

## 8x8 DigitalMedia™ Switcher



- Delivers a unified HD signal distribution solution incorporating both point-to-point wired and IP streaming technologies
- Provides lossless HD AV signal routing over twisted pair copper wire or fiber
- Integrates video, audio, networking, and control over one wire or fiber strand
- Enables high-performance H.264 streaming from any input source up to 1080p or WUXGA
- Provides a built-in CONTENT LAN port for streaming
- Affords full matrix switching with ultra high 12.5 Gbps backplane data rate
- Handles HDMI® devices with Deep Color, 3D, 4K, and high-bitrate 7.1 encoded audio
- HDBaseT® Certified device — Enables direct connection to other HDBaseT certified equipment
- HDCP 2.2 compliant via 4K input and output cards
- Distributes Full HD 1080p, Ultra HD, and 4K signals via DM 8G+® and HDBaseT connectivity
- Distributes 1080p and WUXGA signals over via DM 8G® Fiber or via DM 8G® SM Fiber
- Allows streaming of 1080p signals over an IP network with no distance limitations
- Supports first-generation DM® CAT and DM® Fiber products
- Configurable with up to eight DM, HDBaseT, and/or HDMI outputs
- Configurable with up to four streaming outputs
- Easy output expansion using multiple DM switchers
- Modular inputs support a complete range of digital, analog, and streaming signal types
- QuickSwitch HD™ technology manages HDCP keys for fast, reliable switching
- Auto-Locking® technology achieves rapid switching between disparate sources
- Performs automatic AV signal format management via EDID
- Enables device control via CEC
- Allows independent scaling for every display through select output cards and DM receivers

- Distributes and routes USB HID mouse and keyboard signals
- Allows full audio and USB breakaway switching
- Supports analog audio embedding and de-embedding
- Includes integrated Ethernet switch with Gigabit LAN port
- Private Network Mode — requires just one IP address for the complete DM system
- Secure access through full user/group management or Active Directory® credential management integration
- Hardware level security using 802.1X authentication
- TLS, SSL, SSH, and SFTP network security protocols
- Includes a built-in web server
- 4-space 19 in. (483 mm) rack-mountable

The DM-MD8X8-CPU3 delivers an advanced 4K60 4:4:4 AV signal routing solution to provide the foundation for a complete DigitalMedia™ system. The DM-MD8X8-CPU3 affords ultra fast switching and lossless distribution of HDMI® and other signals to support digital media players, HDTV receivers, computers, cameras, and display devices.

The DM-MD8X8-CPU3 is configurable to handle up to eight AV sources. The outputs are configurable to provide up to eight DM, HDBaseT®, and/or HDMI outputs, or up to four H.264 streaming outputs, in a single chassis.<sup>1</sup> Based on the 3-Series® platform, the DM-MD8X8-CPU3 provides enterprise-grade security.

Integrated Ethernet networking and USB distribution provide a complete connectivity solution combined with built-in Crestron® control<sup>2</sup> for managing the displays and other room devices without any additional wiring. User-friendly operation, setup, and troubleshooting tools are provided through the DM-MD8X8-CPU3 front panel, or via [Crestron Toolbox™](#) software, to allow for easy setup. A web browser interface is also provided.<sup>3</sup>

#### 4K Ultra HD

The DM-MD8X8-CPU3 is designed to meet the extreme bandwidth requirements for handling 4K and Ultra HD video signals. Support for 4K video also ensures support for the latest generation of computers and monitors with native resolutions beyond 1080p and WUXGA.<sup>4</sup>

#### DigitalMedia 8G+® Technology

The DM-MD8X8-CPU3 provides full support for Crestron DigitalMedia 8G+ devices as well as first-generation DM CAT<sup>8,10</sup> and DM Fiber<sup>9,10</sup> products, letting you take advantage of the latest Crestron DigitalMedia 8G+ technology.

A DigitalMedia 8G+ system handles high resolution video signals and can simultaneously distribute stereo and multichannel surround sound signals that support high bitrate 7.1 audio formats as well as uncompressed linear PCM. Signals are transported over one CAT type twisted pair cable or one strand of multimode or single-mode fiber.

