Request for Bids  
Curry Public Library Meeting Hall A/V Upgrade Project  
Issued February 24, 2022

Contact Person:  
Jeremy Skinner, Library Director  
Curry Public Library District  
94341 3rd Street  
Gold Beach, OR 97444  
Voice: 541-247-3452  
Email: jeremy@cplib.net

Timeline:  
Advertisement Posting Date: February 24, 2022  
Submission Due Date: March 11, 2022  
Notification: March 14, 2022

Introduction:  
Curry Public Library District is seeking the services of an auto-video consultant and installer to plan, procure equipment, and install new audio-video in the library’s large meeting room according to the attached specifications.

Project Description:  
Curry Public Library has a large multi-purpose meeting room capable of seating 150 people. It has an integrated Crestron control system for video projection and sound. The system currently includes line array speakers and microphones. During the COVID-19 pandemic, the library saw an increase in demand for using the space to have meetings that could be easily streamed on zoom to allow virtual attendance. Additionally, the library has desire to easily live stream its educational programs. To serve both of these goals the library seeks a contractor who can plan and install a system that will include:

- At least one 1080p HD camera with a lens capable of capturing the room and being remotely controlled.
- Ceiling mounted pendant microphones capable of capturing discussion in large spaces.
- Appropriate microphones for capturing meeting audio.
- A control system that will integrate with the library’s existing Crestron system and will be compatible with Zoom videoconference software.

The plans and documentation for the current system are attached to this document.

Requirements:

- The system must meet, at a minimum, the specification capacity included on the Project Description.
- Bidders must meet the performance requirements included in the Project Description trimline and project management sections.
- Bidders must include total price of the contract including:
  - All required equipment, conductors, permitting and labels
  - All project management, permit and net metering application
Full commissioning
2 year workmanship warrantee

Proposal Requirements:
1. Provide a cover letter stating the firm’s legal name, address, and phone number.
2. Provide the resume for bidder, including appropriate Oregon licensure numbers.
3. Provide a list of recent, comparable projects the bidder has completed (limit response on this item to one page maximum).
4. Briefly describe the plan for this project. Include a summary of proposed equipment to be installed, and a project timeline.
5. Provide a not-to-exceed bid for this project. Include all costs in the fee proposal, both direct and indirect, as well as all reimbursable expenses.

Proposal Submission:
Proposals must be delivered by 5pm on March 14 to

Jeremy Skinner
Library Director
Curry Public Library District
94341 3rd Street
Gold Beach, OR 97444
Voice: 541-247-3452
Fax: 541-247-4411
Email: jeremy@cplib.net

Emailed proposals are acceptable for this project.

Contract Award:
Curry Public Library District will award this project to the bidder offering the best combination of qualifications, experience, and cost.

Curry Public Library District may reject any submittal not in compliance with all prescribed procedures and requirements, and may cancel this solicitation or reject, for good cause, all responses upon a finding by Curry Public Library District that it is in the public interest to do so.

Please note that throughout this procurement, Curry Public Library District will not accept responses or queries that require Curry Public Library District to pay the cost of production or delivery.
> Ultra clean, modern appearance
> Thin profile and compact footprint
> Affordable and easy to install
> 7” widescreen active-matrix color display
> 1024 x 600 WSVGA display resolution
> Capacitive touch screen technology
> Multi-touch capable
> Smart Graphics® performance
> Backlit soft-touch capacitive buttons
> Any/all button hide feature
> Auto-brightness control
> Voice recognition capability
> H.264 or MJPEG streaming video display
> Built-in 5 MP H.264 IP camera
> Built-in microphone and speakers
> Rave® SIP intercom and phone technology
> Native Sonos® app
> Crestron Fusion® room scheduling
> Built-in PinPoint™ beacon
> Customizable audio feedback
> Built-in web browsing
> On-screen multi-language keyboard
> Customizable screensaver
> Single-wire Ethernet connectivity
> PoE or PoE+ network powered (refer to specifications)
> US, UK, or European electrical wall box mounting
> Lectern mount over a rectangular cutout
> Retrofit and masonry mounting options available
> Multi-surface and ADA compliance mounting options available
> Tabletop and swivel mount options available
> 3 RU rack mount option available
> Available in smooth black or white finish

Advanced Touch Screen Control
A Crestron® touch screen offers an ideal user-interface for controlling all the technology in your home, boardroom, classroom, courtroom, or command center. Touch screens simplify and enhance the way you use technology, doing away with those piles of remote controls, cluttered wall switches, disparate smartphone apps, and cryptic computer screens. For controlling audio, video, lighting, shades, HVAC, security, and other systems, Crestron touch screens are fully-customizable with easy-to-use controls and icons, true feedback and real-time status display, live streaming video, voice recognition, web browsing, and a full-featured media player for an enhanced multroom entertainment experience.

With its clean, contemporary design highlighted by edge-to-edge glass and stunning color graphics, the Crestron TSW-760 touch screen makes an elegant statement on any wall, tabletop, lectern, or equipment rack.
Customizable themes allowing a completely different look and feel for every user, event, or season

Fully-developed SmartObjects® that enable sophisticated control over complex devices with minimal programming

A consistent look and feel across multiple touch screens of varying sizes

Soft-Touch Buttons
The TSW-760 includes five backlit, soft-touch capacitive buttons for quick access to commonly used functions. These buttons are pre-labeled with icons for “Power”, “Home”, “Lights”, “Up”, and “Down” functions. Each button is programmable via the control system for custom functionality, and any unused button can be hidden by simply turning off its backlight.

Auto-Brightness Control
To ensure optimal visibility under varying lighting conditions, the TSW-760 includes a built-in light sensor, which regulates the brightness of the display and button backlighting according to the ambient light level in the room. Separate auto-brightness settings are provided for the display and buttons to allow each to be adjusted or defeated as needed.

Voice Recognition
Some things are easier said than done, so why not just say what you want and let Crestron do it for you? With built-in voice recognition, the TSW-760 provides the ability to use spoken commands to control virtually anything. Voice recognition can be used to quickly turn devices on or off, select and play a specific media title or playlist, change the channel, choose a lighting scene, lock the doors, arm the security system, or enter a password. Simply say a command and Crestron does the rest.1,2

Streaming Video
High-performance streaming video capability makes it possible to view security cameras and other video sources right on the touch screen. Native support for H.264 and MJPEG formats allows the TSW-760 to display live streaming video from an IP camera, a streaming encoder (Crestron CEN-NVS200, DM-TXRX-100-STR, or similar), or a DigitalMedia™ switcher. Video is delivered to the touch screen over Ethernet, eliminating the need for any extra video wiring.

