DMPS3-4K-150-C

3-Series® 4K DigitalMedia™ Presentation System 150

The DMPS3-4K-150-C from Crestron® provides an ultra high-definition presentation switcher and control solution that's perfect for huddle rooms, conference rooms, and classrooms. It integrates the control system, multimedia switcher, 4K video scaler, mic preamp, and audio DSP all into one compact device that mounts conveniently under a conference table or in an equipment rack. Built-in Crestron Connect It™ functionality affords a complete collaboration solution that's easy and affordable to deploy in any small to medium sized meeting space. Without requiring any programming, the DMPS3-4K-150-C is easily configurable for a variety of media presentation applications using a choice of touch screen, iPad®, or computer for setup and control.

> Ultra high-definition, multi-format 10x1 presentation switcher, scaler, mic preamp, audio DSP, and control system

> Out of the box Crestron Connect It™ collaboration system functionality

> Supports up to four TT-100 series Crestron Connect It presentation interfaces [1]

> Preloaded DMPS3 .AV Framework™ software enables customized presentation control without programming [2]

> Allows quick and easy setup using just an iPad®, computer, or Crestron touch screen [2]

> Integrated 3-Series Control System® enables fully-programmable room control

> Includes auto-switching HDMI®, VGA, DM 8G+™, and stereo analog audio inputs

> Also supports DisplayPort Multimode, DVI, HDBaseT®, and analog video sources [3,4]

> QuickSwitch HD® technology manages HDCP keys for fast, reliable switching

> Auto-Locking™ technology achieves rapid switching between disparate sources

> Performs automatic AV signal format management via EDID

> Allows audio-follow-video or analog breakaway switching for all inputs

> Includes a single microphone input with EQ, gating, and compression

> Provides parallel HDMI and DM 8G+ outputs for one or more display devices

> DigitalMedia 8G+™ connectivity enables long-distance wiring over CAT type twisted pair cable [7]

> Integrates seamlessly with DigitalMedia™ matrix switchers to allow facility-wide signal distribution

> HDBaseT Certified — Enables direct connection to other HDBaseT certified equipment

> Features a built-in, high-performance 4K scaler

> Upscales input signals to match the native resolution of any screen — including 4K and Ultra HD displays!

> Downscales 4K, UHD, and ultra high-resolution computer signals to fit 1080p and other lower-resolution displays

> Handles any input resolution from standard NTSC 480i or PAL 576i, to UHD and 4K

> Provides intelligent frame rate conversion, content-adaptive noise reduction, and motion-adaptive de-interlacing

> Provides 3D to 2D signal conversion, and passes 3D video (without scaling) to 3D displays [5]

> Provides a balanced stereo audio output with graphic EQ, limiting, and delay

> Enables HDMI audio signal extraction and embedding

> Handles Dolby® TrueHD, DTS-HD®, and uncompressed 7.1 linear PCM audio [6]

> Enables USB signal routing via DM transmitters and receivers or USB-EXT-DM extenders [8]

> Includes onboard IR, RS-232, relay, digital input, and Cresnet® control ports

> Supports Crestron® touch screens, keypads, and wireless remotes

> Supports XPanel with Smart Graphics™ computer and Web based control

> Supports iPhone®, iPad, and Android™ control apps

> Supports universal remotes via built-in RC-5 compatible IR receiver

> Integrates with Crestron Fusion® Enterprise Management Software

> Enables IT-friendly network integration via SNMP

> Integrated Ethernet switch provides a single-point LAN connection

> Private Network Mode — requires just one IP address for the complete system

> Includes front panel controls for switching and volume adjustment

> Includes customizable front panel label strips

> Allows complete AV setup and adjustment via a Web browser

> Enables USB signal routing [8]

> Features an internal universal power supply for worldwide compatibility

> Furnishes Power over DM® or HDBaseT for PoDM/PoH-powered devices

> Mounts under the table or in a single 19î rack space

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DMPS3-4K-150-C — Rear View

Auto-switching HDMI®, VGA, and analog audio inputs provide the essential connectivity needed to manage multiple computers and other media sources. A full-featured microphone input is also included for applications requiring high-quality speech reinforcement. The selected input source and microphone can be mixed and routed to one HDMI output and one stereo analog audio output. Additional DigitalMedia 8G+™ inputs and output afford a streamlined, long-distance wiring solution for additional remote sources, for the display device, and for facility-wide integration as part of a larger media distribution system. Built-in 4K scaling ensures the highest possible image quality, and compatibility with the widest range of sources and displays.

