DMPS3-200-C

3-Series® DigitalMedia™ Presentation System 200

The DMPS3-200-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 DMPS3-200-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 DMPS3-200-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 DMPS3-200-C to control two displays, connect to AirMedia™ and DM® devices, and communicate with Crestron Fusion® Enterprise Management Software.[1]

- *High-Definition multimedia system switcher, mic mixer, audio DSP, amplifier, and control system*
- *Preloaded DMPS3 .AV Framework™ software enables customized presentation control without programming[1]*
- *Allows quick and easy setup using just an iPad®, computer, or Crestron® touch screen[1]*
- *Integrated 3-Series Control System® enables fully-programmable room control*
- *DigitalMedia 8G+® connectivity enables long-distance wiring over CAT type twisted pair cable[5]*
- *HDBaseT® Certified — Enables direct connection to other HDBaseT certified equipment*
- *Provides matrix signal routing for up to 6 video sources and 2 displays*
- *Handles HDMI®, DVI, DisplayPort Multimode, HDBaseT, and SPDIF digital sources[2]*
- *Handles RGB, composite, S-Video, component, and stereo audio analog sources[9]*
- *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[7]*
- *Includes built-in 4-channel gated microphone mixing w/DSP*
- *Affords versatile audio signal mixing and routing to 5 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[3,4]*
- *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[8]*
- *Includes onboard IR, RS-232, relay, digital input, and Cresnet® control ports*
- *Supports Crestron touch screens, keypads, and wireless remotes*
- *Supports XPanel with Smart Graphics™ computer and Web based control*
- *Supports iPhone®, iPad, and Android™ control apps*
- *Supports universal remotes via external RC-5 compatible IR receiver[7]*
- *ntegrates 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[6]*
- *3-space 19-inch rack-mountable*

DMPS3-200-C 3-Series® DigitalMedia™ Presentation System 200

DMPS3-200-C – Rear View

HD System Switcher

The DMPS3-200-C provides high-performance routing of numerous digital and analog sources to two separate projectors, flat panel displays, codecs, touch screens, and other devices. Connectivity is provided for up to five HDMI® sources[2], 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 DMPS3-200-C selects the right audio and video combination. Built-in matrix switching allows routing of six different sources to two 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.[3,4]

DigitalMedia 8G+®

Its DM 8G+ input and output endow the DMPS3-200-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 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 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.[5,6]

HDBaseT® Certified

Crestron DigitalMedia 8G+ technology is designed using HDBaseT Alliance specifications, ensuring interoperability with other HDBaseT certified products. Via DM 8G+, the DMPS3-200-C can be connected directly to an HDBaseT compliant source or display device without requiring a DM transmitter or receiver.

4-Channel Microphone Mixer

The DMPS3-200-C includes built-in mixing and processing for four 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 four microphones at each of the DMPS3-200-C's five outputs.

Codec Mixing

For video conferencing applications, the DMPS3-200-C allows one or two codecs to be connected to any of the six 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 DMPS3-200-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 DMPS3-200-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

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

EDID Format Management

The DMPS3-200-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 DMPS3-200-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 DMPS3-200-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.[7]

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 DMPS3-200-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 DMPS3-200-C employs Private Network Mode to provide a single-point connection for the complete system. Using Private Network Mode, the DMPS3-200-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 DMPS3-200-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[7]), which may be used to enable the routing of multiple USB devices of virtually any type, all seamlessly managed through the DMPS3-200-C.[8]

Integrated 3-Series Control System®

Its built-in 3-Series control system enables the DMPS3-200-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 DMPS3-200-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 DMPS3-200-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 DMPS3-200-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 DMPS3-200-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.

DMPS3-200-C 3-Series® DigitalMedia™ Presentation System 200

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 [1]

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[10], 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[8]; 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[7]
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: 6x2 matrix, auto-switching, auto-detecting multi-format digital/analog source inputs, QuickSwitch HD® technology
Input Signal Types: HDMI w/Deep Color & 3D[4] (DVI & DisplayPort Multimode compatible[2]), DM 8G+ & HDBaseT w/Deep Color & 3D[4], RGB/VGA (RGBHV, RGBS, RGsB)[9], component (YPbPr), S-Video (Y/C), composite (NTSC, PAL)
Output Signal Types: HDMI w/Deep Color & 3D[4] (DVI compatible[2]), DM 8G+ & HDBaseT w/Deep Color & 3D[4]
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: 6x5 stereo source switcher, auto-detecting multi-format digital/analog source inputs, audio-follow-video or breakaway, 4-channel gated mic mixer w/DSP, independent 4-ch mic + source mixer per output, dual codec mixer, independent stereo DSP per analog output, integrated power amplifier, 6x2 multichannel source switcher, digital audio mixer bypass mode for multichannel pass-through to digital outputs

