DMC-C



HDBaseT® Certified DigitalMedia 8G+® Input Card for DM® Switchers

- > Modular input card for a DM-MD8X8, DM-MD16X16, or DM-MD32X32 switcher
- > Provides a single DM 8G+® input
- > Supports cable lengths up to 330 ft (100 m) using DM 8G® cable or CAT5e^[1]
- > HDBaseT® Certified Enables direct connection to other HDBaseT certified equipment
- > Handles video resolutions up to Full HD 1080p
- > Handles computer resolutions up to WUXGA
- > Handles 3D video and Deep Color
- > Handles Dolby® TrueHD, DTS-HD®, and uncompressed 7.1 linear PCM audio
- > HDCP compliant
- > Includes an HDMI® output for pass-through of the input signal
- > Includes a stereo analog line-level audio output with volume control [3]
- > Allows extraction of stereo 2-channel audio signals
- > Supports PoDM and PoH[2]
- > Occupies a single DM® switcher input card slot
- > Provides a rack-mountable DM 8G+ receiver solution using the optional DMCI card interface^[4]

The DMC-C is an input card designed for use with any card-based Crestron® DigitalMedia™ Switcher. It provides one DM 8G+® input, with complementary HDMI® pass-through and analog audio outputs. The DM 8G+ input enables the connection of a DM 8G+ transmitter, the output of another DM® switcher, or an HDBaseT® certified source, using a single CAT type twisted pair cable. [1] Power over DM (PoDM) is supplied through the same connection, providing a centralized power source for PoDM compatible transmitters. [2]

NOTE: Refer to model DMC-C-DSP for use with surround sound sources. Refer to models DMC-4K-C and DMC-4K-C-DSP for applications requiring support for higher resolutions up to 4K.

DigitalMedia 8G+®

Engineered for ultra high-bandwidth and ultimate scalability, DigitalMedia 8G+ (DM 8G+) provides a true one-wire lossless transport for moving high-definition video, audio, power, Ethernet, and control signals over low-cost twisted pair copper wire. DM 8G+ handles uncompressed Full HD 1080p video signals with support for HDCP, Deep Color, 3D, and high-bitrate 7.1 audio, as well as computer signals up to WUXGA. All signals are transported over a single CAT type cable, supporting distances up to 330 feet (100 m) using Crestron DM 8G® Cable or CAT5e.^[1]

HDBaseT® Certified

Crestron DigitalMedia 8G+ technology is designed using HDBaseT Alliance specifications, ensuring interoperability with other HDBaseT certified products. An HDBaseT compliant device can be connected directly to the DM 8G+ input on the DMC-C without requiring a DM transmitter.



HDMI® Pass-Through

Every DM switcher input card includes an HDMI output port, which can be used to pass the input signal through to a local audio processor or video monitor, or to feed a second DM switcher for output expansion purposes.

Audio Extracting

The DMC-C also includes an unbalanced analog audio output, allowing stereo audio signals to be extracted from the digital input and fed to a multiroom audio distribution system. The output volume is adjustable via a control system using a keypad, touch screen, handheld remote, or mobile device. [3]

NOTE: For applications requiring the simultaneous distribution of multichannel surround sound and 2-channel stereo audio signals, use model DMC-C-DSP.

Power over DM®

Power over DM (PoDM) and Power over HDBaseT (PoH) can be supplied through the DMC-C via its DM 8G+ input port to power a compatible DM 8G+ transmitter or HDBaseT device. To enable PoDM or PoH, simply connect a PoDM Power Supply (model DM-PSU-8 or DM-PSU-16^[4]) to the POE IN port on the input card. As an alternative to a PoDM Power Supply, a Crestron PoE switch, PoE injector, or other 802.3af or 802.3at compliant PoE PSE may be used. [2]

Standalone DM 8G+ Receiver

In addition to its use as an input card for DM switchers, the DMC-C may also be used with the DMCI DigitalMedia Card Interface^[4] to provide a DM 8G+ receiver solution that's perfect for installation in an equipment rack or AV cart, or as a portable display interface.

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

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



DMC-C HDBaseT® Certified DigitalMedia 8G+® Input Card for DM® Switchers

SPECIFICATIONS

Video

Input Signal Types: DM 8G+® & HDBaseT® w/Deep Color & 3D

Output Signal Types: HDMI® w/Deep Color & 3D (DVI compatible ^[5])

Input Resolutions, Progressive: 640x480@60Hz, 720x480@60Hz
(480p), 720x576@50Hz (576p), 800x600@60Hz, 848x480@60Hz,
852x480@60Hz, 854x480@60Hz, 1024x768@60Hz, 1024x852@60Hz,
1024x1024@60Hz, 1280x720@50Hz (720p50), 1280x720@60Hz
(720p60), 1280x768@60Hz, 1280x800@60Hz, 1280x960@60Hz,
1280x1024@60Hz, 1360x768@60Hz, 1365x1024@60Hz,
1366x768@60Hz, 1400x1050@60Hz, 1440x900@60Hz, 1600x900@60Hz,
1600x1200@60Hz, 1680x1050@60Hz, 1920x1080@24Hz (1080p24),
1920x1080@25Hz (1080p25), 1920x1080@50Hz (1080p50),
1920x1080@60Hz (1080p60), 1920x1200@60Hz, 2048x1080@24Hz,
2048x1152@60Hz, plus any other resolution allowed by HDMI up to
165MHz pixel clock

