DM-MD16X16

16x16 DigitalMedia™ Switcher

Crestron® DM® Switchers provide the foundation for a complete DigitalMedia system, delivering an advanced, true high-definition multi-room AV signal routing solution that's extremely flexible and installer-friendly. The DM-MD16X16 affords low-latency switching and pure, lossless distribution of HDMI® and other signals to support the latest Blu-ray Disc® players, HDTV receivers, digital media servers, computers, and all your other AV devices. Integrated Ethernet networking and USB HID distribution provide a complete connectivity solution. And naturally, Crestron control is built in for managing the displays and other room devices without necessitating any additional wiring.

The DM-MD16X16 is field-configurable to handle up to 16 AV sources of virtually any type. The outputs are factory-configurable to provide up to 16 DM room outputs and/or HDMI outputs in a single chassis, with expansion capability possible for up to 80 outputs using multiple chassis. A full selection of DM switcher input cards, DM transmitters, and DM receivers provides extensive connectivity throughout a residence or commercial facility, supporting a complete range of analog and digital signal types — all through one switcher!

DigitalMedia thoughtfully manages all of your disparate AV signals and devices to ensure an optimum video image and audio signal at every location. User-friendly setup and troubleshooting tools are provided through the DM-MD16X16 front panel, or via Crestron ToolboxTM software, to make setting up a complete multi-room HD system easy.

To configure a DM switcher complete with input and output cards, cables, and other peripherals, please use the DigitalMedia $^{\text{TM}}$ Switcher Configuration Tool.

DigitalMedia 8G™

You can't talk about AV and home entertainment today without talking about high-definition, and creating a professional HD AV distribution system means handling the challenges that come with HDMI. HDMI is the standard for interfacing high-definition AV equipment, but despite its many benefits, wasn't developed with multi-room distribution in mind. So, as the leader in HDMI and control system technologies, Crestron developed DigitalMedia, the first complete HD AV distribution system to take HDMI to a higher level, allowing virtually any mix of AV sources to be distributed throughout a room, structure or across a campus from a centralized rack location.

DigitalMedia 8G is the latest generation of DM, providing the world's only truly professional, one-wire digital AV distribution and control network. Engineered for ultra high-bandwidth and ultimate scalability, DM 8G™ handles uncompressed video beyond high-definition with support for HDCP, Deep Color, and 3D, plus high-bitrate 7.1 audio formats including Dolby® TrueHD and DTS-HD Master Audio™, uncompressed multichannel PCM audio, and high-speed Ethernet, all over one 8-conductor twisted-pair wire or simplex multimode fiber. DM 8G enables wire distances up to 330 feet (100 m) via DM 8G+ (DM 8G over CAT5e)^[1,5], or 1000 ft via DM 8G Fiber (DM 8G over simplex multimode fiber)^[2,5], without any need for repeaters.

The DM-MD16X16 provides full support for Crestron DigitalMedia 8G devices as well as all first-generation DM CAT^[3,5] and DM Fiber^[4,5] products, letting you take advantage of the latest Crestron DM technology without compromising your existing investment.

Modular Architecture





The DM-MD16X16 features a modular architecture with 16 input card slots. Input cards are field-installable, allowing for easy and flexible system configuration with the ability to make changes to the system as needs change. A wide selection of input cards is offered to support a complete range of digital and analog AV signal types including HDMI, DVI, DisplayPort Multimode^[6], SDI, analog video and RGB, SPDIF and analog audio, and DigitalMedia.

The outputs on the DM-MD16X16 are factory-configurable to feed up to 16 DM Receivers/Room Controllers using your choice of DM 8G+, DM 8G Fiber, DM CAT, or DM Fiber. HDMI outputs are also available for direct connection to centralized audio processors and video monitors.

Output Expansion

An HDMI "pass-thru" output is provided on every input card to allow the inputs of up to 5 DM switchers to be daisy-chained, enabling the configuration of very large distribution systems with many DM and HDMI outputs. Using five DM-MD16X16 switchers, it is possible to support an incredible 80 separate outputs.

