CINOS.net

Archived resources

For further resources and
documentation please visit us:
www.cinos.net

DMPS3-4K-150-C

DigitalMedia™

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, multi-format 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.

> Ultra high-definition, multi-format 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 Cable Caddies [1]

> Built-in .AV Framework™ delivers a fully-functional system without any programming [3]

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

> Includes four auto-switching HDMI®, VGA, and stereo analog audio inputs [6]

> Includes two DM 8G+® inputs

> Also supports Dual-Mode DisplayPort, DVI, HDBaseT®, and analog video sources [4,5]

> Input auto-detection configures each input automatically

> 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

> Provides adjustable input level compensation on each audio input

> 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 [9]

> 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 [7]

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

> Enables analog-to-HDMI audio embedding and de-embedding [6]

> Handles Dolby® TrueHD, Dolby Atmos®, DTS-HD®, and uncompressed 7.1 linear PCM audio [8]

> Enables USB signal routing via DM transmitters and receivers or USB-EXT-DM extenders [10]

> 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

> Communicates natively with Crestron Fusion®

> 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

> Features an internal universal power supply for worldwide compatibility

> Furnishes power to PoDM and HDBaseT PoE powered devices

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

CRESTRON®

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 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 handles 4K and Ultra HD video signals, which is essential to ensure 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 BYOD connectivity and one-touch control for multiple participants around a conference table. Simply add up to four Crestron Connect It Cable Caddies (TT-100 series [1]) to the DMPS3-4K-150-C. Its auto-switching inputs support individual HDMI, VGA, and analog audio connections at each cable caddy. Four USB ports on the DMPS3-4K-150-C provide power and communications for each cable caddy.

A fully functional Crestron Connect It system is enabled right out of the box by simply connecting the cable caddies 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, one DM receiver, and an AirMedia® Presentation Gateway without any additional programming.[1,2]

No Programming Required!

Installing the DMPS3-4K-150-C is easy, fast, and affordable. Built-in .AV Framework™ technology delivers a fully-functional presentation system with simplified configuration and a choice of control options and other add-ons. For complete details on the capabilities supported by .AV Framework, please visit: www.crestron.com/avframework.[3]

Multi-Format Auto-Switcher

The DMPS3-4K-150-C provides high-performance automatic switching between four local groups of inputs and two DM 8G+® inputs. Each local input group includes connections for HDMI, VGA, and unbalanced stereo audio. The HDMI inputs are compatible with DVI and Dual-Mode DisplayPort sources; the VGA inputs can handled RGB, composite, S-Video, and component video sources; and the DM 8G+ inputs are compatible with HDBaseT®. Digital audio is supported by the HDMI and DM 8G+ inputs,

plus each analog audio input may be used in combination with its corresponding VGA or HDMI video input. 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.[4,5,6]

4K Scaler

With its high-performance 4K video scaler on board, the DMPS3-4K-150-C ensures an optimal image from every video source. It allows all types of video and computer sources to be viewed reliably and look their best on any display up to 4K. It accepts any input resolution, from standard definition NTSC 480i to ultra high-definition DCI 4K, and scales it perfectly to match the native resolution of any screen up to DCI 4K (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.[7] The output of the scaler feeds both the HDMI and DM 8G+ outputs.

Flexible Audio Outputs

The switched audio signal is routed to the HDMI output as well as to a separate balanced analog audio output, with individual 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, Dolby Atmos®, DTS-HD®, and 7.1 linear PCM audio signals can also be routed through the HDMI and DM 8G+ inputs and output.[8]

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 remote 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). 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 mobile devices 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.[9]

HDBaseT® Certified

Crestron DM 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.

USB Signal Routing

Along with video and audio, 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.[10]

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® 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 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 or HDBaseT connections, eliminating the need for any dedicated serial cables or IR emitters.

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 the display and source devices, 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.