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### HDBaseT® Certified

Using DigitalMedia 8G+® technology, the DM-MD8X8-CPU3 can be connected directly to an HDBaseT compliant device without requiring a DM transmitter or receiver.

### H.264 Streaming

The DM-MD8X8-CPU3 streaming input capability enables IP cameras and other H.264 encoded sources to be distributed via DigitalMedia alongside HDMI and other non-streaming sources. It also allows DM switchers to be bridged together for simplified routing of HD content between buildings and global offices. Large-scale streaming to computers and mobile devices can be facilitated through integration with a streaming media system such as a Wowza® or Kaltura® media system.

### Built-In CONTENT LAN Port

Any streaming input or output may be configured to stream via the CONTENT LAN or LAN port of the DM switcher or via a dedicated CONTENT LAN port of a DMC Series input or output card. Control and content can be combined on a single network or can be isolated onto separate networks.

### Modular Architecture

The DM-MD8X8-CPU3 features a modular architecture with 8 input card slots and 4 dual output card slots. A wide selection of input cards is offered to support a complete range of digital and analog AV signal types as specified in the following specifications table.

### Output Expansion

An HDMI pass-through output is provided on every input card to allow the inputs of up to five DM switchers to be daisy-chained, enabling the configuration of very large distribution systems with many outputs. Using five DM-MD8X8-CPU3 switchers, for example, it is possible to support up to 40 separate outputs.

### QuickSwitch HD™ Technology

Digital media signals are typically encrypted to protect against unauthorized viewing. After authenticating displays or signal processors, a source device must issue a key before delivering an output signal. Crestron QuickSwitch HD technology manages these keys to ensure fast, reliable switching and immunity to blackouts.

**NOTE:** QuickSwitch HD technology requires the use of a scaling HDMI output, which is available on DigitalMedia™ devices such as the DM-RMC-4KZ-SCALER-C and DMC-4KZ-HDO.

### Auto-Locking® Technology

Crestron Auto-Locking technology enables super fast signal switching by instantaneously configuring every device in the signal path as soon as the signal hits the first device. Auto-Locking technology virtually eliminates any noticeable gap while switching.

### EDID Format Management

DigitalMedia technology manages the EDID (Extended Display Identification Data) that devices use to communicate to eliminate conflicts that may arise when one source is routed to multiple displays or audio components. Via Crestron Toolbox software, the format and resolution capabilities of each device can be assessed, allowing the installer to properly configure EDID.

### A Scaler for Every Display

Installing select output cards into the DM-MD8X8-CPU3 or connecting a DM receiver with built-in HD and 4k scalers to the DM-MD8X8-CPU3 allows for high-performance scaling. Independent scalers placed at every display device allow for the routing of multiple sources to many different display devices.<sup>13</sup> The Distributed Scaler Approach ensures an optimal image on every screen and allows a high-res computer source to be viewed on any display in the building.

### Versatile Audio Routing

HDMI is the key to handling 7.1 surround sound formats such as Dolby® TrueHD, Dolby Atmos®, and DTS HD Master Audio™. To share these audio sources with multiple audio zones, the DM-MD8X8-CPU3 allows for the simultaneous distribution of multichannel surround sound and two-channel stereo signals from the same HDMI source.

The digital stereo signal is converted to analog to enable sharing via a Sonnex® Multiroom Audio System or any other audio distribution system. The DM-MD8X8-CPU3 also allows surround sound processors and amplifiers to be located centrally instead of at the display location via optional local HDMI outputs.

### Built-in Ethernet Switch

The DM-MD8X8-CPU3 includes an integrated Ethernet switch with a gigabit LAN port. In addition to transporting digital video and audio, a DigitalMedia system can also extend 100 Ethernet out to each display and source device via select DM receivers and transmitters, providing high-speed connectivity for any room device that requires a LAN connection. Ethernet is also utilized internally by the Crestron control bus to manage the DM devices in the system and provide display control in each room.

### Private Network Mode

To streamline its implementation on a corporate or university LAN, the DM-MD8X8-CPU3 employs Private Network Mode to provide a single-point connection for the complete system. Using Private Network Mode, the DM-MD8X8-CPU3 requires just one IP address for the complete DM network.