4K Ultra HD

The DMPS3-4K-150-C features the latest HDMI and DigitalMedia™ technologies, providing support for 4K and Ultra HD video signals. Support for 4K video is essential to ensuring support for the latest generation of computers and monitors with native resolutions beyond 1080p and WUXGA.

Crestron Connect It™

Crestron Connect It is a cost-effective, simple-to-use presentation solution that provides tabletop connectivity, cable management, and one-touch control through a system of stylish, easy-to-install devices. The DMPS3-4K-150-C accommodates up to four Crestron Connect It Presentation Interface devices (TT-100 series [1]). Its auto-switching inputs support individual HDMI, VGA, and analog audio connections at each device. Power and communications for each device are provided via four USB ports.

A fully functional Crestron Connect It system is enabled right out of the box by simply connecting the Crestron Connect It devices and input cables. Additional settings and AV adjustments are available through a simple Web browser setup screen. In addition to the Crestron Connect It devices, the DMPS3-4K-150-C can also accommodate two DM® transmitters and one DM receiver without any additional programming.

No Programming Required!

The DMPS3-4K-150-C is easily configurable for a variety of media presentation applications, with complete setup and control provided using a Crestron touch screen, Apple® iPad, or computer. The intuitive user interface provides simple controls for specifying the display device, naming the inputs, and assigning user-friendly icons. The same device used to configure the system also facilitates day-to-day operation, providing the essential controls needed for turning the system on and off, selecting sources, and adjusting audio volume. Without any custom programming, the DMPS3-4K-150-C can control a single display device, connect to AirMedia™ and DM devices, and communicate with Crestron Fusion® Enterprise Management Software.[2]

Multimedia Auto-Switcher

The DMPS3-4K-150-C provides high-performance automatic switching between ten inputs. Its video inputs include four HDMI, four VGA, and two DM 8G+™. Four unbalanced analog audio inputs are also included, which may be used in combination with any of the video inputs. The HDMI inputs are also compatible with DVI and DisplayPort Multimode sources[3], the VGA inputs can handled RGB, composite, S-Video, and component video sources[4], and the DM 8G+ inputs are compatible with HDBaseT®. Input auto-detection eliminates the need to configure the inputs — simply connect your source and the DMPS3-4K-150-C selects the right audio and video combination. The switched video signal is routed to one HDMI output and one DM 8G+ output simultaneously.

4K Scaler

With its high-performance 4K video scaler on board, the DMPS3-4K-150-C ensures an optimal image from every video source on practically any display device. It allows SD, HD, and all types of computer sources to look their best on Ultra HD and 4K displays, and it allows sources with resolutions above HD 1080p to be viewed reliably on 1080p and lower resolution displays. It accepts any input resolution, from standard definition NTSC 480i to ultra high-definition 4K DCI, and scales it perfectly to match the native resolution of any screen up to 4K DCI (4096 x 2160). Interlaced sources are converted to progressive scan using motion-adaptive deinterlacing. Intelligent frame rate conversion enables support for 24p and PAL format sources. And, 3D to 2D conversion allows 3D content to be viewed on 2D-only displays.[5] The output of the scaler feeds both the HDMI and DM 8G+ outputs.

Flexible Audio Routing

Adjustable audio input compensation on each input helps to ensure support for a wide range of sources. Analog audio breakaway allows the analog audio inputs to be switched independently or in combination with any video input. The switched audio signal goes to a balanced analog audio output, and to the HDMI output, with separate level adjustments provided for each output. The HDMI output signal is also fed simultaneously to the DM 8G+ output. All inputs and outputs support stereo audio, with the option to configure the analog output for mono. Dolby® TrueHD, DTS-HD®, and 7.1 linear PCM audio signals can also be routed through the HDMI and DM 8G+ inputs and output.[6]

Professional Audio DSP

The analog audio output includes professional digital signal processing, allowing the signal to be adjusted for optimum performance and sound quality. The analog output is ideally designed to be connected to an external power amplifier and used to drive a set of ceiling or wall mount speakers. In addition to volume, bass, treble, and mute controls, the DSP provides 10-band graphic equalization, fully-adjustable limiting, and up to 80 ms of delay. All settings are adjustable using the DMPS3-4K-150-C's

Web browser user interface for easy setup. The output volume level is also adjustable using the front panel volume knob.

Microphone Input with DSP

A full-featured microphone preamp is included to support the connection of a single wired or wireless mic. Advanced features include fully-adjustable gating and compression, 4-band semi-parametric EQ, and switchable 48V phantom power. The microphone signal can be routed to the analog output, the digital output (HDMI and DM 8G+), or both, with separate level adjustments provided for each.

