DM-MD64X64

DigitalMedia™

64x64 DigitalMedia™ Switcher

> *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*

> *Modular design configurable in blades of 8 inputs or outputs*

> *Enables full matrix switching scalable from 8x8 to 64x64*

> *Handles HDMI® with Deep Color, 3D, 4K, and high-bitrate 7.1 encoded audio [2]*

> *HDBaseT® Certified — Enables direct connection to other HDBaseT certified equipment*

> *HDCP 2.2 compliant via compatible 4K input and output blades [2]*

> *Supports up to 64 DM 8G® transmitters and 64 DM 8G receivers*

> *Distributes Full HD 1080p, Ultra HD, and 4K signals over CAT type twisted pair cable at distances up to 330 ft (100 m) via DM 8G+® and HDBaseT [3,6]*

> *Distributes 1080p and WUXGA signals over multimode fiber at distances up to 1000 ft (300 m) via DM 8G® Fiber [4,6]*

> *Distributes 1080p and WUXGA signals over single-mode fiber at distances up to 7.5 miles (12 km) via DM 8G SM Fiber [5,6]*

> *Integrates seamlessly with DM NVX via external DMF-CI-8 card chassis to enable 4K signal distribution over fiber or Ethernet [7]*

> *Supports high-definition H.264 video streaming via DM-TXRX-100-STR encoder/decoders [7]*

> *QuickSwitch HD™ technology manages HDCP keys for fast, reliable switching*

> *Auto-Locking® technology achieves rapid switching between disparate sources*

> *Supports analog audio embedding and de-embedding*

> *Supports Dante® audio networking [9]*

> *Includes stereo line-level audio monitoring output*

> *15" color touch screen enables simplified front panel setup, operation, video preview, and troubleshooting*

> *Built-in web server enables full operation from any networked computer*

> *Allows system monitoring through front panel, web browser, control system, or Crestron Fusion®*

> *Allows independent scaling for every display device through select output blades and DM receivers [7]*

> *Enables device control via CEC*

> *Distributes and routes USB HID mouse and keyboard signals between transmitters and receivers [8]*

> *Expanded USB routing capabilities available using USB over Ethernet Extenders [8]*

> *Includes integrated Ethernet switch with Gigabit LAN port*

> *Private Network Mode — requires just one IP address for the complete DM system*

> *Features hot-swappable redundant power supplies and fan tray with advanced status monitoring*

> *Hot-swappable I/O blades afford fast restoration of service with minimal disruption*

> *14-space 19-inch rack-mountable*

Crestron® DM® Switchers provide the foundation for a complete DigitalMedia™ system, delivering an advanced 4K ultra high-definition AV signal routing solution that's extremely flexible and installer-friendly. The DM-MD64X64 is a modular matrix switcher designed for large-scale projects demanding ultimate reliability. It delivers ultra fast signal routing and pure, lossless distribution of HDMI® and other signals to support all the digital media players, HDTV receivers, computers, cameras, and display devices that fill any modern facility. DigitalMedia thoughtfully manages all of the disparate AV signals and devices to deliver a transparent user experience, and to ensure an optimum video image and audio signal at every location.

Featuring a scalable blade-based design, the DM-MD64X64 affords maximum input and output count in a condensed 14U rack-mountable chassis. The DM-MD64X64 is field-configurable to handle up to 64 inputs and 64 outputs, supporting HDMI, HDBaseT®, analog audio, Dante® networked audio, and all types of DigitalMedia 8G™ signals. Through a selection of hot-swappable input and output blades, and a variety of DM 8G® transmitters and receivers, the DM-MD64X64 allows extensive connectivity throughout a commercial or residential facility, supporting a wide range of signal types all through one switcher!

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DM-MD64X64   64x64 DigitalMedia™ Switcher

Integrated Ethernet networking and USB distribution provide a complete connectivity solution combined with built-in Crestron control [1] for managing the displays and other room devices without necessitating any additional wiring. Hot-swappable redundant power supplies and advanced system-wide monitoring ensure continuous, dependable operation for mission-critical applications. User-friendly operation, setup, and troubleshooting tools are provided through the front panel touch screen or web browser interface to make setting up a complete multiroom 4K video distribution system easy.