Rava® SIP Intercom
Rava SIP Intercom Technology enables hands-free VoIP communication with other Rava-enabled touch screens and door stations. Rava works over Ethernet, supporting 2-way intercom, video intercom, and paging without requiring any special wiring. VoIP phone capability is also possible through integration with a SIP-compatible IP phone system or SIP server, allowing hands-free telephone functionality complete with speed-dialing, caller ID, custom ringers, and other enhancements. Built-in echo cancellation affords full-duplex performance for clear, seamless voice communication using the TSW-760’s integrated microphone and speakers.3

Built-in Camera
A 5 megapixel camera is built into the TSW-760 to support video intercom and room monitoring capabilities. This feature allows individuals to communicate both verbally and visually between two touch screens, or between one touch screen and a Rava-compatible video door station. It can also be used to visually monitor any room securely using an H.264 compatible decoder (Crestron DM-TXRX-100-STR, DM-RMC-100-STR, or similar) or a third-party video monitoring system. When not needed, the camera feature can be turned off programmatically through the control system. A “no-camera” model is also available.2

Sonos® App
Merging technologies from Sonos and Crestron brings a whole-house music experience like no other. From any touch screen in the house, a family can effortlessly browse for tracks, artists, or playlists using all the services available from Sonos and instantly play them in any room using Sonos wireless speakers or a Crestron Sonnex® Multiroom Audio System. The Sonos app runs natively on the TSW-760, enabling enhanced control of Sonos products as part of a complete Crestron system. The app checks for updates nightly so it’s always current.1

Room Scheduling
The TSW-760 can provide an invaluable productivity tool for corporate enterprises and other organizations that use Crestron Fusion®, Microsoft® Outlook®, Google Calendar™, or another calendaring application to schedule meetings and manage rooms. Mounted on the wall outside each room, the TSW-760 allows anyone to see at-a-glance if the room is...
available or in use, and to view details about the current meeting. A swipe of the finger reveals the room’s entire schedule for the day, displaying upcoming meetings and open time slots, and allowing the room to be reserved right on the spot.

Room scheduling functionality is enabled on the TSW-760 using the built-in room scheduling application, which syncs directly over the network with Crestron Fusion, Microsoft Exchange, Office 365®, Google Calendar, or G Suite™. A Room Availability Hallway Sign (model SSC or SSW [3]) can be added for enhanced visibility.

**PinPoint™ Beacon (Coming Soon)**
The built-in PinPoint proximity detection beacon enhances the intelligence and personalization of a Crestron system by enabling a smartphone or tablet device to always know what room it’s in. It works with the Crestron App or Crestron PinPoint App, using Bluetooth® technology to determine when the mobile device is in or near the same room as the beacon, and signals the mobile app to automatically display the appropriate controls and information for that location.

**Web Browsing**
Using its built-in web browser, the TSW-760 provides quick access to online program guides and other web-based services at the touch of a button, allowing enhanced touch screen control of DVRs and other appliances without having to pick up a separate tablet or smartphone. If a device can be controlled or managed through a web browser, it can be integrated into the Crestron system through the TSW-760. Of course, the web browser may also be used to simply browse the Internet, check traffic conditions, or look up a recipe.

**On-Screen Keyboard**
Typing in passwords, URLs, and text searches is facilitated using the on-screen multi-language keyboard.

**Multi-Touch Support**
The TSW-760’s capacitive touch screen affords enhanced capabilities for browsing web pages using multi-touch gestures.

**Audio Feedback**
Customized audio files can be loaded to add another dimension to the touch screen graphics using personalized sounds, button feedback, and voice prompts.

**Single-Wire Connectivity**
A simple Ethernet LAN connection is all that is required to wire the TSW-760, containing all control, video, intercom, and power signals within a single wire.

**Power over Ethernet**
Using PoE technology, the TSW-760 gets its operating power right through the LAN wiring. PoE (Power over Ethernet) eliminates the need for a local power supply or any dedicated power wiring. A PoE Injector (PWE-4803RU [6]) simply connects in line with the LAN cable at a convenient location. Crestron PoE switches (CEN-SW-POE-5 or CEN-SWPOE-16 [6]) may also be used to provide a total networking solution with built-in PoE.

*Note: Refer to the “Power” specifications for additional details.*

---

**Wall or Lectern Mounting Options**
Using the bracket provided, the TSW-760 is easily installed over a 2-gang or 3-gang electrical box, or a 2-gang European or UK electrical box. The same bracket allows for installation in a wooden lectern or podium over a rectangular cutout. When installed, the touch screen protrudes just 1/2 inch from the mounting surface and latches firmly into its mounting bracket leaving no visible screws for an ultra clean appearance. A security latch option is included to deter unauthorized removal of the touch screen.

Additional mounting options are afforded using the TSW-UMB-60 Universal Mounting Bracket. By itself, the TSW-UMB-60 provides a post-construction solution for retrofitting the TSW-760 into existing drywall. For pre-construction applications that don’t require a back box, the TSW-UMB-60 can be used along with a TSW-UMB-60-PMK Pre-Construction Mounting Kit. Masonry and concrete applications are accommodated using the TSW-UMB-60 along with a TSW-UMB-60-BBI back box. The TSW-UMB-60 is compatible with TSW-560, -760, and -1060 model touch screens, making it easy to change devices at any time.

When installing the TSW-760 in place of an older Crestron touch screen (APAD, CT-1000, LC-1000, TPS-4L, or TPS-2000L), Crestron offers Retrofit Mounting Brackets (TSW-60-RMB series [3]), which facilitate replacement without having to tear out the old mounting hardware or patch the wall.

For impenetrable surfaces, such as glass, granite, or marble, or for applications requiring ADA compliance, Crestron offers the Multi-Surface Mount Kit (TSW-760/1060-MSMK [3]). This option allows for attaching securely to virtually any smooth, flat surface without screws, providing an ideal solution for modern offices with glass walls or historically significant spaces where cutting and drilling is prohibited. It can also be mounted over a conventional electrical box. When installed, the touch screen is angled upwards at a 20° tilt to allow for mounting at an ADA approved height.

**Tabletop Option**
Using the optional Tabletop Kit (TSW-760-TTK [3]), the TSW-760 becomes a stylish, freestanding touch screen that fits perfectly on a table, desk, or countertop. It can even be permanently attached to the surface using the optional Swivel Mount Kit (TSW-560/760/1060-RMK [3]).