Computer Compatibility

Besides handling every available HDTV format supported by HDMI, DigitalMedia also supports the distribution of DVI, DisplayPort Multimode^[6], and RGB computer sources, and is fully compatible with DVI computer monitors up to 1920 x 1200 WUXGA.

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. For instance, the Blu-ray player that's feeding your 1080p 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 the 20" TV in the kitchen. 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 many devices use to communicate their capabilities. Via Crestron Toolbox software, the format and



resolution capabilities of each device can be assessed, allowing the installer to configure EDID signals appropriately for the most desirable and predictable behavior.

A Scaler for Every Display

Scaling capability can be added to any DM system using select DM receivers with built in high-definition scalers. [7] By placing an independent high-performance scaler at 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, and allows a high-definition 3D source to be viewed on lower-resolution 2D displays without compromising the original signal, letting you share your theater's full HD 1080p 3D image with smaller, lesser displays in the kitchen, bathroom, and bedrooms.

QuickSwitch HD® Technology

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 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.

Versatile Audio Routing

HDMI is the key to handling all the latest 7.1 surround sound formats like Dolby TrueHD and DTS-HD Master Audio. Great for your high-end home theater, but how do you share that same source with other audio zones in the house?

DigitalMedia provides the answer, allowing for the simultaneous distribution of multi-channel surround sound and two-channel stereo signals from the same HDMI source. Using a choice of DSP-based input cards, the DM-MD16X16 employs onboard digital processing to derive a stereo down-mix from the original multi-channel signal. Both signals can be routed separately or simultaneously from any of the switcher's DM outputs, allowing either signal to be selected for output at each DM receiver location.

Back at the switcher, the digital stereo signal is also converted to analog to enable sharing with every other room in the house via a SonnexTM, Adagio®, or other multi-room audio distribution system. The DM-MD16X16 also allows bulky surround sound processors and amplifiers to be located centrally instead of at the display location via optional local HDMI outputs.

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 DM room controllers and select DM 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 all of the DM devices in the system and provide display control

USB HID Switch

DigitalMedia lets you centralize ALL of your HD sources - not just television receivers and DVD changers, but also media servers and computers. Built-in USB HID (Human Interface Device) signal routing allows USB HID compatible keyboards and mice to be connected at a remote display location, conference table or presentation lectern, extending their signals through to the centralized equipment via USB HID ports provided on select switcher input cards.

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-MD16X16 provides a gateway for controlling many devices right through their HDMI connections, 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 as you like.

Easy Setup

Via the front panel or using Crestron Toolbox software, every step of the DM-MD16X16's setup process is designed to be quick and easy, configuring inputs and outputs automatically while letting the installer make intelligent design decisions along the way. The switcher even tests and measures the length of each DM cable, automatically making the appropriate calibrations for optimal signal transmission to every room. With DigitalMedia, an entire 16x16 system can be commissioned in as little as 15 minutes.

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

Please refer to the DigitalMedia Resources Webpage at http://www.crestron.com/dmresources/ for additional design tools and reference documents.

- > Provides lossless HD AV signal routing over twisted-pair wire or fiber
- > Integrates video, audio, networking, and control over one wire
- > Affords full matrix switching with ultra high 12.5 Gbps backplane data rate
- > Handles HDMI® with Deep Color, 3D, and high-bitrate 7.1 encoded audio
- > Supports video resolutions up to WUXGA 1920x1200 and HD 1080p60
- > Allows up to 330 ft (100 m) wire distance via DM $8G+^{TM}$
- > Allows up to 1000 ft (300 m) wire distance via DM 8G Fiber^[2,5]
- > Also supports all first-generation DM® CAT and DM Fiber products[3,4,5]
- > Supports up to 16 DM receivers and room controllers with easy expansion for more outputs
- > Modular inputs support a complete range of digital and analog signal types
- > QuickSwitch HD® technology manages HDCP keys for