4K Ultra HD

Crestron DigitalMedia continues to advance the standard for digital AV signal distribution, delivering the world's first end-to-end 4K system solution. From day one, the DM-MD64X64 was 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.[2]

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 room, building, or campus using a point-to-point signal transport 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 handles uncompressed Full HD 1080p, Ultra HD, 2K, and 4K video signals with support for 3D, Deep Color, and HDCP 2.2.[2] Audio capabilities include support for high-bitrate 7.1 audio formats like Dolby® TrueHD, Dolby Atmos®, DTS HD®, and DTS:X® as well as uncompressed linear PCM. All signals are transported over one CAT type twisted pair cable or one strand of multimode or single-mode fiber. DM 8G enables wire distances up to 330 feet (100 m) via DM 8G+® (DM 8G over twisted pair copper wire) [3,6], 1000 feet (300 m) via DM 8G Fiber (DM 8G over multimode fiber) [4,6], or 7.5 miles (12 km) via DM 8G SM Fiber (DM 8G over single-mode fiber) [5,6].

Note: To enable distribution of 4K signals over fiber, or to add AV over IP connectivity, the DM-MD64X64 can easily be augmented using Crestron network AV encoders and decoders. Adding one or more DMF-CI-8 card chassis affords a tidy solution for adapting multiple HDMI inputs and outputs to support 4K video streaming over copper or fiber. Individual DM NVX series or DM-TXRX-100-STR encoder/decoders may also be employed. Both point-to-point and switched Ethernet topologies are supported.

HDBaseT® Certified

Crestron DigitalMedia 8G+® technology is designed using HDBaseT Alliance specifications, ensuring interoperability with other HDBaseT certified products. Via DM 8G+, the DM-MD64X64 can be connected directly to an HDBaseT compliant device without requiring a DM transmitter or receiver. Crestron's implementation of HDBaseT includes the transport of 4K video with HDCP 2.2, high-bitrate 7.1 audio, CEC and RS-232 control, Ethernet networking, and PoE or PoE+ power, all over one wire.[3]
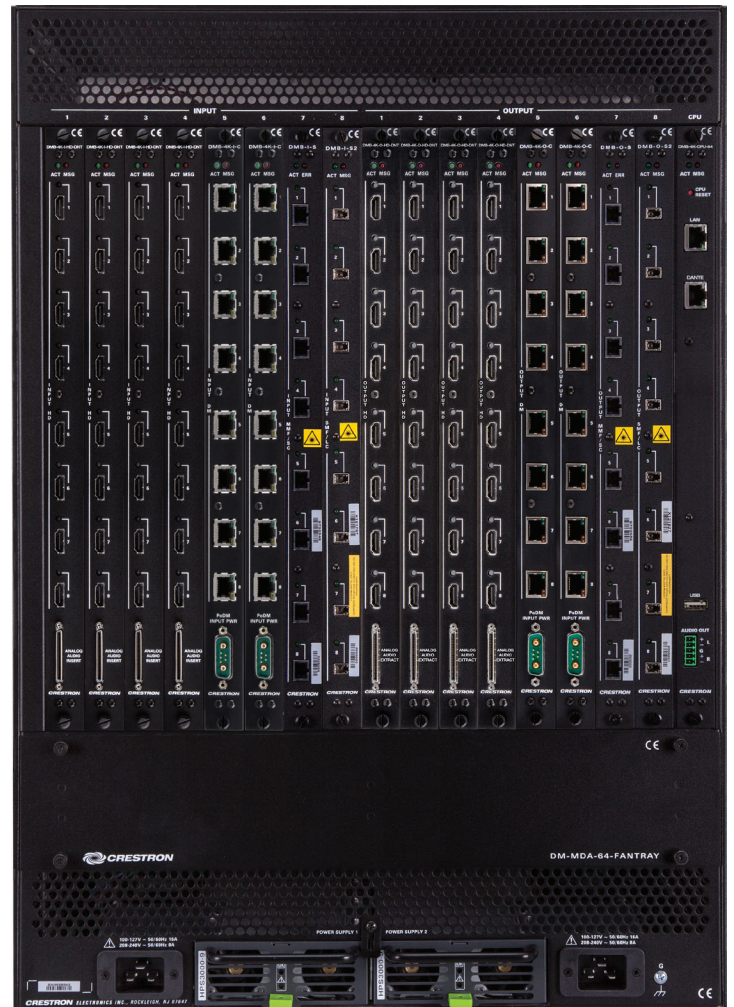
DM-MD64X64 – Rear view with I/O blades installed

