Digital Media^{**}

DMPS3-4K-350-C-AIRMEDIA

3-Series® 4K DigitalMedia™ Presentation System 350 with AirMedia®



- 9x4 AV switcher
- 4K and Ultra HD video support
- .AV Framework[™] technology
- Built-in AirMedia® gateway
- H.264 streaming video decoder
- 4K/60 video scaling
- DigitalMedia 8G+® technology compatible with the HDBaseT® standard
- 6-channel microphone mixer
- Audio digital signal processing (DSP)
- Built-in amplifier, 25 W/Ch @ 8 Ω stereo or 50 W @ 70/100V mono
- Analog to HDMI audio embedding and de-embedding
- EDID format management
- QuickSwitch HD™ technology
- Auto-Locking® technology
- USB signal routing
- Integrated 3-Series® control system
- CEC device control
- Built-in Ethernet switch
- Dedicated control subnet
- PoDM+ and HDBaseT PoE+ power sourcing
- Advanced setup and adjustment via a web browser
- 3 RU, 19 in. rack-mountable

The DMPS3-4K-350-C-AIRMEDIA offers an all-in-one, custom-programmable 4K AV presentation system with fully configurable signal routing and processing. The DMPS3-4K-350-C-AIRMEDIA integrates the control system, matrix switcher, video scaler, streaming decoder, mic mixer, audio DSP, and amplifier into one 3 RU rack mount package. The built-in AirMedia® gateway enables wireless presentation from computers and mobile devices. DigitalMedia 8G+® and HDBaseT® connectivity afford a streamlined, long-distance wiring solution for remote sources and display devices, and for facility-wide integration as part of a larger media distribution system.

4K Ultra HD Video

The DMPS3-4K-350-C-AIRMEDIA handles 4K/60 video with HDCP 2.2 encryption, ensuring support for the latest 4K and Ultra HD displays and media sources.

.AV Framework™ technology

Built-in .AV Framework™ technology delivers a fully-functional presentation system with simplified configuration and a choice of control options and other add-ons. No programming is required. For complete details on the capabilities supported by .AV Framework, please visit:

http://www.crestron.com/avframework²

AirMedia® Wireless Presentation

Crestron AirMedia technology allows for wireless presentation of content from a personal computer, laptop, or mobile device via a Wi-Fi® wireless network. Airmedia enables presentation of Full HD video at frame rates up to 30 fps. Desktop and laptop computer users can present content using downloadable client software, or the AirMedia extension for Google Chrome™ browser. Android® and iOS® mobile devices can present with the AirMedia app or the Crestron PinPoint™ app. For more information about AirMedia, visit www.crestron.com/airmedia.³

HD Streaming Video

An onboard streaming decoder enables the DMPS3-4K-350-C-AIRMEDIA to receive a high-definition AV signal over the network or internet from a DigitalMedia™ switcher, IP camera, or streaming encoder (Crestron DM-TXRX-100-STR or similar). H.264 and MJPEG streaming formats are supported with resolutions up to HD 1080p and bitrates up to 25 Mbps. High-quality AAC audio decoding is employed to handle 2-channel stereo audio with full frequency response.⁴

4K System Switcher

The DMPS3-4K-350-C-AIRMEDIA provides high-performance routing of HDMI®, AirMedia¹, and streaming AV sources to up to four separate displays, projectors, codecs, and other devices. Video inputs include six HDMI, two DM 8G+®, and one streaming/AirMedia. The HDMI inputs are compatible with DVI and Dual-Mode DisplayPort™ sources⁵, and the DM 8G+ inputs are compatible with HDBaseT connectivity. Five balanced analog audio inputs are also included. Each HDMI and analog audio input includes adjustable input compensation to accommodate a range of signals and maintain consistent volume levels when switching between sources.

Built-in 9x4 video matrix switching allows up to four video sources to be routed simultaneously to four display devices. Video outputs are comprised of two HDMI and two DM 8G+. The HDMI outputs are compatible with DVI6 and the DM 8G+ outputs are compatible with HDBaseT connectivity.



The audio signal from any input can be routed to any of three separate stereo analog audio outputs. Audio can also be routed to the digital outputs via two independently switchable signal paths, either of which may be selected to feed the HDMI output, the DM 8G+ output, or both.

4K/60 Video Scaling

A high-performance 4K scaler is included on each HDMI output to ensure an optimal image on each display.

