

DM-TX-201-S

DigitalMedia 8G™ Fiber Transmitter 201

The DM-TX-201-S is a DM 8G™ Fiber transmitter and switcher that provides a convenient interface for computers and other high-resolution AV sources as part of a complete DigitalMedia™ system. With both HDMI® and RGB inputs, the DM-TX-201-S is ideal for use at a lectern, conference table, wall plate, or any remote location in a boardroom, classroom, or residence to provide an input for a laptop computer, DVD player, or similar source. It connects to the head end or display location via a single multimode fiber strand.

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 is the latest generation of DM®, providing the world's only truly professional, one-wire digital AV distribution and control network. Using the DM-TX-201-S, DM 8G handles uncompressed video beyond high-definition with support for HDCP, plus uncompressed multichannel PCM audio, and high-speed Ethernet, all over one simplex multimode fiber. DM 8G enables wire distances up to 1000 ft using CresFiber® 8G Fiber Optic Cable.^[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) without relying on scaling or compression. 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-201-S 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 analog RGB signals up to WUXGA 1920x1200 pixels, as well as component 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 fiber strand connects the DM-TX-201-S to a DM switcher or receiver, transporting video, audio, control, and networking signals all through one simple SC type optical connection.^[1] Used with a single DM 8G Fiber Receiver/Room Controller and optional Crestron Control System, the DM-TX-201-S affords a very simple solution for extending a multimedia computer or AV signal to a single display up to 1000 feet (300 m) away^[1]. As part of a larger system using a DM-MD series switcher, multiple DM-TX-201-Ss may be installed to enable the distribution of several sources at different locations to feed multiple displays throughout any room or larger facility.

In addition to its DM output, there is also an HDMI output provided to feed a local HDMI or DVI monitor, eliminating the need for an extra outboard distribution amp or other hardware.

LAN Connectivity

Along with high-definition AV and control, DigitalMedia also integrates high-speed Ethernet networking for a total signal distribution solution. The DM-TX-201-S includes a 10/100 Ethernet port, providing a convenient LAN connection for a local network



device.

Keyboard/Mouse Extender

The DM-TX-201-S also functions as a keyboard/mouse extender, providing a USB port which connects to the source device (i.e. computer or other USB HID-compliant host device), allowing it to be controlled by a mouse or keyboard located in another room, or at a presentation lectern, conference table, or some other remote location.

EDID Format Management

The DM-TX-201-S 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-201-S, 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-201-S 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.

Compact and Versatile

The DM-TX-201-S is designed to be mounted to a flat surface or placed on a shelf. It is compact enough to fit discreetly inside a presentation lectern or beneath a table, and can even be attached to a rack rail in the back of an equipment cabinet. An array of indicators on the DM-TX-201-S provides for easy setup and troubleshooting, verifying the status of connections and signal activity at a glance.

A Digital Upgrade for Legacy Systems

The DM-TX-201-S also affords a perfect signal converter for integrating DigitalMedia with analog-based systems like Crestron MPS, QuickMedia®, and the CEN-RGBHV Series. A simple HD15 VGA cable

DM-TX-201-S DigitalMedia 8G™ Fiber Transmitter 201

connected between the output of an MPS system and the input of the DM-TX-201-S allows every RGB, component, S-Video, and composite video input on the MPS to be converted to DigitalMedia^[3]. Analog audio is converted similarly through a simple unbalanced stereo audio cable. The DM-TX-201-S's HDMI input may also be used to expand the input capabilities of the MPS system to handle digital AV sources.

Please refer to the *DigitalMedia Design Guide, Doc. #4789* for additional information.

- > *DigitalMedia 8G™ transmitter and multimedia interface*
- > *Built-in 2x1 AV switcher*
- > *DM 8G™ Fiber output supports up to 1000 ft cable length^[1]*
- > *Low-profile surface-mount design*
- > *Provides HDMI® and RGB/component video inputs*
- > *Also supports DVI and DisplayPort Multimode sources^[2]*
- > *Handles HD video with HDCP, and multichannel PCM audio*
- > *Includes mini-TRS stereo audio input*
- > *Provides onboard auto-switching capability*
- > *Includes a local HDMI monitor output*
- > *Includes USB HID device port for connection to a computer*
- > *Provides 10/100 Ethernet connection*
- > *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*

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 Types: DM 8G™ Fiber (DigitalMedia™ over simplex multimode fiber optic cable), HDMI, DVI^[2]

Formats: HDMI, DVI, HDCP content protection support, RGBHV 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),

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@24Hz (1080p24), 1920x1080@50Hz (1080p50), 1920x1080@60Hz (1080p60), 1920x1200@60Hz, 2048x1080@24Hz, 2048x1152@60Hz

Input Resolutions, Component^[3]: 480i, 576i, 480p, 576p, 720p50, 720p60, 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 Types: DM 8G Fiber, HDMI

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 Fiber, HDCP management, EDID format management, CEC

Ethernet: 10BaseT/100BaseTX, auto-switching, auto-negotiating, auto-discovery, full/half duplex, TCP/IP, UDP/IP, CIP, DHCP, rSTP