Modular Architecture

The DM-MD64X64 features a modular architecture with 8 input blade slots and 8 output blade slots. Each blade slot is field-installable, allowing for easy and flexible system configuration with the ability to expand and upgrade the system as needs change. The input and output blades are hot-swappable to facilitate servicing without shutting down the whole switcher. I/O blades are offered to support the choice of HDMI + analog audio, HDMI + Dante, HDBaseT, DM 8G+, DM 8G Fiber, and DM 8G Single-Mode Fiber. Each blade provides eight inputs or outputs of any one type.

QuickSwitch HD™

Handling high-definition digital media means handling HDCP (High-bandwidth Digital Content Protection), the encryption scheme that content providers use to protect their DVDs, Blu-ray™ discs, and broadcast signals against unauthorized copying. Viewing HDCP encrypted content requires a source device to "authenticate" each display and signal processor in the system and issue it a "key" before the content can be viewed. Ordinarily this causes a complete loss of signal for up to 15 seconds each time a new source or display is selected anywhere in the system. To make matters worse, every source device has a limited number of keys available, so

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connect too many displays and the source will simply stop outputting a signal without warning.

Not to worry — Crestron QuickSwitch HD manages the keys for every HDCP-compliant device in the system, maintaining continuous authentication for each device to ensure fast, reliable routing of any source to any number of display devices.

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. Whether switching between sources or TV channels, Auto-Locking significantly reduces the time it takes each device to sense the new signal and configure itself to handle the changes, virtually eliminating any noticeable gap while switching.

EDID Format Management

With all of today's varied AV sources comes a multitude of confusing video and audio formats to keep track of, and chances are not every device in your system supports all of the same formats. Such conflicts can wreak havoc any time you route one source to more than one display or audio component. The media source feeding your 1080p or Ultra HD projector in the theater may restrict itself to a lower resolution, or even shut off completely, if someone decides to view the same signal on a smaller TV in another room. And, instead of enjoying your theater's incredible 7.1 surround sound, you may find yourself limited to 5.1 or even plain old stereo.

DigitalMedia eliminates such conflicts by managing the EDID (Extended Display Identification Data) that modern digital devices use to communicate their capabilities. Through the DM-MD64X64, the format and resolution capabilities of each device can be assessed, allowing the installer to configure EDID appropriately for the most desirable and predictable behavior.

A Scaler for Every Display

High-performance scaling capability can be added to any output on the DM-MD64X64 using select output blades or DM receivers with built-in HD and 4K scalers. By providing an independent scaler for every display device, DigitalMedia truly delivers the most flexible and user-friendly solution for routing multiple disparate sources to many different display devices. This "Distributed Scaler" approach ensures an optimal image on every screen no matter what sources are selected. Distributed scaling allows a high-res computer source to be viewed on any display in the building. It also allows an SD, HD, or Ultra HD video source to be viewed simultaneously on the 4K display in your theater and on lower-resolution displays throughout the house.

Built-in Ethernet Switch

In addition to transporting digital video and audio, DigitalMedia can also extend 10/100 Ethernet out to each display and source device via select DM receivers and transmitters or HDBaseT, 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-MD64X64 employs Private Network Mode to provide a single-point connection for the complete system. Using Private Network Mode, the DM-MD64X64 requires just one IP address for the complete DM network including all connected DM receivers and transmitters.

USB Signal Routing

Along with video, audio, and Ethernet, DigitalMedia also provides for the routing of USB HID (Human Interface Device) signals, allowing a USB HID compliant keyboard and/or mouse at one location to control a computer or media server in another location, whether just across the room or in another building. USB HID connectivity is provided through select DM receivers and transmitters.

