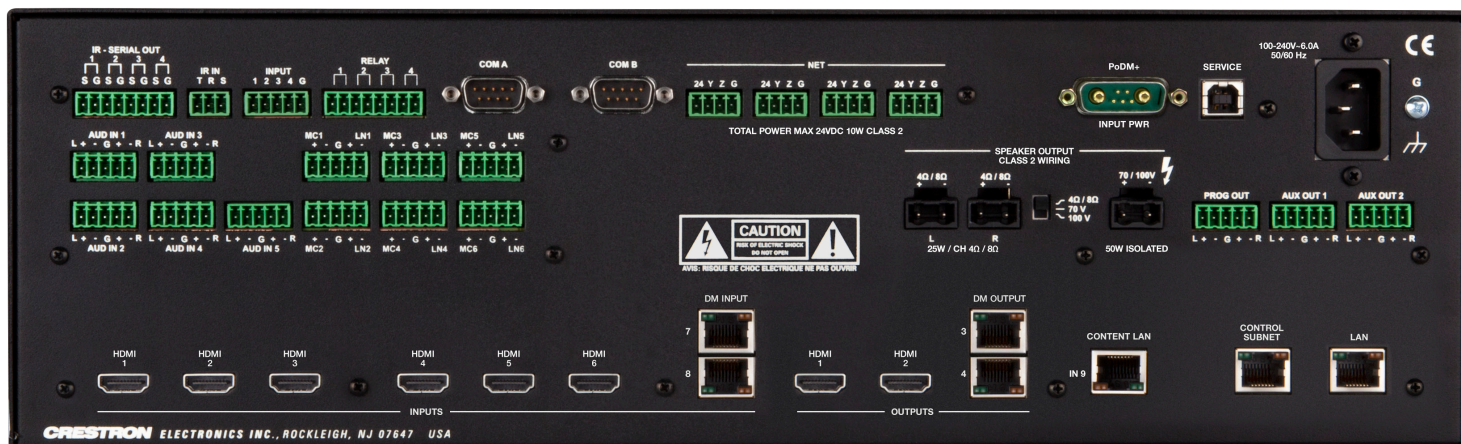


## 3-Series® 4K DigitalMedia™ Presentation System 350



- > Ultra high-definition 9x4 system switcher, scaler, mic mixer, audio DSP, amplifier, and control system
- > Built-in .AV Framework™ delivers a fully-functional system without any programming<sup>[2]</sup>
- > Integrated 3-Series Control System® allows fully-programmable room control
- > Onboard AirMedia® gateway enables wireless BYOD presentation capability<sup>[1]</sup>
- > Built-in H.264 streaming video decoder<sup>[3]</sup>
- > Provides matrix signal routing for up to 9 video sources and 4 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<sup>[4]</sup>
- > 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 adjustable input level compensation on each audio input
- > Includes built-in 6-channel gated microphone mixing with DSP
- > Provides two HDMI and two DM 8G+ (HDBaseT compatible) outputs
- > DigitalMedia 8G+® connectivity enables long-distance wiring over CAT type twisted pair cable<sup>[7]</sup>
- > HDBaseT Certified — Enables direct connection to other HDBaseT certified equipment
- > Features an independent, high-performance 4K scaler at each HDMI output
- > Upscales input signals to match the native resolution of any screen — including 4K and Ultra HD displays!
- > Downscales 4K, UHD, and ultra high-resolution computer signals to fit 1080p and other lower-resolution displays
- > Handles any input resolution from standard NTSC 480i or PAL 576i, to UHD and 4K
- > Provides intelligent frame rate conversion, content-adaptive noise reduction, and motion-adaptive de-interlacing
- > Provides 3D to 2D signal conversion<sup>[5]</sup>
- > Provides three balanced stereo audio outputs, each with independent mixer and DSP
- > Provides two additional audio mixes, either of which is selectable at any 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<sup>[9]</sup>
- > Includes onboard IR, RS-232, relay, digital input, and Cresnet® control ports
- > Supports Crestron® touch screens, keypads, and wireless remotes
- > Supports XPanel with Smart Graphics® computer and web based control
- > Supports iPhone®, iPad®, and Android™ control apps
- > Supports universal remotes via external RC-5 compatible IR receiver<sup>[6]</sup>
- > 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<sup>[8]</sup>
- > 3-space 19-inch rack-mountable

# DMPS3-4K-350-C 3-Series® 4K DigitalMedia™ Presentation System 350



DMPS3-4K-350-C – Rear View

The DMPS3-4K-350-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-350-C. In one 3-space rack mount package, it integrates the control system, matrix switcher, video scalers, 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-350-C with AirMedia pre-activated (no license required), see model [DMPS3-4K-350-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-350-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-350-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 MacBook® 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-350-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-350-C provides high-performance routing of HDMI®, AirMedia [1], and streaming AV sources to up to four separate displays, projectors, codecs, and other devices. Its video inputs include six HDMI, two DM 8G+®, and one streaming/AirMedia. The HDMI inputs are compatible with DVI and Dual-Mode DisplayPort sources [4], and the DM 8G+ inputs are 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 9x4 video matrix switching allows up to four different video sources to be routed simultaneously to four different display devices. Video outputs are comprised of two HDMI and two DM 8G+. The HDMI outputs are compatible with DVI [4] and the DM 8G+ outputs are compatible with HDBaseT.