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; 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, SSL, TLS, SSH, SFTP (SSH File Transfer Protocol), FIPS 140-2 compliant encryption, IEEE 802.1X, SNMP, BACnet™/IP [11], IPv4 or IPv6, Active Directory authentication, IIS v.6.0 web server, SMTP e-mail client, RSTP, Private Network Mode
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 [10]
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, RS-232, PoE, Ethernet
HDMI: HDCP, EDID, CEC

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

Video

Switcher: 10x1 (organized as multi-format 6x1), auto-switching, auto-detecting multi-format digital/analog source inputs, QuickSwitch HD technology
Scaler: 4K video scaler, motion-adaptive deinterlacer, intelligent frame rate conversion, Deep Color support, 3D to 2D conversion [7], content-adaptive noise reduction, widescreen format selection (zoom, stretch, maintain aspect-ratio, or 1:1)
Input Signal Types: HDMI w/Deep Color, 3D, & 4K (DVI & Dual-Mode DisplayPort compatible [4]); DM 8G+ & HDBaseT w/Deep Color, 3D, & 4K; RGB/VGA (RGBHV, RGBS, RGsB); component (YPbPr); S-Video (Y/C); composite (NTSC, PAL) [5]
Output Signal Types: HDMI w/Deep Color, 3D, & 4K (DVI compatible [4]); DM 8G+ & HDBaseT w/Deep Color, 3D, & 4K
Analog-To-Digital Conversion: 10-bit 165 MHz per each of 3 channels

Maximum Pass-Through Resolutions:

Input Type	Scan Type	Resolution	Frame Rate	Color Sampling	Color Depth
HDMI, DM, or HDBaseT	Progressive	4096x2160 DCI 4K or 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
RGB/VGA	Progressive	1600x1200 UXGA	60 Hz	n/a	
		1920x1200 WUXGA	60 Hz	n/a	
Component [5]	Progressive	1920x1080 HD1080p	60 Hz	n/a	
	Interlaced	1920x1080 HD1080i	30 Hz	n/a	
Composite or S-Video [5]	Interlaced	480i NTSC or 576i PAL	60 Hz	n/a	

Maximum Scaler Input Resolutions:

Input Type	Scan Type	Resolution	Frame Rate	Color Sampling	Color Depth
HDMI, DM, or HDBaseT	Progressive	4096x2160 DCI 4K or 3840x2160 4K UHD	24 Hz	4:4:4	30 bit
			30 Hz	4:4:4	24 bit
			30 Hz	4:2:2	36 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
RGB/VGA	Progressive	1600x1200 UXGA	60 Hz	n/a	
		1920x1200 WUXGA	60 Hz	n/a	
Component [5]	Progressive	1920x1080 HD1080p	60 Hz	n/a	
	Interlaced	1920x1080 HD1080i	30 Hz	n/a	
Composite or S-Video [5]	Interlaced	480i NTSC or 576i PAL	60 Hz	n/a	

Maximum Scaler Output Resolutions:

Output Type	Scan Type	Resolution	Frame Rate	Color Sampling	Color Depth
HDMI, DM, or HDBaseT	Progressive	4096x2160 DCI 4K or 3840x2160 4K UHD	24 Hz	4:4:4	30 bit
			30 Hz	4:4:4	24 bit
			30 Hz	4:2:2	36 bit
		2560x1600 WQXGA	60 Hz	4:4:4	36 bit
		1920x1080 HD1080p	60 Hz	4:4:4	36 bit

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 – General

Switcher/Mixer: 10x1 (organized as multi-format 6x1) stereo source switcher, auto-detecting digital/analog source inputs, single-channel gated mic preamp w/DSP, 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
Analog-To-Digital Conversion: 24-bit 48 kHz
Digital-To-Analog Conversion: 24-bit 48 kHz
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)

Audio – Microphone Input

Input Signal Type: Mono analog mic level
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

Audio – Source Inputs

Typical of 10 source input channels (Audio Inputs 1 – 4, HDMI Inputs 1 – 4, & DM Inputs 1 – 2)
Input Signal Types: Analog 2-channel [6], HDMI (Dual-Mode DisplayPort compatible [4]), DM 8G+ & HDBaseT
Analog Formats: Stereo 2-channel
Digital 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 [8]
Input Compensation: ±10.0 dB [8]

Audio – Analog Line Output

Output Signal Type/Format: Stereo 2-channel
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