Crestron also offers USB extenders to enable the routing of virtually any type of USB peripheral to any host device, all managed through the DigitalMedia system. Connect a USB over Ethernet Extender host module (USB-EXT-DM-LOCAL [7]) to each computer, media server, game system, annotator, and any other host that you want to control or communicate with. Then, install a device module (USB-EXT-DM-REMOTE [7]) at every display location to connect keyboards, mice, game controllers, whiteboards, flash drives, cameras, and mobile devices. Every module communicates with the DM switcher over the local Ethernet network or via a direct connection to the LAN port of a DM transmitter or receiver.

CEC Embedded Device Control

For controlling third-party AV devices, DigitalMedia provides an alternative to conventional IR, RS-232, and Ethernet by harnessing the CEC (Consumer Electronics Control) signal embedded in HDMI. Through its connection to the control system, the DM-MD64X64 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.

Touch Screen Front Panel

Simplified setup and operation of the DM-MD64X64 is provided through a large 15" color touch screen. Through its user-friendly graphical interface, the touch screen enables the routing of AV signals with the ability to view resolution and format information for every input and output signal, and even preview a live video image of any input. Configuration and diagnostics capabilities include monitoring of the status for each i/o blade, fan tray and power supply, configuration of Ethernet settings, and updating of the firmware for all connected devices.

Web Browser Control

The DM-MD64X64 also includes a built-in web server, enabling full operation and monitoring through any networked computer with a web browser. Password protection prevents unauthorized access to this feature.

Audio Monitoring

When previewing video on the front panel touch screen, audio can also be monitored through the built-in speakers or external stereo speakers. Built-in 7.1 decoding and downmixing enables monitoring of both stereo and surround sound sources. A stereo line-level output is provided to feed an external amplifier. Audio volume is adjustable via the front panel touch screen or web browser.

Hot-Swappable Redundant Power Supplies

The DM-MD64X64 delivers enhanced reliability for mission critical applications, employing hot-swappable redundant power supplies to ensure continuous operation throughout the life of the system. Each of its two onboard power supplies has a demonstrated MTBF (Mean Time Between Failures) of over a half million hours, and in the unlikely event of an individual power supply fault, the switcher will continue to operate unhindered on only one power supply. Clear indication of such a fault is provided on the unit's front panel, and the power supplies can even be remotely monitored via a control system touch screen, mobile device, or the Crestron Fusion® Enterprise Management Service. A modular hot-swappable plug-in design allows either supply to be replaced in seconds without ever shutting down the switcher or removing it from the equipment rack.

To configure a DM switcher complete with input and output blades, cables, and other peripherals, please use the online DigitalMedia Switcher Configuration Tool.

Please refer to the DigitalMedia webpage at https://www.crestron.com/digitalmedia *for additional design tools and reference documents.*

SPECIFICATIONS

Video

Switcher: 64x64 digital matrix, modular input/output blades, Crestron QuickSwitch HD technology
Input Signal Types: Configurable via modular plug-in blades supporting HDMI (DVI & Dual-Mode DisplayPort compatible [10]), DM 8G+ & HDBaseT, DM 8G Fiber, & DM 8G SM Fiber
Output Signal Types: Configurable via modular plug-in blades supporting HDMI (DVI compatible [10]), DM 8G+ & HDBaseT, DM 8G Fiber, & DM 8G SM Fiber
Preview Scaler: 4K video scaler for front panel preview monitor, motion-adaptive deinterlacing, intelligent frame rate conversion, Deep Color support, 3D to 2D conversion, content-adaptive noise reduction

Note: For additional specifications, please refer to the spec sheet for each input, output, and CPU blade.

Audio

Switcher: 64x64 digital multi-channel audio-follow-video matrix switching, monitor output;
Note: Audio breakaway is not supported
Input Signal Types: Configurable via modular plug-in blades supporting HDMI (Dual-Mode DisplayPort compatible [10]), analog (stereo 2-channel), Dante (stereo), DM 8G+ & HDBaseT, DM 8G Fiber, & DM 8G SM Fiber
Output Signal Types: Configurable via modular plug-in blades supporting HDMI, analog (stereo 2-channel), Dante (stereo), DM 8G+ & HDBaseT, DM 8G Fiber, & DM 8G SM Fiber
Dante I/O: Up to 120 stereo channels in and/or out at up to 24-bit 48 kHz [9]
Monitor Output Downmix Decoding: Dolby Digital®, Dolby Digital EX, Dolby Digital Plus, Dolby TrueHD, Dolby Atmos, DTS®, DTS ES, DTS 96/24, DTS HD High Res, DTS HD Master Audio, DTS:X, LPCM up to 8 channels

Monitor Output DAC: 24-bit 48 kHz
Monitor Output Volume Adjustment: -80 to 0 dB plus mute, adjustable via front panel touch screen or web browser

Note: For additional specifications, please refer to the spec sheet for each input, output, and CPU blade.