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

## 4K/60 Video Scaling

An independent, high-performance 4K scaler is included on each HDMI output to ensure an optimal image on each display no matter what sources are selected. Each scaler allows all types of video and computer sources to

# DMPS3-4K-350-C 3-Series® 4K DigitalMedia™ Presentation System 350

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 2D-only displays.<sup>[6]</sup> Fully automatic operation eliminates any complicated setup by utilizing the displays' EDID to configure each scaler.

Scaling can be added to either DM 8G+ output using the [DM-RMC-4K-SCALER-C](#) receiver<sup>[6]</sup>, 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 multiple disparate display devices.

## DigitalMedia 8G+®

Its DM 8G+ inputs and outputs endow the DMPS3-4K-350-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 either DM 8G+ output provides a streamlined AV and control interface for a projector or flat panel display located anywhere in the room. Connecting up to two [DM 8G+ transmitters](#) provides expanded input connectivity to incorporate remote AV sources and mobile devices at a conference table, lectern, credenza, wall plate, or some other location. DM 8G+ can also provide the interface to a centralized [DigitalMedia matrix switcher](#) to enable the distribution of signals between multiple rooms and buildings.<sup>[7,8]</sup>

## 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-350-C can be connected directly to an HDBaseT compliant source or display device without requiring a DM® transmitter or receiver.

## 6-Channel Microphone Mixer

The DMPS3-4K-350-C includes built-in mixing and processing for six microphones. Each mic input provides 60 dB of gain adjustment, switchable 48V phantom power, fully-adjustable gating, compression, delay, and 4-band semi-parametric EQ. Sophisticated matrix mixing allows for a completely different stereo mix of all six microphones at each of the DMPS3-4K-350-C's three analog audio outputs. Two additional mixes can be configured and selected to feed any of the HDMI or DM 8G+ outputs.

## Professional Audio DSP

Each analog audio output on the DMPS3-4K-350-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 DMPS3-4K-350-C to directly drive a pair of stereo speakers (25 Watts per channel @ 8Ω), or a group of distributed ceiling speakers (50 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 to provide a complete solution for driving separate program and speech speakers, or any multi-zone speaker system.

## Audio Embedding & De-Embedding

The inclusion of professionally balanced analog audio inputs and outputs, combined with the ability to route audio signals independent of video, affords extensive flexibility for many specialized applications — without the need for any extra equipment! For instance, its balanced inputs allow the DMPS3-4K-350-C to interface directly with an audio mixing console, allowing the live sound mix to be embedded with the video signal from a digital camera and combined into a single HDMI output signal. Or, any of its balanced outputs may be used to de-embed audio from a digital AV source to feed the mixing console. An "Aux" output may even be re-routed back through an analog input to allow its built-in DSP, or an [external DSP](#), to be used to process the audio signal feeding the HDMI and DM 8G+ outputs.

## EDID Format Management

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

## 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-350-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-350-C 3-Series® 4K DigitalMedia™ Presentation System 350

Ethernet Extenders ([USB-EXT-DM-LOCAL](#) and [USB-EXT-DM-REMOTE](#)<sup>[6]</sup>), which may be used to enable the routing of multiple USB devices of virtually any type, all seamlessly managed through the DMPS3-4K-350-C.<sup>[9]</sup>

## Integrated 3-Series Control System®

Its built-in 3-Series control system enables the DMPS3-4K-350-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-350-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](#)<sup>®</sup> delivers the industry's most powerful platform for remotely controlling, monitoring, and managing multiple rooms using computers and mobile devices.

## CEC Embedded Device Control

For controlling third-party AV devices, the DMPS3-4K-350-C provides an alternative to conventional IR, RS-232, and Ethernet by harnessing the CEC (Consumer Electronics Control) signal embedded in HDMI. Using CEC, many devices can be controlled right through their HDMI or HDBaseT connections, eliminating the need for any dedicated serial cables or IR emitters.

## Built-in Ethernet Switch

In addition to transporting digital video and audio, the DM 8G+ ports on the DMPS3-4K-350-C can also extend Ethernet out to the display and source devices (via select DM transmitters and receivers), providing high-speed connectivity for each room device that requires a LAN connection. Ethernet is also utilized internally by the Crestron control bus to manage each transmitter and receiver and provide device control.