- > Allows full audio and USB breakaway switching
- > Integrates with analog audio distribution systems
- > Enables simultaneous output of stereo and surround sound audio
- > Includes integrated Ethernet switch with Gigabit LAN port
- > Includes built-in power distribution for DM transmitters, repeaters, and room controllers
- > Provides easy setup and diagnostics tools via front panel or software
- > Half-million hour rated internal universal power supply
- > 7-space 19-inch rack-mountable

SPECIFICATIONS

Video

Switcher: 16x16 digital matrix, modular input cards and factory-configurable outputs, Crestron QuickSwitch HD®

Input Signal Types: Configurable via modular plug-in cards supporting HDMI®, DisplayPort Multimode^[6], DVI, SDI, RGB, component (YPbPr), S-Video (Y/C), composite video, DM CAT, DM Fiber, DM 8G+, and DM 8G Fiber Output Signal Types: Configurable via factory-installed output cards supporting DM CAT, DM Fiber, DM 8G+, DM 8G Fiber, HDMI, and DVI^[8] (All input cards also include HDMI pass-thru outputs)

Formats: HDMI w/Deep Color & 3D, DVI, HDCP content protection support, SD-SDI, HD-SDI, 3G-SDI, 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, 1024x768@60Hz, 1024x852@60Hz, 1024x1024@60Hz, 1280x720@50Hz (720p50), 1280x720@60Hz (720p60), 1280x768@60Hz, 1280x800@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, 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: 480i, 576i, 480p, 576p, 720p50, 720p60, 1080p24, 1080i25 (1125 lines), 1080i30, 1080p30, 1080p50 (1125 lines), 1080p60

Input Resolutions, Composite and S-Video: 480i, 576i Input Resolutions, SDI: (see DMC-SDI spec sheet)

Output Resolutions: Matched to inputs Backplane Data Rate: 12.5 Gbps

Audio

Switcher: 16x16 digital multi-channel audio-follow-video matrix switching, plus independent 16x16 stereo matrix for audio breakaway

Formats, SDI: (see DMC-SDI spec sheet)

Communications

DigitalMedia: DM Fiber, DM CAT, DMNet®, DM 8G+, DM 8G Fiber, HDCP management, EDID format management, CEC

Ethernet: 10/100/1000 Mbps, auto-switching, auto-negotiating, auto-

discovery, full/half duplex, TCP/IP, UDP/IP, CIP, DHCP, RSTP

USB: Supports USB HID class devices

Ethernet Switch

Provides (1) onboard 10/100/1000BaseT Gigabit Ethernet port, (1) internal 10BaseT/100BaseTX Ethernet port for the switcher, and (32) remote 10BaseT/100BaseTX Ethernet ports via select outboard devices

USB Switch

16x16 matrix

Card Slots

1 - 16: (16) DM switcher input card slots;

Each slot accepts (1) DMC-series input card;

Input cards are field-installable

DM OUTPUTS (SLOT 1 - 2): (2) DM switcher output card slots;

Each slot accepts (1) DMCO-series output card;

Output cards require factory installation

Connectors

LAN: (1) 8-wire RJ45 female;

10/100/1000BaseT Ethernet port

24ABG / EIG 1 - 8 (SLOT 1 - 2): (16) sets of (1) 4-pin and (1) 3-pin 3.5mm detachable terminal blocks;

Comprises (16) DMNet ports with "EIG" power selection ports, each set associated with a corresponding DM CAT output port on the output card in either output slot:

Each DMNet port provides power and communications for a DM CAT device connected via DM cable:

Each EIG port connects to an external power supply^[9], or to the internal power source via a jumper, to power the DM CAT device connected to the corresponding DMNet port:

Maximum Load: 40 Watts (1.66 Amps @ 24 Volts DC) per port, limited to available DMNet power from internal power supply (see "Power Requirements" below) or external power supply^[9]