DigitalMedia 8G+™

Its DM 8G+ inputs and output endow the DMPS3-4K-150-C with incredible potential for connecting sources and display devices, and integrating with larger systems. DM 8G+ provides a true one-wire interface for transporting ultra high-definition video, audio, control, power, and networking signals over CAT type cable at distances up to 330 feet (100 meters).[7] Connecting a DM 8G+ receiver to the DM 8G+ output provides a streamlined AV and control interface for a single projector or flat panel display located anywhere in the room. Connecting up to two DM 8G+ transmitters provides expanded input connectivity to incorporate remote AV sources and computers at a lectern, credenza, wall plate, or some other location. DM 8G+ can also provide the interface to a centralized DigitalMedia matrix switcher to enable the distribution of signals between multiple rooms and buildings.

HDBaseT® Certified

Crestron DigitalMedia 8G+ technology is designed using HDBaseT Alliance specifications, ensuring interoperability with other HDBaseT certified products. Via DM 8G+, the DMPS3-4K-150-C can be connected directly to an HDBaseT compliant source or display device without requiring a DM 8G+ transmitter or receiver.

EDID Format Management

The DMPS3-4K-150-C provides comprehensive management of the EDID (Extended Display Identification Data) information that passes between display devices and input sources, ensuring that each source gets displayed at its optimal resolution and format. Most applications require no changes to the default settings. For applications requiring custom configuration, the DMPS3-4K-150-C allows for easy assessment of each device's format and resolution capabilities, with the ability to configure signals appropriately for the most desirable and predictable behavior.

QuickSwitch HD® Technology

Handling digital media signals means handling HDCP (High-bandwidth Digital Content Protection), the encryption scheme used by content providers to protect their DVDs, Blu-ray™ discs, and broadcast signals against unauthorized copying. Viewing HDCP encrypted content requires a source device to "authenticate" each display and signal processor in the system and issue it a "key" before delivering an output signal. Crestron QuickSwitch HD manages these keys to ensure fast, reliable switching and immunity to "blackouts," whether using a single display, or distributing to multiple displays through a larger DigitalMedia system.

Auto-Locking™ Technology

Crestron Auto-Locking Technology enables super fast signal switching by instantaneously configuring every device in the signal path, including DM transmitters, DM receivers, and scalers, as soon as the signal hits the first device. Whether switching between sources or TV channels, Auto-Locking significantly reduces the time it takes each device to sense the new signal and configure itself to handle the changes, virtually eliminating any noticeable gap while switching.

Built-in Ethernet Switch

In addition to transporting digital video and audio, the DM 8G+ ports on the DMPS3-4K-150-C can also extend Ethernet out to each source and display device, providing high-speed connectivity for each room device that requires a LAN connection. Ethernet is also utilized internally by the Crestron control bus to manage each transmitter and receiver and provide device control.

Private Network Mode

To streamline its implementation on a corporate or university LAN, the DMPS3-4K-150-C employs Private Network Mode to provide a single-point connection for the complete system. Using Private Network Mode, the DMPS3-4K-150-C requires just one IP address for the complete DM network including all connected DM receivers and transmitters.

USB Signal Routing

Along with video, audio, and Ethernet, the DMPS3-4K-150-C can also provide for the routing of USB HID (Human Interface Device) signals, allowing a USB HID compliant keyboard and/or mouse at one location to control a computer or media server at another location. USB HID connectivity is provided through select DM receivers and transmitters. Crestron also offers USB over Ethernet Extenders (USB-EXT-DM[1]), which may be used to enable the routing of all types of USB devices, all seamlessly managed through the DMPS3-4K-150-C.[8]

Integrated 3-Series Control System®

Its built-in 3-Series control system enables the DMPS3-4K-150-C to provide complete, customizable control of every AV device, as well as room lighting, window shades, and projection screens, without requiring a separate control processor. Onboard control ports include one IR port, one RS-232 COM port, two relay ports, and two digital input ports, as well as Cresnet® and Ethernet. The DMPS3-4K-150-C supports the full line of Crestron touch screens, keypads, and wireless remotes for a user experience custom tailored to the specific requirements of each end-user. Support for Crestron control apps and Crestron Fusion Enterprise Management Software delivers the industry's most powerful platform for remotely controlling and managing multiple rooms using computers and mobile devices.

