

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

- > Modular output card for a DM-MD8X8, DM-MD16X16, or DM-MD32X32 switcher
- > Provides two independent 4K DM 8G+™ outputs
- > HDBaseT® Certified — Enables direct connection to other HDBaseT certified equipment
- > Includes a parallel HDMI® port on the first output
- > Handles video resolutions up to 4K and Ultra HD
- > Handles 3D video and Deep Color
- > Handles Dolby® TrueHD, DTS-HD®, and uncompressed 7.1 linear PCM audio
- > HDCP compliant
- > Supports cable lengths up to 330 ft (100 m) for all resolutions up to UHD and 4K using DM® Ultra cable<sup>[1]</sup>
- > Supports cable lengths up to 330 ft (100 m) for 1080p, WUXGA, and 2K using DM 8G® cable or CAT5e<sup>[1]</sup>
- > Supports cable lengths up to 230 ft (70 m) for UHD and 4K using DM 8G cable, or 165 ft (50 m) using CAT5e<sup>[1]</sup>
- > Enables HDMI and HDBaseT device control via CEC
- > Supports PoDM and PoH<sup>[2]</sup>
- > Occupies a single output card slot



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/](http://www.crestron.com/dmresources/) for additional design tools and reference documents.

### SPECIFICATIONS

#### Maximum Cable Lengths

Cable Type:	DM-CBL-ULTRA DM® Ultra Cable	DM-CBL-8G DM 8G® Cable	CAT5e (or better) UTP or STP <sup>[1]</sup>
Resolution:			
1080p60 Full HD	330 ft (100 m)	330 ft (100 m)	330 ft (100 m)
1920x1200 WUXGA			
1600x1200 UXGA			
2048x1080 2K DCI			
2560x1440 WQHD	230 ft (70 m)	230 ft (70 m)	165 ft (50 m)
2560x1600 WQXGA			
3840x2160 Ultra HD			
4096x2160 4K DCI			

The DMC-4K-CO-HD is an output card designed for use with any card-based Crestron® DigitalMedia™ Switcher. It provides two independent DM 8G+™ outputs, plus one HDMI® output. The HDMI output carries the same signal as the first DM 8G+ output. Both DM 8G+ outputs are compatible with HDBaseT®. Each DM 8G+ output enables connection to a DM 8G+ receiver, the input of another DM® switcher, or an HDBaseT certified display device or receiver, using a single CAT type twisted pair cable.<sup>[1]</sup> Power over DM (PoDM) is supplied through the same connection, providing a centralized power source for PoDM compatible receivers.<sup>[2]</sup>

All outputs on the DMC-4K-CO-HD are capable of handling video resolutions up to 4K and Ultra HD. Support for 4K video also ensures support for the latest generation of computers and monitors with native resolutions beyond 1080p and WUXGA. DM 8G+ transports uncompressed Full HD 1080p, WUXGA, and 2K signals over distances up to 330 feet (100 m) using Crestron [DM Ultra](#) or [DM 8G®](#) Cable, or third-party CAT5e. Higher resolution signals up to UHD and 4K are supported over distances up to 330 feet (100 m) using DM Ultra Cable, 230 feet (70 m) using DM 8G Cable, or 165 feet (50 m) using CAT5e.<sup>[1]</sup>

Crestron DigitalMedia 8G+ technology is designed using HDBaseT Alliance specifications, ensuring interoperability with other HDBaseT certified products. Either DM 8G+ output can be connected directly to an HDBaseT compliant device without requiring a DM receiver.

DigitalMedia offers an alternative to conventional RS-232 and IR display control by harnessing the CEC (Consumer Electronics Control) signal embedded in HDMI. Through its connection to a control system (via the DM switcher), the DMC-4K-CO-HD provides a gateway for controlling display devices right through their HDMI or HDBaseT connections, potentially eliminating the need for any dedicated control wires or IR emitters.