## Dedicated Control Subnet

The Crestron Control Subnet is a Gigabit Ethernet network dedicated to Crestron devices. Via the DMPS3-4K-350-C'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](#)<sup>[6]</sup>) to handle multiple touch screens, gateways, and other devices. PoE can be enabled at the Control Subnet port to power a single touch screen or other PoE powered device.<sup>[8]</sup> Auto-configuration of the entire subnet is performed by the DMPS3-4K-350-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-350-C employs Private Network Mode. Using Private Network Mode, the DMPS3-4K-350-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-350-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.<sup>[2]</sup> Advanced configuration and adjustment is

enabled through the front panel or a web browser. The front panel label strips can be customized using Crestron Engraver software or standard 3/8" 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-350-C. Simply add one or more [Crestron Connect It Cable Caddies](#) ([TT-100](#), [TT-101](#), [TT-110](#), or [TT-111 series](#)<sup>[6]</sup>), 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, BACnet™/IP<sup>[10]</sup>, IPv4 or IPv6, Active Directory authentication, IIS v.6.0 Web Server, SMTP e-mail client, RSTP, Private Network Mode

**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**<sup>[11]</sup>: (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<sup>[9]</sup>; USB device port for computer console (setup)

**RS-232:** 2-way device control and monitoring up to 115.2k baud with hardware and software handshaking

**IR/Serial:** 1-way device control via infrared up to 1.2 MHz or serial TTL/RS-232 (0-5 Volts) up to 115.2k baud; supports CNXRMIIRD IR Receiver<sup>[6]</sup>

**DigitalMedia:** DM 8G+, HDCP 2.2, EDID, CEC, PoDM+<sup>[8]</sup>, Ethernet

**HDBaseT:** HDCP 2.2, EDID, CEC, RS-232, PoE+<sup>[8]</sup>, Ethernet

**HDMI**<sup>®</sup>: HDCP 2.2, EDID, CEC

# DMPS3-4K-350-C 3-Series® 4K DigitalMedia™ Presentation System 350

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

## Video

**Switcher:** 9x4 matrix, Crestron QuickSwitch HD technology  
**Scalers (HDMI outputs):** (2) 4K video scalers with motion-adaptive deinterlacing, intelligent frame rate conversion, Deep Color support, 3D to 2D conversion<sup>[5]</sup>, content-adaptive noise reduction, and widescreen format selection (zoom, stretch, maintain aspect-ratio, or 1:1)  
**Input Signal Types:** HDMI w/Deep Color, 3D<sup>[5]</sup>, & 4K (DVI & Dual-Mode DisplayPort compatible<sup>[4]</sup>) on Inputs 1-6; DM 8G+ & HDBaseT w/Deep Color, 3D<sup>[5]</sup>, & 4K on Inputs 7 & 8; streaming & AirMedia on Input 9 (LAN)  
**Output Signal Types:** HDMI w/Deep Color & 4K (DVI compatible<sup>[4]</sup>) on Outputs 1 & 2; DM 8G+ & HDBaseT w/Deep Color, 3D, & 4K on Outputs 3 & 4

### Maximum Resolutions:

Scan Type	Resolution	Frame Rate	Color Sampling	Color Depth
Progressive	4096x2160 DCI 4K & 3840x2160 4K UHD	24 Hz	4:4:4	30 bit
		30 Hz	4:4:4	24 bit
		30 Hz	4:2:2	36 bit
		60 Hz	4:2:0	24 bit
	2560x1600 WQXGA	60 Hz	4:4:4	36 bit
1920x1080 HD1080p	60 Hz	4:4:4	36 bit	
Interlaced (excluded on HDMI outputs)	1920x1080 HD1080i	30 Hz	4:4:4	36 bit

*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 outputs.*

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

**Users:** Supports up to 32 users (presentation device connections)  
**Client Software OS Support:** Windows 7, Windows 8, Windows 10, Mac® OS X® (versions 10.10 through 10.13)  
**Client Software Video Frame Rate:** 30 fps, 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:** 14x5 stereo source matrix switcher, digital & analog source inputs, streaming & AirMedia source input, 6-channel gated mic mixer w/DSP, independent mixer per analog output (6-ch mic + 1 stereo source), independent stereo DSP per analog output, integrated power amplifier, two independent digital output mixers (6-ch mic + 1 stereo source), 2x1 digital output mix selector per digital output

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

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

**Frequency Response, Digital & Analog Line Outputs:**

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)

**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

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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<sup>[4]</sup>) on Inputs 1-6, DM 8G+ & HDBaseT on Inputs 7 & 8, streaming & AirMedia on Input 9 (LAN), analog 2-channel on Aud In 1-5  
Analog Formats: Stereo 2-channel  
Digital Formats: 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 4 digital outputs (HDMI Output 1 – 2 & DM Output 3 – 4):  
Output Signal Types: HDMI (DVI compatible<sup>[4]</sup>) on Outputs 1 & 2, DM 8G+ & HDBaseT on Outputs 3 & 4