Input resolutions are scaled to any output resolution up to 4K DCI (4096 x 2160 @ 60 Hz). Interlaced sources are converted to progressive scan using motion-adaptive deinterlacing. Intelligent frame rate conversion enables support for 24p and PAL format sources. 3D to 2D conversion allows 3D content to be viewed on 2D-only displays. Fully automatic operation eliminates any complicated setup by utilizing the displays' EDID to configure each scaler.

Scaling can be added to either DM 8G+ output using the DM-RMC-4KZ-SCALER-C receiver, which features a built-in 4K scaler. This method of employing an independent scaler for each display device delivers the most versatile and reliable solution for handling a wide array of input sources and routing them to multiple disparate display devices.

DigitalMedia 8G+® Technology

The DM 8G+ inputs and outputs allow the DMPS3-4K-350-C-AIRMEDIA to connect remote sources and display devices, and integrate with larger systems. DM 8G+ technology 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 ft (100 m). Connecting a DM 8G+ receiver to either DM 8G+ output provides a streamlined AV and control interface for a 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. DM 8G+ connectivity can also provide the interface to a centralized DigitalMedia matrix switcher to enable the distribution of signals between multiple rooms and buildings.^{7,8}

HDBaseT® Technology Certified

Crestron DM 8G+ technology is designed using HDBaseT Alliance specifications, ensuring interoperability with other HDBaseT certified products. Via DM 8G+ technology, the DMPS3-4K-350-C-AIRMEDIA can be connected directly to an HDBaseT compliant source or display device without requiring a DM® transmitter or receiver.

6-Channel Microphone Mixer

The DMPS3-4K-350-C-AIRMEDIA includes built-in mixing and processing for six microphones. Each mic input provides 60 dB of gain adjustment, switchable 48V phantom power, fully-adjustable gating, compression, delay, and 4-band

semi-parametric EQ. Sophisticated matrix mixing allows for a completely different mix of all six microphones at each of the DMPS3-4K-350-C-AIRMEDIA's three stereo analog audio outputs. Two additional mixes can be configured and selected to feed any of the HDMI and DM 8G+ outputs.

Professional Audio DSP

Each analog audio output on the DMPS3-4K-350-C-AIRMEDIA includes its own digital signal processor, allowing each output to be optimized to feed a power amplifier, codec, recorder, or assistive listening system. In addition to real-time adjustable volume, bass, treble, and mute controls, each DSP provides 10-band graphic equalization, 4-band parametric equalization, fully-adjustable limiting, and up to 85 ms of speaker delay adjustment.

Built-in Power Amplifier

A built-in power amplifier allows the DMPS3-4K-350-C-AIRMEDIA to directly drive a pair of stereo speakers (25 W per channel @ 8 Ω), or a group of distributed ceiling speakers (50 W mono @ 70 or 100V). Fed by the main program output, the internal amplifier benefits fully from the onboard DSP. For larger applications, Crestron AMP-Series power amplifiers may be added to provide a complete solution for driving separate program and speech speakers, or a multi-zone speaker system.

Audio Embedding & De-Embedding

Balanced inputs enable the DMPS3-4K-350-C-AIRMEDIA to interface directly with an audio mixing console, allowing the live sound mix to be embedded with the video signal from a digital camera and combined into a single HDMI output signal. Any of the balanced outputs may be used to de-embed audio from a digital AV source to feed the mixing console. An aux output may even be rerouted back through an analog input to allow the built-in DSP, or an external DSP, to be used to process the audio signal feeding the HDMI and DM 8G+outputs.

EDID Format Management

The DMPS3-4K-350-C-AIRMEDIA allows for management of the EDID (Extended Display Identification Data) information that passes between the display devices, scalers, and input sources in the system. From the web browser setup screen, the format and resolution capabilities of each device can be assessed, allowing EDID signals to be configured appropriately.

QuickSwitch HD™ Technology

Crestron QuickSwitch HD technology manages HDCP (Highbandwidth Digital Content Protection) encryption to ensure fast, reliable switching and immunity to blackouts for every source and display device connected to the 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 changing TV channels, Auto-Locking significantly reduces the time it takes each device to sense the new signal and configure the device to handle the changes, virtually eliminating any noticeable gap while switching.