#### Video

#### Maximum Resolutions:

Scan Type	Maximum Resolution	Frame Rate	Color Sampling
Progressive	4096x2160 4K DCI	Up to 24 Hz	4:4:4
Progressive	3840x2160 Ultra HD	Up to 30 Hz	4:4:4
Progressive	2560x1600 WQXGA	Up to 60 Hz	4:4:4
Progressive	4096x2160 4K DCI	Up to 60 Hz	4:2:0 <sup>[4]</sup>
Progressive	3840x2160 Ultra HD	Up to 60 Hz	4:2:0 <sup>[4]</sup>
Interlaced	1920x1080 1080i30	Up to 30 Hz	4:4:4

NOTE: Common resolutions are shown; other custom resolutions are supported at pixel clock rates up to 300 MHz

# DMC-4K-CO-HD 2-Channel HDBaseT® Certified 4K DM 8G+™ Output Card for DM® Switchers

**Signal Types:** DM 8G+™ (DigitalMedia over one CAT type twisted pair copper wire), HDBaseT®, HDMI®, DVI<sup>[3]</sup>

**Formats:** DM 8G+, HDBaseT, & HDMI with Deep Color, 3D, & 4K; HDCP content protection support

## Audio

**Signal Types:** DM 8G+, HDBaseT, HDMI

**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™, up to 8ch PCM

## Communications

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

**HDBaseT:** HDCP, EDID, CEC, PoH, Ethernet

**HDMI:** HDCP, EDID, CEC

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

## Connectors

**DM OUT:** (2) 8-pin RJ45 female, shielded, comprising (2) DM 8G+ outputs (HDBaseT compliant);

PoDM and PoH PSE (Power Sourcing Equipment) ports<sup>[2]</sup>;

Each connects to the DM 8G+ input of a DM receiver or other DM device, or to an HDBaseT device, via CAT5e, Crestron DM-CBL-8G, or Crestron DM-CBL-ULTRA cable<sup>[1]</sup>

**POE IN:** (2) 8-pin RJ45 female comprising (2) PoE inputs;

Each connects to one port of a DM-PSU-8 or DM-PSU-16 PoDM Power Supply, or 802.3af or 802.3at compliant PoE PSE (Power Sourcing Equipment), to enable PoDM and PoH power sourcing via the corresponding DM 8G+ output<sup>[2]</sup>

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

HDMI digital video/audio output, DVI compatible<sup>[3]</sup>;

Outputs same signal as the left DM 8G+ output

## Indicators

**DM OUT:** (4) LEDs, green LEDs indicate DM link status, amber LEDs indicate video and HDCP signal presence, for each corresponding DM 8G+ output

## Construction

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

## Weight

6.2 oz (176 g)

## MODELS & ACCESSORIES

### Available Models

**DMC-4K-CO-HD:** 2-Channel HDBaseT® Certified 4K DigitalMedia 8G+™ Output 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-ULTRA-NP:** DigitalMedia™ Ultra Cable, Non-Plenum Type CMR

**DM-CBL-ULTRA-P:** DigitalMedia™ Ultra Cable, Plenum Type CMP

**DM-CBL-ULTRA-LSZH:** DigitalMedia™ Ultra Cable, Low Smoke Zero Halogen

**DM-CONN:** Connector for DM-CBL-ULTRA

**DM-CBL-8G-NP:** DigitalMedia 8G™ Cable, non-plenum

**DM-CBL-8G-P:** DigitalMedia 8G™ 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

### Notes:

1. The maximum cable length for DigitalMedia 8G+ (DM 8G+) or HDBaseT is dependent upon the type of cable and resolution of the video signal. Refer to the "Maximum 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. 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 either DM 8G+ output requires connection of the corresponding 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. DVI is supported via the HDMI output using a suitable adapter or interface cable. [CBL-HD-DVI](#) interface cables are available separately.
4. Support for 4K and UHD at 50/60 Hz with 4:2:0 color sampling will be enabled through a future firmware update.

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](http://www.crestron.com/salesreps) or by calling 800-237-2041.

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

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