Typical of 4 microphone input channels (Mic/Line 1 – 4):
- **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

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

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

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 – 4: -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)[11]
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 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)
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 2 digital outputs (HDMI Output 1 & DM Output 2):
Output Signal Types: HDMI (DVI compatible[2]) on Output 1, DM 8G+ & HDBaseT on Output 2
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 –4: -80 to +10 dB Level adjustment range, plus Mute and Pan[3]
Mics Master: -80 to +10 dB Level adjustment range, plus Mute[3]
Source: -80 to +10 dB Level adjustment range, plus Mute and Balance[3]
Master Volume: -80 to +10 dB Level adjustment range, plus Mute[3]
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[2,4]

RGB INPUT 3 – 5: (3) DB15HD female, analog RGB/video inputs;
Signal Types: RGBHV, component, S-Video, or composite[9];
Formats: RGBHV, RGBS, RGsB, YPbPr, Y/C, NTSC or PAL;
Input Level: 0.5 to 1.5 Vp-p with built-in DC restoration;
Input Impedance: 75 Ohms nominal;
Sync Detection: RGBHV, RGBS, RGsB, YPbPr;
Sync Input Level: 3 to 5 Vp-p;

Sync Input Impedance: 2.2k Ohms;
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: (1) 8-pin RJ45 female, shielded;
DM 8G+ input, HDBaseT compliant;
PoDM and PoH PSE (Power Sourcing Equipment) port[6];
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[5]

MC1/LN1 – MC4/LN4: (4) 5-pin 3.5mm detachable terminal blocks;
Comprises (4) 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 OUTPUT 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 OUTPUT 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: (1) 19-pin Type A HDMI female, digital video/audio output;
Signal Types: HDMI, DVI[2]

DM OUTPUT 2: (1) 8-pin RJ45 female, shielded;
DM 8G+ output, HDBaseT compliant;
PoDM and PoH PSE (Power Sourcing Equipment) port[6];
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[5]

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[7];
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[6];
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

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

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

DMPS3-200-C 3-Series® DigitalMedia™ Presentation System 200

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
INPUT 1 – 6: (6) pushbuttons and red LEDs, select input to be routed
OUTPUT 1 – 2, PROG, AUX 1 – 2: (5) pushbuttons and red LEDs, select output destination(s)
SPEAKER OUTPUT (rear): (1) 3-position slide switch, selects the amplifier output configuration
DM INPUT 6 (rear): (2) LEDs, green LED indicates DM link status, amber LED indicates video and HDCP signal presence
DM INPUT 6 PoDM (rear): (1) green LED, indicates upstream device is drawing power over DM
DM OUTPUT 2 (rear): (2) LEDs, green LED indicates DM link status, amber LED indicates video and HDCP signal presence
DM OUTPUT 2 PoDM (rear): (1) green LED, indicates downstream device is drawing power over DM
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 Devices[6]
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 Devices[6]
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

DMPS3-200-C: 3-Series® DigitalMedia™ Presentation System 200

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
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

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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 DMPS3-200-C without programming. It comes preloaded on the DMPS3-200-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.
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 simultaneous 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 input 6.
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 DMPS3-200-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 DMPS3-200-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 or by calling 800-237-2041.