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, 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

HDMI 1 – 6 INPUTS: (6) HDMI Type A connectors, female; Digital video/audio inputs; (DVI and Dual-Mode DisplayPort compatible<sup>[4]</sup>)

DM INPUT 7 – 8: (2) 8-pin RJ45 connectors, female, shielded; DM 8G+ inputs, HDBaseT compliant; PoDM+ PSE ports (HDBaseT PoE+ compatible<sup>[8]</sup>); Each connects to the DM 8G+ output of a DM transmitter or other DM device, or to an HDBaseT device, via CAT5e, Crestron DM-CBL-8G, or Crestron DM-CBL-ULTRA cable<sup>[7]</sup>

## 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 mm<sup>2</sup>); 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 mm<sup>2</sup>); 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

# DMPS3-4K-350-C 3-Series® 4K DigitalMedia™ Presentation System 350

**AUX OUT 1 – 2:** (2) 5-pin 3.5 mm 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 1 – 2 OUTPUTS:** (2) HDMI Type A connectors, female;  
Digital video/audio outputs;  
(DVI compatible<sup>[4]</sup>)

**DM OUTPUT 3 – 4:** (2) 8-pin RJ45 connectors, female, shielded;  
DM 8G+ outputs, HDBaseT compliant;  
PoDM+ PSE ports (HDBaseT PoE+ compatible)<sup>[8]</sup>;  
Each connects to the DM 8G+ input of a DM receiver or other DM device,  
or to an HDBaseT device, via CAT5e, Crestron DM-CBL-8G, or Crestron  
DM-CBL-ULTRA cable<sup>[7]</sup>

## Connectors - Networking, Control, & Power

**IR - SERIAL OUT 1 – 4:** (4) 2-pin 3.5 mm detachable terminal blocks;  
IR/Serial output ports;  
IR output up to 1.2 MHz;  
1-way serial TTL/RS-232 (0-5 Volts) up to 115.2k baud

**IR IN:** (1) 3-pin 3.5 mm detachable terminal block  
For connection of the CNXRMIIRD IR Receiver<sup>[6]</sup>;  
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<sup>[8]</sup>;  
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~ 6.0A 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 9:** (1) 8-pin RJ45 connector, female;  
10Base-T/100Base-TX Ethernet port;  
Provides a dedicated LAN connection for streaming input & AirMedia<sup>[1]</sup>

**CONTROL SUBNET:** (1) 8-pin RJ45 connector, female;  
10Base-T/100Base-TX/1000Base-T Ethernet port;  
PoE PSE (Power Sourcing Equipment) port<sup>[8]</sup>;  
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)

## Controls & Indicators

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

**OUTPUT 1 – 4, PROG, AUX 1 – 2:** (7) 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 – 8 (rear):** (4) LEDs, green LEDs indicate DM link status, amber LEDs indicate video and HDCP signal presence, for each corresponding port

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

# DMPS3-4K-350-C 3-Series® 4K DigitalMedia™ Presentation System 350

**CONTENT LAN IN 9 (rear):** (2) LEDs, (1) green and (1) amber, for indication of Ethernet speed, activity, and link status

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

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

## Power

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

**Power Consumption:** 93 Watts typical, 72 Watts idle

**Available Cresnet 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)<sup>[6]</sup>

**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)<sup>[6]</sup>

**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)<sup>[6]</sup>

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

## Environmental

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

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

**Heat Dissipation:** 317 BTU/hr typical, 246 BTU/hr idle

## Enclosure

**Chassis:** Metal, 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

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

## MODELS & ACCESSORIES

### Available Models

DMPS3-4K-350-C: 3-Series® 4K DigitalMedia™ Presentation System 350

### 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

# DMPS3-4K-350-C 3-Series® 4K DigitalMedia™ Presentation System 350

**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:** 3x210W Commercial Power Amplifier, 4/8Ω

**AMP-3210T:** 3x210W Commercial Power Amplifier, 4/8Ω or 70/100V

**GLS-ODT-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

**CNXRMIRD:** 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-CRIMP:** Crimping Tool for DM-8G-CONN-100

**DM-8G-CONN-WG-100:** Connectors with Wire Guide for DM-CBL-8G Series

**DM-8G-CRIMP-WG:** Crimping Tool for DM-8G-CONN-WG-100

**CRESNET 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-350-C with AirMedia pre-activated (no license required), see model [DMPS3-4K-350-C-AIRMEDIA](#). 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-350-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 outputs do not pass 3D signals. On these outputs, 3D signals are automatically converted to 2D, then scaled and output as 2D. 3D signals can be passed through the DM 8G+ outputs.
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-D](#) DigitalMedia D 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. #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.
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. Manages the routing of USB HID signals between peripheral DM devices that are equipped with USB HID ports. The USB ports onboard the DMPS3-4K-350-C are not usable for USB signal routing. Also programmable to manage the routing of USB signals between Crestron USB over Ethernet Extender modules ([USB-EXT-DM](#), sold separately). Refer to the [USB-EXT-DM](#) spec sheet for more information.
10. [License](#) required. The DMPS3-4K-350-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.

