

## 3-Series® 4K DigitalMedia™ Presentation System 250 with AirMedia®



- 8x2 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-250-C-AIRMEDIA** offers an all-in-one, custom-programmable 4K AV presentation system with fully configurable signal routing and processing. The DMPS3-4K-250-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-250-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](http://www.crestron.com/airmedia.3)

### HD Streaming Video

An onboard streaming decoder enables the DMPS3-4K-250-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.<sup>4</sup>

### 4K System Switcher

The DMPS3-4K-250-C-AIRMEDIA provides high-performance routing of HDMI®, AirMedia<sup>1</sup>, and streaming AV sources to two separate displays, projectors, codecs, and other devices. Video inputs include six HDMI, one DM 8G+®, and one streaming/AirMedia. The HDMI inputs are compatible with DVI and Dual-Mode DisplayPort™ sources<sup>5</sup>, and the DM 8G+ input is 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 8x2 video matrix switching allows two video sources to be routed simultaneously to two display devices. Video outputs are comprised of one HDMI and one DM 8G+. The HDMI output is compatible with DVI<sup>6</sup> and the DM 8G+ output is compatible with HDBaseT connectivity.

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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 the HDMI output to ensure an optimal image on the 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 a 2D-only display.<sup>6</sup> Fully automatic operation eliminates any complicated setup by utilizing the display's EDID to configure the scaler.

Scaling can be added to the 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 two disparate display devices.

### DigitalMedia 8G+® Technology

The DM 8G+ input and output allow the DMPS3-4K-250-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 the DM 8G+ output provides a streamlined AV and control interface for a projector or flat panel display located anywhere in the room. Connecting a DM 8G+ transmitter 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.<sup>7,8</sup>

### 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-250-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-250-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-250-C-AIRMEDIA's three stereo analog audio outputs. Two additional mixes can be configured and selected to feed the HDMI or DM 8G+ outputs.

### Professional Audio DSP

Each analog audio output on the DMPS3-4K-250-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-250-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-250-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-250-C-AIRMEDIA allows for management of the EDID (Extended Display Identification Data) information that passes between the display devices, scaler, 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 (High-bandwidth Digital Content Protection) encryption to ensure fast, reliable switching and immunity to blackouts for every source and display device connected to the system.

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### 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 scalars, 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-250-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-R2](#)<sup>6</sup> (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-250-C-AIRMEDIA.<sup>7</sup>

### Integrated 3-Series® Control System

The built-in 3-Series control system enables the DMPS3-4K-250-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-250-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-250-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-250-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-250-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 device<sup>8</sup> Auto-configuration of the entire subnet is performed by the DMPS3-4K-250-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-250-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.<sup>2</sup> 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

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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

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|       |        |
|-------|--------|
| SDRAM | 512 MB |
| Flash | 4 GB   |

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### Communications

|                             |   |
|-----------------------------|---|
| <b>Ethernet</b>             | 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 IP <sup>10</sup> , IPv4 or IPv6, Active Directory® authentication, IIS v.6.0 Web Server, SMTP e-mail client, RSTP, Private Network Mode |
| <b>Control Subnet</b>       | 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  |
| <b>AirMedia<sup>1</sup></b> | (Via Ethernet) 100 Mbps, IPv4, DHCP, TLS, AES, mDNS, HTTPS web server   |
| <b>Streaming</b>            | (Via Ethernet) 100 Mbps, DHCP, H.264 decoding, MJPEG decoding, HDCP 2.2, RTP, RTSP, SDP   |
| <b>Cresnet</b>              | Cresnet master mode   |
| <b>USB</b>                  | USB signal routing via select DM transmitters and receivers, or via USB-EXT-DM series extenders <sup>9</sup> ; USB device port for computer console (setup)   |
| <b>RS-232</b>               | 2-way device control and monitoring up to 115.2k baud with hardware and software handshaking  |
| <b>IR/Serial</b>            | 1-way device control via infrared up to 1.2 MHz or serial TTL/ RS-232 (0-5V) up to 115.2k baud  |
| <b>DigitalMedia</b>         | DM 8G+, HDCP 2.2, EDID, CEC, PoDM+ <sup>8</sup> , Ethernet  |
| <b>HDBaseT</b>              | HDCP 2.2, EDID, CEC, RS-232, PoE+ <sup>8</sup> , Ethernet   |
| <b>HDMI®</b>                | HDCP 2.2, EDID, CEC   |

#### NOTES:

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

### Video

|                 |  |
|-----------------|--|
| <b>Switcher</b> | 8x2 matrix, Crestron QuickSwitch HD technology |
|-----------------|--|

