

**DM-MD8X8/DM-MD16X16/DM-MD32X32/DM-MD8X8-RPS/DM-MD16X16-RPS/
DM-MD32X32-RPS**
DigitalMedia™ Switchers

DO Install the Device

Crestron® DigitalMedia™ switchers can be mounted into a rack or can be placed onto a flat surface.

NOTE: Unless otherwise indicated, references to the DM-MD8X8, DM-MD16X16, and DM-MD32X32 throughout this guide also apply to the DM-MD8X8-RPS, DM-MD16X16-RPS, and DM-MD32X32-RPS, respectively.

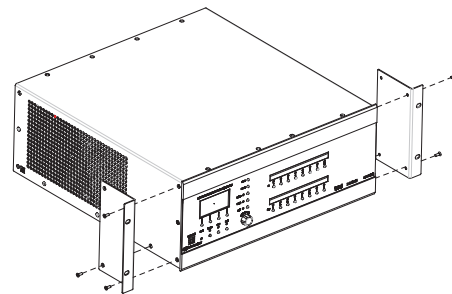
Mounting into a Rack

For information about mounting the DM-MD8X8 or DM-MD16X16 into a rack, refer to the “Mounting the DM-MD8X8 or DM-MD16X16 into a Rack” section. For information about mounting the DM-MD32X32 into a rack, refer to the “Mounting the DM-MD32X32 into a Rack” section.

Mounting the DM-MD8X8 or DM-MD16X16 into a Rack

The DM-MD8X8 occupies 4U of rack space. The DM-MD16X16 occupies 7U of rack space. Using a #2 Phillips screwdriver (not included) and the included 6-32 x 3/8" Phillips head screws, attach the two included rack ears to the device. Then, mount the device into the rack using four mounting screws (not included) for the DM-MD8X8 and eight mounting screws (not included) for the DM-MD16X16.

Attachment of Rack Ears (DM-MD8X8 Shown)



Mounting the DM-MD32X32 into a Rack

The DM-MD32X32 occupies 14U of rack space. Rack ears are molded into the chassis and cannot be removed. Mount the device into the rack using eight mounting screws (not included).

Placing onto a Flat Surface

When placing the device onto a flat surface or stacking it with other equipment, attach the included feet near the corner edges on the underside of the device.

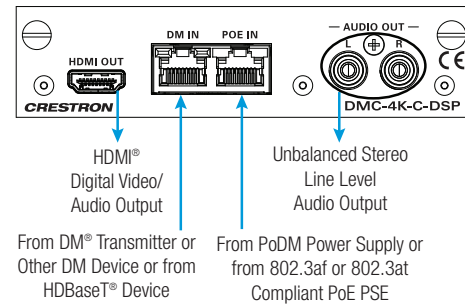
DO Connect Input and Output Cards

Various input and output cards are available for the DigitalMedia switchers.

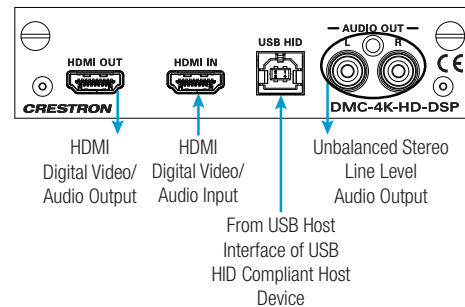
Connecting Input Cards

The following illustrations provide information about connections to some of the available input cards.