USB Signal Routing

Along with video and audio, the DMPS3-4K-350-C-AIRMEDIA can also provide routing for 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, the DM-NUX-L2 and DM-NUX-L2 and DM-NUX-R2 (sold separately), which may be used to enable the routing of multiple USB devices of virtually any type, all seamlessly managed through the DMPS3-4K-350-C-AIRMEDIA.⁷

Integrated 3-Series® Control System

The built-in 3-Series control system enables the DMPS3-4K-350-C-AIRMEDIA to provide complete, customizable control of AV devices, as well as room lighting, window shades, and projection screens, without requiring a separate control processor. Onboard control ports include four IR ports, two RS-232 COM ports, four relay ports, and four digital input ports, as well as Cresnet® and Ethernet connectivity. The DMPS3-4K-350-C-AIRMEDIA 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® software delivers the industry's most powerful platform for remotely controlling, monitoring, and managing multiple rooms using computers and mobile devices.

CEC Embedded Device Control

For controlling third-party AV devices, the DMPS3-4K-350-C-AIRMEDIA 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-350-C-AIRMEDIA can also extend Ethernet out to the display and source devices (via select DM transmitters and receivers), 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.

Dedicated Control Subnet

The Crestron Control Subnet is a Gigabit Ethernet network dedicated to Crestron devices. Via the DMPS3-4K-350-C-AIRMEDIA's Control Subnet port, a single touch screen or wireless gateway may be connected, or a Crestron PoE switch (sold separately) can be added to handle multiple touch screens, gateways, and other devices. PoE can be enabled at the Control Subnet port to power a single touch screen or other PoE powered device⁸ Auto-configuration of the entire subnet is performed by the DMPS3-4K-350-C-AIRMEDIA, discovering each device and assigning IP addresses without any extra effort.

Private Network Mode

To streamline implementation on a corporate or university LAN, the DMPS3-4K-350-C-AIRMEDIA employs Private Network Mode, which requires just one IP address for the complete room system including all connected DM receivers and transmitters.

Easy Setup

Every step of the setup process is designed to be quick and easy. The front panel supports basic signal routing for easy testing and troubleshooting during installation. Simplified system configuration is enabled using .AV Framework, which is easily configurable via a computer web browser.² Advanced configuration and adjustment is enabled through the front panel or a web browser. The front panel label strips can be customized using Crestron Engraver software or standard 3/8 in. tape labels, allowing for the clear designation of each input and output. Inputs and outputs may also be designated by name to appear on the LCD display when selected.

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

Memory

SDRAM	512 MB	
Flash	4 GB	



Communications

Ethernet 100/1000 Mbps, auto-switching,

auto-negotiating, autodiscovery, 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™ connectivity and IP¹0, IPv4 or IPv6, Active Directory®

authentication, IIS v.6.0 Web Server, SMTP e-mail client, RSTP, Private

Network Mode

Control Subnet 100/1000 Mbps Ethernet,

auto-switching, autonegotiating, auto-discovery, full/half duplex, DHCP server, DNS Server, port forwarding, Isolation Mode, IEEE 802.3at Type 1

compliant PoE PSE

AirMedia¹ (Via Ethernet) 100 Mbps, IPv4, DHCP,

TLS, AES, mDNS, HTTPS web server

Streaming (Via Ethernet) 100 Mbps, DHCP, H.264

decoding, MJPEG decoding, HDCP 2.2,

RTP, RTSP, SDP

Cresnet Cresnet master mode

USB USB signal routing via select DM

transmitters and receivers, or via USB-EXT-DM series extenders⁹; USB device port for computer console (setup)

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 (0-5V) up to

115.2k baud

DigitalMedia DM 8G+, HDCP 2.2, EDID, CEC, PoDM+8,

Ethernet

HDBaseT HDCP 2.2, EDID, CEC, RS-232, PoE+8,

Ethernet

HDMI® HDCP 2.2, EDID, CEC

NOTES:

RS-232

Supports management of HDCP and EDID

 Supports management of CEC between the connected HDMI and HDBaseT devices and the control system

Video

Scalers (2) 4K video scalers with motion-adaptive deinterlacing, intelligent frame rate

conversion, Deep Color support, 3D to 2D conversion, and widescreen format

selection (zoom, stretch, maintain

aspect-ratio, or 1:1)

Input Signal HDMI w/Deep Color, 3D⁶, & 4K (DVI & Types Dual-Mode DisplayPort compatible⁵) on

Inputs 1-6;

DM 8G+ & HDBaseT w/Deep Color, 3D6, &

4K on Inputs 7 & 8;

Streaming & AirMedia on Input 9 (LAN)

Output Signal HDMI w/Deep Color & 4K (DVI Types compatible⁵) on Outputs 1 & 2;

DM 8G+ & HDBaseT w/Deep Color, 3D, &

4K on Outputs 3 & 4

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 (excluded on HDMI outputs)	1920x1080 HD1080i	30 Hz	4:4:4	36 bit