Maximum DM 8G Cable Lengths

Cable Type: Resolution:	DM-CBL-ULTRA DM® Ultra Cable	DM-CBL-8G DM 8G® Cable	3rd-Party CAT5e (or better) [3]
1080p60 Full HD			
1920x1200 WUXGA		330 ft (100 m) via DM 8G+ blades	
1600x1200 UXGA			
2048x1080 DCI 2K			
2560x1440 WQHD	330 ft (100 m) via DM 8G+ blades	230 ft (70 m) via DM 8G+ blades	165 ft (50 m) via DM 8G+ blades
2560x1600 WQXGA			
3840x2160 4K UHD			
4096x2160 DCI 4K			

Cable Type: Resolution:	CRESFIBER8G CresFiber® 8G Multimode Fiber	3rd-Party OM3 Multimode Fiber
1080p60 Full HD		
1920x1200 WUXGA	1000 ft (300 m) via DM 8G Fiber blades	500 ft (150 m) via DM 8G Fiber blades
1600x1200 UXGA		
2048x1080 DCI 2K @24Hz		

Cable Type: Resolution:	CRESFIBER8G-SM CresFiber 8G Single-Mode Fiber	3rd-Party G.652.D (or better) Single-Mode Fiber
1080p60 Full HD		
1920x1200 WUXGA	7.5 miles (12 km) via DM 8G SM Fiber blades	
1600x1200 UXGA		
2048x1080 DCI 2K @24Hz		

Communications

Ethernet: 10/100/1000 Mbps, auto-switching, auto-negotiating, auto-discovery, full/half duplex, TCP/IP, UDP/IP, CIP, DHCP, Private Network Mode, HTTPS web browser setup and control, Crestron control system integration
Dante: Dante network interface via LAN port or dedicated DANTE port [9]
USB: USB signal routing via select transmitters, receivers, and extenders [8]; USB 2.0 host for USB mass storage devices to support firmware update and save/load of configuration and EDID settings
DigitalMedia: DM 8G+, DM 8G Fiber, DM 8G SM Fiber, HDCP 2.2 [2], EDID, CEC, PoDM, PoDM+, Ethernet
HDBaseT: HDCP 2.2, EDID, CEC, RS-232, PoE, PoE+, Ethernet
HDMI: HDCP 2.2, EDID, CEC

NOTE: Supports management of HDCP and EDID; supports management of CEC between connected HDMI and HDBaseT devices and a control system. For additional specifications, please refer to the spec sheet for each input and output blade.

Blade Slots

INPUT 1 – 8: (8) DM switcher input blade slots, hot-swappable; Each slot accepts (1) DMB-I series input blade

OUTPUT 1 – 8: (8) DM switcher output blade slots, hot-swappable; Each slot accepts (1) DMB-O series output blade

CPU: Accepts (1) DMB-4K-CPU-64 CPU blade (included)

Connectors – CPU Blade

LAN: (1) 8-pin RJ45 connector, shielded, female; 10Base-T/100Base-TX/1000Base-T Ethernet LAN port

DANTE: (1) 8-pin RJ45 connector, shielded, female; 1000Base-T Dante network port [1]

USB: (1) USB Type A connector, female; USB 2.0 host port for connection of a USB flash drive; For save/load of configuration and EDID settings and for firmware update

AUDIO OUT: (1) 5-pin 3.5mm detachable terminal block; Balanced/unbalanced stereo line-level output for local monitoring; Output Impedance: 200 Ohms balanced, 100 Ohms unbalanced; Maximum Output Level: 4 Vrms balanced, 2 Vrms unbalanced