100-250V~7.0A 50/60Hz: (1) IEC C14 male chassis plug, main power input; Mates with removable power cord, included

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

COMPUTER (front): (1) USB Type B female;

USB 1.1 computer console port (6 ft cable included)

LCD Display

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

Controls & Indicators

SOFTKEYS: (4) pushbuttons for activation of LCD driven functions **HW-R:** (1) recessed miniature pushbutton for hardware reset, reboots the switcher

ROUTE: (1) pushbutton and red LED, selects ROUTE mode to allow routing changes

VIEW: (1) pushbutton and red LED, selects VIEW mode for viewing current routes

INFO: (1) pushbutton and red LED, selects INFO mode for viewing AV and device info

MENU: (1) pushbutton, steps menu back one level

ENTER: (1) pushbutton, executes highlighted menu or value AUDIO: (1) pushbutton & red LED, selects audio routing view VIDEO: (1) pushbutton & red LED, selects video routing view



IN 1 - 16: (16) pushbuttons and red LEDs, select input for routing **OUT 1 - 16:** (16) pushbuttons and red LEDs, select output for routing LAN (rear): (2) LEDs, green LED indicates Ethernet link status, amber LED indicates Ethernet activity

Power Requirements

Main Power: 550 Watts @ 100-240 Volts AC, 50/60 Hz

Available DMNet Power: 110 Watts (4.6 Amps @ 24 Volts DC) from internal

power supply

Environmental

Temperature: 32° to 104°F (0° to 40°C) Humidity: 10% to 90% RH (non-condensing)

Heat Dissipation: 1500 BTU/Hr

Enclosure

Chassis: Metal with black finish, vented sides, fan-cooled

Faceplate: Extruded aluminum, black finish with polycarbonate label overlay Mounting: Freestanding or 7U 19-inch rack-mountable (adhesive feet and

rack ears included)

Dimensions

Height: 12.22 in (311 mm) without feet

Width: 17.28 in (439 mm), 19.00 in (483 mm) with ears

Depth: 18.13 in (461 mm) without cards

Weight

28.4 lb (12.9 kg) without cards

Available Models

DM-MD16X16: 16x16 DigitalMedia™ Switcher

Available Accessories

DMC-HD: HDMI® Input Card

DMC-HD-DSP: HDMI® Input Card w/Down-mixing

DMC-DVI: DVI/RGB Input Card

DMC-VID-RCA-A: RCA Analog Video Input Card w/Analog Audio DMC-VID-RCA-D: RCA Analog Video Input Card w/SPDIF Audio

DMC-VID-BNC: BNC Analog Video Input Card

DMC-VID4: Quad Video Input Card

DMC-SDI: SDI Input Card

DMC-CAT: DigitalMedia[™] CAT Input Card

DMC-CAT-DSP: DigitalMedia™ CAT Input Card w/Down-mixing

DMC-F: DigitalMedia™ Fiber Input Card

DMC-F-DSP: DigitalMedia™ Fiber Input Card w/Down-mixing

DMC-C: DigitalMedia 8G+™ Input Card

DMC-C-DSP: DigitalMedia 8G+™ Input Card w/Down-mixing

DMC-S: DigitalMedia 8G™ Fiber Input Card

DMC-S-DSP: DigitalMedia 8G™ Fiber Input Card w/Down-mixing

DMCO-1000: 2 DM Fiber Output Card

DMCO-1100: 4 DM Fiber Output Card

DMCO-1110: 6 DM Fiber Output Card

DMCO-1111: 8 DM Fiber Output Card

DMCO-2000: 2 DM CAT w/1 HDMI Output Card

DMCO-2200: 4 DM CAT w/2 HDMI Output Card

DMCO-2220: 6 DM CAT w/3 HDMI Output Card

DMCO-2222: 8 DM CAT w/4 HDMI Output Card

DMCO-4000: 2 DM 8G Fiber w/1 HDMI Output Card

DMCO-4400: 4 DM 8G Fiber w/2 HDMI Output Card DMCO-4440: 6 DM 8G Fiber w/3 HDMI Output Card

