

## 3-Series® DigitalMedia™ Presentation System 300

The DMPS3-300-C from Crestron® is a complete, high-definition presentation control and signal routing solution for classrooms, boardrooms, lecture halls, and videoconference rooms. Integrating the control system, multimedia matrix switcher, mic mixer, audio DSP, and amplifier all into one 3-space rack mount package, the DMPS3-300-C affords extensive signal routing flexibility and high-performance signal processing without the need for separate components. Auto-configuring inputs enable plug-and-play compatibility with a wide range of digital and analog sources. Built-in DigitalMedia™ and HDBaseT® connectivity affords a streamlined, long-distance wiring solution for additional remote sources and display devices, and for facility-wide integration as part of a larger media distribution system.



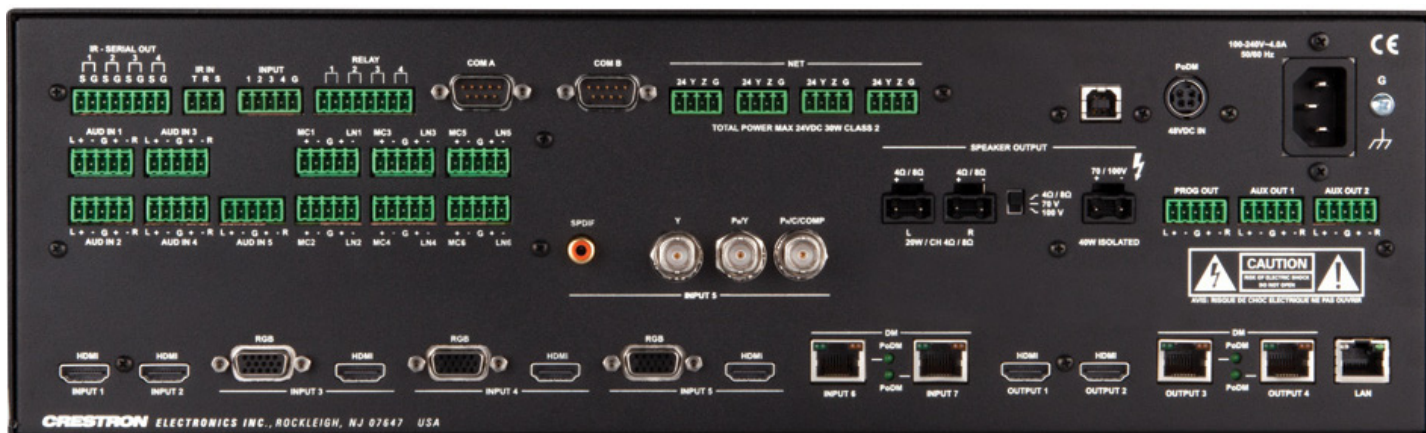
### No Programming Required!

Installing the DMPS3-300-C is easy, fast, and affordable. There's no programming required to deliver a fully-functional presentation system — with simple controls provided for system power, source selection, and volume adjustment using a Crestron touch screen, computer, or iPad®.

Complete system configuration is enabled right from the touch screen, computer, or iPad, allowing the installer to quickly specify display devices and assign user-friendly names and icons to the inputs and outputs. That's it! Preloaded DMPS3 .AV Framework™ software does all the programming for you, enabling the DMPS3-300-C to control up to four displays, connect to AirMedia™ and DM® devices, and communicate with Crestron Fusion® Enterprise Management Software.<sup>[1]</sup>

- > High-Definition multimedia system switcher, mic mixer, audio DSP, amplifier, and control system
- > Preloaded DMPS3 .AV Framework™ software enables customized presentation control without programming<sup>[1]</sup>
- > Allows quick and easy setup using just an iPad®, computer, or Crestron® touch screen<sup>[1]</sup>
- > Integrated 3-Series Control System® enables fully-programmable room control
- > DigitalMedia 8G+® connectivity enables long-distance wiring over CAT type twisted pair cable<sup>[5]</sup>
- > HDBaseT® Certified — Enables direct connection to other HDBaseT certified equipment
- > Provides matrix signal routing for up to 7 video sources and 4 displays
- > Handles HDMI®, DVI, DisplayPort Multimode, HDBaseT, and SPDIF digital sources<sup>[2]</sup>
- > Handles RGB, composite, S-Video, component, and stereo audio analog sources<sup>[9]</sup>
- > Features auto-detecting, auto-switching inputs for all types of video and audio sources
- > 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
- > External scaler options provide discrete image optimization for each display device<sup>[7]</sup>
- > Includes built-in 6-channel gated microphone mixing w/DSP
- > Affords versatile audio signal mixing and routing to 7 separate outputs
- > Allows audio-follow-video or breakaway switching for all inputs
- > Enables HDMI audio signal extraction and embedding
- > Handles Dolby Digital®, Dolby® TrueHD, DTS®, DTS-HD®, and uncompressed 7.1 linear PCM audio<sup>[3,4]</sup>
- > Provides 3 stereo analog outputs with independent DSP per output
- > Features built-in amplifier, selectable for 20W/Ch. @ 8Ω stereo or 40W @ 70/100 Volts mono
- > Enables USB signal routing via DM® transmitters and receivers or USB-EXT-DM extenders<sup>[6]</sup>
- > 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 external RC-5 compatible IR receiver<sup>[7]</sup>
- > Integrates with Crestron Fusion® Enterprise Management Software
- > Enables IT-friendly network integration via SNMP
- > Integrated Ethernet switch provides a single-point LAN connection
- > Private Network Mode — requires just one IP address for the complete system
- > Provides easy setup and diagnostics via front panel or software
- > Features an internal universal power supply for worldwide compatibility
- > Furnishes Power over DM or HDBaseT for PoDM/PoH-powered devices<sup>[6]</sup>
- > 3-space 19-inch rack-mountable