Audio – Digital Output

Output Signal Types: HDMI, 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 [8]
Mic: -80 to +10 dB Level adjustment range, plus Mute and Pan [8]
Source: -80 to +10 dB Level adjustment range, plus Mute and Balance [8]
Master Volume: -80 to +10 dB Level adjustment range, plus Mute [8]

Connectors – Audio/Video Inputs

VGA IN 1 – 4: (4) HD15 female;
Analog VGA/RGB/video inputs;
Signal Types: VGA, RGB, component, S-Video, or composite [5];
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) 3.5 mm 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.). Please note, the analog audio inputs do not pass audio if the HDMI video input resolution is higher than 1920x1200.

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

CRESTRON®

DM IN 1 – 2: (2) 8-pin RJ45 female, shielded;
DM 8G+ inputs, HDBaseT compliant;
PoDM PSE ports (HDBaseT PoE compatible);
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 [9]

MIC IN: (1) 3-pin 3.5 mm 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 [4]

DM OUT: (1) 8-pin RJ45 female, shielded;
DM 8G+ output, HDBaseT compliant;
PoDM PSE ports (HDBaseT PoE compatible);
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 [9]

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

LAN: (1) 8-pin 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 Cable Caddies [1];
Also enables firmware update via USB flash drive

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

NET: (1) 4-pin 3.5 mm 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) Bi-color 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 pushbutton for hardware reset, reboots the control system

SW-R: (1) Recessed pushbutton for software reset, restarts the software program

AUTO INPUT SELECT: (1) Pushbutton and bi-color green/amber LED, selects auto-switching mode

VGA INPUT SELECT 1 – 4: (4) Pushbuttons for manual input selection, and (4) bi-color 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) bi-color 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) bi-color 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

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

Power

Main Power: 1.4 Amps @ 100-240 Volts AC, 50/60 Hz
Power Consumption: 42 Watts typical, 27 Watts idle
Available Cresnet Power: 24 Watts
Power over DM (PoDM): IEEE 802.3at compliant PoDM PSE (Power Sourcing Equipment), each DM IN/OUT port supplies up to 15.4 Watts to power one PoDM (Class 0-3) PD (Powered Device) [12]
Power over HDBaseT: IEEE 802.3at PoE compliant PSE (Power Sourcing Equipment), each DM IN/OUT port supplies up to 15.4 Watts to power one HDBaseT PoE (Class 0-3) PD (Powered Device) [12]

Environmental

Temperature: 41° to 104° F (5° to 40° C)
Humidity: 10% to 90% RH (non-condensing)
Heat Dissipation: 142 BTU/hr typical, 93 BTU/hr idle

Enclosure

Chassis: Metal, black finish, fan-cooled, vented sides
Front Panel: Metal, black finish with polycarbonate label overlay
Mounting: Freestanding, 1 RU 19-inch rack-mount, 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)

DM 8G+ & HDBaseT Maximum Cable Lengths

Cable Type: Resolution:	DM-CBL-ULTRA DM® Ultra Cable	DM-CBL-8G DM 8G® Cable	CAT5e (or better) [9]
1080p60 Full HD			
1920x1200 WUXGA		330 ft (100 m)	330 ft (100 m)
1600x1200 UXGA			
2048x1080 DCI 2K	330 ft (100 m)		
2560x1440 WQHD			
2560x1600 WQXGA		230 ft (70 m)	165 ft (50 m)
3840x2160 4K UHD			
4096x2160 DCI 4K			