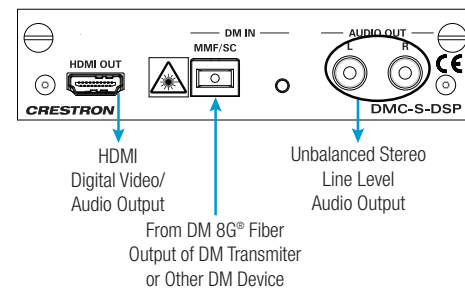
DMC-4K-C-DSP Input Card



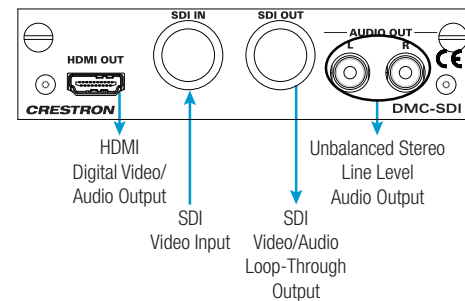
DMC-4K-HD-DSP Input Card



DMC-S-DSP Input Card



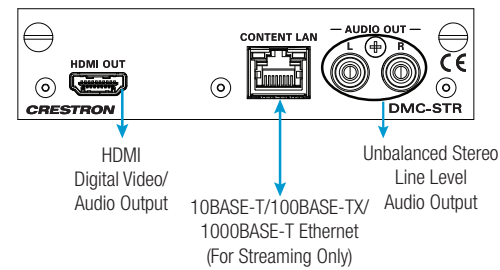
DMC-SDI Input Card



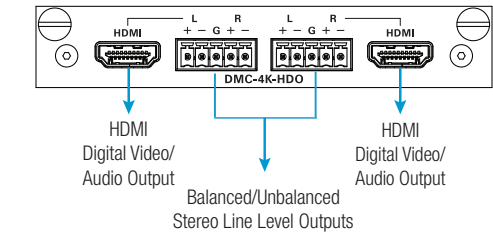
DO Check the Box

| QUANTITY | PRODUCT | COLOR | PART NUMBER |
|--|---|-------|-------------|
| 1 | Cable, USB 2.0, A - B, 6' (1.83 m) | | 2014966 |
| 8, 16, or 32 | Connector, 4-Pin | | 2003576 |
| 4 | Foot, 0.5" x 0.5" x 0.23", Adhesive | Black | 2002389 |
| DM-MD8X8 and DM-MD8X8-RPS Only | | | |
| 1 | Power Cord, 6' 7" (2 m) | | 4505164 |
| DM-MD16X16, DM-MD16X16-RPS, DM-MD32X32, and DM-MD32X32-RPS Only | | | |
| 1 | Power Cord, 6' 6" (2 m) | | 4510874 |
| DM-MD8X8, DM-MD16X16, and DM-MD32X32 Only | | | |
| 8, 16, or 32 | Connector, 3-Pin with Jumpers | | 4508102 |
| DM-MD8X8-RPS, DM-MD16X16-RPS, and DM-MD32X32-RPS Only | | | |
| 8, 16, or 32 | Connector, 3-Pin | | 2003575 |
| DM-MD8X8 and DM-MD8X8-RPS Only | | | |
| 2 | Bracket, Rack Ear, 4U | | 2029093 |
| DM-MD16X16 and DM-MD16X16-RPS Only | | | |
| 2 | Bracket, Rack Ear, 7U | | 2023207 |
| DM-MD8X8, DM-MD8X8-RPS, DM-MD16X16, and DM-MD16X16-RPS Only | | | |
| 6 or 14 | Screw, 6-32 x 3/8", Undercut Head, Phillips | Black | 2007235 |

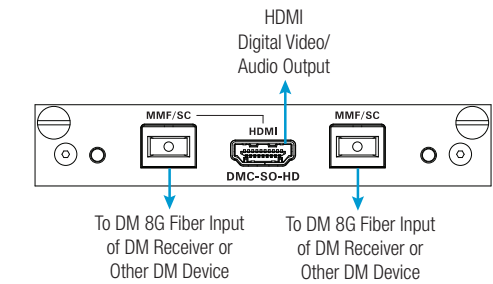
DMC-STR Input Card



DMC-4K-HDO Output Card



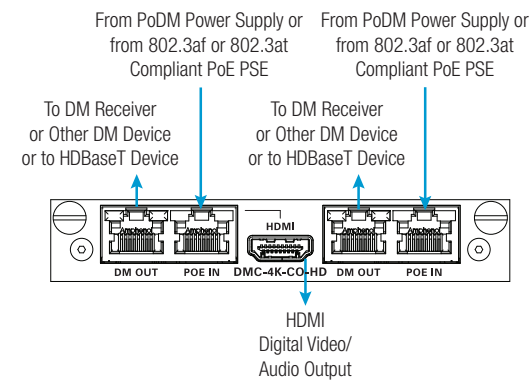
DMC-SO-HD Output Card



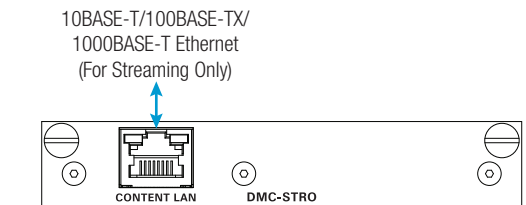
Connecting Output Cards

The following illustrations provide information about connections to some of the available output cards.

