

Wall Plate DigitalMedia 8G+™ Transmitter 200

- > DigitalMedia 8G+™ transmitter and multimedia interface
- > Built-in 2x1 AV switcher
- > DM 8G+™ output supports up to 330 ft cable length^[1]
- > 2-gang wall mount design with integral faceplate
- > Provides HDMI® and RGB/component video inputs^[3]
- > Also supports DVI and DisplayPort Multimode sources^[2]
- > Includes mini-TRS stereo audio input
- > Provides onboard auto-switching capability
- > Includes USB HID keyboard/mouse port
- > Powered over the DM connection or local power pack^[4]
- > Affords a true one-wire connection to a DM® switcher or receiver
- > Detects and reports detailed video and audio input information
- > Performs automatic AV signal format management via EDID
- > Enables device control via CEC
- > Allows quick, easy setup and diagnostics
- > Extends the life of analog-based AV systems

The DM-TX-200-C-2G-WALL is a DM 8G+™ transmitter and switcher that installs in a double-gang wall box to provide a convenient interface for computers and high-definition AV sources as part of a complete DigitalMedia™ system. With both HDMI® and RGB inputs, the DM-TX-200-C-2G-WALL is ideal for wall and lectern applications in a boardroom, classroom, or residence to provide an input for a laptop computer or similar source. It connects to the head end or display location using a single CAT5e or Crestron® DM 8G® cable.

DigitalMedia 8G+™

As the leader in HDMI and control system technologies, Crestron developed DigitalMedia to deliver the first complete HD AV distribution system to take HDMI to a higher level. DigitalMedia allows virtually any mix of AV sources to be distributed throughout the home, office, school, or virtually any other facility.

DigitalMedia 8G+ breaks even further ground, providing a true one-wire transport for moving high-definition video, audio, and Ethernet over low-cost twisted-pair cable without any compression or repeaters. Just one 8-conductor twisted-pair cable is required, supporting distances up to 330 feet (100 m) using Crestron [DM 8G Cable](#) or CAT5e.^[1]

DigitalMedia thoughtfully manages all of the various AV signals and devices in your system, matching each source's output to the capabilities of the selected display(s). Every signal is preserved in its native video resolution and audio format, ensuring a pure, lossless signal path throughout.

Multimedia Computer/AV Interface

The DM-TX-200-C-2G-WALL provides simple switching between two inputs. Its HDMI input supports HDCP and handles WUXGA computer resolutions and 1080p60 HDTV with multi-channel lossless audio. The HDMI input can also handle DVI and DisplayPort Multimode signals using an appropriate adapter or dongle^[2]. The RGB input handles all analog RGB



and VGA signals up to WUXGA 1920x1200 pixels, as well as analog video up to 1080p60^[3]. A mini-TRS stereo audio input is also provided to accept analog audio signals from an unbalanced line-level or headphone output.

A single cable connects the DM-TX-200-C-2G-WALL to a DM® switcher or receiver, transporting video, audio, control, networking, and power signals all through one simple RJ45 connection.^[1,4] Used with a single DM 8G+ Receiver/Room controller and optional Crestron Control System, the DM-TX-200-C-2G-WALL affords a very simple solution for extending a multimedia computer or AV signal to a single display up to 330 feet (100 m) away^[1]. As part of a larger system using a DM-MD series switcher, multiple DM-TX-200-C-2G-WALLs may be installed to enable the distribution of several sources at different locations to feed multiple displays throughout any room or larger facility.

Keyboard/Mouse Extender

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

EDID Format Management

The DM-TX-200-C-2G-WALL allows for management of the EDID (Extended Display Identification Data) information that passes between the display devices and input sources in the system. Using [Crestron Toolbox™](#) software, the format and resolution capabilities of each device can be assessed and managed through the DM-TX-200-C-2G-WALL, ensuring reliable operation by instructing sources to output only the resolutions and formats that can be handled by the displays and system wiring.

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-WALL 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 probes. Through proper CEC signal management, DigitalMedia allows you to take control of each device in the system as you like.

Simple Wall Mount Design

The DM-TX-200-C-2G-WALL is designed to be wall mounted using a standard electrical box or plaster ring. It features an integral metal faceplate, which also serves as a heat sink. 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 DM) for a true one-wire solution^[4]. An array of indicators on the front of the DM-TX-200-C-2G-WALL provides for easy setup and troubleshooting. Advanced configuration is enabled through Crestron Toolbox software.

