

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^[1]
- > Supports cable lengths up to 330 ft (100 m) using DM 8G® cable or CAT5e^[1]
- > HDBaseT® Certified — Enables direct connection to other HDBaseT certified equipment
- > Provides HDMI® and RGB/component video inputs^[4]
- > Also supports DVI and Dual-Mode DisplayPort™ sources^[3]
- > 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 (2-3/4 in. deep)
- > Also fits in a typical 6 in. deep floor box
- > Available in black or white finish
- > Powered via the DM connection or local power pack (sold separately)^[5,6]

The DM-TX-200-C-2G provides an 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.^[1] Standard gang-box mounting (2-3/4 in. deep) allows for installation adjacent to an Ethernet jack (Crestron MP-WP183 or equivalent) for a total connectivity solution.^[2]



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.^[1]

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.

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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 Dual-Mode DisplayPort™ signals using an appropriate adapter or interface cable.^[3]
- **PC** — This VGA type input handles analog RGB signals up to WUXGA 1920x1200 pixels, as well as analog video up to 1080p60.^[4] A 1/8 in. (3.5 mm) stereo audio input is included to accommodate the analog audio signal from an unbalanced line-level source or headphone output.

Note: Analog 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.^[2,5,6] 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

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 2-3/4 in. deep 2-gang electrical box or plaster ring (not included). It also fits a 2-gang opening in a typical 6 in. 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 a 2407WUL power pack (sold separately), or PoDM (Power over DigitalMedia) for a true one-wire solution.^[5,6] 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 auto-switching, auto-detecting multi-format digital/analog inputs; Crestron QuickSwitch HD technology

Input Signal Types: HDMI (DVI & Dual-Mode DisplayPort compatible^[3]), RGB/VGA (RGBHV, RGBS, RGsB); component (YPbPr); S-Video (Y/C); composite (NTSC, PAL)^[4]

Output Signal Types: DM 8G+ & HDBaseT

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Resolutions, HDMI, 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 165 MHz pixel clock

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

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

Resolutions, Component^[4]: 480i, 576i, 480p, 576p, 720p50, 720p60, 1080p24, 1080i25 (1125 lines), 1080i30, 1080p30, 1080p50 (1125 lines), 1080p60

Resolutions, Composite & S-Video^[4]: 480i, 576i

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

Audio

Switcher: 2x1 with auto-detecting digital/analog inputs and analog audio breakaway

Input Signal Types: HDMI (Dual-Mode DisplayPort compatible^[3]), analog stereo

Output Signal Types: DM 8G+ & HDBaseT

Digital Formats: Dolby Digital®, Dolby Digital EX, DTS®, DTS-ES, DTS 96/24, 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: <0.05% @ 1 kHz;
Stereo Separation: >90 dB

Communications

USB: Supports signal extension of USB HID class devices

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

HDBaseT: HDCP, EDID, PoE, 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) 3.5 mm 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;
(DVI & Dual-Mode DisplayPort compatible^[3])

PC IN: (1) HD15 female;
Analog VGA/RGB/video input;
Signal Types: VGA, RGB, component, S-Video, or composite^[4];
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 PD port (HDBaseT PoE compatible)^[5,6];
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^[1];

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

24VDC 0.7A: (1) 2-pin captive screw terminal block;
24 VDC power input;
PW-2407WUL power pack (sold separately)

G: (1) 6-32 screw;
Chassis ground lug

Controls & Indicators

PWR: (1) Green LED, indicates operating power supplied via PoDM, HDBaseT PoE, or power pack

RESET: (1) Recessed pushbutton for hardware reset

SETUP: (1) Red LED and (1) 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

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Power

Power Pack (sold separately): Input: 100-240 VAC, 50/60 Hz
Output: 0.75 Amps @ 24 VDC
Model: PW-2407WUL

Power over DM (PoDM): IEEE 802.3at Type 1 Class 3 (12.95 W) compliant PoDM PD (Powered Device), capable of being powered by a PoDM PSE (Power Sourcing Equipment) ^[5]

Power over HDBaseT: IEEE 802.3at Type 1 Class 3 (12.95 W) compliant HDBaseT PoE PD (Powered Device), capable of being powered by an HDBaseT PoE PSE (Power Sourcing Equipment) ^[6]

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, black finish with white or black polycarbonate label overlays
Flush Mount: Mounts in a 2-gang 2-3/4 in. deep electrical box or plaster ring, or in a 2-gang opening in a typical 6 in. deep floor box, requires a 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

Available Accessories

PW-2407WUL: Wall Mount Power Pack 24 VDC, 0.75 A, Universal
DM-PSU-ULTRA-MIDSPAN: DigitalMedia™ Ultra Midspan PoDM++ Injector
FP-G2-DM-B-T: 2-Gang Decorator Style Faceplate for HD-MD-300-C-E and DM-TX-200-C-2G Series, Black Textured
FP-G2-DM-W-T: 2-Gang Decorator Style Faceplate for HD-MD-300-C-E and DM-TX-200-C-2G Series, White Textured
DM-CBL-ULTRA-PC: DigitalMedia™ Ultra Patch Cables
DM-CONN-ULTRA-RECP: DigitalMedia™ Ultra Keystone RJ45 Jack
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. 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 PC 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. To power the DM-TX-200-C-2G using PoDM (Power over DigitalMedia) requires connection to a DM switcher or other equipment that has a PoDM PSE port. Any wiring that is connected to a PoDM 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. To power the DM-TX-200-C-2G using HDBaseT PoE requires connection to a switcher or other equipment that has an HDBaseT PoE PSE port. Any wiring that is connected to an HDBaseT PoE 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.

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.

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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