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**USB Signal Routing**

The DM-MD8X8-CPU3 supports USB HID (Human Interface Device) signal routing so that a USB HID compliant keyboard and/or mouse can provide local control for devices in other locations.<sup>16</sup> USB HID connectivity is provided through select DM receivers, transmitters, and input cards. Connect a USB over Ethernet Extender host module ([USB-EXT-DM-LOCAL<sup>12</sup>](#)) to a host that you would like to communicate with and install a device module ([USB-EXT-DM-REMOTE<sup>12</sup>](#)) at every display location to connect keyboards, gaming controllers, mice, or other devices.

**CEC Embedded Device Control**

Through its connection to the control system, the DM-MD8X8-CPU3 provides a gateway for controlling many devices right through their HDMI or HDBaseT connections, potentially eliminating the need for any dedicated control wires or IR emitters.<sup>13</sup>

**Web Browser Control**

The DM-MD8X8-CPU3 also includes a built-in web server that allows functions such as Ethernet configuration, routing, and firmware upgrades to be performed.<sup>3</sup>

*Upgrading an existing DM switcher that has older multi-gang DMCO-series output cards? Use the online [Output Card Additions and Upgrades Tool](#) to update your existing output cards and switcher to the new single-gang output card format.*

*Refer to the DigitalMedia Resources Webpage at [www.crestron.com/dmresources/](http://www.crestron.com/dmresources/) for additional design tools and reference documents.*

**Specifications****Maximum Cable Lengths**

Resolution	Cable Type		
	DM-CBL-ULTRA DM® Ultra Cable	DM-CBL-8G DM 8G® Cable	Third-Party CAT5e (or higher)
1920x1080 FHD 1080p	330 ft (100 m)	330 ft (100 m)	330 ft (100 m)
1920x1200 WUXGA			
1600x1200 UXGA			
2048x1080 DCI 2K			
2048x1152 QWXGA			
2560x1080 UWFHD	230 ft (70 m)	165 ft (50 m)	
2560x1080 WQHD			
2560x1600 WQXGA			
3840x2160 4K UHD			
4096x2160 DCI 4K			

Resolution	Cable Type	
	CRESFIBER8G CresFiber® 8G Multimode Fiber	Third-Party OM3 Multimode Fiber
1920x1080 FHD 1080p	1000 ft (300 m) via DM 8G Fiber cards	500 ft (150 m) via DM 8G Fiber cards
1920x1200 WUXGA		
1600x1200 UXGA		
2048x1080 2K DCI @ 24Hz		

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Resolution	Cable Type	
	CRESFIBER8G-SM CresFiber 8G Single-Mode Fiber	Third-Party G.652.D (or higher) Single-Mode Fiber
1920x1080 FHD 1080p	7.5 miles (12 km) via DM 8G SM Fiber cards	
1920x1200 WUXGA		
1600x1200 UXGA		
2048x1080 2K DCI @ 24Hz		

## Video

<b>Switcher</b>	8x8 digital matrix, modular input/output cards, Crestron QuickSwitch HD™ technology
<b>Input Signal Types</b>	Configurable via modular plug-in cards supporting HDMI® (DVI & Dual-Mode DisplayPort compatible <sup>12</sup> ), DVI, 3G-SDI, RGB/VGA, component, S-Video, composite (NTSC & PAL), DM 8G+® & HDBaseT®, DM 8G® Fiber, DM 8G SM Fiber, DM® CAT (legacy), DM Fiber (legacy), & H.264 streaming
<b>Output Signal Types</b>	Configurable via modular plug-in cards supporting HDMI (DVI compatible <sup>15</sup> ), DM 8G+ & HDBaseT, DM 8G Fiber, DM 8G SM Fiber, DM CAT (legacy), DM Fiber (legacy), & H.264 streaming (All input cards also include HDMI pass-through outputs)
<b>Backplane Data Rate</b>	12.5 Gbps