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

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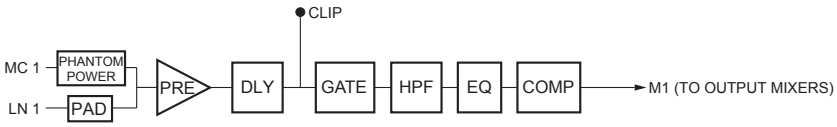
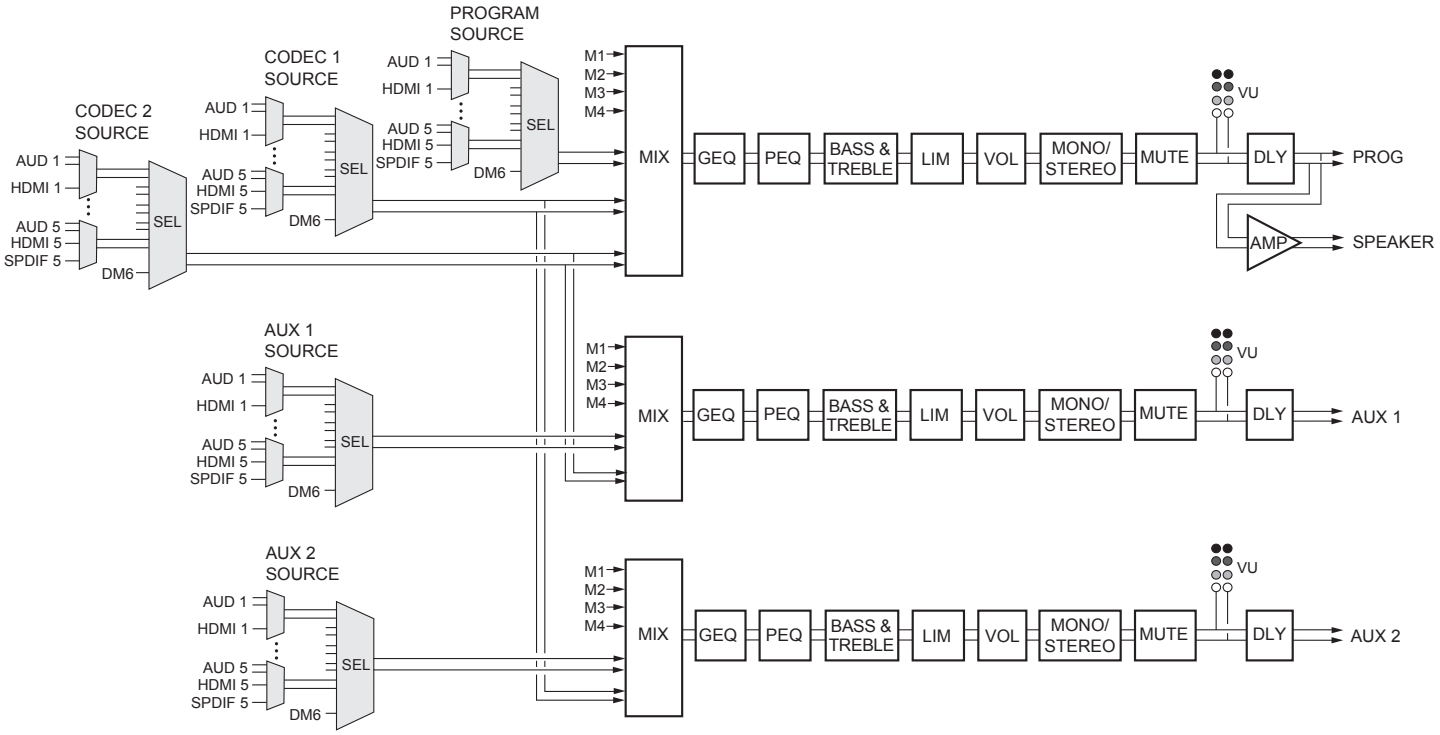
AV SIGNAL FLOW DIAGRAMS



Microphone Inputs (Typical of 4)



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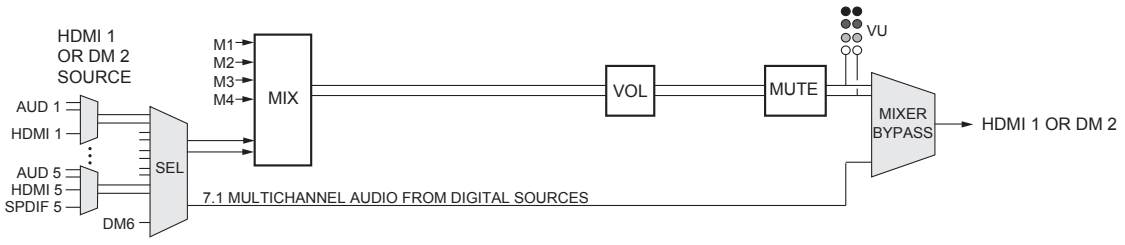
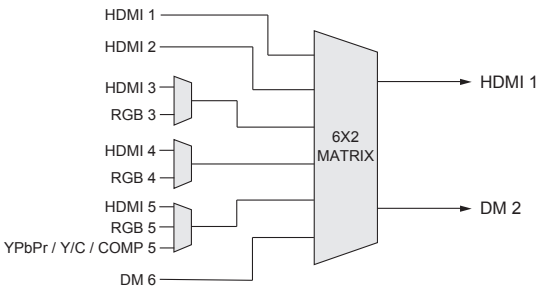


