

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



- *Modular output blade for a DM-MD64X64 or DM-MD128X128 switcher*
- *Provides eight independent 4K DM 8G+® outputs*
- *HDBaseT® Standard Certified — Enables direct connection to other HDBaseT certified equipment*
- *Handles video resolutions up to 4K and Ultra HD*
- *Handles 3D video and Deep Color*
- *Handles Dolby® TrueHD, Dolby Atmos®, and DTS HD® audio formats, and uncompressed 7.1 linear PCM audio*
- *HDCP 2.2 compliant*
- *Supports cable lengths up to 330 ft (100 m) for all resolutions up to UHD and 4K using DM® Ultra cable*
- *Supports cable lengths up to 330 ft (100 m) for 1080p, WUXGA, and 2K using DM 8G® cable or CAT5e*
- *Supports cable lengths up to 230 ft (70 m) for UHD and 4K using DM 8G cable, or 165 ft (50 m) using CAT5e*
- *Supports PoDM and HDBaseT PoE power sourcing*
- *Occupies a single DM® switcher output blade slot*

The DMB-4K-O-C is an output blade designed for use with any blade-based Crestron® DigitalMedia™ Switcher. It provides eight independent DM 8G+® outputs, which are also compatible with HDBaseT® technology. Using a single CAT5e (or better) twisted pair cable, each DM 8G+ output enables the connection of a DM 8G+ receiver, the output of another DM switcher, or an HDBaseT® certified display device or receiver.

#### 4K Ultra HD

All outputs on the DMB-4K-O-C are capable of handling video resolutions up to 4K and Ultra HD. Support for 4K video also ensures compatibility with the latest generation of computers and monitors with native resolutions beyond 1080p and WUXGA.

#### DigitalMedia 8G+® Technology

Engineered for ultra high-bandwidth and ultimate scalability, DigitalMedia 8G+ provides a true one-wire lossless transport for high-definition video, audio, power, Ethernet, and control signals. All signals are transported over a single cable, supporting 1080p, WUXGA, and 2K signals at distances up to 330 ft (100 m) using Crestron DM Ultra Cable, Crestron DM 8G Cable, or third-party CAT5e (or better). Higher resolutions up to UHD and 4K are supported at distances up to 330 ft (100 m) using DM Ultra Cable, 230 ft (70 m) using DM 8G Cable, or 165 ft (50 m) using CAT5e.<sup>1</sup>

#### HDBaseT® Standard Certified

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

#### Power over DM® Technology

Power over DM (PoDM) technology affords a true one-wire solution by supplying power to each connected device over the same wire that carries video, audio, and data signals. To enable PoDM power sourcing through the blade's DM 8G+ input ports, simply connect a compatible PoDM power source to the PoDM input. Compatible power sources include Crestron models PW-5430DUS and DM-PSU-3X8-RPS. Support for PoDM+ is enabled through all eight ports using the DM-PSU-3X8-RPS, or through a maximum of four ports using the PW-5430DUS.<sup>3</sup>

**NOTE:** Refer to the DigitalMedia Resources Webpage at <http://www.crestron.com/dmresources/> for additional design tools and reference documents.

### Specifications

#### Maximum Cable Lengths

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

#### Video

**Output Signal Types** DM 8G+ & HDBaseT with Deep Color, 3D, & 4K

#### Maximum Resolutions

Scan Type	Resolution	Frame Rate	Color Sampling	Color Depth
Progressive	4096x2160 DCI 4K & 3840x2160 4K UHD	24 Hz	4:4:4	30 bit
		30 Hz	4:4:4	24 bit
		30 Hz	4:2:2	36 bit
		60 Hz	4:2:0	24 bit
Progressive	2560x1600 WQXGA	60 Hz	4:4:4	36 bit
	1920x1080 HD1080p	60 Hz	4:4:4	36 bit
Interlaced	1920x1080 HD1080i	30 Hz	4:4:4	36 bit

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

#### Audio

**Output Signal Types** DM 8G+, HDBaseT

**Formats** 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™, LPCM up to 8 channels

#### Communications

**DigitalMedia** DM 8G+, HDCP 2.2<sup>2</sup>, EDID, CEC, PoDM, PoDM+, Ethernet

**HDBaseT** HDCP 2.2<sup>2</sup>, EDID, CEC, RS-232, PoE, PoE+, Ethernet

*NOTE: The DMB-4K-O-C supports management of HDCP and EDID, and management of CEC between the connected HDBaseT devices and a control system.*

#### Connectors

**OUTPUT DM 1 – 8** (8) 8-pin RJ45 female, shielded; DM 8G+ outputs, HDBaseT compliant; PoDM PSE port (HDBaseT PoE compatible)<sup>3</sup>; Each connects to the DM 8G+ output of a DM receiver or other DM device, or to an HDBaseT device, via CAT5e, Crestron DM-CBL-8G, or DM-CBL-ULTRA cable<sup>1</sup>

**PoDM INPUT PWR** (1) Combo D-Sub 7w2, male; 48 VDC power input for PoDM power supply<sup>3</sup>; Enables PoDM and HDBaseT PoE power sourcing

#### Indicators

**ACT** (1) Green LED, indicates blade activity

**MSG** (1) Red LED, indicates an error message has been generated

**OUTPUT DM 1 – 8** (16) LEDs, green LEDs indicate DM link status, amber LEDs indicate video and HDCP signal presence, for each corresponding output

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

## Construction

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

## Weight

1.6 lb (726 g)

## Models

**DMB-4K-O-C**

## Available Accessories

### PW-5430DUS

High-Efficiency Power Pack

### DM-PSU-3X8-RPS

PoDM+ Redundant Power Supply

### DM-RPP-K24

DigitalMedia 24-Port Keystone Patch Panel

### DM-CONN-ULTRA-RECP

DigitalMedia Ultra Keystone RJ45 Jack

### DM-CBL-ULTRA-PC

DigitalMedia Ultra Patch Cables

### 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

### 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+ 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. Older units with Crestron Material #6506002 support HDCP 1.2 only. A hardware replacement 11 using Material #6507802 is required to enable support for HDCP 2.2.
3. To enable PoDM or HDBaseT PoE power sourcing via any or all eight DM 8G+ outputs requires either a DM-PSU-3X8-RPS PoDM+ Redundant Power Supply or PW-5430DUS PoDM Power Pack, each sold separately. PoDM+ and HDBaseT PoE+ are supported via all eight outputs using the DM-PSU-3X8-RPS, or a maximum of four outputs using the PW-5430DUS. Refer to the connected DM 8G+ or HDBaseT device for its PoDM or HDBaseT PoE capabilities and requirements. Any wiring that is connected to a PoDM or HDBaseT 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.

This product may be purchased from select authorized Crestron dealers and distributors. To find a dealer or distributor, please contact the Crestron sales representative for your area. A list of sales representatives is available online at [www.crestron.com/How-To-Buy/Find-a-Representative](http://www.crestron.com/How-To-Buy/Find-a-Representative) or by calling 855-263-8754.

This product is covered under the Crestron standard limited warranty. Refer to [www.crestron.com/warranty](http://www.crestron.com/warranty) for full details.

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

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