Connectors – Main Chassis

100-127V~50/60Hz 16A, 200-240V~50/60Hz 8A: (2) IEC 60320 C-20 main power inlets; mate with removable power cords, included

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

COMPUTER (front): (1) USB Type B connector, female; USB computer console port (6 ft cable included)

Controls & Indicators

Touch Screen: 15 inch (381 mm) diagonal TFT active matrix color LCD, 15:9 WXGA, 1280 x 768 pixels, resistive touch membrane, amplified speakers; provides signal routing, video input preview, video and audio signal information, system diagnostics, setup and configuration
Touch Screen Hard Key: (1) Pushbutton, not used
POWER SUPPLIES, 1 – 2: (2) Green LEDs, each indicates when the corresponding supply is functioning
POWER SUPPLIES, FAULT: (1) Red flashing LED, indicates a fault with either supply
HW-R: (1) Recessed pushbutton for hardware reset, reboots the switcher
ACT (rear, CPU): (1) Green LED, indicates CPU activity
MSG (rear, CPU): (1) Red LED, indicates CPU has generated an error message
CPU RESET (rear, CPU): (1) Recessed pushbutton, reboots the CPU and front panel

LAN (rear, CPU): (2) LEDs, green LED indicates Ethernet link status, amber LED indicates Ethernet activity
DANTE (rear, CPU): (2) LEDs, green LED indicates Dante network link status, amber LED indicates Dante network activity
OK (rear, power supplies): (2) Green LEDs, each indicates when the corresponding supply is powered and functioning
! (rear, power supplies): (2) Amber LEDs, each indicates a fault with the corresponding supply

Power

Main Power: 16 Amps @ 100-127 Volts AC or 8 Amps @ 200-240 Volts AC, 50/60 Hz; Requires (2) 20 Amp @ 100-127V, or (2) 10 Amp @ 200-240V, AC circuits

Power over DM (PoDM): Refer to the specifications for each DM 8G+ input and output blade

Power over HDBaseT: Refer to the specifications for each DM 8G+ input and output blade

Redundant Power Supplies

Quantity/Type: (2) high efficiency (>90%), hot-swappable, variable speed fan cooled, Crestron model DM-MDA-64-PWS (included)
Demonstrated MTBF: >500,000 hours per power supply
Redundancy: Complete unit continues to operate at full capacity on one or more functioning power supplies

Environmental

Temperature: 32° to 104° F (0° to 40° C)
Humidity: 10% to 90% RH (non-condensing)
Heat Dissipation: 5460 BTU/hr maximum, 3000 BTU/hr typical, with all blade slots occupied
Ambient Noise: 45 to 55 dBA typical; 43.5 to 44.5 dBA idle

Enclosure

Chassis: Metal with black finish, integrated rack ears, vented sides and rear, fan-cooled
Faceplate: Metal, black finish with polycarbonate label overlay, plastic touch screen bezel
Mounting: 14U 19-inch rack-mountable (rack ears built in), includes removable front and rear handles for handling

Dimensions

Height: 24.44 in (621 mm)
Width: 19.00 in (483 mm)
Depth: 17.21 in (438 mm) including rear handles

Weight

49.0 lb (22.3 kg) without I/O blades

Compliance

UL Listed for US & Canada, IC, CE, FCC Part 15 Class A digital device

MODELS & ACCESSORIES

Available Models

DM-MD64X64: 64x64 DigitalMedia™ Switcher

Included Accessories

DMB-4K-CPU-64: CPU Blade for DM-MD64X64 (Qty. 1 Included)
DM-MDA-64-FANTRAY: Fan Tray for DM-MD64X64 (Qty. 1 Included)
DM-MDA-64-PWS: Power Supply for DM-MD64X64 (Qty. 2 Included)

