PD (Powered Device), capable of being powered by a PoH PSE (Power Sourcing Equipment), conforms to IEEE 802.3af (802.3at Type 1) Class 3 (12.95W)<sup>[6]</sup>

Note: May be powered via power pack or PoDM/PoH, not both.

## Environmental

**Temperature:** 32° to 95°F (0° to 35°C)

**Humidity:** 10% to 90% RH (non-condensing)

**Heat Dissipation:** 36 BTU/hr

## Enclosure

**Construction:** Metal

**Flush Mount:** Mounts in a 2-gang electrical box or in a 2-gang opening in a typical 6 inch deep floor box, 2.5 inch minimum mounting depth required, decorator style faceplate not included

## Dimensions

**Height:** 4.12 in (105 mm)

**Width:** 3.50 in (89 mm)

**Depth:** 2.65 in (68 mm)

## Weight

14.2 oz (403 g)

## MODELS & ACCESSORIES

### Available Models

**DM-TX-200-C-2G-B-T:** Wall Plate DigitalMedia 8G+™ Transmitter 200, Black Textured

**DM-TX-200-C-2G-W-T:** Wall Plate DigitalMedia 8G+™ Transmitter 200, White Textured

### Included Accessories

**PW-2407WUL:** Wall Mount Power Pack 24VDC, 0.75A, Universal (Qty. 1 included)

### Available Accessories

**DM-CBL-8G-NP:** DigitalMedia 8G™ Cable, non-plenum

**DM-CBL-8G-P:** DigitalMedia 8G™ Cable, plenum

**DM-8G-CONN:** Connector for DM-CBL-8G

**DM-8G-CRIMP:** Crimping Tool for DM-8G-CONN

**DM-8G-CONN-WG:** Connector with Wire Guide for DM-CBL-8G

**DM-8G-CRIMP-WG:** Crimping Tool for DM-8G-CONN-WG

**CBL Series:** Crestron® Certified Interface Cables

**MP-WP183:** Media Presentation Wall Plate – Ethernet

### Notes:

1. For DM 8G+ or HDBaseT wiring, use Crestron [DM-CBL-8G](#) DigitalMedia 8G Cable or third-party CAT5e (or better) UTP or STP. (Crestron legacy [DM-CBL](#) DigitalMedia Cable or [DM-CBL-D](#) DigitalMedia D Cable may also be used.) The maximum wire length for DM 8G+ is 330 ft (100 m) between devices. Shielded cable and connectors are recommended to safeguard against unpredictable environmental electrical noise which may impact performance at resolutions above 1080p. Refer to the [Crestron DigitalMedia Design Guide, Doc. #4546](#) for complete system design guidelines. DM 8G+ is compatible with HDBaseT Alliance specifications for connecting to HDBaseT compliant equipment. All wire and cables are sold separately.
2. The DM-TX-200-C-2G 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 are available separately.
4. The PC/RGB/VGA input can actually accept component, composite, and S-Video signals through an appropriate adapter (not included), or via direct interface to Crestron MPS Series products. However, input sync detection is not provided for composite or S-Video signal types through this connection.
5. Receiving Power over DM (PoDM) or Power over HDBaseT (PoH) requires connection to a switcher or other equipment that has a PoDM or PoH PSE (Power Sourcing Equipment) port. Any wiring that is connected to a PoDM or PoH PSE port is for intra-building use only and should not be connected to a line that runs outside of the building in which the PSE is located.
6. References to the IEEE 802.3af and 802.3at standards are used to demonstrate that PoDM and PoH technology is similar in function to PoE and follows the same essential specifications. The DM-TX-200-C-2G cannot be powered over Ethernet, and its DM OUT port should not be connected directly to an Ethernet network or device.

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](http://www.crestron.com/salesreps) or by calling 800-237-2041.

The specific patents that cover Crestron products are listed online at: [patents.crestron.com](http://patents.crestron.com).

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