CEC Embedded Device Control

For controlling third-party AV devices, the DMPS3-4K-150-C provides an additional alternative to conventional IR, RS-232, and Ethernet by harnessing the CEC (Consumer Electronics Control) signal embedded in HDMI. Using CEC, many devices can be controlled right through their HDMI connections, eliminating the need for any dedicated serial cables or IR emitters.

SPECIFICATIONS

Operating System

Crestron® 3-Series®; real-time, preemptive, multi-threaded/multitasking kernel; Transaction-Safe Extended FAT file system; supports up to 10 simultaneously running programs; preloaded DMPS3 .AV Framework™ Base Program[2]; out-of-the-box "Crestron Connect It™" functionality

Control System Memory

SDRAM: 1 GB
Flash: 4 GB

Communications

Ethernet: 10/100 Mbps; auto-switching; auto-negotiating; auto-discovery; full/half duplex; industry-standard TCP/IP stack; UDP/IP; CIP; DHCP; Private Network Mode; SSL; IEEE 802.1X; SNMP; BACnet™/IP[9]; IPv4 or IPv6; Active Directory authentication; RSTP; SMTP e-mail client; IIS v.6.0 Web Server
Cresnet®: Cresnet master mode
USB: USB host ports for Crestron Connect It devices and firmware update via USB flash drive; USB device port for computer console (setup); supports USB signal routing via select DM transmitters and receivers, or via USB-EXT-DM extenders[8]
RS-232: 2-way device control and monitoring up to 115.2k baud with hardware and software handshaking
IR/Serial: 1-way device control via infrared up to 1.2 MHz or serial TTL/RS-232 (0-5 Volts) up to 115.2k baud; built-in RC-5 compatible IR receiver
DigitalMedia™: DM 8G+™, HDCP, EDID, CEC, PoDM, Ethernet
HDBaseT®: HDCP, EDID, CEC, PoH, Ethernet
HDMI®: HDCP, EDID, CEC

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

Video

Switcher: auto-detecting multi-format digital/analog source inputs, 10x1 switcher, auto-switching, DigitalMedia 8G+™ technology (HDBaseT compatible), QuickSwitch HD® technology
Scaler: 4K video scaler, motion-adaptive deinterlacer, intelligent frame rate conversion, Deep Color support, 3D to 2D conversion[5], content-adaptive noise reduction, widescreen format selection (zoom, stretch, maintain aspect-ratio, or 1:1)
Input Signal Types: HDMI, RGB/VGA[4], DM 8G+, HDBaseT
Output Signal Types: HDMI, DM 8G+, HDBaseT)
Formats: DM 8G+, HDBaseT, & HDMI w/Deep Color, 3D, & 4K; DVI; DisplayPort Multimode; HDCP content protection support; RGBHV, RGBS, RGsB, YPbPr, Y/C, NTSC, & PAL [3,4]
Analog-To-Digital Conversion: 10-bit 165 MHz per each of 3 channels

Maximum Pass-Through Resolutions:

Input Type	Scan Type	Maximum Resolution	Frame Rate	Color Sampling
HDMI or HDBaseT	Progressive	4096x2160 4K DCI	Up to 24 Hz	4:4:4
		3840x2160 Ultra HD	Up to 30 Hz	
		2560x1600 WQXGA	Up to 60 Hz	
		4096x2160 4K DCI	Up to 60 Hz	4:2:0 [10]
		3840x2160 Ultra HD	Up to 60 Hz	
	Interlaced	1920x1080 1080i30	Up to 30 Hz	4:4:4
RGB/VGA	Progressive	1600x1200 UXGA	Up to 60 Hz	
		1920x1200 WUXGA	Up to 60 Hz	
Component [4]	Progressive	1920x1080 HD1080p	Up to 60 Hz	
	Interlaced	1920x1080 HD1080i	Up to 30 Hz	
Composite or S-Video [4]	Interlaced	480i NTSC or 576i PAL	Up to 60 Hz	

Maximum Scaler Input Resolutions:

Input Type	Scan Type	Maximum Resolution	Frame Rate	Color Sampling
HDMI or HDBaseT	Progressive	4096x2160 4K DCI	Up to 24 Hz	4:4:4
		3840x2160 Ultra HD	Up to 30 Hz	
		2560x1600 WQXGA	Up to 60 Hz	
	Interlaced	1920x1080 1080i30	Up to 30 Hz	
RGB/VGA	Progressive	1600x1200 UXGA	Up to 60 Hz	
		1920x1200 WUXGA	Up to 60 Hz	
Component [4]	Progressive	1920x1080 HD1080p	Up to 60 Hz	
	Interlaced	1920x1080 HD1080i	Up to 30 Hz	
Composite or S-Video [4]	Interlaced	480i NTSC or 576i PAL	Up to 60 Hz	