DMC-4K-CO-HD Output Card



DMC-STRO Output Card



DO Power DM 8G+ Devices Using Power over DM

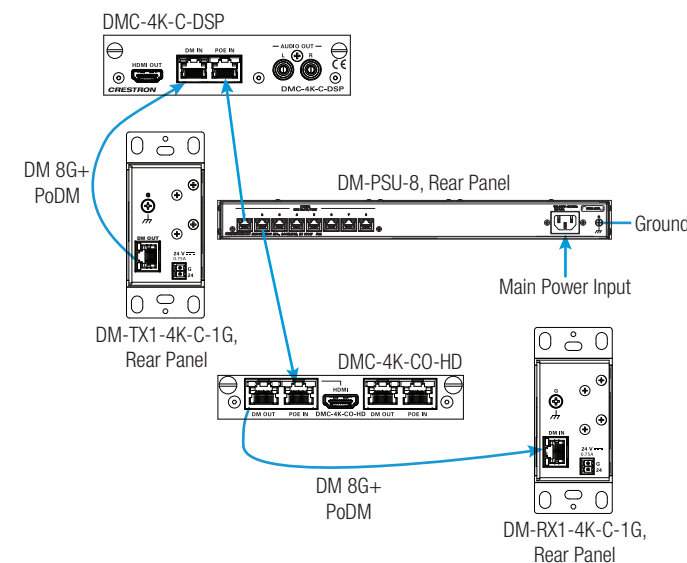
The DM IN port of a DM 8G+® input card and the DM OUT port of a DM 8G+ output card can power connected DM 8G+ devices using Power over DM (PoDM or PoDM+). To enable the DM IN or DM OUT port to use PoDM or PoDM+, do the following:

- For PoDM, connect the corresponding POE IN port to a PoDM power supply (DM-PSU-8 or DM-PSU-16) or to 802.3af or 802.3at Power over Ethernet (PoE) compliant Power Sourcing Equipment (PSE). Refer to the connected DM 8G+ device documentation for PoDM capabilities and requirements.
- For PoDM+, connect the corresponding POE IN port to 802.3at Type 2 Class 4 PoE+ compliant PSE such as the CEN-SWPOE-16. Refer to the connected DM 8G+ device documentation for PoDM+ capabilities and requirements.

NOTE: At the time of publication of this document, the DM-RMC-4K-SCALER-C is the only DigitalMedia endpoint that requires PoDM+.

Refer to the following illustration for an example of powering DM 8G+ devices using PoDM.

Powering DM 8G+ Devices Using PoDM



NOTE: The POE IN port does not provide a network connection. The POE IN port is used to enable PoDM or PoDM+ only.

NOTE: The internal power supply of a DigitalMedia switcher does not power DM 8G+ devices.

NOTE: When PoDM or PoDM+ is used to power a DM 8G+ device, connection of the DM 8G+ device to the included power pack is not required.

NOTE: Any wiring that is connected to a PoDM or PoE PSE port is for intrabuilding use only and should not be connected to a line that runs outside of the building in which the PSE is located.

DO Route Inputs

Using the front panel controls, route inputs to one or more of the available outputs as follows:

- Press the **ROUTE** button. The AUDIO, VIDEO, and USB LEDs light, indicating the signal types that are to be routed. (Pressing the **AUDIO**, **VIDEO**, and **USB** buttons selects or deselects the corresponding signal type.)
- Press the appropriate **IN** button that corresponds to the input to be routed. The LED of the selected input lights, and the LEDs of any outputs to which the input is currently routed also light.
- Press the appropriate **OUT** buttons that correspond to the desired outputs. The LEDs of the selected outputs flash to indicate that the input is not yet routed.
- Press the **ENTER** button to route the input. The LEDs of the selected outputs light steadily, and the display shows the input number and the outputs to which the input is routed.

To disconnect an input from an output, do the following:

- Press the **ROUTE** button.
- Press the desired **OUT** button. The display shows **IN None**.
- Press the **ENTER** button. The output is disconnected from the input.

DO Configure the DM Switcher

Configure input, output, and network settings using the front panel controls and Installer Tools.

Configuration of network settings includes the following:

- IP Address
- Subnet Mask
- Default Router
- DHCP
- Hostname
- Control System IP Address
- Private Network Mode (refer to the following section for additional information)

DO Configure Private Network Mode

Configure Private Network Mode (PNM) as necessary. PNM allows a DM system to consume only one IP address in the public network. PNM is enabled by default.