**NOTE:** For additional specifications, refer to the DMC Series input and output card spec sheets.

## Audio

<b>Switcher</b>	8x8 digital multichannel audio-follow-video matrix switching, plus independent 8x8 stereo matrix for audio breakaway
<b>Input Signal Types</b>	Configurable via modular plug-in cards supporting HDMI (Dual-Mode DisplayPort compatible <sup>12</sup> ), 3G-SDI, analog (stereo 2-channel), SPDIF, DM 8G+ & HDBaseT, DM 8G Fiber, DM 8G SM Fiber, DM CAT (legacy), DM Fiber (legacy), & H.264 streaming

## Output Signal Types

Configurable via modular plug-in cards supporting HDMI, analog (stereo 2-channel), DM 8G+ & HDBaseT, DM 8G Fiber, DM 8G SM Fiber, DM CAT (legacy), DM Fiber (legacy), & H.264 streaming (All input cards also include HDMI pass-through outputs, and most digital audio input cards also include analog stereo pass-through audio outputs)

**NOTE:** For additional specifications, refer to the DMC Series input and output card spec sheets.

## Communications

<b>Ethernet</b>	100/1000 Mbps, auto-switching, auto-negotiating, auto-discovery, full/half duplex, industry-standard TCP/IP stack, UDP/IP, CIP, DHCP, SSL, TLS, SSH, SFTP (SSH File Transfer Protocol), FIPS 140-2 compliant encryption, IEEE 802.1X, SNMP, IPv4 or IPv6, Active Directory authentication, IIS v.6.0 Web Server, SMTP e-mail client, Private Network Mode
<b>USB</b>	USB signal routing via select input cards, transmitters, receivers, and extenders <sup>16</sup> ; USB computer console port for setup
<b>DigitalMedia</b>	DM 8G+, DM 8G Fiber, DM 8G SM Fiber, DM Fiber, DM CAT, HDCP 2.2 <sup>4</sup> , EDID, CEC, PoDM, PoDM+, Ethernet
<b>HDBaseT</b>	HDCP 2.2 <sup>4</sup> , EDID, CEC, RS-232, PoH, Ethernet
<b>HDMI</b>	HDCP 2.2 <sup>4</sup> , EDID, CEC

**NOTE:** Supports management of HDCP and EDID; supports management of CEC between connected HDMI and HDBaseT devices and a control system.<sup>14</sup> For additional specifications, refer to the DMC Series input and output card spec sheets.

## Card Slots

<b>1 - 8</b>	(8) DM switcher input card slots; Each slot accepts (1) DMC-series input card
<b>DM OUTPUTS 1-8</b>	(4) DM switcher output card slots; Each slot accepts (1) DMC-series output card

## Connectors

<b>LAN</b>	(1) 8-pin RJ45 female; 100Base-TX/1000Base-T Ethernet port
<b>CONTENT</b>	(1) 8-pin RJ45 female; 100Base-TX/1000Base-T Ethernet port; Provides a dedicated LAN connection for streaming only, used in lieu of streaming via the LAN port of the switcher or the

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<b>SERVICE</b>	CONTENT LAN port of a DMC Series input or output card (1) 8-pin RJ45 female; 100Base-TX/1000Base-T Ethernet port; For factory use only
<b>USB</b>	(1) USB Type A connector, female; USB 2.0 host port for USB flash drive; For save/load of EDID settings and firmware update
<b>100-240V~;3-1.2A 50/60 Hz</b>	(1) IEC 60320 C14 mains power inlet; Mates with included power cord
<b>G</b>	(1) 6-32 screw, chassis ground lug
<b>COMPUTER (front)</b>	(1) USB Type B female; USB computer console port (6 ft cable included)