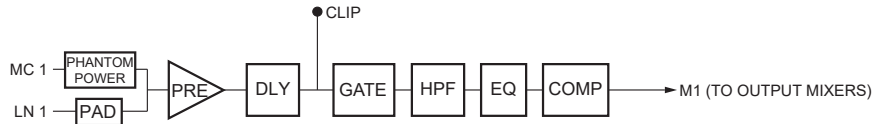
This product may be purchased from an authorized Crestron dealer. To find a dealer, please contact the Crestron sales representative for your area. A list of sales representatives is available online at <http://www.crestron.com/salesreps> or by calling 800-237-2041.

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

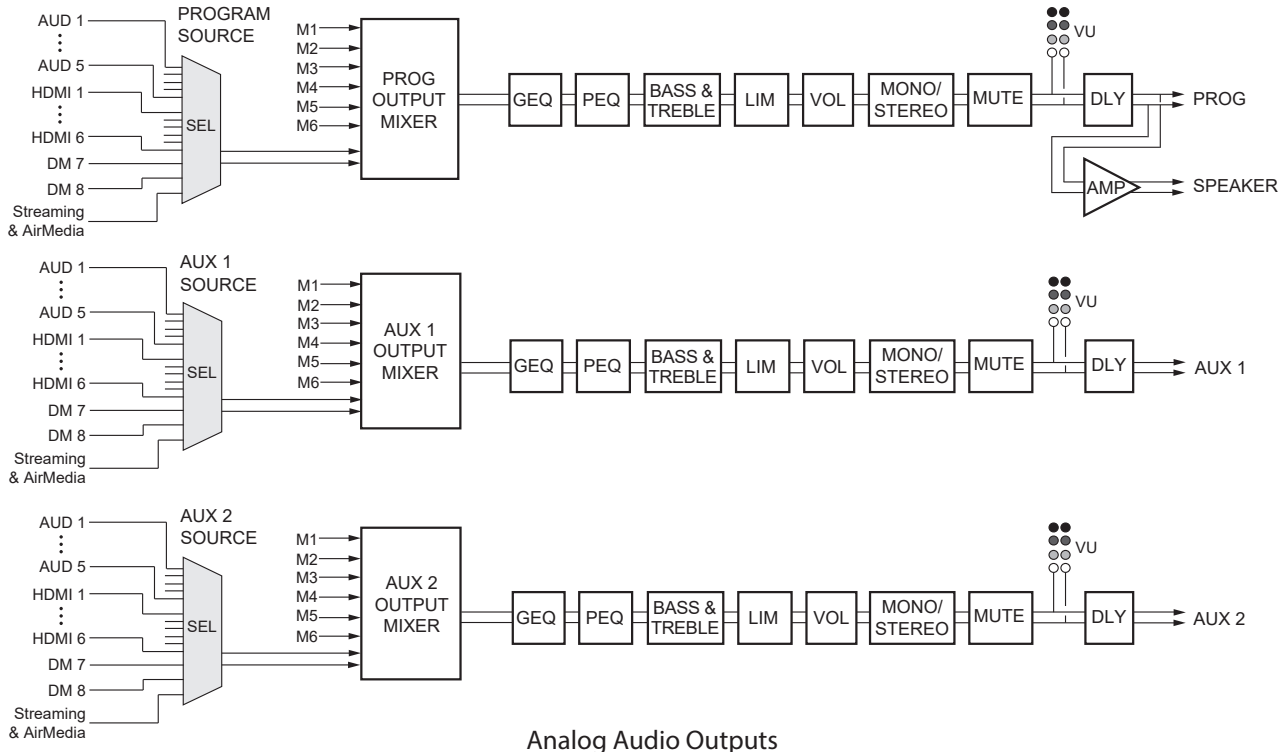
Certain Crestron products contain open source software. For specific information, please visit <http://www.crestron.com/opensource>.

