

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
- > Supports cable lengths up to 330 ft (100 m) for 1080p, WUXGA, and 2K signals 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]
- > 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, DTS-HD®, and uncompressed 7.1 linear PCM audio
- > HDCP compliant
- > Supports PoDM and PoH^[2]
- > Occupies a single output blade slot

The DMB-4K-0-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®. 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.^[1] Power over DM (PoDM) is supplied through the same connection, providing a centralized power source for PoDM compatible receivers.^[2]

All outputs on the DMB-4K-0-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. DM 8G+ transports uncompressed Full HD 1080p, WUXGA, and 2K signals over distances up to 330 feet (100 m) using Crestron DM 8G® Cable or CAT5e. Higher resolution signals up to UHD and 4K are supported over distances up to 230 feet (70 m) using DM 8G Cable, or 165 feet (50 m) using CAT5e.^[1]

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.

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

SPECIFICATIONS

Video

Output Signal Types: DM 8G+™ (DigitalMedia™ over one CAT type twisted pair copper wire), HDBaseT®^[1]

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



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 ^[3]
Progressive	3840x2160 Ultra HD	Up to 60 Hz	4:2:0 ^[3]
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

DMB-4K-0-C

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Maximum Wire Lengths

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

Audio

Output Signal Types: DM 8G+, HDBaseT

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, Ethernet

HDBaseT: HDCP, EDID, PoH, Ethernet

Connectors

OUTPUT DM 1 – 8: (8) 8-pin RJ45 female, shielded; DM 8G+ outputs, HDBaseT compliant; PoDM and PoH PSE (Power Sourcing Equipment) ports^[2]; Each connects to the DM 8G+ input of a DM receiver or other DM device, or to a HDBaseT device, via CAT5e or Crestron DM-CBL-8G DigitalMedia 8G™ cable^[1]

PoDM INPUT PWR: (1) Combo D-Sub 7w2, male; 48 Volt DC power input for PoDM power pack^[2]; Enables PoDM and PoH 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)

MODELS & ACCESSORIES

Available Models

DMB-4K-0-C: 8-Channel 4K DigitalMedia 8G+™ Output Blade for DM® Switchers

Available Accessories

PW-4830DUS: 150W PoDM Power Pack

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

DM-CBL-8G-P: DigitalMedia 8G™ Cable, plenum

DM-8G-CONN: DigitalMedia 8G™ Cable Connector

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

DM-8G-CONN-WG: DigitalMedia 8G™ Cable Connector with Wire Guide

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 330 ft (100 m) for resolutions up to 1080p60, UXGA, WUXGA, and 2K DCI 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. For higher resolutions up to 4K DCI and UHD, the maximum wire length is 230 ft (70 m) using DM-CBL-8G, or 165 ft (50 m) using DM-CBL, DM-CBL-D, or 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 a DM 8G+ output requires the external power pack, model PW-4830DUS, 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 or PoH 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. 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 or by calling 800-237-2041.

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

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