USB: Supports USB HID class devices

Connectors

LAN: (1) 8-wire RJ45 female, shielded;

10BaseT/100BaseTX Ethernet port

DM OUT MMF/SC: (1) SC female optical fiber connector;

DM 8G Fiber output ;

Connects to DM 8G Fiber input of a DM switcher, receiver/room controller, or other DM device via CresFiber 8G fiber optic cable^[1]

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

HDMI digital video/audio output;

Also supports DVI^[2]

PWR 24VDC 0.75A: (1) 2.1mm barrel DC power jack;

24 Volt DC power input;

PW-2407WU power pack included

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

USB HID: (1) USB Type B female;

USB 1.1 device port for connection to the USB host interface of a computer or other USB HID-compliant host device

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

HDMI digital video/audio input;

Also supports DVI and DisplayPort Multimode^[2]

RGB IN: (1) DB15HD female, RGB (VGA) or component (YPbPr) video input^[3];

Formats: RGBHV, RGBS, RGSB, YPbPr;

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

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

Unbalanced stereo line-level audio input;

Input Impedance: 10k Ohms;

Input Level: 2 Vrms maximum

Controls & Indicators LAN: (2) LEDs, green LED indicates

DM-TX-201-S DigitalMedia 8G™ Fiber Transmitter 201

Environmental

Temperature: 32° to 104°F (0° to 40°C)
Humidity: 10% to 90% RH (non-condensing)
Heat Dissipation: 61 BTU/Hr

Enclosure

Chassis: Metal, black finish, with (2) integral mounting flanges, vented sides
Mounting: Freestanding, surface mount, or attach to a single rack rail

Dimensions

Height: 6.47 in (165 mm)
Width: 7.36 in (187 mm)
Depth: 1.24 in (32 mm)

Weight

24.3 oz (689 g)

Available Models

DM-TX-201-S: DigitalMedia 8G™ Fiber Transmitter 201

Included Accessories

PW-2407WU Wall Mount Power Pack 24VDC, 0.75A, Universal [Included Quantity: 1]