DMCO-4444: 8 DM 8G Fiber w/4 HDMI Output Card

DMC0-5000: 2 DM 8G+ w/1 HDMI Output Card

DMCO-5500: 4 DM 8G+ w/2 HDMI Output Card

DMCO-5550: 6 DM 8G+ w/3 HDMI Output Card

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DMCO-3333: 8 HDMI w/8 Stereo Analog Audio Output Card
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DMCO-2100: 2 DM Fiber & 2 DM CAT w/1 HDMI Output Card DMCO-1220: 2 DM Fiber & 4 DM CAT w/2 HDMI Output Card

DMCO-2221: 2 DM Fiber & 6 DM CAT w/3 HDMI Output Card

DMCO-1120: 4 DM Fiber & 2 DM CAT w/1 HDMI Output Card

DMCO-1122: 4 DM Fiber & 4 DM CAT w/2 HDMI Output Card

DMCO-1112: 6 DM Fiber & 2 DM CAT w/1 HDMI Output Card

DMCO-5100: 2 DM Fiber & 2 DM 8G+ w/1 HDMI Output Card

DMCO-1550: 2 DM Fiber & 4 DM 8G+ w/2 HDMI Output Card

DMCO-5551: 2 DM Fiber & 6 DM 8G+ w/3 HDMI Output Card

DMCO-1150: 4 DM Fiber & 2 DM 8G+ w/1 HDMI Output Card

DMCO-1155: 4 DM Fiber & 4 DM 8G+ w/2 HDMI Output Card

DMCO-1115: 6 DM Fiber & 2 DM 8G+ w/1 HDMI Output Card

DMCO-1300: 2 DM Fiber & 2 HDMI w/2 Stereo Analog Audio Output Card

DMCO-1330: 2 DM Fiber & 4 HDMI w/4 Stereo Analog Audio Output Card

DMCO-1333: 2 DM Fiber & 6 HDMI w/6 Stereo Analog Audio Output Card

DMCO-1130: 4 DM Fiber & 2 HDMI w/2 Stereo Analog Audio Output Card

DMCO-1133: 4 DM Fiber & 4 HDMI w/4 Stereo Analog Audio Output Card

DMCO-1113: 6 DM Fiber & 2 HDMI w/2 Stereo Analog Audio Output Card DMCO-2300: 2 DM CAT w/1 HDMI & 2 HDMI w/2 Stereo Analog Audio Output

DMCO-2330: 2 DM CAT w/1 HDMI & 4 HDMI w/4 Stereo Analog Audio Output Card

DMCO-2333: 2 DM CAT w/1 HDMI & 6 HDMI w/6 Stereo Analog Audio Output Card

DMCO-2230: 4 DM CAT w/2 HDMI & 2 HDMI w/2 Stereo Analog Audio Output Card

DMCO-2233: 4 DM CAT w/2 HDMI & 4 HDMI w/4 Stereo Analog Audio Output Card

DMCO-2223: 6 DM CAT w/3 HDMI & 2 HDMI w/2 Stereo Analog Audio Output Card

DMCO-4300: 2 DM 8G Fiber w/1 HDMI & 2 HDMI w/2 Stereo Analog Audio **Output Card**

DMCO-4330: 2 DM 8G Fiber w/1 HDMI & 4 HDMI w/4 Stereo Analog Audio **Output Card**

DMCO-4333: 2 DM 8G Fiber w/1 HDMI & 6 HDMI w/6 Stereo Analog Audio **Output Card**

DMCO-4430: 4 DM 8G Fiber w/2 HDMI & 2 HDMI w/2 Stereo Analog Audio **Output Card**

DMCO-4433: 4 DM 8G Fiber w/2 HDMI & 4 HDMI w/4 Stereo Analog Audio **Output Card**

DMCO-4443: 6 DM 8G Fiber w/3 HDMI & 2 HDMI w/2 Stereo Analog Audio **Output Card**