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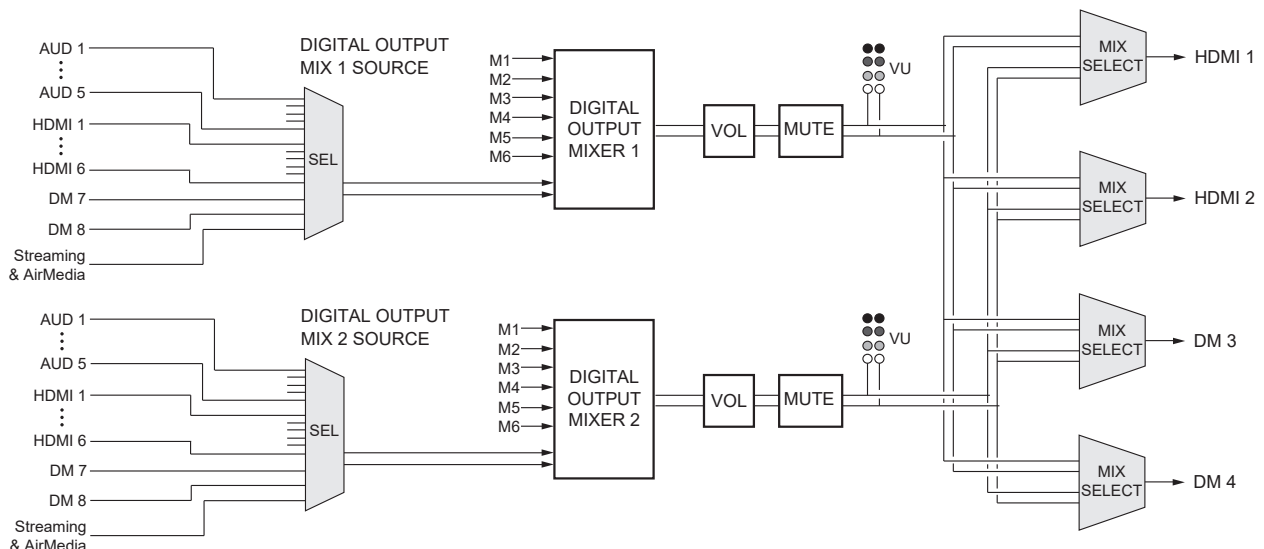
## AV SIGNAL FLOW DIAGRAMS



Microphone Inputs (Typical of 6)