# DMPS3-300-C 3-Series® DigitalMedia™ Presentation System 300



DMPS3-300-C – Rear View

## HD System Switcher

The DMPS3-300-C provides high-performance routing of numerous digital and analog sources to up to four separate projectors, flat panel displays, codecs, touch screens, and other devices. Connectivity is provided for up to five HDMI® sources<sup>[2]</sup>, or other combinations of HDMI, RGB, SPDIF, analog audio, and analog video sources (plus additional remote sources via DM 8G+® or HDBaseT). Input auto-detection and auto-switching eliminates the need to configure the inputs — simply connect your source and the DMPS3-300-C selects the right audio and video combination. Built-in matrix switching allows routing of seven simultaneous sources to four different digital AV devices and three additional analog audio components.

## Flexible Audio Routing

The HDMI, SPDIF, and analog audio inputs may be configured to follow their associated video inputs, or switched independently. In fact, the audio from any HDMI source can be extracted from the digital stream and converted to analog to feed an outboard processor, mixer, or codec, with the return signal feeding back through any analog input, which can be embedded with any video source to form a new HDMI output. Dolby Digital®, Dolby® TrueHD, DTS®, DTS-HD®, and 7.1 linear PCM audio signals can be routed through the HDMI and DM 8G+ inputs and outputs. The HDMI, SPDIF, and analog audio inputs include adjustable input compensation to accommodate a wide range of signals and maintain consistent volume levels when switching between sources.<sup>[3,4]</sup>

## DigitalMedia 8G+®

Its DM 8G+ inputs and outputs endow the DMPS3-300-C with incredible potential for connecting sources and display devices, and integrating with larger systems. DM 8G+ provides a true one-wire interface for transporting 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 either of the DM 8G+ outputs 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 computers at a conference table, 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.<sup>[5,6]</sup>

## HDBaseT® Certified

Crestron DigitalMedia 8G+ technology is designed using HDBaseT Alliance specifications, ensuring interoperability with other HDBaseT certified products. Via DM 8G+, the DMPS3-300-C can be connected directly to an HDBaseT compliant source or display device without requiring a DM transmitter or receiver.

## 6-Channel Microphone Mixer

The DMPS3-300-C 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 stereo mix of all six microphones at each of the DMPS3-300-C's seven outputs.

## Codec Mixing

For video conferencing applications, the DMPS3-300-C allows one or two codecs to be connected to any of the seven source inputs. Audio from both codecs can be mixed with the local presentation source and routed to the room speakers via the main “Program” output. The presentation source audio can also be routed to the codecs via the “Aux” outputs, allowing far end participants to experience the full presentation. Both codecs can even be used simultaneously, allowing the signal from one codec to be fed to the other for a fully inclusive teleconferencing experience.

## Professional Audio DSP

Each analog audio output on the DMPS3-300-C 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

Its built-in power amplifier allows the DMPS3-300-C to directly drive a pair of stereo speakers (20 Watts per channel @ 8Ω), or a group of distributed ceiling speakers (40 Watts mono @ 70 or 100 Volts). Fed by the main “Program” output, the internal amplifier benefits fully from the onboard DSP. For larger applications, Crestron [AMP-Series](#) power amplifiers may

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be added, providing a complete solution for driving separate program and speech speakers, or any multi-zone speaker system.

## EDID Format Management

The DMPS3-300-C allows for management of the EDID (Extended Display Identification Data) information that passes between the display devices and input sources in the system. Using [Crestron Toolbox™](#) software, the format and resolution capabilities of each device can be assessed, allowing the installer to configure EDID signals appropriately for the most desirable and predictable behavior.

## A Scaler for Every Display

Through a distributed scaler approach, the DMPS3-300-C affords a very flexible and user-friendly solution for handling multiple disparate display devices. Employing discrete outboard scalers like the [HD-SCALER-HD-E](#), [DM-RMC-SCALER-C](#), and [DM-RMC-4K-SCALER-C](#), the DMPS3-300-C allows an independent high-performance scaler to be installed at each display device, ensuring an optimal image on every screen no matter what sources are selected.<sup>[7]</sup>

## 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” 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 TV channels, Auto-Locking significantly reduces the time it takes each device to sense the new signal and configure itself to handle the changes, virtually eliminating any noticeable gap while switching.

## Built-in Ethernet Switch

In addition to transporting digital video and audio, the DigitalMedia 8G+ ports on the DMPS3-300-C can also extend Ethernet out to each display and source device, providing high-speed connectivity for each room device that requires a LAN connection. Ethernet is also utilized internally by the Crestron control bus to manage each transmitter and receiver and provide device control.

## Private Network Mode

To streamline its implementation on a corporate or university LAN, the DMPS3-300-C employs Private Network Mode to provide a single-point connection for the complete system. Using Private Network Mode, the DMPS3-300-C requires just one IP address for the complete DM network including all connected DM receivers and transmitters.

## USB Signal Routing

Along with video, audio, and Ethernet, the DMPS3-300-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<sup>\[7\]</sup>](#)), which may be used to enable the routing of multiple USB devices of virtually any type, all seamlessly managed through the DMPS3-300-C.<sup>[8]</sup>

## Integrated 3-Series Control System®

Its built-in 3-Series control system enables the DMPS3-300-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 four IR ports, two RS-232 COM ports, four relay ports, and four digital input ports, as well as Cresnet® and Ethernet. The DMPS3-300-C supports the full line of Crestron touch screens, keypads, and wireless remotes for a user experience custom tailored to the specific requirements of each end-user. Support for [Crestron control apps](#) and [Crestron Fusion Enterprise Management Software](#) delivers the industry’s most powerful platform for remotely controlling and managing multiple rooms using computers and mobile devices.