Available Accessories

DMB Series: Input and Output Blades for DM® Switchers
AUD-BOB-1602 Series: 16-Channel Analog Audio Breakout Box
DMF-CI-8: DigitalMedia™ Card Chassis for DM-NVX-C
PW-4830DUS: 150W PoDM Power Pack for DM 8G+® I/O Blades
DM-PSU-3X8-RPS: PoDM+ Redundant Power Supply for DM 8G+® I/O Blades
DM-RPP-K24: DigitalMedia™ 24-Port Keystone Patch Panel
DM-CONN-ULTRA-RECP Series: DigitalMedia™ Ultra Keystone RJ45 Jacks
DM-CBL-ULTRA-PC Series: DigitalMedia™ Ultra Patch Cables
DM-CBL-ULTRA-NP Series: DigitalMedia™ Ultra Cable, Non-Plenum Type CMR
DM-CBL-ULTRA-P Series: DigitalMedia™ Ultra Cable, Plenum Type CMP
DM-CBL-ULTRA-LSZH Series: DigitalMedia™ Ultra Cable, Low Smoke Zero Halogen
DM-CONN-20: Connectors for DM-CBL-ULTRA DigitalMedia Ultra Cable, 20-Pack
DM-CBL-8G-NP Series: DigitalMedia 8G™ Cable, non-plenum
DM-CBL-8G-P Series: DigitalMedia 8G™ Cable, plenum
DM-8G-CONN-WG-100: Connectors with Wire Guide for DM-CBL-8G DigitalMedia 8G™ Cable, 100-Pack
DM-8G-CRIMP-WG: Crimping Tool for DM-8G-CONN-WG-100
CRESFIBER8G-NP Series: CresFiber® 8G Multimode Fiber Optic Cable, 50/125 x4 breakout, non-plenum
CRESFIBER8G-P Series: CresFiber® 8G Multimode Fiber Optic Cable, 50/125 x4 breakout, plenum
CRESFIBER-CONN-SC50UM-12: Connectors for CresFiber® 8G Multimode Fiber Optic Cable, SC 50µm, 12-Pack
CRESFIBER8G-SM-P-SP2KM: CresFiber® 8G Single-Mode Fiber Optic Cable, plenum, 2 km spool
CRESFIBER8G-SM-CONN-LC-12: Connectors for CresFiber® 8G Single-Mode Fiber Optic Cable, LC, 12-Pack
CRESFIBER-TK: CresFiber® Termination Kit
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

Notes:

1. Crestron control via the DM network requires a Crestron control system, sold separately.
2. 4K, Ultra HD, and HDCP 2.2 are currently supported over HDMI, DM 8G+, and HDBaseT using select input and output blades. Refer to the specifications for each input/output blade and each connected device for its full capabilities. To enable 4K over fiber, the DM-MD64X64 can be augmented with one or more DMF-CI-8 card chassis or individual DM NVX series encoder/decoders.
3. The maximum cable length for DigitalMedia 8G+ (DM 8G+) or HDBaseT is dependent upon the type of cable 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 required when bundling multiple cables in a wire run, and are recommended for all applications 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.
4. The maximum cable length for DigitalMedia 8G Fiber (DM 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. See also note 2.
5. The maximum cable length for DigitalMedia 8G Single-Mode Fiber (DM 8G SM Fiber) is 7.5 miles (12 km) using CRESFIBER8G-SM or third-party G.652.D (or better) single-mode fiber optic cable. See also note 2.
6. Refer to the Crestron DigitalMedia Design Guide, Doc. #4546 for complete system design guidelines. All wire and cables are sold separately.
7. Item(s) sold separately.
8. Manages the routing of USB HID signals between peripheral DM devices 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 series, sold separately). Refer to the USB-EXT-DM-LOCAL and USB-EXT-DM-REMOTE spec sheets for more information.
9. Dante audio networking requires the switcher to be equipped with one or more Dante enabled input or output blades, models DMB-4K-I-HD-DNT and DMB-4K-O-HD-DNT.
10. Any HDMI input can support a DVI or Dual-Mode DisplayPort signal, and any HDMI output can support a DVI signal, using a suitable adapter or interface cable. CBL-HD-DVI interface cables are available separately.

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 https://www.crestron.com/How-To-Buy/Find-a-Representative or by calling 855-263-8754.

The specific patents that cover this and other Crestron products are listed online at https://www.crestron.com/legal/patents.

16.96 in
431 mm

15.06 in
383 mm

17.21 in
438 mm

19.00 in
483 mm

17.28 in
439 mm

24.44 in
621 mm