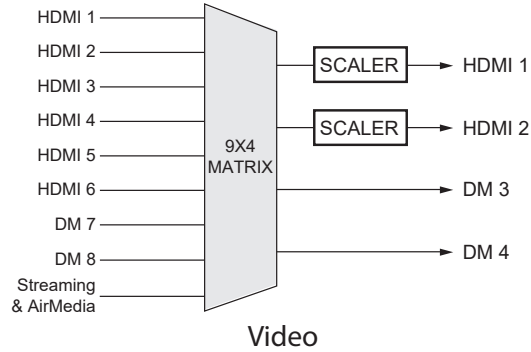


Analog Audio Outputs

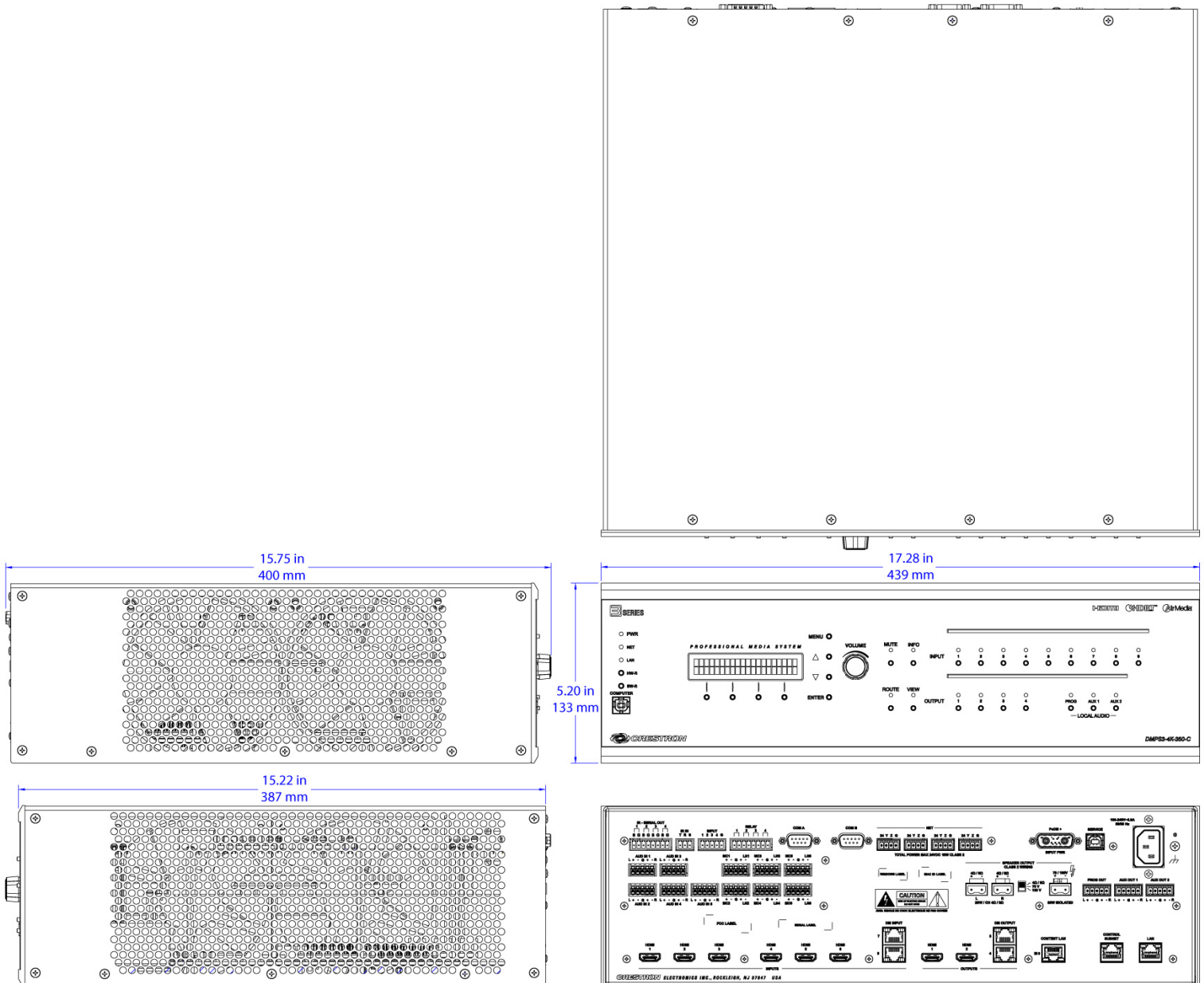


Digital Audio Outputs

# DMPS3-4K-350-C 3-Series® 4K DigitalMedia™ Presentation System 350



## DIMENSIONAL DIAGRAM



## 4K DigitalMedia 8G+® Receiver & Room Controller w/Scaler

- > DigitalMedia 8G+® receiver, 4K/60 scaler, audio extractor, and display controller
- > Connects to a DM® switcher or transmitter over a single CAT type twisted pair cable<sup>[1]</sup>
- > HDBaseT® Certified — Enables direct connection to other HDBaseT certified equipment
- > Provides one HDMI® or DVI display output<sup>[2]</sup>
- > Upscales the input signal to match the native resolution of any screen — including 4K and Ultra HD displays!
- > Downscapes 4K, UHD, and ultra high-resolution computer signals to enable viewing on 1080p and other lower-resolution displays
- > Handles any input resolution from standard NTSC 480i or PAL 576i, to UHD and 4K
- > Provides intelligent frame rate conversion
- > Includes content-adaptive noise reduction
- > Includes motion-adaptive de-interlacing
- > Allows adjustable overscan or underscan up to 7.5%
- > Automatically passes 3D video without scaling to 3D capable displays<sup>[3]</sup>
- > Supports up to 8x8 video wall processing<sup>[9]</sup>
- > Handles Dolby® TrueHD, Dolby Atmos®, DTS-HD®, and uncompressed 7.1 linear PCM audio
- > Provides a balanced stereo analog line-level audio output with volume control<sup>[6]</sup>
- > Allows de-embedding of stereo 2-channel audio signals
- > HDCP 2.2 compliant
- > Supports cable lengths up to 330 ft (100 m) for all resolutions up to UHD and 4K using DM Ultra cable<sup>[1]</sup>
- > Supports cable lengths up to 330 ft (100 m) for 1080p, WUXGA, and 2K using DM 8G® cable or CAT5e<sup>[1]</sup>
- > Supports cable lengths up to 230 ft (70 m) for UHD and 4K using DM 8G cable, or 165 ft (50 m) using CAT5e<sup>[1]</sup>
- > Provides a 10/100 Ethernet LAN connection
- > Compatible with Crestron USB over Ethernet Extenders<sup>[7]</sup>
- > Enables device control via CEC, IR, RS-232, and Ethernet
- > Provides two low-voltage relay control ports
- > Allows quick, easy setup and diagnostics
- > Powered via the DM connection or local power pack (included)<sup>[3,4]</sup>
- > Low-profile surface mount design



Its compact, low-profile design allows the DM-RMC-4K-SCALER-C to be installed discreetly behind a flat panel display or above a ceiling mounted projector. It connects to the head end or source location using a single CAT type twisted pair cable.<sup>[1]</sup>

### 4K Ultra HD

Crestron DigitalMedia continues to advance the standard for digital AV signal distribution, delivering the world's first end-to-end 4K system solution. The DM-RMC-4K-SCALER-C features the latest DM 8G+ technology, providing support for the transport of 4K and Ultra HD video signals. Support for 4K video also ensures support for the latest generation of computers and monitors with native resolutions beyond 1080p and WUXGA.

### DigitalMedia 8G+®

As the leader in HDMI and control system technologies, Crestron developed DigitalMedia (DM®) to deliver the first complete HD AV distribution system to take HDMI to a higher level. DigitalMedia allows virtually any mix of HDMI and other AV sources to be distributed throughout a home, office, school, or virtually any other facility. The latest generation of DM is called DigitalMedia 8G™ (DM 8G®). Engineered for ultra high-bandwidth and ultimate scalability, DM 8G provides a true one-wire lossless transport for moving high-definition video, audio, Ethernet, and control signals over a choice of twisted pair or fiber optic cable.