## CEC Embedded Device Control

For controlling third-party AV devices, the DMPS3-300-C provides an additional alternative to conventional IR, RS-232, and Ethernet by harnessing the CEC (Consumer Electronics Control) signal embedded in HDMI. Using CEC, many devices can be controlled right through their HDMI connections, eliminating the need for any dedicated serial cables or IR emitters.

## Easy Setup

Every step of the DMPS3-300-C setup process is designed to be quick and easy using its front panel or Crestron Toolbox software, configuring inputs and outputs automatically while letting the installer make intelligent design decisions along the way. Out of the box, the DMPS3-300-C front panel supports basic signal routing for easy testing and troubleshooting during installation. The front panel label strips can be customized using Crestron Engraver software or standard 3/8” tape labels, allowing for the clear designation of each input and output. Inputs and outputs may also be designated by name through the software to appear on the LCD display.



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## 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<sup>[1]</sup>

### Memory

SDRAM: 512 MB

Flash: 4 GB

### Communications

**Ethernet:** 10/100/1000 Mbps, auto-switching, auto-negotiating, auto-discovery, full/half duplex, industry-standard TCP/IP stack, UDP/IP, CIP, DHCP, SSL, TLS, IEEE 802.1X, SNMP, BACnet™/IP<sup>[10]</sup>, 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 signal routing via select DM transmitters and receivers, or via USB-EXT-DM extenders<sup>[6]</sup>; USB device port for computer console (setup)

**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; supports CNXRMIRD IR Receiver<sup>[7]</sup>

**DigitalMedia™:** DM 8G+®, HDCP, EDID, CEC, PoDM, Ethernet

**HDBaseT®:** HDCP, EDID, PoH, Ethernet

**HDMI®:** HDCP, EDID, CEC

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

### Video

**Switcher:** 7x4 matrix, auto-switching, auto-detecting multi-format digital/analog source inputs, QuickSwitch HD® technology

**Input Signal Types:** HDMI w/Deep Color & 3D<sup>[4]</sup> (DVI & DisplayPort Multimode compatible<sup>[2]</sup>), DM 8G+ & HDBaseT w/Deep Color & 3D<sup>[4]</sup>, RGB/VGA (RGBHV, RGBS, RGsB)<sup>[9]</sup>, component (YPbPr), S-Video (Y/C), composite (NTSC, PAL)

**Output Signal Types:** HDMI w/Deep Color & 3D<sup>[4]</sup> (DVI compatible<sup>[2]</sup>), DM 8G+ & HDBaseT w/Deep Color & 3D<sup>[4]</sup>

**Input Resolutions, HDMI & HDBaseT, Progressive:** 640x480@60Hz, 720x480@60Hz (480p), 720x576@50Hz (576p), 800x600@60Hz, 848x480@60Hz, 852x480@60Hz, 854x480@60Hz, 1024x768@60Hz, 1024x852@60Hz, 1024x1024@60Hz, 1280x720@50Hz (720p50), 1280x720@60Hz (720p60), 1280x768@60Hz, 1280x800@60Hz, 1280x960@60Hz, 1280x1024@60Hz, 1360x768@60Hz, 1365x1024@60Hz, 1366x768@60Hz, 1400x1050@60Hz, 1440x900@60Hz, 1600x900@60Hz, 1600x1200@60Hz, 1680x1050@60Hz, 1920x1080@24Hz (1080p24), 1920x1080@25Hz (1080p25), 1920x1080@50Hz (1080p50), 1920x1080@60Hz (1080p60), 1920x1200@60Hz, 2048x1080@24Hz, 2048x1152@60Hz, plus any other resolution allowed by HDMI up to 165MHz pixel clock

**Input Resolutions, HDMI & HDBaseT, Interlaced:** 720x480@30Hz (480i), 720x576@25Hz (576i), 1920x1080@25Hz (1080i25), 1920x1080@30Hz (1080i30), plus any other resolution allowed by HDMI up to 165MHz pixel clock

**Input Resolutions, RGB:** 640x480@60Hz, 720x480@60Hz (480p), 720x576@50Hz (576p), 800x600@60Hz, 848x480@60Hz, 1024x768@60Hz, 1280x720@50Hz (720p50), 1280x720@60Hz (720p60), 1280x768@60Hz, 1280x800@60Hz, 1280x960@60Hz, 1280x1024@60Hz, 1360x768@60Hz, 1366x768@60Hz, 1400x1050@60Hz, 1440x900@60Hz, 1600x1200@60Hz, 1680x1050@60Hz, 1920x1080@50Hz (1080p50), 1920x1080@60Hz (1080p60), 1920x1200@60Hz, 2048x1152@60Hz

**Input Resolutions, Component:** 480i, 576i, 480p, 576p, 720p50, 720p60, 1080p24, 1080i25 (1125 lines), 1080i30, 1080p30, 1080p50 (1125 lines), 1080p60

**Input Resolutions, Composite & S-Video:** 480i, 576i

**Output Resolutions:** Matched to inputs

**Analog-To-Digital Conversion:** 10-bit 165 MHz per each of 3 channels

**RGB Source Image Adjustments:**

Brightness: 0% to 50%;

Contrast: -50% to +50%;

Fine Phase: -16 to +15;