**Controls & Indicators**

<b>LCD Display</b>	Green LCD dot matrix, 128 x 64 resolution, adjustable LED backlight, displays inputs/outputs by name, video & audio signal information, Ethernet configuration and setup menus
<b>SOFTKEYS</b>	(4) Push buttons for activation of LCD driven functions
<b>HW-R</b>	(1) Recessed push button for hardware reset, reboots the switcher
<b>ROUTE</b>	(1) Push button and red LED, selects ROUTE mode to allow routing changes
<b>VIEW</b>	(1) Push button and red LED, selects VIEW mode for viewing current routes
<b>INFO</b>	(1) Push button and red LED, selects INFO mode for viewing AV and device info
<b>MENU</b>	(1) Push button, steps menu back one level
<b>ENTER</b>	(1) Push button, executes highlighted menu or value
<b>AUDIO</b>	(1) Push button & red LED, selects audio routing view
<b>VIDEO</b>	(1) Push button & red LED, selects video routing view
<b>USB</b>	(1) Push button & red LED, selects USB routing view
<b>Quick-Adjust Knob</b>	(1) Continuous turn rotary encoder, adjusts menu parameters
<b>IN 1 - 8</b>	(8) Push buttons and red LEDs, each selects the corresponding input for routing
<b>OUT 1 - 8</b>	(8) Push buttons and red LEDs, each selects the corresponding output for routing
<b>LAN (rear)</b>	(2) LEDs; Left LED, green indicates 100Base-TX link

<b>CONTENT (rear)</b>	(2) LEDs; Left LED, green indicates 100Base-TX link is established, amber indicates 1000Base-T link is established; Right LED, flashing amber indicates Ethernet activity
<b>SERVICE (rear)</b>	(2) LEDs; Left LED, green indicates 100Base-TX link is established, amber indicates 1000Base-T link is established; Right LED, flashing amber indicates Ethernet activity

**Power Requirements**

<b>Main Power</b>	3-1.2 A @ 100-240 VAC, 50/60 Hz
<b>Power Consumption</b>	220 W typical
<b>Available PoDM/PoH Power</b>	Refer to the specifications for each DM 8G+ input and output card

**Environmental**

<b>Temperature</b>	32° to 104° F (0° to 40° C)
<b>Humidity</b>	10% to 90% RH (noncondensing)
<b>Heat Dissipation</b>	750 BTU/hr
<b>Ambient Noise</b>	31.5 to 37 dBA typical; 30 to 30.5 dBA idle

**Enclosure**

<b>Chassis</b>	Metal with black finish, vented sides, fan-cooled
<b>Front Panel</b>	Metal, black finish with polycarbonate label overlay
<b>Mounting</b>	Freestanding or 4 RU 19-in. (483 mm) rack-mountable (adhesive feet and rack ears included)

**Dimensions**

<b>Height</b>	6.97 in. (177 mm) without feet
<b>Width</b>	17.28 in. (439 mm), 19.06 in. (485 mm) with rack ears
<b>Depth</b>	15.71 in. (399 mm) without cards

**Weight**

20.0 lb (9.1 kg) without cards

## 8x8 DigitalMedia™ Switcher

### Models

**DM-MD8X8-CPU3**

### Available Accessories

#### **DMC-4KZ-C**

DigitalMedia 8G+® 4K60 4:4:4 HDR Input Card for DM® Switchers, HDBaseT® Compatible

#### **DMC-4KZ-C-DSP**

DigitalMedia 8G+® 4K60 4:4:4 HDR Input Card w/Downmixing for DM® Switchers, HDBaseT® Compatible