MODELS & ACCESSORIES

Available Models

DMPS3-4K-150-C: 3-Series® 4K DigitalMedia™ Presentation System 150

Available Accessories

TT-100 Series: Crestron Connect It™ Cable Caddy
TSW-760: 7" Touch Screen
TSW-1060: 10.1" Touch Screen
MP-B10: Media Presentation Button Panel B10
AM-101: 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-RMC-4K-100-C-1G: Wall Plate 4K DigitalMedia 8G+® Receiver & Room Controller 100
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-TX-4K-100-C-1G: Wall Plate 4K DigitalMedia 8G+® Transmitter 100
DM-TX-200-C-2G: Wall Plate DigitalMedia 8G+® Transmitter 200
DM-TX-4K-202-C: 4K DigitalMedia 8G+® Transmitter 202
DM-TX-4K-302-C: 4K DigitalMedia 8G+® Transmitter 302
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
GLS-ODT-C-CN: Dual-Technology Occupancy Sensor with Cresnet®
GLS-OIR-C-CN: Passive Infrared Occupancy Sensor with Cresnet®
Crestron Fusion®: Enterprise Management Platform
Crestron® App: Control App for Apple® iOS® & Android™
XPanel: Crestron Control® for Computers
3-Series® BACnet™/IP Support: 3-Series Native BACnet/IP Interface License
CSP-LIR-USB: IR Learner
STIRP: IR Emitter Probe w/3.5mm Mini Phone Plug
CNSP-XX: Custom Serial Interface Cable
DM-CONN-ULTRA-RECP: DigitalMedia™ Ultra Keystone RJ45 Jack
DM-CBL-ULTRA-PC: DigitalMedia™ Ultra Patch Cables
DM-CBL-ULTRA: DigitalMedia™ Ultra Cable
DM-CONN: Connector for DM-CBL-ULTRA
DM-CBL-8G: DigitalMedia 8G™ Cable
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: Cresnet® Control Cable
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 AirMedia Presentation Gateway, model AM-101, requires one HDMI input on the DMPS3-4K-150-C.
3. Some features and functions described in this spec sheet may not be supported using .AV Framework. For a complete list of capabilities and options supported by .AV Framework, please visit: www.crestron.com/avframework.