**Rack Mount Option**
The TSW-760 can be mounted in a 19” EIA equipment rack using the optional Rack Mount Kit (TSW-560/760-RMK-1 [3]). When rack mounted, the touch screen occupies three rack spaces.
Ultra high-definition 8x2 system switcher, scaler, mic mixer, audio DSP, amplifier, and control system

Built-in AV Framework™ delivers a fully-functional system without any programming\(^2\)

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

Onboard AirMedia® gateway enables wireless BYOD presentation capability\(^1\)

Built-in H.264 streaming video decoder\(^3\)

Provides matrix signal routing for up to 8 video sources and 2 displays

 Handles video resolutions up to 4K DCI and Ultra HD

Includes HDMI®, DM 8G+, and balanced stereo analog audio inputs

Also supports Dual-Mode DisplayPort, DVI, and HDBaseT® sources\(^4\)

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

HDCP 2.2 compliant

Provides intelligent frame rate conversion, content-adaptive noise reduction, and motion-adaptive de-interlacing

Provides 3D to 2D signal conversion\(^5\)

Provides three balanced stereo audio outputs, each with independent mixer and DSP

Provides two additional audio mixes, either of which is selectable at either digital output

Features a built-in amplifier, selectable for 25W/Ch. @ 8Ω stereo or 50W @ 70/100 Volts mono

Enables analog-to-HDMI audio embedding and de-embedding

Enables USB signal routing via DM® transmitters and receivers or USB-EXT-DM series extenders\(^6\)

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\(^6\)

Communicates natively with Crestron Fusion®

Enables IT-friendly network integration via SNMP

Integrated Ethernet switch provides a single-point LAN connection

Control Subnet — provides a dedicated local network for Crestron devices

Private Network Mode — requires just one IP address for the complete system

Content LAN port allows streaming and AirMedia traffic to be isolated on a secondary network

Includes front panel controls for basic configuration, diagnostics, and signal routing

Includes customizable front panel label strips and LCD display

Allows advanced setup and adjustment via a web browser

Features an internal universal power supply for worldwide compatibility

Furnishes power to PoDM+ and HDBaseT PoE+ powered devices\(^8\)

3-space 19-inch rack-mountable
The DMPS3-4K-250-C from Crestron® offers an all-in-one 4K AV presentation system for classrooms, boardrooms, lecture halls, and videoconference rooms. Delivering a complete, custom-programmable room solution with fully-configurable signal routing and processing is easy and cost-effective using the DMPS3-4K-250-C. In one 3-space rack mount package, it integrates the control system, matrix switcher, video scaler, streaming decoder, mic mixer, audio DSP, and amplifier. Its built-in AirMedia® gateway, when activated [1], enables wireless presentation from computers and mobile devices. DigitalMedia 8G+® and HDBaseT® connectivity affords 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.

Note: To purchase the DMPS3-4K-250-C with AirMedia pre-activated (no license required), see model DMPS3-4K-250-C-AIRMEDIA.

4K Ultra HD
Crestron DigitalMedia™ continues to advance the standard for digital AV signal management, delivering the most complete end-to-end 4K system solutions available. The DMPS3-4K-250-C handles 4K/60 video with HDCP 2.2 encryption, ensuring support for all the latest 4K and Ultra HD displays and media sources. Support for 4K is also essential to support the latest generation of computers and monitors with native resolutions beyond 1080p and WUXGA.

No Programming Required!
Installing the DMPS3-4K-250-C is easy, fast, and affordable. Built-in .AV Framework™ technology delivers a fully-functional presentation system with simplified configuration and a choice of control options and other add-ons. For complete details on the capabilities supported by .AV Framework, please visit: http://www.crestron.com/avframework.[2]

AirMedia® Wireless Presentation [1]
Built-in AirMedia technology allows for wireless presentation of content from a laptop, smartphone, or tablet device via a Wi-Fi® wireless network. With AirMedia, anyone can walk into the room with a Windows® or MacOS® laptop and connect without wires, enabling the presentation of any content including Full HD video at frame rates up to 30 fps. iPhone®, iPad®, and Android™ devices can present PowerPoint®, Excel®, Word, and PDF documents, as well as pictures, videos, or any app content with full-screen mirroring. AirMedia lets up to 32 participants connect at once, switching from one to the next for seamless collaboration on the fly.[1]

HD Streaming Video
Its onboard streaming decoder enables the DMPS3-4K-250-C 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.[3]

4K System Switcher
The DMPS3-4K-250-C provides high-performance routing of HDMI®, AirMedia[1], and streaming AV sources to two separate displays, projectors, codecs, and other devices. Its video inputs include six HDMI, one DM 8G+, and one streaming/AirMedia. The HDMI inputs are compatible with DVI and Dual-Mode DisplayPort sources[4], and the DM 8G+ input is compatible with HDBaseT. 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 different video sources to be routed simultaneously to two different display devices. Video outputs are comprised of one HDMI and one DM 8G+. The HDMI output is compatible with DVI[6] and the DM 8G+ output is compatible with HDBaseT.

The audio signal from any input can be freely 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 no matter what source is selected. The scaler allows all types of video and computer sources to be viewed reliably and
look their best on any display up to 4K.

Input resolutions from standard definition NTSC 480i to ultra high-definition 4K DCI are scaled beautifully 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. And, 3D to 2D conversion allows 3D content to be viewed on a 2D-only display.[9] 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-4K-SCALER-C receiver,[9] which features its own 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+**

Its DM 8G+ input and output endow the DMPS3-4K-250-C with incredible potential for connecting remote sources and display devices, and integrating with larger systems. DM 8G+ provides a true one-wire interface for transporting ultra high-definition video, audio, control, power, and networking signals over CAT type cable at distances up to 330 feet (100 meters). Connecting a DM 8G+ receiver to the DM 8G+ output provides a streamlined AV and control interface for a 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 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.[7,8]

**HDBaseT® Certified**

Crestron DM 8G+ technology is designed using HDBaseT Alliance specifications, ensuring interoperability with other HDBaseT certified products. Via DM 8G+, the DMPS3-4K-250-C can be connected directly to an HDBaseT compliant source or display device without requiring a DM transmitter, DM receiver, and scalers, as soon as the signal hits the 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.

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

**USB Signal Routing**

Along with video and audio, the DMPS3-4K-250-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...
DMPS3-4K-250-C 3-Series® 4K DigitalMedia™ Presentation System 250

Ethernet Extenders (USB-EXT-DM-LOCAL and USB-EXT-DM-REMOTE [9]), 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.[10]

Integrated 3-Series Control System®
Its built-in 3-Series control system enables the DMPS3-4K-250-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 DMPS3-4K-250-C supports the full line of Crestron touch screens, keypads, and wireless remotes for a user experience custom tailored to the specific requirements of each end-user. Support for Crestron control apps and Crestron Fusion® delivers the industry’s most powerful platform for remotely controlling, 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 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 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’s Control Subnet port, an installer may simply connect a single touch screen or wireless gateway, or add a Crestron PoE switch (CEN-SW-POE-5 or CEN-SWPOE-16 [8]) 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.[9] Auto-configuration of the entire subnet is performed by the DMPS3-4K-250-C, discovering each device and assigning IP addresses without any extra effort from the installer.

Private Network Mode
To streamline its implementation on a corporate or university LAN, the DMPS3-4K-250-C employs Private Network Mode. Using Private Network Mode, the DMPS3-4K-250-C requires just one IP address for the complete room system including all connected DM receivers and transmitters.

Easy Setup
Every step of the DMPS3-4K-250-C setup process is designed to be quick and easy. Out of the box, 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.[10] 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” 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.