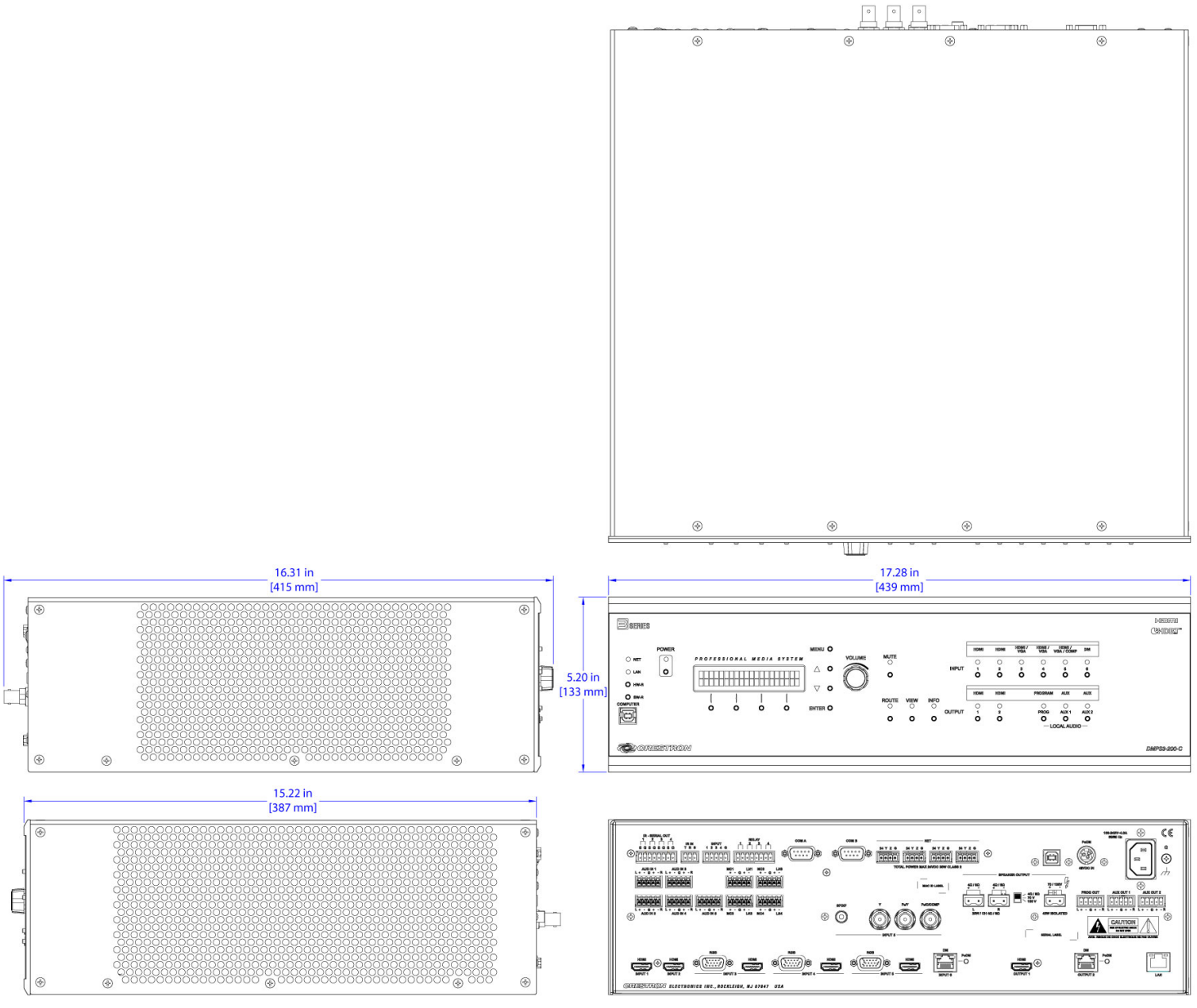
Digital Outputs (Typical of 2)

DMPS3-200-C 3-Series® DigitalMedia™ Presentation System 200



Video

DIMENSIONAL DIAGRAM



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