### Scaler (HDMI output)

(1) 4K video scaler with motion-adaptive deinterlacing, intelligent frame rate conversion, Deep Color support, 3D to 2D conversion<sup>6</sup>, content-adaptive noise reduction, and widescreen format selection (zoom, stretch, maintain aspect-ratio, or 1:1)

### Input Signal Types

HDMI w/Deep Color, 3D<sup>6</sup>, & 4K (DVI & Dual-Mode DisplayPort compatible<sup>5</sup>) on Inputs 1-6;  
DM 8G+ & HDBaseT w/Deep Color, 3D<sup>6</sup>, & 4K on Input 7;  
Streaming & AirMedia on Input 8 (LAN)

### Output Signal Types

HDMI w/Deep Color & 4K (DVI compatible<sup>5</sup>) on Output 1;  
DM 8G+ & HDBaseT w/Deep Color, 3D, & 4K on Output 2

### 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      |
|                                      | 2560x1600 WQXGA                     | 60 Hz      | 4:2:0          | 24 bit      |
|                                      |                                     | 60 Hz      | 4:4:4          | 36 bit      |
| Interlaced (excluded on HDMI output) | 1920x1080 HD1080p                   | 60 Hz      | 4:4:4          | 36 bit      |
|                                      |                                     | 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 output

### Streaming Decoder

|                      |                                   |
|----------------------|-----------------------------------|
| <b>Video Formats</b> | H.264 (MPEG-4 part 10 AVC), MJPEG |
| <b>Audio Format</b>  | AAC stereo                        |
| <b>Bitrates</b>      | Up to 25 Mbps                     |
| <b>Resolutions</b>   | Up to 1080p60                     |



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### AirMedia<sup>1</sup>

|   |  |
|---|--|
| <b>Users</b>                            | Supports up to 32 users (presentation device connections)  |
| <b>Client Software OS Support</b>       | Windows 7, Windows 8, Windows 10, Mac® OS X® (versions 10.10 through 10.13)  |
| <b>Client Software Video Frame Rate</b> | 30 fps   |
| <b>Mobile App OS Support</b>            | Apple® iOS®, Android   |
| <b>Full Screen Device Mirroring</b>     | Shares the screen image and audio from an Apple iOS, Android, Mac OS X, or Windows device  |
| <b>Resolutions</b>                      | 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 |
| <b>Audio Format</b>                     | Stereo   |

### Audio – General

|  |  |
|--|--|
| <b>Switcher/Mixer</b>  | 13x5 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 |
| <b>Analog-To-Digital Conversion</b>                          | 24-bit 48 kHz  |
| <b>Digital-To-Analog Conversion</b>                          | 24-bit 48 kHz  |
| <b>Frequency Response, Digital &amp; Analog Line Outputs</b> | 20 Hz to 20 kHz ±0.5 dB (digital source);<br>20 Hz to 20 kHz ±0.5 dB (analog line source);<br>20 Hz to 20 kHz ±0.7 dB (microphone source)  |
| <b>Frequency Response, Speaker Output</b>                    | 20 Hz to 20 kHz ±1 dB @ 25 W into 8 Ω;<br>100 Hz to 20 kHz ±2.5 dB @ 70 or 100V  |

|   |   |
|---|---|
| <b>S/N Ratio, Digital &amp; Analog Line Outputs</b> | >108 dB, 1 kHz, A-weighted (digital source);<br>>103 dB, 1 kHz, A-weighted (analog line source) |
|---|---|

|                                  |   |
|----------------------------------|---|
| <b>S/N Ratio, Speaker Output</b> | 98 dB @ 25 W into 8 Ω, 1 kHz, A-weighted;<br>96 dB @ 25 W into 4 Ω, 1 kHz, A-weighted |
|----------------------------------|---|

|   |   |
|---|---|
| <b>THD+N, Digital &amp; Analog Line Outputs</b> | <0.002%, 20 Hz to 20 kHz (digital source);<br><0.005%, 20 Hz to 20 kHz (analog line source);<br><0.05%, 20 Hz to 20 kHz (microphone source) |
|---|---|

|                              |   |
|------------------------------|---|
| <b>THD+N, Speaker Output</b> | <0.1%, 1 kHz @ 25 W into 4 or 8 Ω;<br><0.7%, 20 Hz to 20 kHz @ 25 W into 4 or 8 Ω |
|------------------------------|---|

|   |  |
|---|--|
| <b>Stereo Separation, Digital &amp; Analog Line Outputs</b> | >108 dB (digital source);<br>>103 dB (analog source) |
|---|--|