Maximum Scaler Output Resolutions:

Output Type	Scan Type	Maximum Resolution	Frame Rate	Color Sampling
HDMI or HDBaseT	Progressive	4096x2160 4K DCI	Up to 24 Hz	4:4:4
		3840x2160 Ultra HD	Up to 30 Hz	
		2560x1600 WQXGA	Up to 60 Hz	

NOTE: Common resolutions are shown; other custom resolutions are supported at pixel clock rates up to 300 MHz for digital inputs and outputs, or 165 MHz for analog inputs

Audio

Switcher/Mixer: Single-channel gated mic preamp w/DSP, auto-detecting multi-format digital/analog source inputs, DigitalMedia 8G+ technology (HDBaseT compatible), 10x1 stereo source switcher, auto-switching, audio-follow-video or analog breakaway, two independent mic/source mixers (one for analog output, one for digital outputs), stereo DSP for analog output, 6x1 multichannel source switcher, digital audio mixer bypass mode for multichannel pass-through to digital outputs

Microphone input channel:

Input Signal Type: Mono analog mic level

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

Phantom Power: Enable/Disable

Gain: 0 to +60 dB Gain adjustment, plus Mute

EQ Center Frequencies: 50 to 200 Hz (Band 1); 200 to 800 Hz (Band 2); 800 to 3.2k Hz (Band 3); 3.2k to 12.8k Hz (Band 4)

EQ Gain: ±12.0 dB per band

Gating Threshold: -80 to 0 dB

Gating Depth (Attenuation): -80 to 0 dB

Gating Attack: 1 to 250 ms

Gating Release: 1 to 1000 ms

Gating Hold: 1 to 200 ms

Compression Threshold: -80 to 0 dB

Compression Ratio: 1:1 to 10:1

Compression Attack: 1 to 250 ms

Compression Release: 1 to 1000 ms

Compression Hold: 1 to 200 ms

Compression Curve: Hard or soft knee

Typical of 10 source input channels (Audio Inputs 1 – 4, HDMI Inputs 1 – 4, & DM Inputs 1 – 2):

Input Signal Types: Analog 2-channel, HDMI or DisplayPort Multimode[3], DM 8G+ or HDBaseT

Formats, Analog: Stereo 2-Channel

Formats, HDMI & DM: 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 [6]

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

Input Compensation: ±10.0 dB [6]

Analog line output w/DSP:

Output Signal Type/Format: Stereo 2-Channel

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

Mic: -80 to +10 dB Level adjustment range, plus Mute and Pan

Source: -80 to +10 dB Level adjustment range, plus Mute and Balance

Master Volume: -80 to +10 dB Level adjustment range, plus Mute and Mono

Bass: ±12.0 dB

Treble: ±12.0 dB

Equalization: 10-band graphic

GEQ Center Frequencies: 31.5, 63, 125, 250, 500, 1k, 2k, 4k, 8k, 16k Hz

GEQ Gain: ±12.0 dB per band

Delay: 0.0 to 80.0 ms

Limiter Threshold: -80 to 0 dBz

Limiter Ratio: 1:1 to 10:1

Limiter Attack: 1 to 250 ms

Limiter Release: 1 to 1000 ms

Limiter Curve: Hard or soft knee

Frequency Response: 20 Hz to 20 kHz ±0.5 dB (digital source); 20 Hz to 20 kHz ±0.5 dB (analog line source); 20 Hz to 20 kHz ±0.7 dB (microphone source)

S/N Ratio: >108 dB, 1 kHz, A-weighted (digital source); >103 dB, 1 kHz, A-weighted (analog line source)

THD+N: <0.002%, 20 Hz to 20 kHz (digital source); <0.005%, 20 Hz to 20 kHz (analog line source); <0.05%, 20 Hz to 20 kHz (microphone source)

Stereo Separation: >108 dB (digital source); >103 dB (analog source)

Digital output (HDMI & DM)

Output Signal Types: HDMI, DM 8G+ and 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 [6]

Mic: -80 to +10 dB Level adjustment range, plus Mute and Pan[6]

Source: -80 to +10 dB Level adjustment range, plus Mute and Balance[6]

Master Volume: -80 to +10 dB Level adjustment range, plus Mute[6]

Frequency Response: 20 Hz to 20 kHz ±0.5 dB (digital source); 20 Hz to 20 kHz ±0.5 dB (analog line source); 20 Hz to 20 kHz ±0.7 dB (microphone source)