4. HDMI connections require an appropriate adapter or interface cable to accommodate a DVI or Dual-Mode DisplayPort signal. CBL-HD-DVI interface cables are available separately.
5. 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.
6. When using an analog audio input in combination with an HDMI video input, the source's video resolution must be 1920x1200 or lower. The analog audio input will not pass audio if the source's video resolution is higher than 1920x1200.
7. 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.
8. 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.
9. 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.
10. Manages the routing of USB HID signals between peripheral DM devices that are equipped with USB HID ports. The USB ports onboard the DMPS3-4K-150-C are not usable for USB signal routing. Also programmable to manage the routing of USB signals between Crestron USB over Ethernet Extender modules (USB-EXT-DM, sold separately). Refer to the USB-EXT-DM spec sheet for more information.
11. 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.
12. Due to the inherent power loss that occurs over CATx cable, a maximum of 12.95 Watts is delivered at each PoDM or HDBaseT PoE powered device. 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.
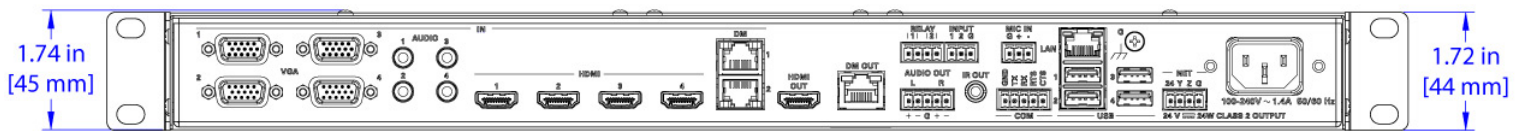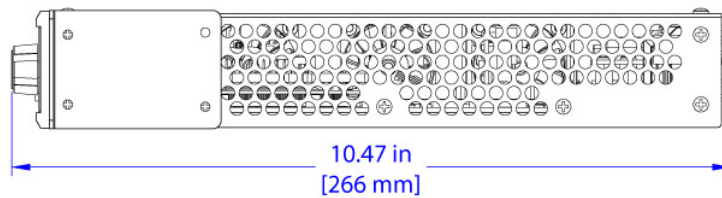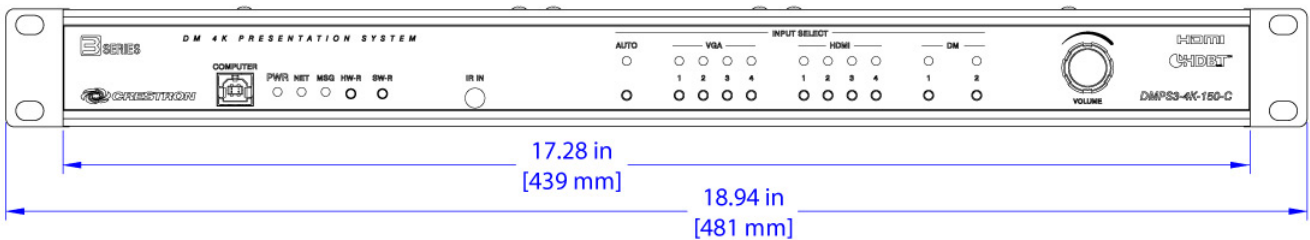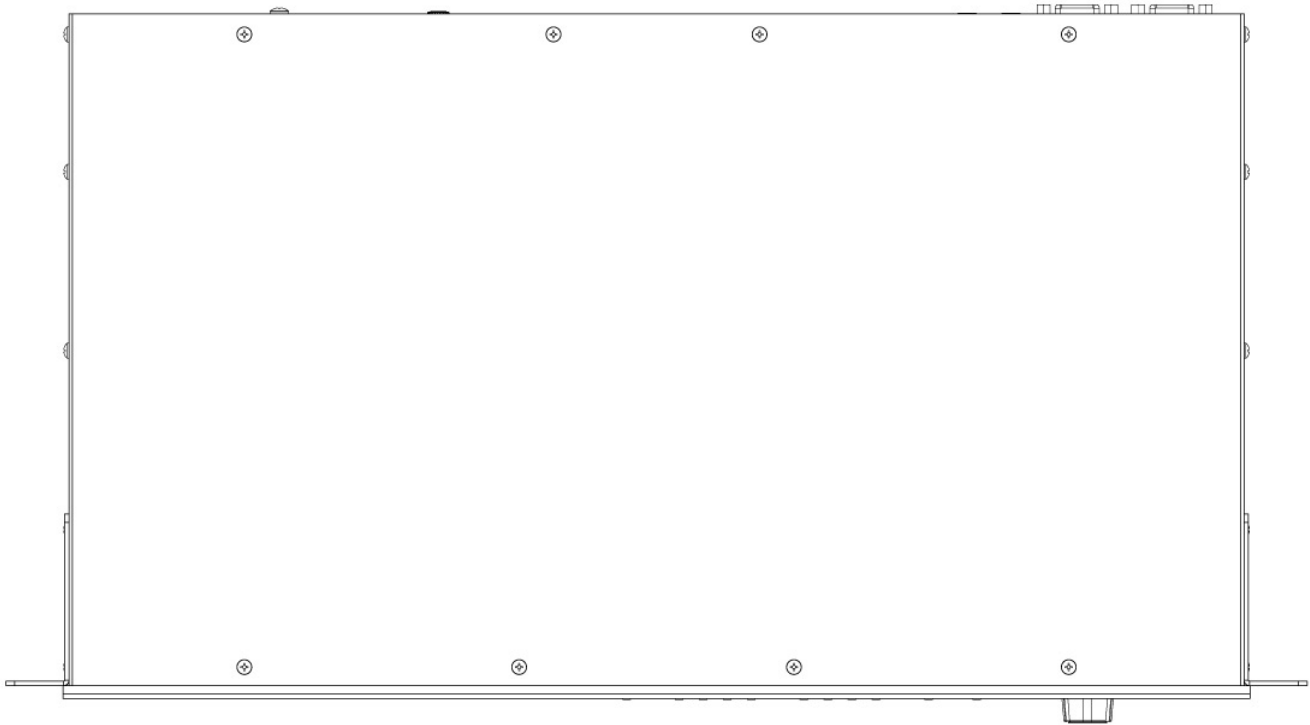
This product may be purchased from an authorized Crestron dealer. To find a dealer, please contact the Crestron sales representative for your area. A list of sales representatives is available online at www.crestron.com/salesreps or by calling 800-237-2041.

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.

17.28 in
[439 mm]

18.94 in
[481 mm]

10.47 in
[266 mm]

1.74 in
[45 mm]

1.72 in
[44 mm]

For further resources and
documentation please visit us:

www.cinos.net