NOTES:

- Common resolutions are shown. Other custom resolutions are supported at pixel clock rates up to 300 MHz.
- Interlaced video is not supported on the HDMI outputs

Streaming Decoder

Video Formats H.264 (MPEG-4 part 10 AVC), MJPEG

Audio Format AAC stereo
Bitrates Up to 25 Mbps



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3-Series® 4K DigitalMedia™ Presentation System 350 with AirMedia®

Resolutions

Up to 1080p60

AirMedia 1

Users

Supports up to 32 users (presentation

device connections)

Client Software OS Support

Windows 7, Windows 8, Windows 10, Mac® OS X® (versions 10.10 through 10.13)

Client Software Video Frame Rate 30 fps

Mobile App OS Support

Apple® iOS®, Android

Full Screen Device Mirroring

Shares the screen image and audio from an Apple iOS, Android, Mac OS X,

or Windows device

Resolutions

800x600@60 Hz, 1024x768@60 Hz, 1280x720@60 Hz, 1280x768@60 Hz, 1280x800@60 Hz, 1280x1024@60 Hz, 1360x768@60 Hz, 1400x1050@60 Hz, 1440x900@60 Hz, 1600x1200@60 Hz, 1920x1080@60 Hz, 1920x1200@60 Hz

Audio Format

Stereo

Audio – General

Switcher/Mixer

14x5 stereo source matrix switcher, digital & analog source inputs, streaming & AirMedia source input, 6-channel gated mic mixer w/DSP, independent mixer per analog output

(6-ch mic + 1 stereo source), independent stereo DSP per analog output, integrated power amplifier, two independent digital output mixers (6-ch mic + 1 stereo source), 2x1 digital output

mix selector per digital output

Analog-To-Digital Conversion

24-bit 48 kHz

Digital-To-Analog Conversion

24-bit 48 kHz

Frequency

20 Hz to 20 kHz ±0.5 dB (digital

Response, Digital & Analog Line Outputs

source); 20 Hz to 20 kHz ±0.5 dB (analog line source):

20 Hz to 20 kHz ±0.7 dB (microphone

source)

Frequency Response, Speaker Output

20 Hz to 20 kHz ± 1 dB @ 25 W into 8 Ω ; 100 Hz to 20 kHz ±2.5 dB @ 70 or 100V

Analog Line

S/N Ratio, Digital & >108 dB, 1 kHz, A-weighted (digital

source);

Outputs >103 dB, 1 kHz, A-weighted (analog line

S/N Ratio, Speaker

Output

98 dB @ 25 W into 8 Ω , 1 kHz,

A-weighted;

96 dB @ 25 W into 4 Ω , 1 kHz,

A-weighted

THD+N, Digital & Analog Line Outputs

<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)

THD+N, Speaker Output

< 0.1%, 1 kHz @ 25 W into 4 or 8 Ω ;

<0.7%, 20 Hz to 20 kHz @ 25 W into 4

Stereo Separation, Digital & Analog Line Outputs

>108 dB (digital source); >103 dB (analog source)

Stereo Separation, Speaker Output

>65 dB @ 25 W, 1 kHz

Channel Separation, Digital

Outputs

Modes

>108 dB (digital source); >103 dB (analog source)

Channel Separation, Analog

Line Outputs

 $4 \Omega/8 \Omega$ stereo, 70V mono, or 100V

>103 dB

Speaker Amplifier **Output Power**

Speaker Output

25 W RMS per channel @ 4 or 8 Ω ;

50 W RMS @ 70 or 100V

Audio – Microphone Inputs

Applies to 6 microphone input channels (Mic/Line 1 - 6):

Input Signal Types Mono analog mic or line level **Phantom Power** Enable/Disable per channel

Gain

0 to +60 dB gain adjustment in 3 dB

increments, plus mute

Delay 0.0 to 85.0 ms

EQ Center 50 to 200 Hz (Band 1), 200 to 800 Hz (Band 2), 800 to 3.2k Hz (Band 3), 3.2k Frequencies

to 12.8k Hz (Band 4)

EQ Gain ±12.0 dB per band

High-Pass Filter On or Off **Gating Threshold** -80 to 0 dB **Gating Depth** -80 to 0 dB

(Attenuation)

1 to 250 ms **Gating Attack** 1 to 1000 ms **Gating Release** -80 to 0 dB Compression