S/N Ratio: >108 dB, 1 kHz, A-weighted (digital source); >103 dB, 1 kHz, A-weighted (analog line source)

THD+N: <0.002%, 20 Hz to 20 kHz (digital source); <0.005%, 20 Hz to 20 kHz (analog line source); <0.05%, 20 Hz to 20 kHz (microphone source)

Stereo Separation: >108 dB (digital source); >103 dB (analog source)

DM 8G+ & HDBaseT Maximum Cable Lengths

Cable Type: Resolution:	DM-CBL-ULTRA DM® Ultra Cable	DM-CBL-8G DM 8G® Cable	CAT5e (or better) UTP or STP [7]
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)	165 ft (50 m)
2560x1600 WQXGA			
3840x2160 Ultra HD			
4096x2160 4K DCI			

Connectors – Audio/Video Inputs

VGA IN 1 – 4: (4) DB15HD female, analog RGB/video inputs;
Signal Types: RGBHV, component, S-Video, or composite [4];
Formats: RGBHV, RGBS, RGsB, YPbPr, Y/C, NTSC or PAL;
Input Level: 0.5 to 1.5 Vp-p with built-in DC restoration;
Input Impedance: 75 Ohms nominal;
Sync Detection: RGBHV, RGBS, RGsB, YPbPr;
Sync Input Level: 3 to 5 Vp-p;
Sync Input Impedance: 2.2k Ohms

AUDIO IN 1 – 4: (4) 3.5mm TRS mini phone jacks;
Unbalanced stereo line-level analog audio inputs;
Input Impedance: 32k Ohms unbalanced;
Maximum Input Level: 2.8 Vrms unbalanced;
Note: If an HDMI input is selected but no digital audio signal is detected, the corresponding analog audio input is activated (AUDIO 1 for HDMI 1, etc.)

HDMI IN 1 – 4: (4) 19-pin Type A HDMI female, digital video/audio inputs;
Signal Types: HDMI, DVI, or DisplayPort Multimode [3,4]

DM IN 1 – 2: (2) 8-pin RJ45 female, shielded;
DM 8G+ inputs, HDBaseT compliant;
PoDM and PoH PSE (Power Sourcing Equipment) ports;
Each connects to the DM 8G+ output of a DM transmitter or other DM device, or to an HDBaseT device, via CAT5e, Crestron DM-CBL-8G, or Crestron DM-CBL-ULTRA cable [7]

MIC IN: (1) 3-pin 3.5mm detachable terminal block;
Balanced microphone audio input;
Input Level: -60 to 0 dBV, 1 Vrms maximum;
Input Impedance: 6.5k Ohms balanced;
Phantom Power: 48 Volts DC, software enabled/disabled

Connectors – Audio/Video Outputs

HDMI OUT: (1) 19-pin Type A HDMI female, digital video/audio output;
Signal Types: HDMI, DVI[3]

DM OUT: (1) 8-pin RJ45 female, shielded;
DM 8G+ output, HDBaseT compliant;
PoDM and PoH PSE (Power Sourcing Equipment) port;
Connects to the DM 8G+ input of a DM receiver/room controller or other DM device, or to an HDBaseT device, via CAT5e, Crestron DM-CBL-8G, or Crestron DM-CBL-ULTRA cable [7]

AUDIO OUT: (1) 5-pin 3.5mm detachable terminal block;
Balanced/unbalanced stereo line-level audio output;
Output Impedance: 200 Ohms balanced, 100 Ohms unbalanced;
Maximum Output Level: 4 Vrms balanced, 2 Vrms unbalanced

Connectors - Control & Power

RELAY 1 – 2: (1) 4-pin 3.5mm detachable terminal block;
Comprises (2) normally open, isolated relays;
Rated 1 Amp, 30 Volts AC/DC;
MOV arc suppression across contacts

INPUT 1 – 2: (1) 3-pin 3.5mm detachable terminal block;
Comprises (2) programmable digital inputs;
Input Voltage Range: 0 to 24 Volts DC, referenced to GND;
Logic Threshold: 2.5 Volts DC nominal with 1 Volt hysteresis band;
Input Impedance: 10k Ohms at >5 Volts, 1M Ohms at <5 Volts;
Pull-up Resistor: 2.2k Ohms per input

IR OUT: (1) 3.5mm mini-phone jack, IR/Serial output port;
IR output up to 1.2 MHz;
1-way serial TTL/RS-232 (0-5 Volts) up to 115.2k baud