X Position: -100 to +100;

Y Position: -10 to +10;

RGB Gains: -50 to +50, separately adjustable for Red, Green, and Blue

**YPbPr, Y/C, or Composite Source Image Adjustments:**

Brightness: 0% to 50%;

Contrast: -50% to +50%;

Saturation: -50% to +50%;

Hue: -50% to +50%

### Audio

**Switcher/Mixer:** 7x7 stereo source switcher, auto-detecting multi-format digital/analog source inputs, audio-follow-video or breakaway, 6-channel gated mic mixer w/DSP, independent 6-ch mic + source mixer per output, dual codec mixer, independent stereo DSP per analog output, integrated power amplifier, 7x4 multichannel source switcher, digital audio mixer bypass mode for multichannel pass-through to digital outputs

Typical of 6 microphone input channels (Mic/Line 1 – 6):

**Input Signal Types:** Mono analog mic or line level

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

**Phantom Power:** Enable/Disable per channel

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

**Delay:** 0.0 to 85.0 ms

**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

**High-Pass Filter:** On or Off

**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

**Compression Threshold:** -80 to 0 dB

**Compression Ratio:** 1:1 to 10:1

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**Compression Attack:** 1 to 250 ms  
**Compression Release:** 1 to 1000 ms  
**Compression Curve:** Hard or soft knee

Typical of 7 source input channels (Input 1 – 7 & Audio In 1 – 5):

**Input Signal Types:** HDMI (DisplayPort Multimode compatible<sup>[2]</sup>) on Inputs 1-5, analog 2-channel on Inputs 1-5, S/PDIF on Input 5 only, DM 8G+ & HDBaseT on Inputs 6 & 7  
**Formats, Analog:** Stereo 2-channel  
**Formats, HDMI & DM:** Dolby Digital®, Dolby Digital EX, Dolby Digital Plus<sup>[4]</sup>, Dolby® TrueHD<sup>[4]</sup>, DTS®, DTS-ES, DTS 96/24, DTS-HD High Res<sup>[4]</sup>, DTS-HD Master Audio™<sup>[4]</sup>, LPCM up to 8 channels  
**Formats, SPDIF:** LPCM 2-channel  
**Analog-To-Digital Conversion:** 24-bit 48 kHz  
**Input Compensation:** ±10.0 dB <sup>[3]</sup>

Typical of 3 analog line outputs w/DSP (Program Out, Aux Out 1, & Aux Out 2):

**Output Signal Type/Format:** Stereo 2-channel  
**Digital-To-Analog Conversion:** 24-bit 48 kHz  
**Mic 1 – 6:** -80 to +10 dB Level adjustment range, plus Mute and Pan  
**Mics Master:** -80 to +10 dB Level adjustment range, plus Mute  
**Source:** -80 to +10 dB Level adjustment range, plus Mute and Balance  
**Codec 1 – 2:** -80 to +10 dB Level adjustment range, plus Mute and Balance (Codec 1 available at Program Out and Aux 2 Out only, Codec 2 available at Program Out and Aux 1 Out only)<sup>[11]</sup>  
**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  
**Equalization:** 10-band graphic + 4-band parametric  
**GEQ Center Frequencies:** 31.5, 63, 125, 250, 500, 1k, 2k, 4k, 8k, 16k Hz  
**GEQ Gain:** ±12.0 dB per band  
**PEQ Center Frequencies:** 10 to 22000 Hz per band  
**PEQ Gain:** -36.0 to +24.0 dB per band  
**PEQ Bandwidth:** 0.02 to 3.50 octaves per band  
**PEQ Types:** Peaking EQ, High Pass, Low Pass, High Shelf, Low Shelf, Notch  
**Delay:** 0.0 to 85.0 ms  
**Limiter Threshold:** -80 to 0 dBz  
**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)  
**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)

**Channel Separation:** >103 dB

Typical of 4 digital outputs (HDMI Output 1 – 2 & DM Output 3 – 4):

**Output Signal Types:** HDMI (DVI compatible<sup>[2]</sup>) on Outputs 1 & 2, DM 8G+ & HDBaseT on Outputs 3 & 4  
**Formats:** Dolby Digital, Dolby Digital EX, Dolby Digital Plus, Dolby TrueHD, DTS, DTS-ES, DTS 96/24, DTS-HD High Res, DTS-HD Master Audio, LPCM up to 8 channels  
**Mic 1 – 6:** -80 to +10 dB Level adjustment range, plus Mute and Pan<sup>[3]</sup>  
**Mics Master:** -80 to +10 dB Level adjustment range, plus Mute<sup>[3]</sup>  
**Source:** -80 to +10 dB Level adjustment range, plus Mute and Balance<sup>[3]</sup>  
**Master Volume:** -80 to +10 dB Level adjustment range, plus Mute<sup>[3]</sup>  
**Mixer Presets:** 1 through 5  
**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, 1kHz, A-weighted (digital source);  
>103 dB, 1kHz, 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)  
**Channel Separation:** >108 dB (digital source);  
>103 dB (analog source)

Speaker Outputs (same signal as Program Out):

**Output Modes:** 4Ω/8Ω stereo, 70V mono, or 100V mono  
**Output Power, 4Ω/8Ω:** 20 Watts RMS per channel at 8 Ohms, 4 Ohms tolerant  
**Output Power, 70/100V:** 40 Watts RMS  
**Frequency Response:** 20 Hz to 20 kHz ±1 dB @ 20 Watts into 8 Ohms;  
100 Hz to 20 kHz ±2.5 dB @ 70 or 100 Volts  
**S/N Ratio:** 98 dB @ 20 Watts into 8 Ohms, 1 kHz, A-weighted;  
96 dB @ 20 Watts in 4 Ohms, 1 kHz, A-weighted  
**THD+N:** <0.1% (1 kHz), <0.7% (20 Hz to 20 kHz), @ 20 Watts into 4 or 8 Ohms  
**Stereo Separation:** >65 dB @ 20 Watts, 1 kHz