Threshold

Compression Ratio 1:1 to 10:1 1 to 250 ms Compression

Attack

Compression 1 to 1000 ms

Release

Compression Curve Hard or soft knee

Audio - Source Inputs

Input Signal Types HDMI (Dual-Mode DisplayPort

compatible⁵) on Inputs 1-6;

DM 8G+ & HDBaseT on Inputs 7 & 8; Streaming & AirMedia on Input 9 (LAN);

Analog 2-channel on Aud In 1-5

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,

DTS:X®, LPCM up to 8 channels ±10.0 dB, adjustable per input

Compensation

Input

Audio – Analog Line & Speaker Outputs

Applies to Program Out, Speaker Outputs, and Aux Out 1 – 2

Output Signal Format

Stereo

-80 to +10 dB level adjustment range, Mic 1 – 6

plus mute and pan

-80 to +10 dB level adjustment range, Mic Master

plus mute

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

Mixer Presets 1 through 5 **Bass** ±12.0 dB **Treble** ±12.0 dB

10-band graphic + 4-band parametric Equalization

GEQ Center 31.5, 63, 125, 250, 500, 1k, 2k, 4k, 8k, and

Frequencies

GEQ Gain ±12.0 dB per band **PEQ Center** 10 to 22000 Hz per band

Frequencies

PEQ Gain -36.0 to +24.0 dB per band PEQ Bandwidth 0.02 to 3.50 octaves per band

PEQ Types Parametric, High Pass, Low Pass, High

Shelf, Low Shelf, Notch

0.0 to 85.0 ms Delay Limiter Threshold -80 to 0 dB Limiter Ratio 1:1 to 10:1 Limiter Attack 1 to 250 ms Limiter Hold 1 to 200 ms Limiter Release 1 to 1000 ms Limiter Curve Hard or soft knee

EQ Presets 1 through 10 (includes Delay and Limiter

settings)

Audio - Digital Outputs

Output Signal HDMI (DVI compatible⁵) on Outputs 1 & Types

DM 8G+ & HDBaseT on Outputs 3 & 4

Dolby Digital®, Dolby Digital EX, Dolby **Formats**

Digital Plus, Dolby® TrueHD, Dolby Atmos®, DTS®, DTS-ES, DTS 96/24, DTS HD® High Res, DTS-HD Master Audio, DTS:X®, LPCM up to 8 channels

Digital Output Mix Selects which mix is routed to the

Select 1 – 2

corresponding output

Digital output mixer options (per mix):

Mic 1 - 6 -80 to +10 dB level adjustment range,

plus mute and pan

Mic Master -80 to +10 dB level adjustment range,

plus mute

Source -80 to +10 dB level adjustment range,

plus mute and balance

Master Volume -80 to +10 dB level adjustment range,

plus mute

Mixer Presets 1 through 5

Connectors - Audio/Video Inputs

AUD IN 1 - 5 (5) 5-pin 3.5 mm detachable terminal

blocks

Balanced/unbalanced stereo line-level

analog audio inputs; Input Impedance: $24 \text{ k}\Omega$ balanced/unbalanced;

Maximum Input Level: 4Vrms balanced,

2Vrms unbalanced



Digital Media[®]

DMPS3-4K-350-C-AIRMEDIA

3-Series® 4K DigitalMedia™ Presentation System 350 with AirMedia®

MC1/LN1 -MC6/LN6 (6) 5-pin 3.5 mm detachable terminal

blocks;

Comprises (6) balanced microphone/line audio inputs; Mic Input Level: -60 to 0 dBV, 1Vrms

maximum;

Balanced Line Input Level: -31 to +11 dBV, 3.7Vrms maximum; Unbalanced Line Input Level: -37 to +5 dBV, 1.85Vrms maximum;

Mic Input Impedance: 3.9 k Ω balanced; Line Input Impedance: 19 k Ω balanced,

9.5 k Ω unbalanced;

Phantom Power: +48VDC, software enabled/disabled per channel

end

(6) HDMI Type A connectors, female;

Digital video/audio inputs;

(DVI and Dual-Mode DisplayPort

compatible 5)

DM INPUT 7 - 8

HDMI1-6

INPUTS

(2) 8-pin RJ45 connectors, female,

shielded;

DM 8G+ inputs, HDBaseT compliant; PoDM+ PSE ports (HDBaseT PoE+

compatible) 8;

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

 $\mathsf{DM}\text{-}\mathsf{CBL}\text{-}\mathsf{ULTRA}\ \mathsf{cable}^7$

PROG OUT

(1) 5-pin 3.5 mm detachable terminal

olock;

Balanced/unbalanced stereo line-level

audio output;