When PNM is enabled, be aware of the following:

- In a DM system containing a single DM switcher, the DM switcher is the only DM device that consumes an IP address. When DHCP is enabled, the IP address is set dynamically. When DHCP is disabled, the IP address is set manually.
 - All DM I/O cards and DM endpoints (transmitters and receivers) that are connected to the DM switcher are hidden from the public network and cannot be reached directly; instead, all communication is managed through the DM switcher. As a result, PNM creates a completely private IP network for all DM cards and endpoints.
- NOTE:** When connected to a DM switcher, a DM endpoint must not have its convenience Ethernet port connected to the LAN. A DM endpoint receives its network connection via the DM switcher. The convenience Ethernet port of a DM endpoint is available for connection to a network device such as a PC, Blu-ray™ player, or TV.

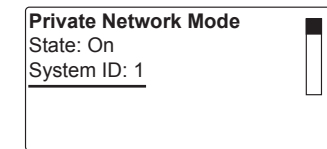
When multiple DM switchers are cascaded, assign a unique system ID to each switcher. PNM uses the system ID of each switcher to determine the internal IP address used by each device in the DM system.

NOTE: When PNM is enabled, each DM switcher must connect directly to the LAN. A DM switcher cannot connect to the LAN through another DM switcher.

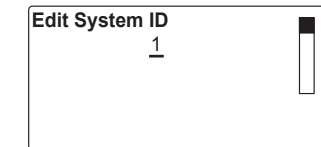
To assign a unique system ID to a DM switcher, do the following:

- In the **Network** section of Installer Tools, navigate to the **Private Network Mode** configuration screen.
- Select **System ID**.

NOTE: Private Network Mode is enabled by default (**State** is set to **On**).



The **Edit System ID** configuration screen appears.



The system ID ranges from 1 to 64. The default system ID is 1.

- Select a unique system ID for the DM switcher.
- NOTE:** Ensure that a unique system ID is set for the DM switcher when connected to other DM switchers. In addition, it is recommended that the default system ID not be used when multiple DM switchers are installed in a facility. The use of a system ID other than the default system ID avoids potential conflicts when bringing additional switchers online.
- Press the **MENU** button to exit Installer Tools.

DO Learn More

Visit the website for additional information and the latest firmware updates. To learn more about this product, use a QR reader application on your mobile device to scan the QR image.

Crestron Electronics

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888.CRESTRON | www.crestron.com



As of the date of manufacture, the product has been tested and found to comply with specifications for CE marking.

This product is Listed to applicable UL Standards and requirements by Underwriters Laboratories Inc.

Federal Communications Commission (FCC) Compliance Statement

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

(1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

CAUTION: Changes or modifications not expressly approved by the manufacturer responsible for compliance could void the user's authority to operate the equipment.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation.

If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Industry Canada (IC) Compliance Statement

CAN ICES-3(B)/NMB-3(B)



The DMC Fiber Series are class 1 laser products. They comply with safety regulations of IEC-60825-1, FDA 21 CFR 1040.11 and FDA 21 CFR 1040.10.

WARNING: Visible and invisible laser radiation when open. Avoid direct exposure to beam.

NOTE: Plug the included dust cap into the optical transceiver when the fiber optic cable is unplugged.

Rack Mounting Safety Precautions

- Elevated Operating Ambient Temperature:** If installed in a closed or multi-unit rack assembly, the operating ambient temperature of the rack environment may be greater than room ambient temperature. Therefore, consideration should be given to installing the equipment in an environment compatible with the maximum ambient temperature (T_{ma}) specified by the manufacturer.
- Reduced Airflow:** Installation of the equipment in a rack should be such that the amount of airflow required for safe operation of the equipment is not compromised.
- Mechanical Loading:** Mounting of the equipment in the rack should be such that a hazardous condition is not achieved due to uneven mechanical loading.
- Circuit Overloading:** Consideration should be given to the connection of the equipment to the supply circuit and the effect that overloading of the circuits might have on overcurrent protection and supply wiring. Appropriate consideration of equipment nameplate ratings should be used when addressing this concern.
- Reliable Earthing:** Reliable earthing of rack-mounted equipment should be maintained. Particular attention should be given to supply connections other than direct connections to the branch circuit (e.g., use of power strips).

Electrical Connection

"This product must be connected to an earthed mains socket-outlet."

- Finland: "Laitte on liitettävä suojamaadoituskoskettimilla varustettuun pistorasiaan."
- Norway: "Apparatet må tilkoples jordet stikkontakt."
- Sweden: "Apparaten skall anslutas till jordat uttag."

The specific patents that cover Crestron products are listed at <http://www.crestron.com/legal/patents>. The product warranty can be found at www.crestron.com/warranty.

Certain Crestron products contain open source software. For specific information, please visit www.crestron.com/opensource.

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