|  |                      |
|--|----------------------|
| <b>Stereo Separation, Speaker Output</b> | >65 dB @ 25 W, 1 kHz |
|--|----------------------|

|  |  |
|--|--|
| <b>Channel Separation, Digital Outputs</b> | >108 dB (digital source);<br>>103 dB (analog source) |
|--|--|

|  |         |
|--|---------|
| <b>Channel Separation, Analog Line Outputs</b> | >103 dB |
|--|---------|

|                             |  |
|-----------------------------|--|
| <b>Speaker Output Modes</b> | 4 Ω/8 Ω stereo, 70V mono, or 100V mono |
|-----------------------------|--|

|                                       |   |
|---------------------------------------|---|
| <b>Speaker Amplifier Output Power</b> | 25 W RMS per channel @ 4 or 8 Ω;<br>50 W RMS @ 70 or 100V |
|---------------------------------------|---|

### Audio – Microphone Inputs

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

|                                   |   |
|-----------------------------------|---|
| <b>Input Signal Types</b>         | Mono analog mic or line level   |
| <b>Phantom Power</b>              | Enable/Disable per channel  |
| <b>Gain</b>                       | 0 to +60 dB gain adjustment in 3 dB increments, plus mute   |
| <b>Delay</b>                      | 0.0 to 85.0 ms  |
| <b>EQ Center Frequencies</b>      | 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) |
| <b>EQ Gain</b>                    | ±12.0 dB per band   |
| <b>High-Pass Filter</b>           | On or Off   |
| <b>Gating Threshold</b>           | -80 to 0 dB   |
| <b>Gating Depth (Attenuation)</b> | -80 to 0 dB   |

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|                              |                   |
|------------------------------|-------------------|
| <b>Gating Attack</b>         | 1 to 250 ms       |
| <b>Gating Release</b>        | 1 to 1000 ms      |
| <b>Compression Threshold</b> | -80 to 0 dB       |
| <b>Compression Ratio</b>     | 1:1 to 10:1       |
| <b>Compression Attack</b>    | 1 to 250 ms       |
| <b>Compression Release</b>   | 1 to 1000 ms      |
| <b>Compression Curve</b>     | Hard or soft knee |

## Audio – Source Inputs

|                           |  |
|---------------------------|--|
| <b>Input Signal Types</b> | HDMI (Dual-Mode DisplayPort compatible <sup>5</sup> ) on Inputs 1-6; DM 8G+ & HDBaseT on Input 7; Streaming & AirMedia on Input 8 (LAN); Analog 2-channel on Aud In 1-5          |
| <b>Analog Formats</b>     | Stereo 2-channel   |
| <b>Digital Formats</b>    | 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 |
| <b>Input Compensation</b> | ±10.0 dB, adjustable per input   |

## Audio – Analog Line & Speaker Outputs

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

|                               |   |
|-------------------------------|---|
| <b>Output Signal Format</b>   | Stereo  |
| <b>Mic 1 – 6</b>              | -80 to +10 dB level adjustment range, plus mute and pan     |
| <b>Mic Master</b>             | -80 to +10 dB level adjustment range, plus mute             |
| <b>Source</b>                 | -80 to +10 dB level adjustment range, plus mute and balance |
| <b>Master Volume</b>          | -80 to +10 dB level adjustment range, plus mute and mono    |
| <b>Mixer Presets</b>          | 1 through 5   |
| <b>Bass</b>                   | ±12.0 dB  |
| <b>Treble</b>                 | ±12.0 dB  |
| <b>Equalization</b>           | 10-band graphic + 4-band parametric                         |
| <b>GEQ Center Frequencies</b> | 31.5, 63, 125, 250, 500, 1k, 2k, 4k, 8k, and 16k Hz         |
| <b>GEQ Gain</b>               | ±12.0 dB per band   |

|                               |   |
|-------------------------------|---|
| <b>PEQ Center Frequencies</b> | 10 to 22000 Hz per band                                       |
| <b>PEQ Gain</b>               | -36.0 to +24.0 dB per band                                    |
| <b>PEQ Bandwidth</b>          | 0.02 to 3.50 octaves per band                                 |
| <b>PEQ Types</b>              | Parametric, High Pass, Low Pass, High Shelf, Low Shelf, Notch |
| <b>Delay</b>                  | 0.0 to 85.0 ms  |
| <b>Limiter Threshold</b>      | -80 to 0 dB   |
| <b>Limiter Ratio</b>          | 1:1 to 10:1   |
| <b>Limiter Attack</b>         | 1 to 250 ms   |
| <b>Limiter Hold</b>           | 1 to 200 ms   |
| <b>Limiter Release</b>        | 1 to 1000 ms  |
| <b>Limiter Curve</b>          | Hard or soft knee   |
| <b>EQ Presets</b>             | 1 through 10 (includes Delay and Limiter settings)            |