Crestron Connect It™
Crestron Connect It™ is a cost-effective, simple-to-use presentation solution that works seamlessly with the DMPS3-4K-250-C. Simply add one or more Crestron Connect It Cable Caddies (TT-100, TT-101, TT-110, or TT-111 series[9]), to provide BYOD connectivity and one-touch control for multiple participants around a conference table. Power and communications for each cable caddy are provided via Cresnet, or via the USB port on a Crestron Connect It compatible DM transmitter.

SPECIFICATIONS

Operating System
Crestron 3-Series; real-time, preemptive, multi-threaded/multitasking kernel; Transaction-Safe Extended FAT file system; supports up to 10 simultaneously running programs; preloaded DMPS3 AV Framework Base Program

Memory
SDRAM: 512 MB
Flash: 4 GB

Communications
Ethernet: 10/100/1000 Mbps, auto-switching, auto-negotiating, auto-discovery, full/half duplex, industry-standard TCP/IP stack, UDP/IP, CIP, DHCP, SSL, TLS, SSH, SFTP (SSH File Transfer Protocol), FIPS 140-2 compliant encryption, IEEE 802.1X, SNMP, BACnetMS/IP[10], IPv4 or IPv6, Active Directory authentication, IIS v.6.0 Web Server, SMTP e-mail client, RSTP, Private Network Mode
Control Subnet: 10/100/1000 Mbps Ethernet, auto-switching, auto-negotiating, auto-discovery, full/half duplex, DHCP server, DNS Server, port forwarding, Isolation Mode, IEEE 802.3at Type 1 compliant PoE PSE
AirMedia[8]; (Via Ethernet) 10/100 Mbps, IPv4, DHCP, TLS, AES, mDNS, HTTPS web server
Streaming: (Via Ethernet) 10/100 Mbps, DHCP, H.264 decoding, MJPEG decoding, HDCP 2.2, RTP, RTSP, SDP
Cresnet: Cresnet master mode
USB: USB signal routing via select DM transmitters and receivers, or via USB-EXT-DM series extenders[9]; 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 CNXRMRD IR Receiver[9]
DigitalMedia: DM 8G+, HDCP 2.2, EDID, CEC, PoDM+[8], Ethernet
HDBaseT: HDCP 2.2, EDID, CEC, RS-232, PoE+[8], Ethernet
HDMI®: HDCP 2.2, EDID, CEC
NOTE: Supports management of HDCP and EDID; supports management of CEC between the connected HDMI and HDBaseT devices and the control system

Video

Switcher: 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, content-adaptive noise reduction, and widescreen format selection (zoom, stretch, maintain aspect-ratio, or 1:1)
Input Signal Types: HDMI w/Deep Color, 3D, & 4K (DVI & Dual-Mode DisplayPort compatible) on Inputs 1-6; DM 8G+ & HDBaseT w/Deep Color, 3D, & 4K on Input 7; streaming & AirMedia on Input 8 (LAN)
Output Signal Types: HDMI w/Deep Color & 4K (DVI & Dual-Mode DisplayPort compatible) on Outputs 1; DM 8G+ & HDBaseT w/Deep Color, 3D, & 4K on Output 2

Maximum Resolutions:

<table>
<thead>
<tr>
<th>Scan Type</th>
<th>Resolution</th>
<th>Frame Rate</th>
<th>Color Sampling</th>
<th>Color Depth</th>
</tr>
</thead>
<tbody>
<tr>
<td>Progressive</td>
<td>4096x2160 DCI 4K &amp; 3840x2160 4K UHD</td>
<td>24 Hz</td>
<td>4:4:4</td>
<td>30 bit</td>
</tr>
<tr>
<td></td>
<td>30 Hz</td>
<td>4:4:4</td>
<td>24 bit</td>
<td></td>
</tr>
<tr>
<td></td>
<td>30 Hz</td>
<td>4:2:2</td>
<td>36 bit</td>
<td></td>
</tr>
<tr>
<td></td>
<td>60 Hz</td>
<td>4:2:0</td>
<td>24 bit</td>
<td></td>
</tr>
<tr>
<td>Interlaced (excluded on HDMI output)</td>
<td>2560x1600 WQXGA</td>
<td>60 Hz</td>
<td>4:4:4</td>
<td>36 bit</td>
</tr>
<tr>
<td></td>
<td>1920x1080 HD1080p</td>
<td>60 Hz</td>
<td>4:4:4</td>
<td>36 bit</td>
</tr>
</tbody>
</table>

NOTE: 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

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

AirMedia (1)

Users: Supports up to 32 users (presentation device connections)
Client Software OS Support: Windows 7, Windows 8, Window 10, Mac® OS X® (versions 10.10 through 10.13)
Client Software Video Frame Rate: 30 fps, audio supported
Mobile App OS Support: Apple® iOS, Android
Full Screen Device Mirroring: Shares the screen image and audio from an Apple iOS, Android, Mac OS X, or Windows device
Resolutions: 800x600@60Hz, 1024x768@60Hz, 1280x720@60Hz (720p60), 1280x768@60Hz, 1280x800@60Hz, 1280x1024@60Hz, 1360x768@60Hz, 1400x1050@60Hz, 1440x900@60Hz, 1600x1200@60Hz, 1920x1080@60Hz (1080p60), 1920x1200@60Hz
Audio Format: Stereo

Audio – General

Switcher/Mixer: 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
Analog-To-Digital Conversion: 24-bit 48 kHz
Digital-To-Analog Conversion: 24-bit 48 kHz

Frequency Response, Digital & Analog Line Outputs:
- 20 Hz to 20 kHz ±0.5 dB (digital source);
- 20 Hz to 20 kHz ±0.7 dB (microphone source)

Frequency Response, Speaker Output:
- 20 Hz to 20 kHz ±1 dB @ 25 Watts into 8 Ohms;
- 100 Hz to 20 kHz ±2.5 dB @ 70 or 100 Volts

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

S/N Ratio, Speaker Output:
- 98 dB @ 25 Watts into 8 Ohms, 1 kHz, A-weighted;
- 96 dB @ 25 Watts into 4 Ohms, 1 kHz, A-weighted

THD+N, Digital & Analog Line Outputs:
- <0.002%, 20 Hz to 20 kHz (digital source);
- <0.005%, 20 Hz to 20 kHz (analog line source);
- <0.05%, 20 Hz to 20 kHz (microphone source)

THD+N, Speaker Output:
- <0.1%, 1 kHz @ 25 Watts into 4 or 8 Ohms;
- <0.7%, 20 Hz to 20 kHz @ 25 Watts into 4 or 8 Ohms

Stereo Separation, Digital & Analog Line Outputs:
- >108 dB (digital source);
- >103 dB (analog source)

Stereo Separation, Speaker Output:
- >65 dB @ 25 Watts, 1 kHz

Channel Separation, Digital Outputs:
- >108 dB (digital source);
- >103 dB (analog source)