#### **DMC-4KZ-HD**

HDMI® 4K60 4:4:4 HDR Input Card for DM® Switchers

#### **DMC-4KZ-HD-DSP**

HDMI® 4K60 4:4:4 HDR Input Card w/Downmixing for DM® Switchers

#### **DMC-4KZ-CO-HD**

2-Channel DigitalMedia 8G+® 4K60 4:4:4 HDR Output Card for DM® Switchers

#### **DMC-4K-CO-HD-HDCP2**

2-Channel HDBaseT® Certified 4K DigitalMedia 8G+® Output Card for DM® Switchers

#### **DMC-4K-HDO**

2-Channel 4K Scaling HDMI® Output Card for DM® Switchers

#### **DMC-DVI**

DVI/VGA Input Card for DM® Switchers

#### **DMC-HDO**

2-Channel HDMI® Output Card for DM® Switchers

#### **DMC-S**

DigitalMedia 8G™ Fiber Input Card for DM® Switchers

#### **DMC-S2**

DigitalMedia 8G™ Single-Mode Fiber Input Card for DM® Switchers

#### **DMC-S2-DSP**

DigitalMedia 8G™ Single-Mode Fiber Input Card w/Downmixing for DM® Switchers

#### **DMC-S2O-HD**

2-Channel DigitalMedia 8G™ Single-Mode Fiber Output Card for DM® Switchers

#### **DMC-SDI**

3G-SDI Input Card for DM® Switchers

#### **DMC-S-DSP**

DigitalMedia 8G™ Fiber Input Card w/Downmixing for DM® Switchers

#### **DMC-SO-HD**

2-Channel DigitalMedia 8G™ Fiber Output Card for DM® Switchers

#### **DMC-STR**

Streaming Input Card for DM® Switchers

#### **DMC-STRO**

Streaming Output Card for DM® Switchers

#### **DMC-VGA**

VGA/Video Input Card for DM® Switchers

#### **DMC-VID4**

Quad Video Input Card for DM® Switchers

#### **DMC-VID-BNC**

BNC Analog Video Input Card for DM® Switchers

#### **DMC-VID-RCA-A**

RCA Analog Video Input Card w/Analog Audio for DM® Switchers

#### **DMC-VID-RCA-D**

RCA Analog Video Input Card w/SPDIF Audio for DM® Switchers

#### **DM-PSU-8-PLUS**

8-Port PoDM+ Power Supply for DM 8G+® I/O Cards

#### **DM-PSU-16-PLUS**

16-Port PoDM+ Power Supply for DM 8G+® I/O Cards

#### **DM-PSU-ULTRA-MIDSPAN**

DigitalMedia™ Ultra Midspan PoDM++ Injector

#### **USB-EXT-DM-LOCAL**

USB over Ethernet Extender with Routing, Host Module

#### **USB-EXT-DM-REMOTE**

USB over Ethernet Extender with Routing, 4-Port Device Module

#### **DM-8G-CONN-100**

Connectors for DM-CBL-8G DigitalMedia 8G™ Cable, 100-Pack

#### **DM-8G-CONN-WG-100**

Connectors with Wire Guide for DM-CBL-8G DigitalMedia 8G™ Cable, 100-Pack

#### **DM-8G-CRIMP**

Crimping Tool for DM-8G-CONN

#### **DM-8G-CRIMP-WG**

Crimping Tool for DM-8G-CONN-WG

#### **DM-CBL-8G-NP-SP1000**

DigitalMedia 8G™ Cable, non-plenum, 1000 ft spool

#### **DM-CBL-8G-P-SP1000**

DigitalMedia 8G™ Cable, plenum, 1000 ft spool

#### **DM-CBL-ULTRA-LSZH-SP1000**

DigitalMedia™ Ultra Cable, Low Smoke Zero Halogen, 1000 ft spool (Available only in Europe)

#### **DM-CBL-ULTRA-NP-SP1000**

DigitalMedia™ Ultra Cable, Non-Plenum Type CMR, 1000 ft spool

#### **DM-CBL-ULTRA-PC-10**

DigitalMedia™ Ultra Patch Cable, 10 ft (3 m)

#### **DM-CBL-ULTRA-P-SP1000**

DigitalMedia™ Ultra Cable, Plenum Type CMP, 1000 ft spool

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**DM-CONN-20**

Connectors for DM-CBL DigitalMedia™ Cable & DM-CBL-ULTRA DigitalMedia Ultra Cable, 20-Pack

**DM-CONN-ULTRA-RECP-50**

DigitalMedia™ Ultra Keystone RJ45 Jack, 50-Pack w/Termination Tool

**DM-RPP-K24**

DigitalMedia™ 24-Port Keystone Patch Panel

**CRESFIBER8G-NP-SP1000**

CresFiber® 8G Multimode Fiber Optic Cable, 50/125 x4 breakout, non-plenum, 1000 ft spool

**CRESFIBER8G-P-SP1000**

CresFiber® 8G Multimode Fiber Optic Cable, 50/125 x4 breakout, plenum, 1000 ft spool

**CRESFIBER8G-SM-CONN-LC-12**

Connectors for CresFiber® 8G Single-Mode Fiber Optic Cable, LC, 12-Pack

**CRESFIBER8G-SM-P-SP2KM**

CresFiber® 8G Single-Mode Fiber Optic Cable, plenum, 2 km spool

**CRESFIBER-CONN-SC50UM-12**

Connectors for CresFiber® 8G Multimode Fiber Optic Cable, SC 50µm, 12-Pack

**CRESFIBER-TK**

CresFiber® Termination Kit (AFL Telecommunications®)