## Audio – Digital Outputs

|  |  |
|--|--|
| <b>Output Signal Types</b>                     | HDMI (DVI compatible <sup>5</sup> ) on Output 1; DM 8G+ & HDBaseT on Output 2  |
| <b>Formats</b>                                 | 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 |
| <b>Digital Output Mix Select 1 – 2</b>         | Selects which mix is routed to the corresponding output  |
| <b>Digital output mixer options (per mix):</b> |  |
| <b>Mic 1 – 6</b>                               | -80 to +10 dB level adjustment range, plus mute and pan  |
| <b>Mic Master</b>                              | -80 to +10 dB level adjustment range, plus mute  |
| <b>Source</b>                                  | -80 to +10 dB level adjustment range, plus mute and balance  |
| <b>Master Volume</b>                           | -80 to +10 dB level adjustment range, plus mute  |
| <b>Mixer Presets</b>                           | 1 through 5  |

## Connectors – Audio/Video Inputs

|                     |  |
|---------------------|--|
| <b>AUD IN 1 – 5</b> | (5) 5-pin 3.5 mm detachable terminal blocks<br>Balanced/unbalanced stereo line-level analog audio inputs;<br>Input Impedance: 24 kΩ<br>balanced/unbalanced;<br>Maximum Input Level: 4Vrms balanced, 2Vrms unbalanced |
|---------------------|--|

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|                          |  |                       |  |
|--------------------------|--|-----------------------|--|
| <b>MC1/LN1 – MC6/LN6</b> | (6) 5-pin 3.5 mm detachable terminal blocks;<br>Comprises (6) balanced microphone/line audio inputs;<br>Mic Input Level: -60 to 0 dBV, 1Vrms maximum;<br>Balanced Line Input Level: -31 to +11 dBV, 3.7Vrms maximum;<br>Unbalanced Line Input Level: -37 to +5 dBV, 1.85Vrms maximum;<br>Mic Input Impedance: 3.9 kΩ balanced;<br>Line Input Impedance: 19 kΩ balanced, 9.5 kΩ unbalanced;<br>Phantom Power: +48VDC, software enabled/disabled per channel | <b>PROG OUT</b>       | (1) 5-pin 3.5 mm detachable terminal block;<br>Balanced/unbalanced stereo line-level audio output;<br>Output Impedance: 200 Ω balanced, 100 Ω unbalanced;<br>Maximum Output Level: 4Vrms balanced, 2Vrms unbalanced  |
| <b>HDMI 1 – 6 INPUTS</b> | (6) HDMI Type A connectors, female;<br>Digital video/audio inputs;<br>(DVI and Dual-Mode DisplayPort compatible <sup>5</sup> )   | <b>AUX OUT 1 – 2</b>  | (2) 5-pin 3.5 mm detachable terminal blocks;<br>Balanced/unbalanced stereo line-level audio outputs;<br>Output Impedance: 200 Ω balanced, 100 Ω unbalanced;<br>Maximum Output Level: 4Vrms balanced, 2Vrms unbalanced  |
| <b>DM INPUT 7</b>        | (1) 8-pin RJ45 connector, female, shielded;<br>DM 8G+ input, HDBaseT compliant;<br>PoDM+ PSE port (HDBaseT PoE+ compatible) <sup>8</sup> ;<br>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 <sup>7</sup>  | <b>HDMI 1 OUTPUTS</b> | (1) HDMI Type A connector, female;<br>Digital video/audio output;<br>(DVI compatible <sup>3</sup> )  |
|                          |  | <b>DM OUTPUT 2</b>    | (1) 8-pin RJ45 connector, female, shielded;<br>DM 8G+ output, HDBaseT compliant;<br>PoDM+ PSE port (HDBaseT PoE+ compatible) <sup>8</sup> ;<br>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 cable <sup>7</sup> (sold separately) |

### Connectors – Audio/Video Outputs

|                                   |   |
|-----------------------------------|---|
| <b>SPEAKER OUTPUT 4Ω/8Ω L – R</b> | (2) 2-pin 7.62 mm 15A detachable terminal blocks;<br>4-8 Ω stereo speaker-level audio output;<br>Wire Size: Terminals accept up to 14 AWG (2.5 mm <sup>2</sup> );<br>Output Power: 25 W RMS per channel stereo at 4 or 8 Ω            |
| <b>SPEAKER OUTPUT 70/100V</b>     | (1) 2-pin 7.62 mm 15A detachable terminal block;<br>Transformer-isolated 70 or 100V mono speaker-level audio output;<br>Wire Size: Terminals accept up to 14 AWG (2.5 mm <sup>2</sup> );<br>Output Power: 50 W RMS mono at 70 or 100V |