Channel Separation, Analog Line Outputs:
- >103 dB

Speaker Output Modes: 4Ω/8Ω stereo, 70V mono, or 100V mono
Speaker Amplifier Output Power:
- 25 Watts RMS per channel @ 8 Ohms, 4 Ohms tolerant
- 50 Watts RMS @ 70 or 100 Volts

Audio – Microphone Inputs

Typical of 6 microphone input channels (Mic/Line 1 – 6):
Input Signal Types: Mono analog mic or line level
Phantom Power: Enable/Disable per channel
Gain: 0 to +60 dB Gain adjustment in 3dB increments, 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

Audio – Source Inputs

Input Signal Types: HDMI (Dual-Mode DisplayPort compatible) on Inputs 1-6, DM 8G+ & HDBaseT on Input 7, streaming & AirMedia on Input 8 (LAN), analog 2-channel on Aud In 1-5
Analog Formats: Stereo 2-channel
Digital Formats: 2-channel LPCM
Input Compensation: ±10.0 dB, adjustable per input

Audio – Analog Line & Speaker Outputs

Typical of 1 analog line/speaker output (Program Out & Speaker Output) and 2 analog line outputs (Aux Out 1 – 2):
Output Signal Type/Format: Stereo 2-channel
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
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)

Audio – Digital Outputs

Typical of 2 digital outputs (HDMI Output 1 & DM Output 2):
Output Signal Types: HDMI (DVI compatible) on Output 1, DM 8G+ & HDBaseT on Output 2
Formats: 2-channel LPCM
Digital Output Mix Select 1 – 2: Selects which mix is routed to the corresponding output
Typical of 2 digital output mixers:
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
Master Volume: -80 to +10 dB Level adjustment range, plus Mute
Mixer Presets: 1 through 5

Connectors – Audio/Video Inputs

AUD IN 1 – 5: (5) 5-pin 3.5 mm detachable terminal blocks;
Balanced/unbalanced stereo line-level analog audio inputs;
Input Impedance: 24k Ohms balanced/unbalanced;
Maximum Input Level: 4 Vrms balanced, 2 Vrms unbalanced
MC1/LN1 – MC6/LN6: (6) 5-pin 3.5 mm 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, 1.85 Vrms maximum;
Mic Input Impedance: 3.9k Ohms balanced;
Line Input Impedance: 48 Volts DC, software enabled/disabled per channel
HDMI 1 – 6 INPUTS: (6) HDMI Type A connectors, female;
Digital video/audio inputs;
(DVI and Dual-Mode DisplayPort compatible)
DM INPUT 7: (1) 8-pin RJ45 connector, female, shielded;
DM 8G+ input, HDBaseT compliant;
PoDM+ PSE port (HDBaseT PoE+ compatible);
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

Connectors – Audio/Video Outputs

SPEAKER OUTPUT 4Ω/8Ω L – R: (2) 2-pin 7.62 mm 15A detachable terminal blocks;
4-8 Ohm stereo speaker-level audio output;
Wire Size: Terminals accept up to 14 AWG (2.5 mm²);
Output Power: 25 Watts RMS per channel stereo at 8 Ohms, 4 Ohms tolerant
SPEAKER OUTPUT 70/100V: (1) 2-pin 7.62 mm 15A detachable terminal block;
Transformer-isolated 70 or 100 Volt mono speaker-level audio output;
Wire Size: Terminals accept up to 14 AWG (2.5 mm²);
Output Power: 50 Watts RMS mono at 70 or 100 Volts;
Note: 4Ω/8Ω and 70/100V outputs are mutually exclusive
PROG OUT: (1) 5-pin 3.5 mm detachable terminal block;
Balanced/unbalanced stereo line-level audio output;
Output Impedance: 200 Ohms balanced, 100 Ohms unbalanced;
Maximum Output Level: 4 Vrms balanced, 2 Vrms unbalanced
**Connectors - Networking, Control, & Power**

**IR - SERIAL OUT 1 – 4:** (4) 2-pin 3.5 mm detachable terminal blocks; IR/Serail 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 3.5 mm detachable terminal block; For connection of the CNXRMRD IR Receiver [8]; Allows control from IR wireless remotes using RC-5 command set

**INPUT 1 – 4:** (1) 5-pin 3.5 mm detachable terminal block; Comprises (4) programmable digital 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 3.5 mm 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 connectors, male; Bidirectional RS-232 ports; Up to 115.2k baud, hardware and software handshaking support

**NET:** (4) 4-pin 3.5 mm detachable terminal blocks; Cresnet Master ports, paralleled; Available Cresnet Power: 10 Watts

**PoDM+ INPUT PWR:** (1) Combo D-Sub 7w2 connector, male; 48 Volt DC power input for PoDM power supply [8]; Enables PoDM+ power sourcing on each DM INPUT/OUTPUT port; Enables PoE power sourcing on the CONTROL SUBNET port

**SERVICE:** (1) USB Type B connector, female; For factory use only

**100-240V~ 60A 50/60Hz:** (1) IEC 60320 C14 main power inlet; Mates with removable power cord, included

**G:** (1) 6-32 screw; Chassis ground lug

**CONTENT LAN IN 8:** (1) 8-pin RJ45 connector, female; 10Base-T/100Base-TX Ethernet port; Provides a dedicated LAN connection for streaming input & AirMedia [1]

**CONTROL SUBNET:** (1) 8-pin RJ45 connector, female; 10Base-T/100Base-TX/1000Base-T Ethernet port; PoE PSE (Power Sourcing Equipment) port [6]; Provides a dedicated local network for Crestron devices

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

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

**PWR:** (1) Green LED, indicates operating power supplied from AC power line

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

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

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

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

**LCD Display:** (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

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

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

**▲, ▼:** (2) Pushbuttons, for scrolling up or down through the menu and adjusting menu parameters

**ENTER:** (1) Pushbutton, executes the 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

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

**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

**INPUT 1 – 8:** (8) Pushbuttons and red LEDs, each selects the corresponding video input for routing

**OUTPUT 1 – 2, PROG, AUX 1 – 2:** (5) Pushbuttons and red LEDs, each selects the corresponding video or audio output for routing

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

**DM INPUT 7 (rear):** (2) LEDs, green LED indicates DM link status, amber LED indicates video and HDCP signal presence

**DM OUTPUT 2 (rear):** (2) LEDs, green LED indicates DM link status, amber LED indicates video and HDCP signal presence

**CONTENT LAN IN 8 (rear):** (2) LEDs, (1) green and (1) amber, for indication of Ethernet speed, activity, and link status
CONTROL SUBNET (rear): (2) LEDs, (1) green and (1) amber, for indication of Ethernet speed, activity, and link status

LAN (rear): (2) LEDs, (1) green and (1) amber, for indication of Ethernet speed, activity, and link status

