

8-Channel HDBaseT® Certified 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® 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®, DTS-HD®, and uncompressed 7.1 linear PCM audio
- > HDCP 2.2 compliant^[2]
- > Supports cable lengths up to 330 ft (100 m) for all resolutions up to UHD and 4K using DM® Ultra cable^[1]
- > Supports cable lengths up to 330 ft (100 m) for 1080p, WUXGA, and 2K using DM 8G® cable or CAT5e^[1]
- > Supports cable lengths up to 230 ft (70 m) for UHD and 4K using DM 8G cable, or 165 ft (50 m) using CAT5e^[1]
- > Supports PoDM and HDBaseT PoE power sourcing^[3]
- > 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®. Using a single CAT type twisted pair cable, 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.^[1]

Note: Older units with Crestron Material # 6506002 support HDCP 1.2 only. A hardware replacement using Material # 6507802 is required to enable support for HDCP 2.2.

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 support for the latest generation of computers and monitors with native resolutions beyond 1080p and WUXGA.

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 twisted pair copper wire. DM 8G+ handles uncompressed Full HD 1080p, Ultra HD, 2K, and 4K video signals with support for HDCP 2.2^[2], Deep Color, 3D, and high-bitrate 7.1 audio. All signals are transported over a single CAT type cable, supporting 1080p, WUXGA, and 2K signals at distances up to 330 feet (100 m) using Crestron [DM Ultra Cable](#), Crestron [DM 8G® Cable](#), or third-party CAT5e. Higher resolutions up to UHD and 4K are supported at 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.^[1]

HDBaseT® Certified

Crestron DigitalMedia 8G+ technology is designed using HDBaseT Alliance specifications, ensuring interoperability with other HDBaseT certified

products. Any DM 8G+ output can be connected directly to an HDBaseT compliant device without requiring a DM receiver.

Power over DM®

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+ output ports, simply connect a compatible PoDM power source to the PoDM input. Compatible power sources include Crestron models [PW-4830DUS](#) 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-4830DUS.^[3]



DMB-4K-0-C 8-Channel HDBaseT® Certified 4K DM 8G+® Output Blade for DM® Switchers

Please refer to the DigitalMedia Resources Webpage at <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) ^[1]
Resolution:			
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 w/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
	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

NOTE: 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 ^[2], EDID, CEC, PoDM, PoDM+, Ethernet
HDBaseT: HDCP 2.2 ^[2], EDID, CEC, RS-232, PoE, PoE+, Ethernet

NOTE: Supports management of HDCP and EDID; supports 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) ^[3]; 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 DM-CBL-ULTRA cable ^[1]

PoDM INPUT PWR: (1) Combo D-Sub 7w2, male; 48 Volt DC power input for PoDM power supply ^[3]; 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

Construction

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

Weight

1.6 lb (726 g)

DMB-4K-O-C 8-Channel HDBaseT® Certified 4K DM 8G+® Output Blade for DM® Switchers

MODELS & ACCESSORIES

Available Models

DMB-4K-O-C: 8-Channel HDBaseT® Certified 4K DigitalMedia 8G+® Output Blade for DM® Switchers

Available Accessories

PW-4830DUS: 150W PoDM Power Pack

DM-PSU-3X8-RPS: PoDM+ Redundant Power Supply

DM-PB-ULTRA-24: DigitalMedia™ Ultra 24-Port Patch Bay

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

DM-8G-CRIMP-WG: Crimping Tool for DM-8G-CONN-WG

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. Older units with Crestron Material # 6506002 support HDCP 1.2 only. A hardware replacement 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-4830DUS](#) 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-4830DUS. 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 intra-building 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 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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