Available Accessories

CRESFIBER8G-NP-SP500: CresFiber® 8G Fiber Optic Cable, 50/125 x4 breakout, non-plenum, 500 ft spool
CRESFIBER8G-NP-SP1000: CresFiber® 8G Fiber Optic Cable, 50/125 x4 breakout, non-plenum, 1000 ft spool
CRESFIBER8G-P-SP500: CresFiber® 8G Fiber Optic Cable, 50/125 x4 breakout, plenum, 500 ft spool
CRESFIBER8G-P-SP1000: CresFiber® 8G Fiber Optic Cable, 50/125 x4 breakout, plenum, 1000 ft spool
CRESFIBER-CONN-SC50UM-12: CresFiber® Fiber Optic Cable Connector (AFL Telecommunications™), SC 50µm, 12-Pack
CRESFIBER-SINGLE-SC-P-1.5: CresFiber® Simplex Fiber Optic Cable Assembly, 50/125, SC, Plenum, 1.5 ft
CRESFIBER-SINGLE-SC-P-3: CresFiber® Simplex Fiber Optic Cable Assembly, 50/125, SC, Plenum, 3 ft
CRESFIBER-SINGLE-SC-P-6: CresFiber® Simplex Fiber Optic Cable Assembly, 50/125, SC, Plenum, 6 ft
CRESFIBER-SINGLE-SC-P-12: CresFiber® Simplex Fiber Optic Cable Assembly, 50/125, SC, Plenum, 12 ft
CRESFIBER-SINGLE-SC-P-20: CresFiber® Simplex Fiber Optic Cable Assembly, 50/125, SC, Plenum, 20 ft
CRESFIBER-SINGLE-SC-P-30: CresFiber® Simplex Fiber Optic Cable Assembly, 50/125, SC, Plenum, 30 ft
CRESFIBER-SINGLE-SC-ARMORED-P-60: CresFiber® ARMORED Simplex Fiber Optic Cable Assembly, 50/125, SC, Armored, Plenum, 60 ft
CRESFIBER-SINGLE-SC-ARMORED-P-100: CresFiber® ARMORED Simplex Fiber Optic Cable Assembly, 50/125, SC, Armored, Plenum, 100 ft
CRESFIBER-SINGLE-SC-ARMORED-P-200: CresFiber® ARMORED Simplex Fiber Optic Cable Assembly, 50/125, SC, Armored, Plenum, 200 ft
CRESFIBER-SINGLE-SC-ARMORED-P-300: CresFiber® ARMORED Simplex Fiber Optic Cable Assembly, 50/125, SC, Armored, Plenum, 300 ft
CRESFIBER-SINGLE-SC-CLEAR-NP-30: CresFiber® CLEAR Simplex Fiber Optic Cable Assembly, 50/125, SC, Non-Plenum, 30 ft
CRESFIBER-SINGLE-SC-CLEAR-NP-60: CresFiber® CLEAR Simplex Fiber Optic Cable Assembly, 50/125, SC, Non-Plenum, 60 ft
CRESFIBER-SINGLE-SC-CLEAR-NP-100: CresFiber® CLEAR Simplex Fiber Optic Cable Assembly, 50/125, SC, Non-Plenum, 100 ft
CBL-HD-1.5: Crestron® Certified HDMI® to Interface Cable, 1.5 ft
CBL-HD-3: Crestron® Certified HDMI® Interface Cable, 3 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
CBL-DP-HD-1.5: Crestron® Certified DisplayPort to HDMI® Interface Cable, 1.5 ft [Discontinued]
CBL-DP-HD-3: Crestron® Certified DisplayPort to HDMI® Interface Cable, 3 ft [Discontinued]
CBL-DP-HD-6: Crestron® Certified DisplayPort to HDMI® Interface Cable, 6 ft [Discontinued]
CBL-DP-HD-12: Crestron® Certified DisplayPort to HDMI® Interface Cable, 12 ft [Discontinued]
CBL-DP-HD-20: Crestron® Certified DisplayPort to HDMI® Interface Cable, 20 ft [Discontinued]
CBL-DP-HD-30: Crestron® Certified DisplayPort to HDMI® Interface Cable, 30 ft [Discontinued]
CBL-VGA-1.5: Crestron® Certified Computer VGA Interface Cable, 1.5 ft
CBL-VGA-3: Crestron® Certified Computer VGA Interface Cable, 3 ft
CBL-VGA-6: Crestron® Certified Computer VGA Interface Cable, 6 ft
CBL-VGA-12: Crestron® Certified Computer VGA Interface Cable, 12 ft
CBL-VGA-25: Crestron® Certified Computer VGA Interface Cable, 25 ft
CBL-VGA-AUD-3: Crestron® Certified Computer VGA Interface Cable w/ Audio, 3 ft
CBL-VGA-AUD-6: Crestron® Certified Computer VGA Interface Cable w/ Audio, 6 ft
CBL-VGA-AUD-12: Crestron® Certified Computer VGA Interface Cable w/ Audio, 12 ft
CBL-VGA-AUD-25: Crestron® Certified Computer VGA Interface Cable w/ Audio, 25 ft
CBL-AUDIO-1.5: Crestron® Certified Mini-TRS Stereo Audio Interface Cable, 1.5 ft
CBL-AUDIO-3: Crestron® Certified Mini-TRS Stereo Audio Interface Cable, 3 ft
CBL-AUDIO-6: Crestron® Certified Mini-TRS Stereo Audio Interface Cable, 6 ft
CBL-AUDIO-12: Crestron® Certified Mini-TRS Stereo Audio Interface Cable, 12 ft
MP-WP150-B: Media Presentation Wall Plate - HDMI® w/Mini-TRS Stereo Audio, Black
MP-WP150-W: Media Presentation Wall Plate - HDMI® w/Mini-TRS Stereo Audio, White
MP-WP152-B: Media Presentation Wall Plate - HDMI®, Black
MP-WP152-W: Media Presentation Wall Plate - HDMI®, White
MP-WP140-B: Media Presentation Wall Plate - DVI-I w/Mini-TRS Stereo Audio, Black
MP-WP140-W: Media Presentation Wall Plate - DVI-I w/Mini-TRS Stereo Audio, White
MP-WP160-B: Media Presentation Wall Plate - DisplayPort w/Mini-TRS Stereo Audio, Black
MP-WP160-W: Media Presentation Wall Plate - DisplayPort w/Mini-TRS Stereo Audio, White
MP-WP162-B: Media Presentation Wall Plate - DisplayPort, Black
MP-WP162-W: Media Presentation Wall Plate - DisplayPort, White
MP-WP130-B: Media Presentation Wall Plate - DB15HD Computer VGA w/ Mini-TRS Stereo Audio, Bulkhead, Black
MP-WP130-W: Media Presentation Wall Plate - DB15HD Computer VGA w/ Mini-TRS Stereo Audio, Bulkhead, White
MP-WP131-B: Media Presentation Wall Plate - DB15HD Computer VGA w/ Mini-TRS Stereo Audio, Breakout, Black
MP-WP131-W: Media Presentation Wall Plate - DB15HD Computer VGA w/ Mini-TRS Stereo Audio, Breakout, White

Notes:

1. All cable sold separately. The maximum DigitalMedia 8G Fiber cable

DM-TX-201-S DigitalMedia 8G™ Fiber Transmitter 201

list of sales representatives is available online at www.crestron.com/salesreps or by calling 800-237-2041.

Crestron, CresFiber, Crestron Toolbox, DigitalMedia, DigitalMedia 8G, DM, DM 8G, and QuickMedia are trademarks or registered trademarks of Crestron Electronics, Inc. Dolby and the double-D symbol are trademarks or registered trademarks of Dolby Laboratories. DTS is a registered trademark & the DTS logos and Symbol are trademarks of DTS, Inc. HDMI, the HDMI Logo, and High-Definition Multimedia Interface are trademarks or registered trademarks of HDMI Licensing LLC in the United States and 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 proprietary interest in the marks and names of others.

DM-TX-201-S DigitalMedia 8G™ Fiber Transmitter 201