## Power

**Main Power:** 6 Amps @ 100-240 Volts AC, 50/60 Hz

**Power Consumption:** 75 Watts typical, 60 Watts idle

**Available Crestron Power:** 10 Watts

**Power over DM (PoDM):** IEEE 802.3at compliant PoDM+ PSE (Power Sourcing Equipment), each DM INPUT/OUTPUT port supplies up to 30 Watts to power one PoDM (Class 0-3) or PoDM+ (Class 4) PD (Powered Device)[6]

**Power over HDBaseT:** IEEE 802.3at PoE+ compliant PSE (Power Sourcing Equipment), each DM INPUT/OUTPUT port supplies up to 30 Watts to power one HDBaseT PoE or PoE+ PD (Powered Device)[8]

**Power over Ethernet (PoE):** IEEE 802.3at compliant PoE PSE (Power Sourcing Equipment), the CONTROL SUBNET port supplies up to 15.4 Watts to power one PoE (Class 0-3) PD (Powered Device)[6]

**PoDM Power Supply:** Compatible with model PW-4830DUS or DM-PSU-3X8-RPS[6]

## Environmental

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

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

**Heat Dissipation:** 256 BTU/hr typical, 205 BTU/hr idle

## Enclosure

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

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

**Mounting:** Freestanding or 3 RU 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:** 15.75 in (400 mm)

## Weight

15.5 lb (7.1 kg)

## Compliance

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

## Maximum DM 8G+ Cable Lengths

<table>
<thead>
<tr>
<th>Resolution</th>
<th>DM-CBL-ULTRA</th>
<th>DM-CBL-8G</th>
<th>CAT5e (or better)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1080p60 Full HD</td>
<td>330 ft (100 m)</td>
<td>330 ft (100 m)</td>
<td></td>
</tr>
<tr>
<td>1920x1200 WUXGA</td>
<td>330 ft (100 m)</td>
<td>330 ft (100 m)</td>
<td></td>
</tr>
<tr>
<td>1600x1200 UXGA</td>
<td>330 ft (100 m)</td>
<td>330 ft (100 m)</td>
<td></td>
</tr>
<tr>
<td>2048x1080 DCI 2K</td>
<td>230 ft (70 m)</td>
<td>165 ft (50 m)</td>
<td></td>
</tr>
<tr>
<td>2560x1440 WQHD</td>
<td>230 ft (70 m)</td>
<td>165 ft (50 m)</td>
<td></td>
</tr>
<tr>
<td>2560x1600 WQXGA</td>
<td>230 ft (70 m)</td>
<td>165 ft (50 m)</td>
<td></td>
</tr>
<tr>
<td>3840x2160 4K UHD</td>
<td>165 ft (50 m)</td>
<td>165 ft (50 m)</td>
<td></td>
</tr>
</tbody>
</table>

## MODELS & ACCESSORIES

### Available Models

- **DMPS3-4K-250-C:** 3-Series® 4K DigitalMedia™ Presentation System 250

### Available Accessories

- **SW-DMPS3-AIRMEDIA:** AirMedia® License
- **TSW-760 Series:** 7” Touch Screen
- **TSW-760-NC Series:** 7” Touch Screen without Camera, Microphone, or PinPoint™ Beacon
- **TSW-1060 Series:** 10” Touch Screen
- **TSW-1060-NC Series:** 10” Touch Screen without Camera, Microphone, or PinPoint™ Beacon
- **MP-B10 Series:** Media Presentation Button Panel B10
- **TT-100, TT-101, TT-110, & TT-111 Series:** Crestron Connect It™ Cable Caddies
- **PW-4830DUS:** 150W PoDM Power Pack
- **DM-PSU-3X8-RPS:** PoDM+ Redundant Power Supply
- **DM-TXRX-100-STR:** HD Streaming Transmitter/Receiver
- **DM-RMC-4K-100-C-1G Series:** Wall Plate 4K DigitalMedia 8G+® Receiver & Room Controller 100
- **DM-RMC-4K-100-C:** 4K DigitalMedia 8G+® Receiver & Room Controller 100
- **DM-RMC-4K-SCALER-C:** 4K DigitalMedia 8G+® Receiver & Room Controller w/Scaler
- **DM-RMC-4K-SCALER-C-DSP:** 4K DigitalMedia 8G+® Receiver & Room Controller w/Scaler & Downmixing
- **DM-RMC-200-C:** DigitalMedia 8G+® Receiver & Room Controller 200
- **DM-RMC-SCALER-C:** DigitalMedia 8G+® Receiver & Room Controller w/Scaler
- **DM-TX-4K-100-C-1G Series:** Wall Plate 4K DigitalMedia 8G+® Transmitter 100
- **DM-TX-200-C-2G:** Wall Plate DigitalMedia 8G+® Transmitter 200
- **DM-TX-4K-202-C:** 4K DigitalMedia 8G+® Transmitter 202
- **DM-TX-4K-302-C:** 4K DigitalMedia 8G+® Transmitter 302
- **DM-TX-201-C:** DigitalMedia 8G+® Transmitter 201
- **DM-TX-401-C:** DigitalMedia 8G+® Transmitter 401
USB-EXT-DM-LOCAL: USB over Ethernet Extender with Routing, Host Module
USB-EXT-DM-REMOTE: USB over Ethernet Extender with Routing, 4-Port Device Module
AMP-150 Series: Single-Channel Modular Power Amplifiers, 50W, 70V or 100V
AMP-225: Dual-Channel Modular Power Amplifier, 25W/Ch., 4/8 Ohm
AMP-1200 Series: Single-Channel Modular Power Amplifiers, 200W, 70V or 100V
AMP-2100 Series: Dual-Channel Modular Power Amplifiers, 100W/Ch.; 4/8 Ohm, 70V, or 100V
AMP-2210HT: 2x210W Commercial Power Amplifier, 4/8Ω or High-Power 70V
AMP-2210S: 2x210W Commercial Power Amplifier, 4/8Ω
AMP-2210T: 2x210W Commercial Power Amplifier, 4/8Ω or 70/100V
AMP-3210S: 2x3210W Commercial Power Amplifier, 4/8Ω
AMP-3210T: 3x3210W Commercial Power Amplifier, 4/8Ω or 70/100V
GLS-DOT-C-CN: Dual-Technology Occupancy Sensor with Cresnet
GLS-OIR-C-CN: Passive Infrared Occupancy Sensor with Cresnet
SW-FUSION-C-3: Crestron Fusion® Cloud
SW-FUSION-P-L: Crestron Fusion® On-premises
CRESTRON-APP Series: Crestron® App for Mobile Devices
XPANEL: XPanel – Crestron Control® for Computers
SW-3SERIES-BACNET-50+-: BACNet™/IP Support for 3-Series®
CSP-LIR-USB: IR Learner
CNSP-XX: Custom Serial Interface Cable
IRP2: IR Emitter
CNXMRID: IR Receiver
DM-CONN-ULTRA-RECP Series: DigitalMedia™ Ultra Keystone RJ45 Jack
DM-CBL-ULTRA-PC Series: DigitalMedia™ Ultra Patch Cables
DM-CBL-ULTRA Series: DigitalMedia™ Ultra Cable
DM-CONN-20: Connectors for DM-CBL-ULTRA Series
DM-CBL-8G Series: DigitalMedia 8G™ Cable
DM-8G-CONN-100: Connectors for DM-CBL-8G Series
DM-8G-GRIMP: Crimping Tool for DM-8G-CONN-100
DM-8G-CONN-WG-100: Connectors with Wire Guide for DM-CBL-8G Series
DM-8G-GRIMP-WG: Crimping Tool for DM-8G-CONN-WG-100
CRESENT Series: Cresnet® Control Cable
CBL Series: Crestron® Certified Interface Cables
MP-WP Series: Media Presentation Wall Plates
MPI-WP Series: Media Presentation Wall Plates - International Version