Output Impedance: 200 Ω balanced,

100 Ω unbalanced;

Maximum Output Level: 4Vrms balanced, 2Vrms unbalanced

AUX OUT 1 – 2

(2) 5-pin 3.5 mm detachable terminal

blocks;

Balanced/unbalanced stereo line-level

audio outputs;

Output Impedance: 200Ω balanced,

100 Ω unbalanced;

Maximum Output Level: 4Vrms balanced, 2Vrms unbalanced

HDMI 1 – 2 OUTPUTS (2) HDMI Type A connectors, female;

Digital video/audio outputs;

(DVI compatible⁵)

DM OUTPUT 3 – 4

(2) 8-pin RJ45 connectors, female,

shielded;

DM 8G+ outputs, HDBaseT compliant; PoDM+ PSE ports (HDBaseT PoE+

compatible)8;

Each connects to the DM 8G+ input of a DM receiver or other DM device, or to

an HDBaseT device, via CAT5e,

DM-CBL-8G or DM-CBL-ULTRA cable⁷

(sold separately)

Connectors - Audio/Video Outputs

SPEAKER OUTPUT $4\Omega/8\Omega L - R$

(2) 2-pin 7.62 mm 15A detachable

terminal blocks;

 $4-8 \Omega$ stereo speaker-level audio

output;

Wire Size: Terminals accept up to

14 AWG (2.5 mm²);

Output Power: 25 W RMS per channel

stereo at 4 or 8 Ω

SPEAKER OUTPUT 70/100V

(1) 2-pin 7.62 mm 15A detachable terminal block:

Transformer-isolated 70 or 100V mono

speaker-level audio output; Wire Size: Terminals accept up to

14 AWG (2.5 mm²);

Output Power: 50 W RMS mono at 70

or 100V

NOTE: The $4\Omega/8~\Omega$ and 70/100V outputs are mutually exclusive

Connectors - Networking, Control, & Power

IR/SERIAL OUT 1 -

4

(4) 2-pin 3.5 mm detachable terminal

blocks;

IR/Serial output ports; IR output up to 1.2 MHz;

1-way serial TTL/RS-232 (0-5V) up to

115.2k baud

IR IN

(1) 3-pin 3.5 mm detachable terminal

block;

Allows control from IR wireless remotes

using RC-5 command set

INPUT 1 – 4

(1) 5-pin 3.5 mm detachable terminal

block;

Comprises (4) programmable digital

nnuts.

Input Voltage Range: 0 to 24VDC,

referenced to GND;

Logic Threshold: 2.5VDC nominal with

1V hysteresis band;

Input Impedance: $10 \text{ k}\Omega$ at >5V, $1 \text{ M}\Omega$ at

<5V;