## Connectors – Audio/Video Inputs

**HDMI INPUT 1 – 5:** (5) 19-pin Type A HDMI female;  
Digital video/audio inputs;  
Signal Types: HDMI, DVI, or DisplayPort Multimode<sup>[2,4]</sup>

**RGB INPUT 3 – 5:** (3) DB15HD female, analog RGB/video inputs;  
Signal Types: RGBHV, component, S-Video, or composite<sup>[9]</sup>;  
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;

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Sync Input Impedance: 2.2k Ohms;

Note: RGB Inputs 3-5 and HDMI Inputs 3-5 are mutually exclusive; HDMI overrides RGB when using the auto-switching feature

**Y, PB/Y, PR/C/COMP INPUT 5:** (3) BNC female comprising (1) auto-sensing multi-format analog video input;

Signal Types: Component, S-Video, or composite;

Formats: YPbPr, Y/C, NTSC or PAL;

Input Level: 1 Vp-p nominal;

Input Impedance: 75 Ohms nominal;

Note: Video Input 5, RGB Input 5, and HDMI Input 5 are mutually exclusive; HDMI and RGB override Video when using the auto-switching feature

**SPDIF INPUT 5:** (1) RCA female, S/PDIF coaxial digital audio input;

Input Impedance: 75 Ohms;

Note: SPDIF Input 5 and HDMI Input 5 are mutually exclusive; HDMI overrides SPDIF when using the auto-switching feature

**AUD IN 1 – 5:** (5) 5-pin 3.5mm detachable terminal blocks;

Balanced/unbalanced stereo line-level analog audio inputs;

Input Impedance: 24k Ohms balanced/unbalanced;

Maximum Input Level: 4 Vrms balanced, 2 Vrms unbalanced;

Note: Analog Audio Inputs 1-5, SPDIF Input 5, and HDMI Inputs 1-5 are mutually exclusive; HDMI and SPDIF override Analog Audio when using the auto-switching feature

**DM INPUT 6 – 7:** (2) 8-pin RJ45 female, shielded;

DM 8G+ inputs, HDBaseT compliant;

PoDM and PoH PSE (Power Sourcing Equipment) ports<sup>[6]</sup>;

Each connects to the DM 8G+ output of a DM transmitter or other DM device, or to an HDBaseT device, via CAT5e or Crestron DM-CBL-8G cable<sup>[5]</sup>

**MC1/LN1 – MC6/LN6:** (6) 5-pin 3.5mm detachable terminal blocks;

Comprises (6) balanced microphone/line audio inputs;

Balanced Mic Input Level: -60 to 0 dBV, 1 Vrms maximum;

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

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

Mic Input Impedance: 3.9k Ohms balanced;

Line Input Impedance: 19k Ohms balanced, 9.5k Ohms unbalanced;

Phantom Power: 48 Volts DC, software enabled/disabled per channel

## Connectors – Audio/Video Outputs

**SPEAKER OUTPUTS 4Ω/8Ω L – R:** (2) 2-pin 7.62mm 15A detachable terminal blocks;

4-8 Ohm stereo speaker-level audio output;

Wire Size: Terminals accept up to 14 AWG;

Output Power: 20W RMS per channel stereo at 8 Ohms, 4 Ohms tolerant

**SPEAKER OUTPUTS 70/100V:** (1) 2-pin 7.62mm 15A detachable terminal block;

Transformer-isolated 70 or 100 Volt mono speaker-level audio output;

Wire Size: Terminals accept up to 14 AWG;

Output Power: 40W RMS mono at 70 or 100 Volts;

Note: 4Ω/8Ω and 70/100V outputs are mutually exclusive

**PROG OUT:** (1) 5-pin 3.5mm detachable terminal block;

Balanced/unbalanced stereo line-level audio output;

Output Impedance: 200 Ohms balanced, 100 Ohms unbalanced;

Maximum Output Level: 4 Vrms balanced, 2 Vrms unbalanced

**AUX OUT 1 – 2:** (2) 5-pin 3.5mm detachable terminal blocks;

Balanced/unbalanced stereo line-level audio outputs;

Output Impedance: 200 Ohms balanced, 100 Ohms unbalanced;

Maximum Output Level: 4 Vrms balanced, 2 Vrms unbalanced

**HDMI OUTPUT 1 – 2:** (2) 19-pin Type A HDMI female, digital video/audio outputs;

Signal Types: HDMI, DVI<sup>[2]</sup>

**DM OUTPUT 3 – 4:** (2) 8-pin RJ45 female, shielded;

DM 8G+ outputs, HDBaseT compliant;

PoDM and PoH PSE (Power Sourcing Equipment) ports<sup>[6]</sup>;

Each connects to the DM 8G+ input of a DM receiver/room controller or other DM device, or to an HDBaseT device, via CAT5e or Crestron DM-CBL-8G cable<sup>[5]</sup>

## Connectors – Control & Power

**IR/SERIAL OUT 1 – 4:** (4) 2-pin 3.5mm detachable terminal blocks;

IR/Serial output ports;

IR output up to 1.2 MHz;

1-way serial TTL/RS-232 (0-5 Volts) up to 115.2k baud

**IR IN:** (1) 3-pin 3.5mm detachable terminal block

For connection of the CNXRMIRD IR Receiver<sup>[7]</sup>;