Notes:
1. To enable the onboard AirMedia gateway requires the purchase of one SW-DMPS3-AIRMEDIA license. To obtain the license, or for any questions regarding AirMedia activation, please visit: https://www.crestron.com/dmps-airmedia-activation. To purchase the DMPS3-4K-250-C with AirMedia pre-activated (no license required), see model DMPS3-4K-250-C-ARMEDIA. 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. AirMedia support in the DMPS3-4K-250-C includes the same essential functionality as the AM-101 AirMedia Presentation Gateway with the exclusion of quad view, moderator mode, and remote view.
2. Some features and functions described in this spec sheet may not be supported using .AV Framework. For a complete list of capabilities and options supported by .AV Framework, please visit: http://www.crestron.com/avframework.
3. 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.
4. HDMI connections require an appropriate adapter or interface cable to accommodate a DVI or Dual-Mode DisplayPort signal. CBL-HD-DVI interface cables are available separately.
5. The HDMI output does not pass 3D signals. On this output, 3D signals are automatically converted to 2D, then scaled and output as 2D. 3D signals can be passed through the DM 8G+ output.
6. Item(s) sold separately.
7. 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. Crestron legacy cable models DM-CBL-DigitalMedia Cable and DM-CBL-DM DigitalMedia Cable support the same resolutions and cable lengths as CAT5e. Shielded cable and connectors are recommended to safeguard against unpredictable environmental electrical noise which may impact performance at resolutions above 1080p. Refer to the Crestron DigitalMedia Design Guide, Doc. #: HD50 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.
8. Enabling PoDM and PoE power sourcing requires an external power supply, model PW-4830DUS or DM-PSU-3X8-RPS, sold separately. Due to the inherent power loss that occurs over CATx cable, a maximum of 25.5 Watts 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 Watts 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.
9. Enables proprié used for USB signal routing. Also programmable to manage the routing of USB signals between Crestron devices that are equipped with USB HID ports. The USB ports onboard the DMPS3-4K-250-C are not usable for USB signal routing. For more information, please visit: http://www.crestron.com/avframework.
10. License required. The DMPS3-4K-250-C supports a maximum of 500 BACnet objects which are dedicated for BACnet use only. Actual capabilities are contingent upon the overall program size and complexity.

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

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

Certain Crestron products contain open source software. For specific information, please visit http://www.crestron.com/opensource.
AV SIGNAL FLOW DIAGRAMS

Microphone Inputs (Typical of 6)

Analog Audio Outputs

Digital Audio Outputs
DMPS3-4K-250-C 3-Series® 4K DigitalMedia™ Presentation System 250

DIMENSIONAL DIAGRAM

15.75 in
400 mm

15.22 in
387 mm

17.28 in
439 mm

5.20 in
133 mm

HDMI 1
HDMI 2
HDMI 3
HDMI 4
HDMI 5
HDMI 6
DM 7
Streaming & AirMedia

8X2 MATRIX

SCALER

HDMI 1
DM 2

Video

All brand names, product names and trademarks are the property of their respective owners. ©2017 Crestron Electronics, Inc.
Specifications subject to change without notice. Revised 12/04/17
SPECIFICATIONS

Touch Screen Display

- Display Type: TFT active matrix color LCD
- Size: 7 inch (178 mm) diagonal
- Aspect Ratio: 16:10 WSVGA
- Resolution: 1024 x 600 pixels
- Brightness: 350 nits (cd/m²)
- Contrast: 1100:1
- Color Depth: 24-bit, 16.7M colors
- Illumination: Edgelit LED w/auto-brightness control
- Viewing Angle: ±80° horizontal, ±80° vertical
- Touch Screen: Projected capacitive, 5-point multi-touch capable

Buttons

- Hard Keys: (5) Projected capacitive pushbuttons, backlit w/auto-brightness control, per-button show/hide (backlight enable/disable), pre-labeled with icons for “Power”, “Home”, “Lights”, “Up”, and “Down”
- Reset: (1) Miniature pushbutton on rear panel for hardware reset

Graphics Engine

- Crestron Smart Graphics, multi-language web browser[1], multi-language on-screen keyboard, screensaver, single scalable streaming video window, native Sonos app[1], native room scheduling application[4], setup and diagnostics via web browser or onscreen UI

Languages

- Smart Graphics: Arabic, Chinese (Simplified), Chinese (Traditional), Czech, Danish, Dutch, English (UK), English (US), Finnish, French, German, Greek, Hebrew, Hungarian, Italian, Japanese, Korean, Norwegian, Polish, Portuguese, Portuguese (Brazilian), Romanian, Russian, Slovak, Spanish, Swedish, Thai
- On-Screen Keyboard: Arabic, Chinese (Simplified), Croatian, Czech, Danish, Dutch, English (UK), English (US), Finnish, French (Canada), French (Switzerland), German, Hebrew, Hungarian, Italian, Japanese, Norwegian, Polish, Portuguese, Russian, Serbian, Spanish, Swedish, Turkish
- Voice Recognition: Afrikaans (South Africa); Chinese, Mandarin (China, Simplified); Chinese, Mandarin (Hong Kong, Simplified); Chinese, Mandarin (Taiwan, Traditional); Chinese, Yue (Hong Kong, Traditional); Czech (Czech Republic); Dutch (Netherlands); English (Australia); English (Canada); English (Generic); English (India); English (New Zealand); English (South Africa); English (UK); English (US); French (France); German (Germany); isizulu (South Africa); Italian (Italy); Japanese (Japan); Korean (South Korea); Polish (Poland); Portuguese (Brazil); Russian (Russia); Spanish (Spain); Turkish (Turkey)

Connectors

- LAN PoE: (1) 8-pin RJ45 connector, female, with 2 LED indicators; 10Base-T/100Base-TX Ethernet port & PoE+ PD port; Green and yellow LEDs indicate Ethernet port status
- USB: (1) USB Type A connector, female; USB 2.0 host port; For optional room availability hallway sign[3,4]

Power over Ethernet:

- IEEE 802.3at Type 2 compliant PoE+ PD (Powered Device);
  - Requests 15 Watts from an 802.3at Type 2 PSE with LLDP advanced power management;
  - Requests 30 Watts (PoE+ Class 4) from an 802.3at Type 2 PSE without LLDP;

Crestron.com | 800.237.2041


[3] Room availability is only available in English.