COM: (1) 5-pin 3.5mm detachable terminal, bidirectional RS-232 port;
Up to 115.2k baud, hardware and software handshaking support

LAN: (1) 8-wire RJ45 female;
10Base-T/100Base-TX Ethernet port

USB 1 – 4: (4) USB Type A female;
USB 2.0 host ports for TT-100 series Crestron Connect It devices[1];
Also enables firmware update via USB flash drive

G: (1) 6-32 screw, chassis ground lug

NET: (1) 4-pin 3.5mm detachable terminal block;
Cresnet Master port;
Available Cresnet Power: 24 Watts

100-240V~1.4A 50/60Hz: (1) IEC 60320 C14 main power inlet;
Mates with removable power cord, included

COMPUTER (front): (1) USB Type B female;
USB computer console port;
For setup only

IR IN (front): (1) infrared sensor;
IR Frequency: 36 to 38 kHz;
IR Formats: Crestron format, RC5;
Allows control from IR wireless remotes using the Crestron or RC-5 command sets

Controls & Indicators

PWR: (1) bicolor green/amber LED, indicates operating power supplied from AC line power, turns amber while booting and green when operating
NET: (1) yellow LED, indicates Cresnet bus activity
MSG: (1) red LED, indicates internal control system has generated an error message
HW-R: (1) recessed miniature pushbutton for hardware reset, reboots the control system
SW-R: (1) recessed miniature pushbutton for software reset, restarts the software program
AUTO INPUT SELECT: (1) pushbutton and bicolor green/amber LED, selects auto-switching mode
VGA INPUT SELECT 1 – 4: (4) pushbuttons for manual input selection, and (4) bicolor green/amber LEDs to indicate the current active input and signal presence at each corresponding VGA input
HDMI INPUT SELECT 1 – 4: (4) pushbuttons for manual input selection, and (4) bicolor green/amber LEDs to indicate the current active input and signal presence at each corresponding HDMI input
DM INPUT SELECT 1 – 2: (2) pushbuttons for manual input selection, and (2) bicolor green/amber LEDs to indicate the current active input and signal presence at each corresponding DM input
VOLUME: (1) continuous turn rotary encoder, adjusts the analog audio output volume
DM IN 1 – 2 (rear): (4) LEDs, green LEDs indicate DM link status, amber LEDs indicate video and HDCP signal presence, for each corresponding DM input
DM OUT (rear): (2) LEDs, green LED indicates DM link status, amber LED indicates video and HDCP signal presence, for the DM output

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LAN (rear): (2) LEDs, bicolor LED (left) indicates Ethernet speed and activity, green LED (right) indicates Ethernet link status

Power Requirements

Main Power: 1.4 Amps @ 100-240 Volts AC, 50/60 Hz
Available Cresnet Power: 24 Watts
Power over DM (PoDM): PoDM PSE (Power Sourcing Equipment), each DM 8G+ port supplies up to 15.4W (Class 0-3) to one PoDM PD (Powered Device)
Power over HDBaseT (PoH): PoH PSE (Power Sourcing Equipment), each DM 8G+ port supplies up to 15.4W (Class 0-3) to one PoH PD (Powered Device)

Environmental

Temperature: 41° to 104°F (5° to 40°C)
Humidity: 10% to 90% RH (non-condensing)

Enclosure

Chassis: Metal, black finish, fan-cooled, vented sides
Front Panel: Metal, black finish with polycarbonate label overlay
Mounting: Freestanding, 1U 19-inch rackmount, or under-table mount (adhesive feet, rack ears, and under-table mounting brackets included)

Dimensions

Height: 1.74 in (45 mm) without feet
Width: 17.28 in (439 mm);
        18.94 in (482 mm) with rack ears
Depth: 10.47 in (266 mm)

Weight

6.4 lb (2.9 kg)

MODELS & ACCESSORIES

Available Models

DMPS3-4K-150-C: 3-Series® 4K DigitalMedia™ Presentation System 150 Just Released (International orders may require up to 30 days)

Available Accessories

TT-100 Series: Crestron Connect It™ Presentation Interfaces
TSW-752-B-DMPS3_PAK: 7" Touch Screen Package for DMPS3 Series, Black; Includes: TSW-752-B-S, TSW-750-TTK-B-S, & Preloaded Software
AM-100: AirMedia™ Presentation Gateway
MP-AMP30: Media Presentation Audio Amplifier
MP-AMP40 Series: Media Presentation Audio Amplifiers, 70 or 100 Volt
AMP Series: Commercial Power Amplifiers
DM-RX1-4K-C-1G: Wall Plate 4K DigitalMedia 8G+™ Receiver
DM-RMC-4K-100-C: 4K DigitalMedia 8G+™ Receiver & Room Controller 100
DM-RMC-4K-SCALER-C: 4K DigitalMedia 8G+™ Receiver & Room Controller w/Scaler