**NOTE:** The 4Ω/8 Ω and 70/100V outputs are mutually exclusive

### Connectors – Networking, Control, & Power

|                            |   |
|----------------------------|---|
| <b>IR/SERIAL OUT 1 – 4</b> | (4) 2-pin 3.5 mm detachable terminal blocks;<br>IR/Serial output ports;<br>IR output up to 1.2 MHz;<br>1-way serial TTL/RS-232 (0-5V) up to 115.2k baud   |
| <b>IR IN</b>               | (1) 3-pin 3.5 mm detachable terminal block;<br>Allows control from IR wireless remotes using RC-5 command set   |
| <b>INPUT 1 – 4</b>         | (1) 5-pin 3.5 mm detachable terminal block;<br>Comprises (4) programmable digital inputs;<br>Input Voltage Range: 0 to 24VDC, referenced to GND;<br>Logic Threshold: 2.5VDC nominal with 1V hysteresis band;<br>Input Impedance: 10 kΩ at >5V, 1 MΩ at <5V;<br>Pull-up Resistor: 2.2 kΩ per input |

## 3-Series® 4K DigitalMedia™ Presentation System 250 with AirMedia®

|                               |   |                                      |   |
|-------------------------------|---|--------------------------------------|---|
| <b>RELAY 1 – 4</b>            | (1) 8-pin 3.5 mm detachable terminal block;<br>Comprises (4) normally open, isolated relays;<br>Rated 1A, 30VAC/VDC;<br>MOV arc suppression across contacts   | <b>LAN</b>                           | (1) Yellow LED, indicates Ethernet activity   |
| <b>COM A – B</b>              | (2) DB9 connectors, male;<br>Bidirectional RS-232 ports;<br>Up to 115.2k baud, hardware and software handshaking support  | <b>HW-R</b>                          | (1) Recessed pushbutton for hardware reset, reboots the control system  |
| <b>NET</b>                    | (4) 4-pin 3.5 mm detachable terminal blocks;<br>Cresnet Master ports, paralleled;<br>Available Cresnet Power: 10 W  | <b>SW-R</b>                          | (1) Recessed pushbutton for software reset, restarts the software program   |
| <b>PoDM+ INPUT PWR</b>        | (1) Combo D-Sub 7w2 connector, male;<br>48VDC power input for PoDM power supply <sup>8</sup> ;<br>Enables PoDM+ power sourcing on each DM INPUT/OUTPUT port;<br>Enables PoE power sourcing on the CONTROL SUBNET port | <b>LCD Display</b>                   | (1) Green LCD alphanumeric; adjustable backlight; 2 lines x 20 characters per line; displays input/outputs by name, volume levels, setup menus, signal routing, device info, and other system information |
| <b>SERVICE</b>                | (1) USB Type B connector, female;<br>For factory use only   | <b>SOFTKEYS</b>                      | (4) Pushbuttons for activation of LCD driven functions and passcode entry   |
| <b>100-240V~ 6.0A 50/60Hz</b> | (1) IEC 60320 C14 main power inlet;<br>Mates with removable power cord, included  | <b>MENU</b>                          | (1) Pushbutton, steps menu back one level   |
| <b>G</b>                      | (1) 6-32 screw;<br>Chassis ground lug   | <b>Λ, V</b>                          | (2) Pushbuttons, for scrolling up or down through the menu and adjusting menu parameters  |
| <b>CONTENT LAN IN 8</b>       | (1) 8-pin RJ45 connector, female;<br>10Base-T/100Base-TX Ethernet port;<br>Provides a dedicated LAN connection for streaming input & AirMedia <sup>1</sup>  | <b>ENTER</b>                         | (1) Pushbutton, executes the highlighted menu or value  |
| <b>CONTROL SUBNET</b>         | (1) 8-pin RJ45 connector, female;<br>10Base-T/100Base-TX/1000Base-T Ethernet port;<br>PoE PSE (Power Sourcing Equipment) port <sup>8</sup> ;<br>Provides a dedicated local network for Crestron devices               | <b>VOLUME</b>                        | (1) Continuous turn rotary encoder, adjusts menu parameters;<br>Defaults to <b>Program</b> audio volume control   |
| <b>LAN</b>                    | (1) 8-pin RJ45 connector, female;<br>10Base-T/100Base-TX/1000Base-T Ethernet port   | <b>MUTE</b>                          | (1) Pushbutton and red LED, mutes the <b>Program</b> audio output   |
| <b>COMPUTER (front)</b>       | (1) USB Type B connector, female;<br>USB computer console port (for setup only)   | <b>INFO</b>                          | (1) Pushbutton and red LED;<br>Selects <b>INFO</b> mode to view AV and device info  |
|                               |   | <b>ROUTE</b>                         | (1) Pushbutton and red LED;<br>Selects <b>ROUTE</b> mode to allow routing changes   |
|                               |   | <b>VIEW</b>                          | (1) Pushbutton and red LED;<br>Selects <b>VIEW</b> mode to view current routing   |
|                               |   | <b>INPUT 1 – 8</b>                   | (8) Pushbuttons and red LEDs;<br>Selects the corresponding video input for routing  |
|                               |   | <b>OUTPUT 1 – 2, PROG, AUX 1 – 2</b> | (5) Pushbuttons and red LEDs;<br>Selects the corresponding video or audio output for routing  |
|                               |   | <b>SPEAKER OUTPUT (rear)</b>         | (1) 3-position slide switch;<br>Selects amplifier output configuration  |
|                               |   | <b>DM INPUT 7 (rear)</b>             | (2) LEDs, (1) green and (1) amber;<br>Green LED indicates DM link status, amber LED indicates video and HDCP signal presence  |