DMCO-5400: 2 DM 8G+ w/1 HDMI & 2 DM 8G Fiber w/1 HDMI Output Card

DMCO-5440: 2 DM 8G+ w/1 HDMI & 4 DM 8G Fiber w/2 HDMI Output Card

DMCO-5444: 2 DM 8G+ w/1 HDMI & 6 DM 8G Fiber w/3 HDMI Output Card

DMCO-5540: 4 DM 8G+ w/2 HDMI & 2 DM 8G Fiber w/1 HDMI Output Card

DMCO-5544: 4 DM 8G+ w/2 HDMI & 4 DM 8G Fiber w/2 HDMI Output Card

DMCO-5554: 6 DM 8G+ w/3 HDMI & 2 DM 8G Fiber w/1 HDMI Output Card

DMCO-5300: 2 DM 8G+ w/1 HDMI & 2 HDMI w/2 Stereo Analog Audio **Output Card**

DMCO-5330: 2 DM 8G+ w/1 HDMI & 4 HDMI w/4 Stereo Analog Audio **Output Card**

DMCO-5333: 2 DM 8G+ w/1 HDMI & 6 HDMI w/6 Stereo Analog Audio Output Card

DMCO-5530: 4 DM 8G+ w/2 HDMI & 2 HDMI w/2 Stereo Analog Audio Output Card

DMCO-5533: 4 DM 8G+ w/2 HDMI & 4 HDMI w/4 Stereo Analog Audio **Output Card**

DMCO-5553: 6 DM 8G+ w/3 HDMI & 2 HDMI w/2 Stereo Analog Audio **Output Card**

DM-CBL-NP-SP500: DigitalMedia™ Cable, non-plenum, 500 ft spool DM-CBL-P-SP500: DigitalMedia™ Cable, plenum-rated, 500 ft spool

DM-CBL-D-NP-SP500: DigitalMedia™ D Cable, non-plenum, 500 ft spool DM-CBL-D-P-SP500: DigitalMedia™ D Cable, plenum, 500 ft spool

DM-CONN-20: DigitalMedia[™] Cable Connectors, 20-Pack



CRESFIBER-DUAL-SC-ARMORED-P-300: CresFiber® ARMORED Duplex Fiber Optic Cable Assembly, 50/125, SC, Armored, Plenum, 300 ft

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

Notes:

1. The maximum DigitalMedia 8G+ cable length is 330 ft (100 m) using DM-CBL-8G DigitalMedia 8G cable, DM-CBL DigitalMedia Cable, 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 1080b.

Optic Cable Assembly, 50/125, SC, Non-Plenum, 100 ft

- 2. The maximum DigitalMedia 8G Fiber cable length is 1000 ft (300 m) using CRESFIBER8G fiber optic cable, or 500 ft (150 m) using standard CRESFIBER, CRESFIBER-SINGLE-SC, or generic OM3 simplex multimode fiber optic cable.
- 3. The maximum DigitalMedia CAT cable length 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.
- 4. The maximum DigitalMedia Fiber cable length is 1000 ft (300 m) using CRESFIBER, CRESFIBERSG, CRESFIBER-DUAL-SC, or generic OM2/OM3 duplex multimode fiber optic cable.
- 5. 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.
- 6. DisplayPort Multimode connectivity is supported via an HDMI or DVI input port using a suitable adapter or interface cable.
- 7. DM receivers with built-in scaling include the DM-RMC-SCALER-C and DM-RMC-200-C. All DM receivers sold separately.
- 8. DVI output is supported via an HDMI output port using a suitable adapter or interface cable. CBL-HD-DVI interface cable available separately.
- 9. For external DMNet power, use a Crestron CNPWS-75, C2N-SPWS300, or other Cresnet power supply as required. Do not interconnect DMNet with

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.

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DM-MD16X16 16x16 DigitalMedia[™] Switcher

DM-MD16X16 in a Typical Application