DM-RMC-4K-SCALER-C-DSP: 4K DigitalMedia 8G+™ Receiver & Room Controller w/Scaler & Downmixing
DM-RMC-200-C: DigitalMedia 8G+™ Receiver & Room Controller 200
DM-RMC-SCALER-C: DigitalMedia 8G+™ Receiver & Room Controller w/Scaler
DM-TX1-4K-C-1G: Wall Plate 4K DigitalMedia 8G+™ Transmitter
DM-TX-200-C-2G: Wall Plate DigitalMedia 8G+™ Transmitter 200
DM-TX-201-C: DigitalMedia 8G+™ Transmitter 201
DM-TX-401-C: DigitalMedia 8G+™ Transmitter 401
USB-EXT-DM: USB over Ethernet Extender with Routing
CRESTRON-APP: Crestron® App for iPhone® & iPod touch®
CRESTRON-APP-PAD: Crestron® App for iPad®
CRESTRON-APP-ANDROID: Crestron® App for Android™
XPANEL: Crestron Control® for Computers
SW-FUSION-EM: Fusion EM® Energy Management Software
SW-FUSION-RV: Fusion RV® Remote Asset Management Software
SW-ROOMVW-ENT: RoomView® Express - Remote Help Desk and Resource Management Software
SW-3SERIES-BACNET-50+: BACnet™/IP Support for 3-Series®
CSP-LIR-USB: IR Learner
STIRP: IR Emitter Probe w/3.5mm Mini Phone Plug
CNSP-XX: Custom Serial Interface Cable
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
CRESNET-NP: Cresnet® Control Cable, non-plenum
CRESNET-HP-NP: Cresnet® "High-Power" Control Cable, non-plenum
CRESNET-P: Cresnet® Control Cable, plenum
CBL Series: Crestron® Certified Interface Cables
MP-WP Series: Media Presentation Wall Plates
MPI-WP Series: Media Presentation Wall Plates - International Version

Notes:

1. Item(s) sold separately.
2. The DMPS3 .AV Framework Base Program enables setup and control of the DMPS3-4K-150-C without programming. It comes preloaded on the DMPS3-4K-150-C, and is also available for download from the Crestron Website. Utilizing this feature requires one of the following user interface options: A) a Crestron TSW-752-B-DMPS3 PAK touch screen package (sold separately), B) a Crestron TSW-752 touch screen (sold separately) with the DMPS3 .AV Framework Project for TSW-752 loaded, C) an Apple iPad running the Crestron App (full paid version required, sold separately) with the DMPS3 .AV Framework Project for iPad loaded, or D) a Windows® or Mac® computer with the DMPS3 .AV Framework Project for XPanel installed. Some functions described in this spec sheet may not be supported using the DMPS3 .AV Framework Base Program feature. For additional resources and a list of supported display devices, please visit: www.crestron.com/dmps.
3. HDMI requires an appropriate adapter or interface cable to accommodate a DVI or DisplayPort Multimode signal. CBL-HD-DVI interface cables are available separately.
4. The VGA inputs can accept component, composite, and S-Video signals using an appropriate adapter (not included). However, input sync detection is not provided for composite or S-Video signal types.
5. Automatically passes 3D video if the display device supports it (reverts to pass-through mode without scaling). Provides automatic 3D-to-2D conversion (with scaling) if the display device does not support 3D.
6. Routing of a multichannel audio signal via a digital input and output (HDMI or DM) requires the input to be set for "mixer bypass" mode. When that input is selected, all audio controls on the digital output are disabled and the ability to route the microphone signal to that output is defeated. Mixer bypass mode also disables the Input Compensation control on that input.
7. 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 "DM 8G+ & HDBaseT 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.
8. Manages the routing of USB HID signals between peripheral DM devices that are equipped with USB HID ports. Also programmable to manage the routing of USB signals between Crestron USB over Ethernet Extender modules (USB-EXT-DM, sold separately). The USB ports onboard the DMPS3-4K-150-C are not usable for USB signal routing.
9. License required. The DMPS3-4K-150-C supports a maximum of 500 BACnet objects when dedicated for BACnet use only. Actual capabilities are contingent upon the overall program size and complexity.
10. 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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