### Controls & Indicators

|            |  |
|------------|--|
| <b>PWR</b> | (1) Green LED, indicates operating power supplied from AC power line |
| <b>NET</b> | (1) Yellow LED, indicates Cresnet bus activity                       |



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|                                |  |
|--------------------------------|--|
| <b>DM OUTPUT 2 (rear)</b>      | (2) LEDs, (1) green and (1) amber; Green LED indicates DM link status, amber LED indicates video signal presence |
| <b>CONTENT LAN IN 8 (rear)</b> | (2) LEDs, (1) green and (1) amber, for indication of Ethernet speed, activity, and link status                   |
| <b>CONTROL SUBNET (rear)</b>   | (2) LEDs, (1) green and (1) amber, for indication of Ethernet speed, activity, and link status                   |
| <b>LAN (rear)</b>              | (2) LEDs, (1) green and (1) amber, for indication of Ethernet speed, activity, and link status                   |

## Power

|                                  |  |
|----------------------------------|--|
| <b>Main Power</b>                | 6A @ 100-240VAC, 50/60 Hz  |
| <b>Power Consumption</b>         | 75 W typical;<br>60 W idle   |
| <b>Available Cresnet Power</b>   | 10 W   |
| <b>Power over DM (PoDM)</b>      | 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) <sup>8</sup> |
| <b>Power over HDBaseT</b>        | IEEE 802.3at PoE+ compliant PSE, each DM INPUT/OUTPUT port supplies up to 30 W to power one HDBaseT PoE or PoE+ PD <sup>8</sup>  |
| <b>Power over Ethernet (PoE)</b> | 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) <sup>8</sup>                       |
| <b>PoDM Power Supply</b>         | Compatible with model <a href="#">PW-5430DUS</a> (sold separately)   |

## Environmental

|                         |  |
|-------------------------|--|
| <b>Temperature</b>      | 41° to 104° F (5° to 40° C)            |
| <b>Humidity</b>         | 10% to 90% RH (non-condensing)         |
| <b>Heat Dissipation</b> | 256 BTU/hr typical;<br>205 BTU/hr idle |

## Enclosure

|                    |  |
|--------------------|--|
| <b>Chassis</b>     | Metal, fan-cooled, vented sides                      |
| <b>Front Panel</b> | Metal, black finish with polycarbonate label overlay |

|                 |   |
|-----------------|---|
| <b>Mounting</b> | Freestanding or 3 RU 19 in. rack-mountable (adhesive feet and rack ears included) |
|-----------------|---|

## Dimensions

|               |  |
|---------------|--|
| <b>Height</b> | 5.20 in. (133 mm) without feet                           |
| <b>Width</b>  | 17.28 in. (439 mm);<br>19.00 in. (483 mm) with rack ears |
| <b>Depth</b>  | 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

## 3-Series® 4K DigitalMedia™ Presentation System 250 with AirMedia®

### Maximum DM 8G+ Cable Lengths

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

### Model

#### DMPS3-4K-250-C-AIRMEDIA

3-Series® 4K DigitalMedia™ Presentation System 250 with AirMedia®

### Available Accessories

For a list of available accessories, see the [DMPS3-4K-250-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.
- 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>.
- 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. Full-motion 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>.
- 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.