Input Resolutions, 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

Output Resolutions: Matched to input

Audio

Input Signal Types: DM 8G+, HDBaseT

Output Signal Types: HDMI (multichannel pass-through from input),

analog stereo (2-channel pass-through from input [3])

Digital Formats: Dolby Digital®, Dolby Digital EX, Dolby Digital Plus, Dolby® TrueHD, DTS®, DTS-ES, DTS 96/24, DTS-HD High Res,

DTS-HD Master Audio™, LPCM up to 8 channels

Analog Formats: Stereo 2-channel

Digital-To-Analog Conversion: 24-bit 48 kHz

Analog Performance: Frequency Response: 20Hz to 20kHz ±0.5dB;

S/N Ratio: >95dB, 20Hz to 20kHz A-weighted;

THD+N: <0.005% @ 1kHz; Stereo Separation: >90dB

Analog Volume Adjustment: -80dB to 0dB

Communications

DigitalMedia: DM 8G+, HDCP, EDID, CEC, PoDM, PoDM+, Ethernet

HDBaseT: HDCP. EDID. PoH. Ethernet

HDMI: HDCP, EDID, CEC

NOTE: Supports management of HDCP and EDID; supports management of CEC between the connected HDMI device and a control system

Connectors

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

HDMI digital video/audio output;

Also supports DVI^[5]

DM IN: (1) 8-pin RJ45 female, shielded;

DM 8G+ input, HDBaseT compliant;

PoDM and PoH PSE (Power Sourcing Equipment) port[2];

Connects to the DM 8G+ output of a DM transmitter or other DM device, or to a HDBaseT device, via CAT5e or Crestron DM-CBL-8G DigitalMedia 8G[™] Cable^[1]

POE IN: (1) 8-pin RJ45 female, PoE input;

Connects to a DM-PSU-8 or DM-PSU-16 PoDM Power Supply, or to an 802.3af or 802.3at compliant PoE PSE (Power Sourcing Equipment), to enable PoDM and PoH power sourcing^[2]

AUDIO OUT: (2) RCA female;

Unbalanced stereo line-level audio output^[3]; Output Impedance: 100 Ohms nominal; Maximum Output Level: 2 Vrms

Indicators

DM IN: (2) LEDs, green LED indicates DM link status, amber LED indicates video and HDCP signal presence

Construction

Plug-in card, occupies (1) DM switcher input card slot, includes metal faceplate w/black finish

Weight

8.0 oz (227 g)

MODELS & ACCESSORIES

Available Models

DMC-C: HDBaseT® Certified DigitalMedia 8G+® Input Card for DM® Switchers

Available Accessories

DM-PSU-8: 8-Port PoDM Power Supply for DM® Switchers DM-PSU-16: 16-Port PoDM Power Supply for DM® Switchers DM-CBL-8G-NP: DigitalMedia $8G^{\text{TM}}$ Cable, non-plenum DM-CBL-8G-P: DigitalMedia $8G^{\text{TM}}$ Cable, plenum

DM-8G-CONN: Connector for DM-CBL-8G
DM-8G-CRIMP: Crimping Tool for DM-8G-CONN

DM-8G-CONN-WG: Connector with Wire Guide for DM-CBL-8G **DM-8G-CRIMP-WG:** Crimping Tool for DM-8G-CONN-WG

CBL Series: Crestron® Certified Interface Cables MP-WP Series: Media Presentation Wall Plates

MPI-WP Series: Media Presentation Wall Plates - International Version

DMCI: DigitalMedia[™] Card Interface



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Notes:

- 1. The maximum cable length for DigitalMedia 8G+ (DM 8G+) or HDBaseT is 330 ft (100 m) using DM-CBL-8G DigitalMedia 8G cable, DM-CBL DigitalMedia Cable, DM-CBL-D DigitalMedia D Cable, or third-party 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 1080p. Refer to the Crestron DigitalMedia Design Guide, Doc. #4546 for complete system design guidelines. DM 8G+ is compatible with HDBaseT Alliance specifications for connecting to HDBaseT compliant equipment. All wire and cables are sold separately.
- 2. Supplying Power over DM (PoDM) or Power over HDBaseT (PoH) via the DM IN port requires connection of the DMC-Cís POE IN port to a PoDM Power Supply (DM-PSU-8 or DM-PSU-16, sold separately) or an 802.3af or 802.3at compliant PoE PSE. Supplying PoDM+ is supported using an 802.3at Type 2 Class 4 compliant PoE+ PSE, such as the Crestron CEN-SWPOE-16 (sold separately). Refer to the connected DM 8G+ or HDBaseT device for its PoDM or PoH capabilities and requirements. Any wiring that is connected to a PoDM, PoH, or PoE PSE port is for intra-building use only and should not be connected to a line that runs outside of the building in which the PSE is located.
- 3. The analog stereo audio output is only active when the input source is outputting a 2-channel stereo signal. For applications using a multichannel surround sound source, use model DMC-C-DSP which provides simultaneous surround sound and stereo downmix output signals.
- 4. Item(s) sold separately.
- 5. DVI is supported via the HDMI output 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 www.crestron.com/salesreps or by calling 800-237-2041.

The specific patents that cover Crestron products are listed online at: patents.crestron.com.

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

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