Allows control from IR wireless remotes using RC-5 command set

**INPUT 1 – 4:** (1) 5-pin 3.5mm detachable terminal block;

Comprises (4) 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

**RELAY 1 – 4:** (1) 8-pin 3.5mm detachable terminal block;

Comprises (4) normally open, isolated relays;

Rated 1 Amp, 30 Volts AC/DC;

MOV arc suppression across contacts

**COM A – B:** (2) DB9 male, bidirectional RS-232 ports;

Up to 115.2k baud, hardware and software handshaking support

**NET:** (4) 4-pin 3.5mm detachable terminal blocks;

Cresnet Master ports, paralleled;

Available Cresnet Power: 30 Watts

**SERVICE:** (1) USB Type B female, for factory use only

**PoDM 48VDC IN:** (1) 4-pin snap & lock DC power connector, female;

48 Volt DC power input for PoDM power pack<sup>[6]</sup>;

Enables PoDM and PoH power sourcing

**100-240V~4.0A 50/60Hz:** (1) IEC 60320 C14 main power inlet;

Mates with removable power cord, included



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

**LAN:** (1) 8-wire RJ45 female, 10Base-T/100Base-TX/1000Base-T Ethernet port

**COMPUTER (front):** (1) USB Type B female (cable included); USB computer console port (for setup only)

## LCD Display

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

## Controls & Indicators

**NET:** (1) yellow LED, indicates Cresnet bus activity

**LAN:** (1) yellow LED, indicates Ethernet activity

**HW-R:** (1) recessed miniature pushbutton for hardware reset, reboots the control system

**SW-R:** (1) recessed miniature pushbutton for software reset, restarts the SIMPL program

**POWER:** (1) pushbutton and green LED, programmable for system power control

**SOFTKEYS:** (4) pushbuttons for activation of LCD driven functions and passcode entry

**MENU:** (1) pushbutton, steps menu back one level

**▲, ▼:** (2) pushbuttons, scroll up or down through menu and adjust menu parameters

**ENTER:** (1) pushbutton, executes highlighted menu or value

**VOLUME:** (1) continuous turn rotary encoder, adjusts menu parameters, defaults to Program audio volume

**MUTE:** (1) pushbutton and red LED, mutes the Program audio output

**ROUTE:** (1) pushbutton and red LED, selects ROUTE mode to allow routing changes

**VIEW:** (1) pushbutton and red LED, selects VIEW mode to view current routing

**INFO:** (1) pushbutton and red LED, selects INFO mode to view AV and device info

**INPUTS 1 – 7:** (7) pushbuttons and red LEDs, select input to be routed

**OUTPUTS 1 – 4, PROG, AUX 1 – 2:** (7) pushbuttons and red LEDs, select output destination(s)

**SPEAKER OUTPUTS (rear):** (1) 3-position slide switch, selects the amplifier output configuration

**DM INPUT 6 – 7 (rear):** (4) LEDs, green LEDs indicate DM link status, amber LEDs indicate video and HDCP signal presence, for each respective port

**DM INPUT 6 – 7 PoDM (rear):** (2) green LEDs, indicate upstream device is drawing power over DM for each respective port

**DM OUTPUT 3 – 4 (rear):** (4) LEDs, green LEDs indicate DM link status, amber LEDs indicate video and HDCP signal presence, for each respective port

**DM OUTPUT 3 – 4 PoDM (rear):** (2) green LEDs, indicate downstream device is drawing power over DM for each respective port

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

## Power Requirements

**Main Power:** 4 Amps @ 100-240 Volts AC, 50/60 Hz

**Available Cresnet Power:** 30 Watts

**Power over DM (PoDM):** PoDM PSE (Power Sourcing Equipment), each DM 8G+ port supplies up to 15.4 Watts (Class 0-3) to one PoDM Powered Device<sup>[6]</sup>

**Power over HDBaseT (PoH):** PoH PSE (Power Sourcing Equipment), each DM 8G+ port supplies up to 15.4 Watts (Class 0-3) to one PoH Powered Device<sup>[6]</sup>

**PoDM Power Pack:** 1.875 Amp @ 48 Volts (100-240 Volts AC, 50/60 Hz power pack, model PW-4818DU sold separately)

## Environmental

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

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

**Heat Dissipation:** 277 BTU/hr

## Enclosure

**Chassis:** Metal, black finish, fan-cooled, vented sides

**Front Panel:** Metal, black finish with polycarbonate label overlay

**Mounting:** Freestanding or 3U 19-inch 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:** 16.31 in (415 mm)

## Weight

16.4 lb (7.5 kg)

## MODELS & ACCESSORIES

### Available Models

**DMPS3-300-C:** 3-Series® DigitalMedia™ Presentation System 300

### Available Accessories

**TSW-752-B-DMPS3\_PAK:** 7" Touch Screen Package for DMPS3 Series, Black; Includes: TSW-752-B-S, TSW-750-TTK-B-S, & Preloaded Software