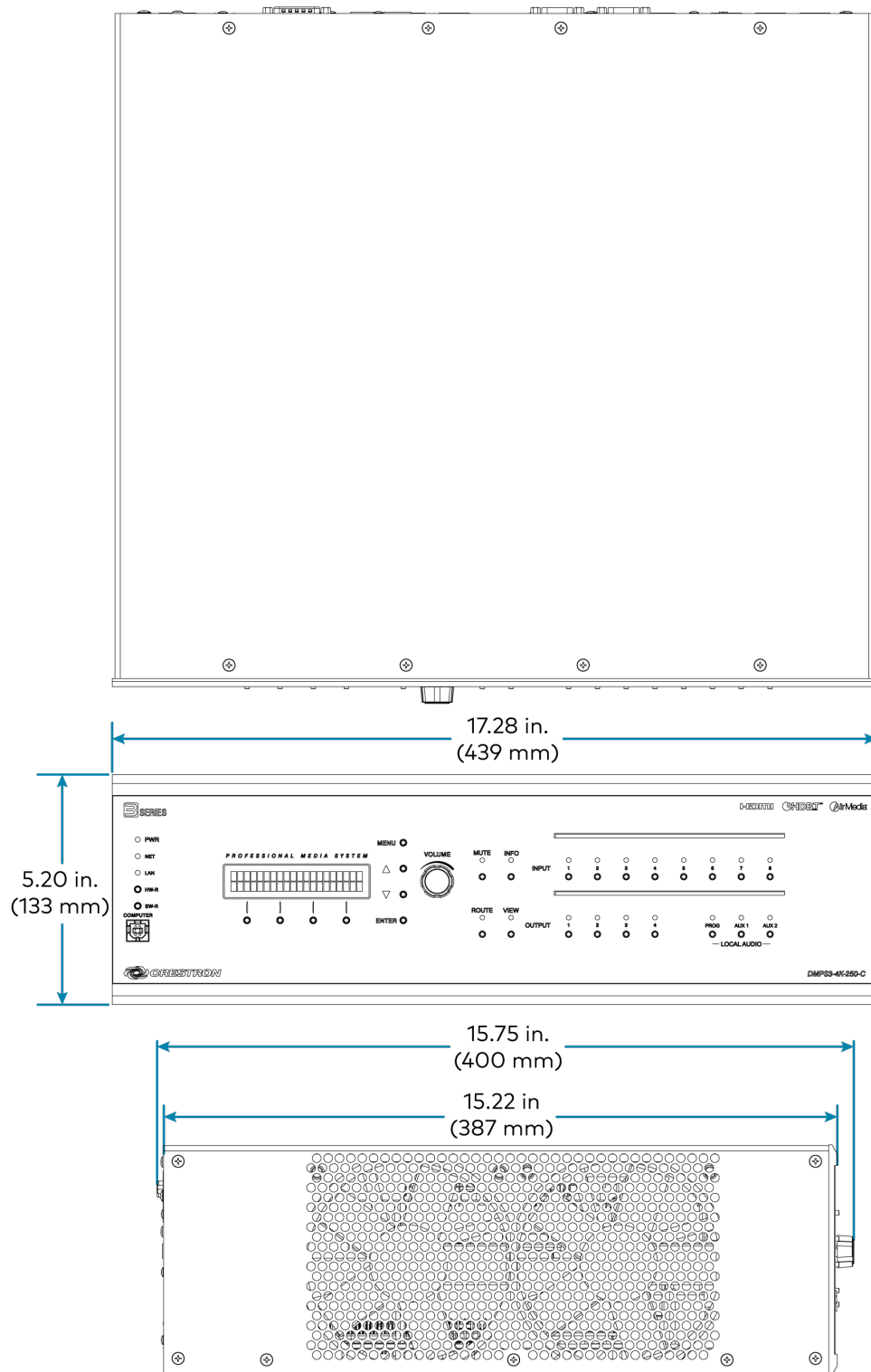
- HDMI connections require an appropriate adapter or interface cable to accommodate a DVI or Dual-Mode DisplayPort signal. [CBL-HD-DVI](#) interface cables are available separately.
- The maximum cable length for DigitalMedia 8G+ (DM 8G+) or HDBaseT is dependent upon the type of cable and resolution 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.
- 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-250-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-250-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](http://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](http://patents.crestron.com).