[4] Room availability is available in English, Chinese, and French.

[5] This feature is only available in English.

[6] This feature is available in English, Chinese, and Japanese.
TSW-760 7” Touch Screen

- Requests 15.4 Watts (PoE Class 0) from an 802.3af (or 802.3at Type 1) PSE

Environmental

Temperature: 32° to 112° F (0° to 45° C)
Humidity: 10% to 90% RH (non-condensing)
Heat Dissipation: 44 BTU/hr

Enclosure

Construction: Plastic, smooth black or white finish, edge-to-edge glass with black or white surround
Mounting: Surface mount over a 2 or 3-gang US electrical box, 2-gang European (DIN 49073) electrical box, or 2-gang UK (BS 4662) electrical box; lectern mount over a 2-1/5” H x 3-3/4” W (56 mm H x 96 mm W) cutout; 1-3/8” (35 mm) minimum mounting depth; additional wall mount, surface mount, rack mount, and tabletop options available separately

Dimensions

Height: 4.79 in (122 mm)
Width: 7.61 in (194 mm)
Depth: 1.52 in (39 mm)
Dimensions do not include the mounting bracket

Weight

14.1 oz (400 g)

Compliance

UL Listed for US & Canada, IC, CE, FCC Part 15 Class B digital device

MODELS & ACCESSORIES

Available Models
TSW-760-B-S: 7” Touch Screen, Black Smooth
TSW-760-W-S: 7” Touch Screen, White Smooth
TSW-760-NC-B-S: 7” Touch Screen without Camera, Microphone, or PinPoint™ Beacon; Black Smooth
TSW-760-NC-W-S: 7” Touch Screen without Camera, Microphone, or PinPoint™ Beacon; White Smooth

Available Accessories
TSW-760-TTK: Tabletop Kit for TSW-760
TSW-560/760/1060-SMK: Swivel Mount Kit for TSW-760-TTK
TSW-UMB-60: Universal Mounting Bracket for TSW-x60 Series
TSW-UMB-60-PMK: Pre-Construction Mounting Kit for TSW-UMB-60
TSW-UMB-60-BBI: Wall Mount Back Box for TSW-UMB-60
TSW-760/1060-RMB-1: Retrofit Mounting Bracket – Converts APAD, CT/LC-1000, or TPS-2000L to TSW-760 or TSW-1060
TSW-760/1060-RMB-2: Retrofit Mounting Bracket – Converts TPS-4L to TSW-760 or TSW-1060
TSW-760/1060-MSMK: Multi-Surface Mount Kit for TSW-760 & TSW-1060
TSW-560/760-RMK-1: Rack Mount Kit for TSW-560 & TSW-760

PWE-4803RU: PoE Injector
CEN-SW-POE-5: 5-Port PoE Switch
CEN-SWPOE-16: 16-Port Managed PoE Switch
CEN-NVS200: Network Video Streamer
DM-TXRX-100-STR: HD Streaming Transmitter/Receiver
DM-RMC-100-STR: HD Streaming Receiver & Room Controller 100
SSC: Room Availability Hallway Sign, Ceiling Mount
SSW: Room Availability Hallway Sign, Wall Mount
SW-FUSION-C-3: Crestron Fusion® Cloud
SW-FUSION-P-L: Crestron Fusion® On-premises

Notes:

1. Voice recognition, web browsing, weather information, Sonos app, and certain other functions require an Internet connection.
2. The camera, microphone, and PinPoint beacon (Bluetooth) are included on models TSW-760-B-S and TSW-760-W-S only. To ensure privacy, the camera, microphone, and Bluetooth transceiver can each be defeated programmatically at any time. For applications demanding an extra measure of privacy, Crestron offers models TSW-760-NC-B-S and TSW-760-NC-W-S, which have no physical camera, microphone, or Bluetooth transceiver installed.
3. Items sold separately. Refer to each product’s spec sheet for complete information.
4. Room scheduling functionality and USB support for the SSC or SSW hallway sign can be enabled using the native room scheduling application or the Room Scheduling SmartObject®. The SmartObject provides a UI similar to the TSS-752 and requires Crestron Fusion. The native application features a newer, more customizable UI, and can be used with Crestron Fusion, or without Crestron Fusion via direct connection to MS Exchange, Office 365, Google Calendar, or G Suite. Refer to http://www.crestron.com/fusion for a list of other calendaring applications that are supported through Crestron Fusion. Using the native application, the TSW-760 must be designated exclusively for room scheduling use, which precludes use of certain other features and functions described in this spec sheet.
5. PinPoint beacon functionality will be enabled through a future update. When enabled, the TSW-760 will provide an integrated, equivalent alternative to the standalone PP-100 beacon. For more details, refer to the PP-100 spec sheet. Bluetooth technology is used solely for proximity detection and does not transmit or receive any control, multimedia, or personal data. PinPoint beacons are only visible to Bluetooth enabled devices that are specifically programmed and configured to work with your system.
6. The TSW-UMB-60, TSW-UMB-60-PMK, and TSW-UMB-60-BBI are all sold separately. The TSW-UMB-60 is also compatible with older TSW-UMB-PMK preconstruction mounting kits and TSW-550 BB back boxes, allowing the TSW-760 touch screen to be installed in place of a previous generation TSW-5xx series touch screen, or any other device that was originally installed using the a TSW-UMB-PMK or TSW-550 BB, without modification to the wall. If replacing an APAD, CT-1000, LC-1000, TPS-4L, or TPS-2000L device, use the appropriate TSW-60-RMB retrofit mounting bracket (sold separately).

This product may be purchased from an authorized Crestron dealer. To find a dealer, please contact the Crestron sales representative for your area. A list of sales representatives is available online at www.crestron.com/salesreps or by calling 800-237-2041.

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

Certain Crestron products contain open source software. For specific information, please visit www.crestron.com/opensource.

Crestron, the Crestron logo, Crestron Fusion, DigitalMedia, PinPoint, Rava, Smart Graphics, SmartObject, SmartObjects, and Sonnex are either trademarks or registered trademarks of Crestron Electronics, Inc. in the United States and/or other countries. Bluetooth is either a trademark or registered trademark of Bluetooth SIG, Inc. in the United States and/or other countries. G Suite and Google Calendar are either trademarks or registered trademarks of Google Inc. in the United States and/or other countries. Microsoft, Office 365, and Outlook are either trademarks or registered trademarks of Microsoft Corporation 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.
©2017 Crestron Electronics, Inc.
TSW-760 7” Touch Screen

Wall mounting bracket (included)

Specifications subject to change without notice. Revised 11/03/17