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^[2], DisplayPort Multimode^[2], RGB, component (YPbPr)^[3], S-Video (Y/C)^[3], composite^[3]

Output Signal Type: DM 8G+ (DigitalMedia over one CAT5e twisted-pair copper wire)^[1]

Formats: HDMI, DVI, HDCP content protection support, computer up to UXGA/WUXGA, HDTV up to 1080p60, NTSC or PAL

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^[3]: 480i, 576i, 480p, 576p, 720p50,

720p60, 1080p24, 1080i25 (1125 lines), 1080i30, 1080p30, 1080p50 (1125 lines), 1080p60

Input Resolutions, Composite and S-Video^[3]: 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^[2], analog stereo

Output Signal Type: DM 8G+

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

DigitalMedia: DM 8G+, HDCP management, EDID format management, CEC, PoDM

USB: Supports USB HID class devices

Connectors – Front

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

Unbalanced stereo line-level audio input;

Input Impedance: 10k Ohms;

Input Level: 2 Vrms maximum

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^[2]

PC IN: (1) DB15HD female;

RGB (VGA), component, S-Video, or composite video input^[3];

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, accepts PoDM (Power over DM)^[4];

Connects to DM 8G+ input of a DM switcher, receiver/room controller, or other DM 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 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 or power pack

RESET: (1) miniature recessed pushbutton for hardware reset

SETUP: (1) red LED and (1) miniature recessed pushbutton for Ethernet auto-discovery

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

Power over DM (PoDM): Receives power from a DM 8G+ PoDM power sourcing device

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

Environmental

Temperature: 32° to 95°F (0° to 35°C)

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

Heat Dissipation: 43 BTU/hr

Enclosure

Construction: Metal chassis with black metal faceplate

Flush Wall Mount: 2-gang mountable in a standard electrical box (2.5 inch deep minimum)

Dimensions

Height: 4.70 in (120 mm)

Width: 4.70 in (120 mm)

Depth: 2.68 in (68 mm)

Weight

18.6 oz (526 g)

MODELS & ACCESSORIES

Available Models

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

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-100: DigitalMedia 8G™ Cable Connector, 100-Pack

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

CBL-HD: Crestron® Certified HDMI® Interface Cable

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

CBL-VGA: Crestron® Certified Computer VGA Interface Cable

CBL-VGA-AUD: Crestron® Certified Computer VGA Interface Cable w/Audio

CBL-AUDIO: Crestron® Certified Mini-TRS Stereo Audio Interface Cable

Notes:

1. For DM 8G+ wiring up to 330 ft (100 m) between devices, use Crestron [DM-CBL-8G](#) DigitalMedia 8G Cable, Crestron [DM-CBL](#) DigitalMedia Cable, Crestron [DM-CBL-D](#) DigitalMedia D Cable, or generic CAT5e (or better) UTP or STP. Shielded cable and connectors are recommended to safeguard against unpredictable environmental electrical noise which may impact performance at resolutions above 1080p. Refer to the [DigitalMedia Infrastructure Guide, Doc. #4556](#) for complete wiring guidelines, and the [Crestron DigitalMedia Design Guide, Doc. #4789](#) for complete system design guidelines. All cable sold separately.
2. HDMI requires an appropriate adapter or interface cable to accommodate a DVI or DisplayPort Multimode signal. [CBL-HD-DVI](#) interface cables available separately.
3. The RGB input can accept component, composite, and S-Video signals via direct interface to Crestron MPS Series products, or through an appropriate adapter (not included). Input sync detection is not provided for composite or S-Video signal types through the RGB connection.
4. Power over DM requires connection to a DM 8G+ PoDM power sourcing 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 or by calling 800-237-2041.

Specifications subject to change without notice. Crestron is not responsible for errors in typography or photography.

Crestron, Crestron Toolbox, DigitalMedia, DigitalMedia 8G+, DM, DM 8G, DM 8G+, QuickSwitch HD, and the Crestron logo are trademarks or registered trademarks of Crestron Electronics, Inc. in the United States and other countries. Dolby, Dolby Digital, and the double-D symbol are either trademarks or registered trademarks of Dolby Laboratories in the United States and/or other countries. DTS and the DTS logos and Symbol are either trademarks or registered trademarks of DTS, Inc. in the United States and/or other countries. HDMI and the HDMI Logo are either trademarks or registered trademarks of HDMI Licensing LLC in the United States and/or other countries. Other trademarks and trade names may be used in this document to refer to either the entities claiming the marks and names or their products. Crestron disclaims any proprietary interest in the marks and names of others. ©2011 Crestron Electronics, Inc.