Certain Crestron products contain open source software. For specific information, please visit [www.crestron.com/opensource](http://www.crestron.com/opensource). Crestron, the Crestron logo, 3-Series, 3-Series Control System, AirMedia, Auto-Locking, .AV Framework, Cresnet, Crestron Connect It, Crestron Fusion, DigitalMedia, DigitalMedia 8G, DigitalMedia 8G+, DM, DM 8G, DM 8G+, QuickSwitch HD, and Smart Graphics are either trademarks or registered trademarks of Crestron Electronics, Inc. in the United States and/or other countries. BACnet is either a trademark or registered trademark of American Society of Heating, Refrigerating and Air-Conditioning Engineers, Inc. in the United States and/or other countries. Apple, iOS, iPad, iPhone, Mac, MacBook, and OS X are either trademarks or registered trademarks of Apple Inc. in the United States and/or other countries. Android is either a trademark or registered trademark of Google Inc. in the United States and/or other countries. HDBaseT and the HDBaseT Alliance logo are either trademarks or registered trademarks of the HDBaseT Alliance in the United States and/or other countries. HDMI and the HDMI Logo are either trademarks or registered trademarks of HDMI Licensing LLC in the United States and/or other countries. Active Directory, Excel, PowerPoint, and Windows are either trademarks or registered trademarks of Microsoft Corporation in the United States and/or other countries. DisplayPort is either a trademark or registered trademark of Video Electronics Standards Association in the United States and/or other countries. Other trademarks, registered trademarks, and trade names may be used in this document to refer to either the entities claiming the marks and names or their products. Crestron disclaims any proprietary interest in the marks and names of others. Crestron is not responsible for errors in typography or photography. Specifications are subject to change without notice. ©2024 Crestron Electronics, Inc. Rev 02/14/24

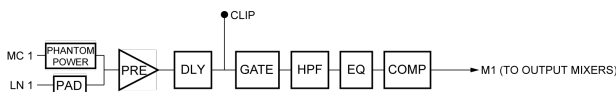
## 3-Series® 4K DigitalMedia™ Presentation System 250 with AirMedia®



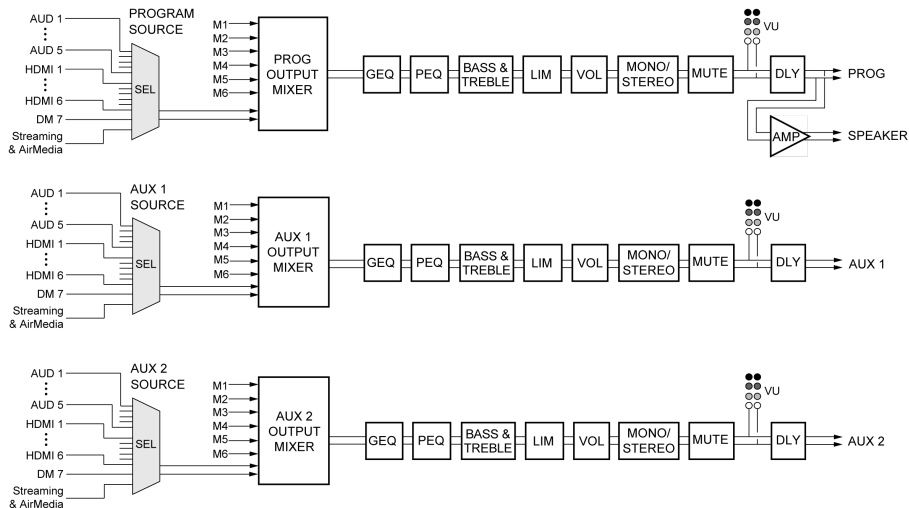
## 3-Series® 4K DigitalMedia™ Presentation System 250 with AirMedia®

### AV Signal Flow Diagrams

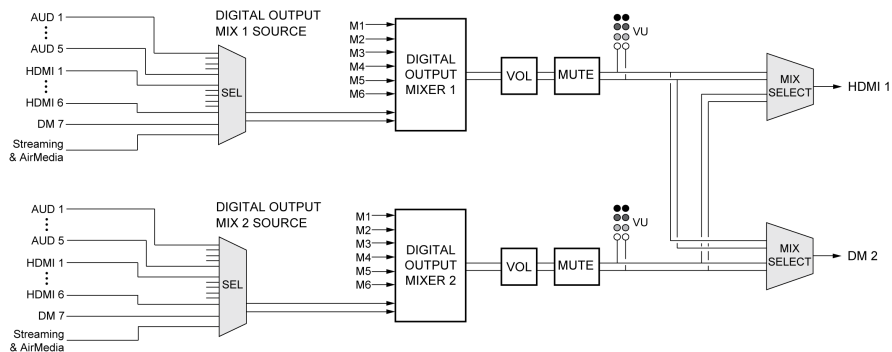
Microphone Inputs (Typical of 6)



Analog Audio Outputs



Digital Audio Outputs



Video