Pull-up Resistor: $2.2 \text{ k}\Omega$ per input

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RELAY1-4	(1) 8-pin 3.5 mm detachable terminal block;	LAN	(1) Yellow LED, indicates Ethernet activity
	Comprises (4) normally open, isolated relays; Rated 1A, 30VAC/VDC;	HW-R	(1) Recessed pushbutton for hardware reset, reboots the control system
	MOV arc suppression across contacts	SW-R	(1) Recessed pushbutton for software reset, restarts the software program
COM A – B	(2) DB9 connectors, male; Bidirectional RS-232 ports; Up to 115.2k baud, hardware and software handshaking support	LCD Display	(1) Green LCD alphanumeric; adjustable backlight; 2 lines x 20 characters per line; displays input/outputs by name,
NET	(4) 4-pin 3.5 mm detachable terminal blocks; Cresnet Master ports, paralleled;		volume levels, setup menus, signal routing, device info, and other system information
	Available Cresnet Power: 10 W	SOFTKEYS	(4) Pushbuttons for activation of LCD driven functions and passcode entry
PoDM+ INPUT PWR	(1) Combo D-Sub 7w2 connector, male; 48VDC power input for PoDM power supply ⁸ ;	MENU	(1) Pushbutton, steps menu back one level
	Enables PoDM+ power sourcing on each DM INPUT/OUTPUT port; Enables PoE power sourcing on the	Λ, V	(2) Pushbuttons, for scrolling up or down through the menu and adjusting menu parameters
SERVICE	CONTROL SUBNET port (1) USB Type B connector, female;	ENTER	(1) Pushbutton, executes the highlighted menu or value
100-240V~ 6.0A 50/60Hz	For factory use only (1) IEC 60320 C14 main power inlet; Mates with removable power cord, included	VOLUME	(1) Continuous turn rotary encoder, adjusts menu parameters; Defaults to Program audio volume control
G	(1) 6-32 screw; Chassis ground lug	MUTE	(1) Pushbutton and red LED, mutes the Program audio output
CONTENT LAN IN 9	(1) 8-pin RJ45 connector, female; 10Base-T/100Base-TX Ethernet port; Provides a dedicated LAN connection	INFO	(1) Pushbutton and red LED; Selects INFO mode to view AV and device info
CONTROL SUBNET	for streaming input & AirMedia ¹ (1) 8-pin RJ45 connector, female; 10Base-T/100Base-TX/1000Base-T	ROUTE	(1) Pushbutton and red LED; Selects ROUTE mode to allow routing changes
	Ethernet port; PoE PSE (Power Sourcing Equipment) port ⁸ ;	VIEW	(1) Pushbutton and red LED; Selects VIEW mode to view current routing
LAN	Provides a dedicated local network for Crestron devices (1) 8-pin RJ45 connector, female;	INPUT 1 – 9	(9) Pushbuttons and red LEDs; Selects the corresponding video input
	10Base-T/100Base-TX/1000Base-T Ethernet port	OUTPUT 1 – 4, PROG, AUX 1 – 2	for routing (7) Pushbuttons and red LEDs; Selects the corresponding video or
COMPUTER (front)	(1) USB Type B connector, female; USB computer console port (for setup	•	audio output for routing
	only)	SPEAKER OUTPUT (rear)	(1) 3-position slide switch; Selects amplifier output configuration
Controls & Indicate		DM INPUT 7 – 8 (rear)	(4) LEDs, (2) green and (2) amber; Green LEDs indicate DM link status,
PWR	(1) Green LED, indicates operating power supplied from AC power line	(rear)	amber LEDs indicate video and HDCP signal presence for each corresponding



port

NET

activity

(1) Yellow LED, indicates Cresnet bus

DM OUTPUT 3 – 4

(rear)

(4) LEDs, (2) green and (2) amber; Green LEDs indicate DM link status, amber LEDs indicate video and HDCP signal presence for each corresponding

por

CONTENT LAN IN 9 (rear)

(2) LEDs, (1) green and (1) amber, for indication of Ethernet speed, activity,

and link status

CONTROL SUBNET (rear)

(2) LEDs, (1) green and (1) amber, for indication of Ethernet speed, activity,

and link status

LAN (rear)

(2) LEDs, (1) green and (1) amber, for indication of Ethernet speed, activity,

and link status

Power

Main Power 6A @ 100-240VAC, 50/60 Hz

Power 93 W typical; Consumption 72 W idle Available Cresnet 10 W

Power

Power over DM (PoDM)

IEEE 802.3at compliant PoDM+ PSE (Power Sourcing Equipment), each DM INPUT/OUTPUT port supplies up to 30 W to power one PoDM (Class 0-3) or PoDM+ (Class 4) PD (Powered

Device)8

Power over HDBaseT IEEE 802.3at PoE+ compliant PSE, each DM INPUT/OUTPUT port supplies up to 30 W to power one HDBaseT PoE or

PoE+ PD8

Power over Ethernet (PoE) IEEE 802.3at compliant PoE PSE (Power Sourcing Equipment), the CONTROL SUBNET port supplies up to 15.4 W to power one PoE (Class 0-3) PD

(Powered Device)8

PoDM Power Supply Compatible with model PW-5430DUS

(sold separately)

Environmental

Temperature 41° to 104° F (5° to 40° C)

Humidity 10% to 90% RH (non-condensing)

Heat Dissipation 317 BTU/hr typical; 246 BTU/hr idle

Enclosure

Chassis Metal, fan-cooled, vented sides

Front Panel Metal, black finish with polycarbonate

label overlay

Mounting Freestanding or 3 RU 19 in.

rack-mountable (adhesive feet and rack

ears included)

Dimensions

Height 5.20 in. (133 mm) without feet

Width 17.28 in. (439 mm);

19.00 in. (483 mm) with rack ears

Depth 15.75 in. (400 mm)

Weight

15.5 lb (7.1 kg)

Compliance

UL Listed for US & Canada, IC, CE, FCC Part 15 Class A

digital device

Maximum DM 8G+ Cable Lengths

Resolution	DM-CBL-ULTRA DM® Ultra Cable	DM-CBL-8G DM 8G® Cable	CAT5e (or better) ⁷
1080p60 Full HD			
1920x1200 WUXGA		330 ft	330 ft
1600x1200 UXGA		(100 m)	(100 m)
2048x1080 DCI 2K	330 ft		
2560x1440 WQHD	(100 m)		
2560x1600 WQXGA		230 ft	165 ft
3840x2160 4K UHD	-	(70 m)	(50 m)
4096x2160 DCI 4K			

Model

DMPS3-4K-350-C-AIRMEDIA

3-Series® 4K DigitalMedia™ Presentation System 350 with AirMedia®

Available Accessories

For a list of available accessories, see the DMPS3-4K-350-C-AIRMEDIA product page.