## Notes:

- All output types are configured in pairs except for streaming (a single streaming output occupies the space of two outputs of any other type). To configure a complete DM switcher with output and input cards, use the online [DigitalMedia Switcher Configuration Tool](#). Current DM switchers use DMC-series "single-gang" output cards. For older DM switchers with DMC-series "multi-gang" output cards, use the online [Output Card Additions and Upgrades Tool](#) to update your existing output cards and switcher to the new single-gang output card format.
- Control via the DM network requires a Crestron control system, sold separately.
- Configuration of input cards, output cards, and endpoints is not supported.
- 4K60 4:4:4, HDR, Ultra HD, and HDCP 2.2 are currently supported over HDMI, DM 8G+, and HDBaseT using select input and output cards. Refer to the specifications for each input/output card and each connected device for its full capabilities.
- The maximum cable length for DigitalMedia 8G+ or HDBaseT is dependent upon the type of cable, the choice of input/output card, and the resolution of the video signal. Refer to the "Maximum DM 8G Cable Lengths" table for a detailed overview. Crestron legacy cable models [DM-CBL](#) DigitalMedia Cable and [DM-CBL-D](#) DigitalMedia D Cable support the same resolutions and cable lengths as CAT5e. Shielded cable and connectors are recommended to safeguard against unpredictable environmental electrical noise which may impact performance at resolutions above 1080p. DM 8G+ is compatible with HDBaseT Alliance specifications for connecting to HDBaseT compliant equipment.
- The maximum cable length for DigitalMedia 8G™ Fiber is 1000 ft (300 m) using [CRESFIBER8G](#) multimode fiber optic cable, or 500 ft (150 m) using [CRESFIBER](#) (legacy) or third-party OM3 multimode fiber optic cable.
- The maximum cable length for DigitalMedia 8G Single-Mode Fiber is 7.5 miles (12 km) using [CRESFIBER8G-SM](#) or third-party G.652.D (or better) single-mode fiber optic cable.
- The maximum cable length for DigitalMedia CAT is 450 ft (137 m) using [DM-CBL](#) DigitalMedia Cable. Actual cable length depends upon multiple factors. Up to two DM Repeaters (Model [DM-DR](#)) may be required.
- The maximum cable length for DigitalMedia Fiber is 1000 ft (300 m) using [CRESFIBER](#) (legacy), [CRESFIBER8G](#), or third-party OM2/OM3 duplex multimode fiber optic cable.
- Refer to the Crestron [DigitalMedia Design Guide, Doc. #4546](#), for complete system design guidelines. All wire and cables are sold separately.
- Streaming output supports 2-channel stereo audio only. Multichannel surround sound audio sources cannot be streamed unless downmixed to stereo. Stereo downmix capability requires a "DSP" type DM switcher input card, sold separately.
- Any HDMI input can support a DVI or Dual-Mode DisplayPort signal using a suitable adapter or interface cable.
- Item(s) sold separately.
- Control of third-party HDBaseT devices using CEC is only supported via 4K DM 8G+ input and output cards.
- DVI output is supported via an HDMI output port using a suitable adapter or interface cable. [CBL-HD-DVI](#) interface cables are available separately.
- Manages the routing of USB HID signals between peripheral DM devices and input cards that are equipped with USB HID ports. Also programmable to manage the routing of USB signals between Crestron USB over Ethernet Extender modules ([USB-EXT-DM](#), sold separately). Refer to the USB-EXT-DM spec sheet for more information.

This product may be purchased from select authorized Crestron dealers and distributors. To find a dealer or distributor, please contact the Crestron sales representative for your area. A list of sales representatives is available online at [www.crestron.com/How-To-Buy/Find-a-Representative](http://www.crestron.com/How-To-Buy/Find-a-Representative) or by calling 855-263-8754.

This product is covered under the Crestron standard limited warranty. Refer to [www.crestron.com/warranty](http://www.crestron.com/warranty) for full details.

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

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## 8x8 DigitalMedia™ Switcher