**AM-100:** AirMedia™ Presentation Gateway

**PW-4818DU:** 90W PoDM Power Pack for DMPS

**HD-SCALER-HD-E:** High-Definition Video Scaler, HDMI® In, HDMI Out

**HD-SCALER-VGA-E:** High-Definition Video Scaler, VGA In, HDMI® Out

**DM-RX1-4K-C-1G:** Wall Plate 4K DigitalMedia 8G+® Receiver

**DM-RMC-4K-100-C:** 4K DigitalMedia 8G+® Receiver & Room Controller 100

**DM-RMC-200-C:** DigitalMedia 8G+® Receiver & Room Controller 200

**DM-RMC-SCALER-C:** DigitalMedia 8G+® Receiver & Room Controller w/Scaler

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**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-TX1-4K-C-1G:** Wall Plate 4K DigitalMedia 8G+® Transmitter  
**DM-TX-200-C-2G:** Wall Plate DigitalMedia 8G+® Transmitter 200  
**DM-TX-201-C:** DigitalMedia 8G+® Transmitter 201  
**DM-TX-401-C:** DigitalMedia 8G+® Transmitter 401  
**DM-MD8X1-4K-C:** 4K Scaling Presentation Switcher w/HDBaseT® Output  
**USB-EXT-DM:** USB over Ethernet Extender with Routing  
**AMP Series:** Commercial Power Amplifiers  
**CRESTRON-APP:** Crestron® App for iOS® & Android™  
**XPANEL:** Crestron Control® for Computers  
**SW-FUSION-EM:** Fusion EM® Energy Management Software  
**SW-FUSION-RV:** Fusion RV® Remote Asset Management Software  
**SW-ROOMVW-ENT:** RoomView® Express - Remote Help Desk and Resource Management Software  
**SW-3SERIES-BACNET:** BACnet™/IP Support for 3-Series®  
**CSP-LIR-USB:** IR Learner  
**CNSP-XX:** Custom Serial Interface Cable  
**IRP2:** IR Emitter Probe  
**CNXRMIRD:** IR Receiver  
**DM-CBL-8G-NP:** DigitalMedia 8G™ Cable, non-plenum  
**DM-CBL-8G-P:** DigitalMedia 8G™ Cable, plenum  
**DM-8G-CONN:** Connector for DM-CBL-8G  
**DM-8G-CRIMP:** Crimping Tool for DM-8G-CONN  
**DM-8G-CONN-WG:** Connector with Wire Guide for DM-CBL-8G  
**DM-8G-CRIMP-WG:** Crimping Tool for DM-8G-CONN-WG  
**CRESNET-NP:** Cresnet® Control Cable, non-plenum  
**CRESNET-HP-NP:** Cresnet® “High-Power” Control Cable, non-plenum  
**CRESNET-P:** Cresnet® Control Cable, plenum  
**CBL Series:** Crestron® Certified Interface Cables  
**MP-WP Series:** Media Presentation Wall Plates  
**MPI-WP Series:** Media Presentation Wall Plates - International Version

## Notes:

1. The DMPS3 .AV Framework Base Program enables setup and control of the DMPS3-300-C without programming. It comes preloaded on the DMPS3-300-C, and is also available for download from the Crestron Website. To configure this feature requires one of the following user interface options: A) a Crestron [TSW-752-B-DMPS3 PAK](#) touch screen package (sold separately), B) a Crestron [TSW-752](#) touch screen (sold separately) with the DMPS3 .AV Framework Project for TSW-752 loaded, C) an Apple iPad running the [Crestron App](#) (full paid version required, sold separately) with the DMPS3 .AV Framework Project for iPad loaded, or D) a Windows® or Mac® computer with the DMPS3 .AV Framework Project for XPanel installed. Any of these options may also be used by the end-user to control the system. Some functions described in this spec sheet may not be supported using the DMPS3 .AV Framework Base Program feature. For additional resources and a list of supported display devices, please visit: [www.crestron.com/dmps](http://www.crestron.com/dmps).
2. HDMI requires an appropriate adapter or interface cable to accommodate a DVI or DisplayPort Multimode signal. [CBL-HD-DVI](#) interface cables are available separately.
3. Routing of a multichannel audio signal via any HDMI or DM input and output requires the input to be set for “mixer bypass” mode. When that input is routed to a given digital output, all audio controls on that output are disabled, and the ability to simultaneously route microphone signals to that output is defeated. Mixer bypass mode also disables the Input Compensation control on that input.
4. High-bitrate 7.1 encoded audio, 3D video, and Deep Color video signals are only supported via

- HDMI inputs 1 and 2, and DM inputs 6 and 7.
5. For DM 8G+ or HDBaseT wiring, use Crestron [DM-CBL-8G](#) DigitalMedia 8G Cable or third-party CAT5e (or better) UTP or STP. (Crestron legacy [DM-CBL](#) DigitalMedia Cable or [DM-CBL-D](#) DigitalMedia D Cable may also be used) The maximum wire length for DM 8G+ is 330 ft (100 m) between devices. 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.
  6. Supplying Power over DM (PoDM) or Power over HDBaseT (PoH) requires an external power pack, model [PW-4818DU](#), sold separately.
  7. Item(s) sold separately.
  8. Manages the routing of USB HID signals between peripheral DM devices that are equipped with USB HID ports. Also programmable to manage the routing of USB signals between Crestron USB over Ethernet Extender modules ([USB-EXT-DM](#), sold separately). The USB ports onboard the DMPS3-300-C are not usable for USB signal routing.
  9. The RGB/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 through the RGB connection.
  10. [License](#) required. The DMPS3-300-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.
  11. The settings for CODEC 1 & 2 are global for all outputs that receive these signals.

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](http://www.crestron.com/salesreps) or by calling 800-237-2041.

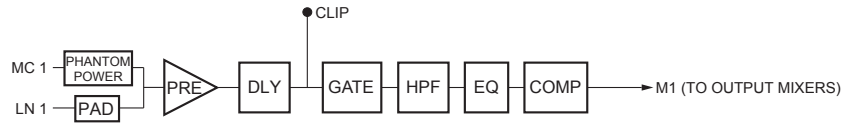
The specific patents that cover Crestron products are listed online at: [patents.crestron.com](http://patents.crestron.com).