Notes:

- Wireless presentation using AirMedia requires an external wireless access point (not included). A wired Ethernet connection may also be used. AirMedia network traffic can be routed through the primary LAN port or isolated through the CONTENT LAN port. Performance quality for full-motion video content is dependent upon network performance and sending device performance.
- 2. 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: http://www.crestron.com/avframework.
- 3. AirMedia wireless presentation requires a wired network connection between the AM-200 and an external Wi-Fi wireless access point (not included). Laptops may alternatively connect to AirMedia using a wired Ethernet connection. Fullmotion video performance is dependent upon the performance of the network and the transmitting device. Computer client software and mobile device apps are available for download at https://www.crestron.com/airmedia.
- 4. The streaming and AirMedia inputs are mutually exclusive. Only one or the other can be used at one time. Streaming network traffic can be routed through the primary LAN port or isolated through the CONTENT LAN port.

- 5. HDMI connections require an appropriate adapter or interface cable to accommodate a DVI or Dual-Mode DisplayPort signal. <u>CBL-HD-DVI</u> interface cables are available separately.
- 6. 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 DM 8G+ Cable Lengths" table for a detailed overview. Shielded cable and connectors are recommended to safeguard against unpredictable environmental electrical noise which may impact performance at resolutions above 1080p. Refer to https://www.crestron.com/Products/Featured-Solutions/Digital-Media 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.
- 7. Enabling PoDM and PoE power sourcing requires an external power supply, model PW-5430DUS sold separately. Due to the inherent power loss that occurs over CATx cable, a maximum of 25.5 W is delivered at each PoDM+ or HDBaseT PoE+ powered device. Be aware that the CONTROL SUBNET port is limited to regular PoE (Class 0-3), which delivers a maximum of 12.95 W to the powered device. Any wiring that is connected to a PoDM or 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.
- 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-350-C-AIRMEDIA are not usable for USB signal routing. Also programmable to manage the routing of USB signals between Crestron USB over Ethernet Extender modules (DM-NUX, sold separately). Refer to the DM-NUX spec sheet for more information.
- License required. The DMPS3-4K-350-C-AIRMEDIA supports a maximum of 500 BACnet objects when dedicated for BACnet use only. Actual capabilities are contingent upon the overall program size and complexity.

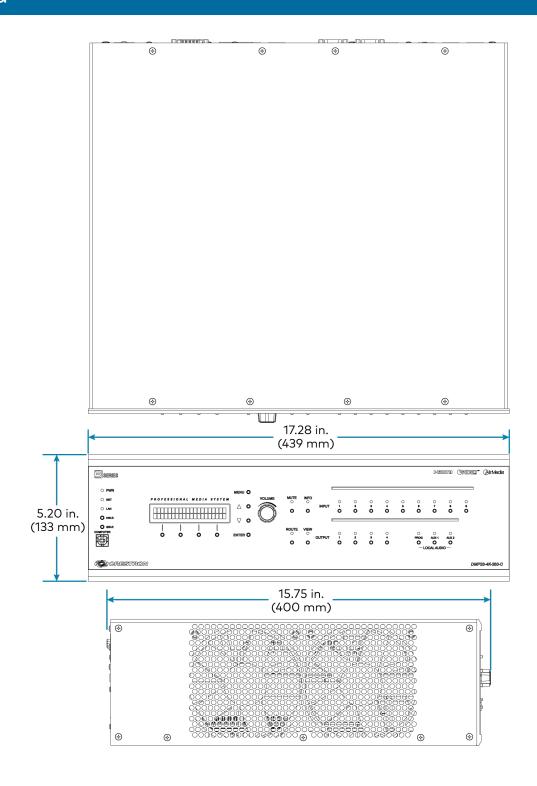
This product may be purchased from select authorized Crestron dealers and distributors. To find a dealer or distributor, please contact the Crestron sales representative for your area. A list of sales representatives is available online at www.crestron.com/How-To-Buy/Find-a-Representative or by calling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

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

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AV Signal Flow Diagrams