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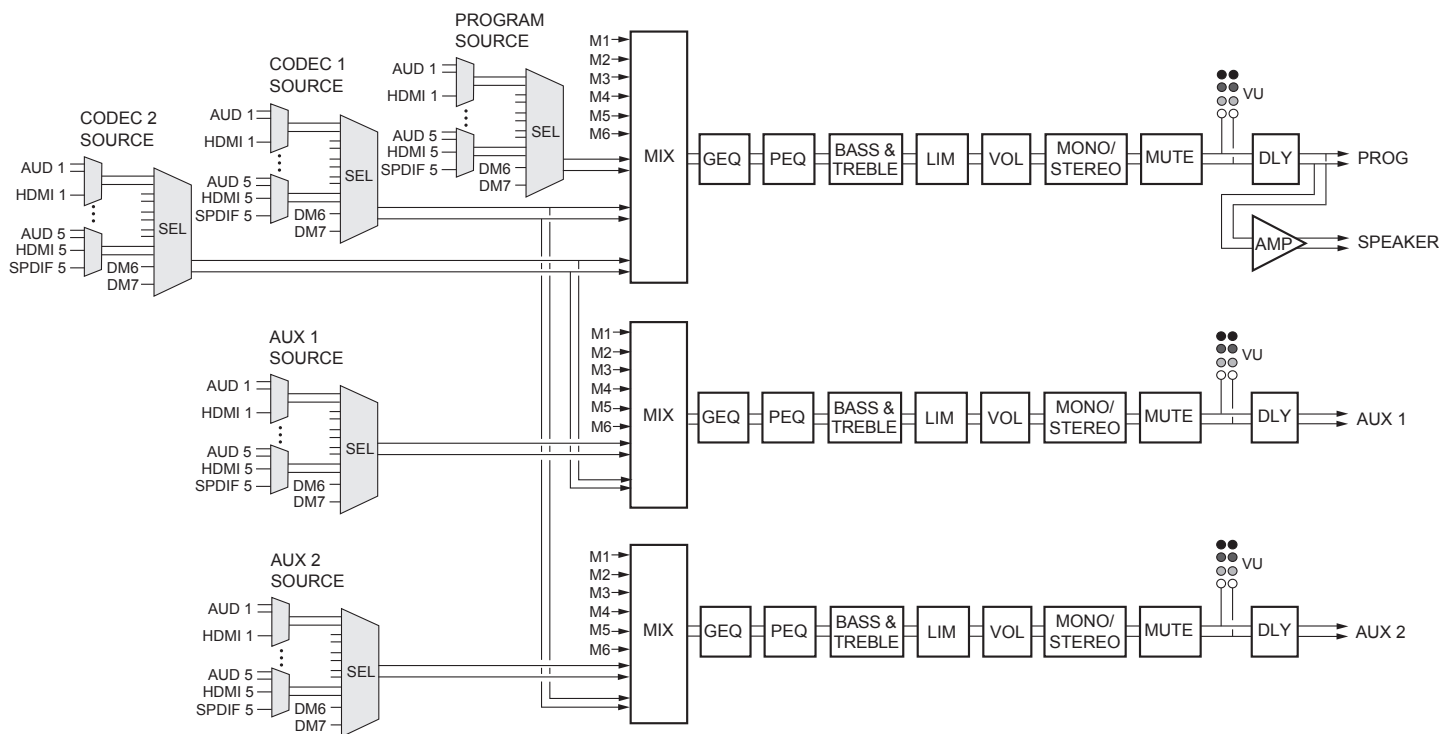


# DMPS3-300-C 3-Series® DigitalMedia™ Presentation System 300

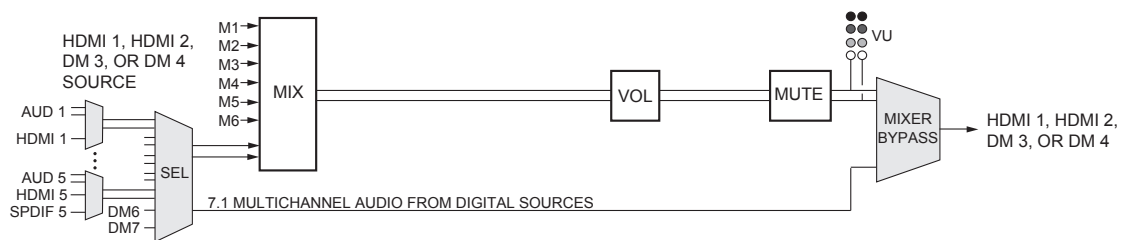
## AV SIGNAL FLOW DIAGRAMS



Microphone Inputs (Typical of 6)

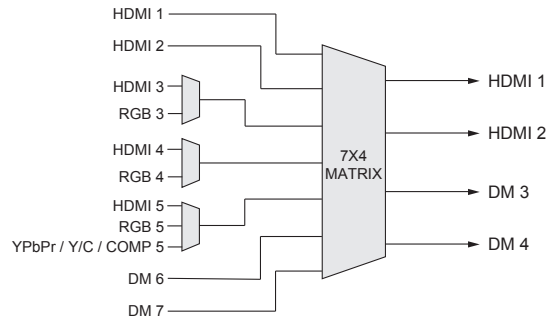


Analog Outputs



Digital Outputs (Typical of 4)

# DMPS3-300-C 3-Series® DigitalMedia™ Presentation System 300



Video

## DIMENSIONAL DIAGRAM