DM 8G over twisted pair copper wire is called DigitalMedia 8G+ (DM 8G+). DM 8G+ handles uncompressed Full HD 1080p, Ultra HD, 2K, and 4K video signals with support for 3D, Deep Color, and HDCP 2.2. Audio capabilities include support for high-bitrate 7.1 audio formats like Dolby® TrueHD, Dolby Atmos®, and DTS-HD® as well as uncompressed linear PCM. All signals are transported over a single CAT type cable, supporting 1080p, WUXGA, and 2K signals at distances up to 330 feet (100 m) using Crestron [DM Ultra Cable](#), Crestron [DM 8G Cable](#), or third-party CAT5e. Higher resolutions up to UHD and 4K are supported at distances up to 330 feet (100 m) using DM Ultra Cable, 230 feet (70 m) using DM 8G Cable, or 165 feet (50 m) using CAT5e.<sup>[1]</sup>

The DM-RMC-4K-SCALER-C provides an advanced one-box interface solution for a single display device as part of a complete Crestron® DigitalMedia™ system. It functions as a DM 8G+® receiver, 4K/60 video scaler, and control interface, providing a single HDMI® output along with an analog audio output, plus Ethernet, RS-232, IR, and relay control ports. In addition to DM 8G+, it is also compatible with HDBaseT®, allowing it to be connected directly to an HDBaseT certified source. Built-in scaling enables the connected display to handle virtually any video signal — including 4K and Ultra HD!

# DM-RMC-4K-SCALER-C 4K DM 8G+® Receiver & Room Controller w/Scaler

## HDBaseT® Certified

Crestron DigitalMedia 8G+ technology is designed using HDBaseT Alliance specifications, ensuring interoperability with other HDBaseT certified products. Via its DM 8G+ input, the DM-RMC-4K-SCALER-C can be connected directly to an HDBaseT compliant source without requiring a DM transmitter.

## Multimedia Display Interface

A single HDMI digital AV output port is provided on the DM-RMC-4K-SCALER-C for connection to a display or other device. The HDMI output can also handle DVI signals using an appropriate adapter or interface cable.<sup>[2]</sup>

A single CAT type cable connects the DM-RMC-4K-SCALER-C to a DM switcher or transmitter, or to an HDBaseT source, transporting video, audio, control, networking, and power signals all through one simple RJ45 connection.<sup>[1,3,4]</sup> Multiple DM-RMC-4K-SCALER-Cs may be installed to handle each display in a multiroom distribution system, all fed from a central DM-MD series switcher. Or, a single DM-RMC-4K-SCALER-C can be fed straight from a DM 8G+ or HDBaseT transmitter, affording a simple solution for extending a computer or AV signal to a single display.

## 4K/60 Scaler

Crestron exclusive 4K/60 scaling technology ensures an optimal image on any screen no matter what video or computer source is selected. And, by placing an independent, high-performance 4K scaler at every display, DigitalMedia delivers the most flexible and user-friendly solution for routing multiple disparate sources to many different display devices. This “distributed scaler” approach allows sources of any resolution or frame rate to be routed to any screen in the building and displayed reliably without compromising the original input signal. So, displays with the same native resolution as the source can receive a pure, unprocessed signal while every other display receives a signal that’s perfectly scaled to look amazing on its particular screen.

With distributed 4K scaling, DM lets you enjoy a full, unadulterated 4K Ultra HD image in your high-end theater while simultaneously distributing the same image to smaller, lesser displays in other rooms. It also enables HD 1080p and lower resolution images from cameras and legacy sources to look their best on every screen in the house.

The DM-RMC-4K-SCALER-C accepts any input resolution from standard definition NTSC 480i to ultra high-definition DCI 4K, and scales it beautifully to any output resolution up to DCI 4K (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. Fully automatic operation eliminates any complicated setup by utilizing the display’s EDID to configure the scaler.<sup>[5]</sup>

## Video Wall Processing

The DM-RMC-4K-SCALER-C has another trick up its sleeve, providing zoom capability and bezel compensation on its output to display just a portion of the source image. Using this feature, multiple units may be combined to configure a video wall composed of up to 64 individual displays. Configurations of up to eight wide by up to eight high are supported, and all that is required is a separate DM-RMC-4K-SCALER-C for each display, and a DM switcher with sufficient DM 8G+ outputs.



DM-RMC-4K-SCALER-C – Left, Front, and Right Views

# DM-RMC-4K-SCALER-C 4K DM 8G+® Receiver & Room Controller w/Scaler

## Audio De-embedding

The DM-RMC-4K-SCALER-C is equipped with a balanced analog audio output, allowing stereo audio signals to be extracted from the digital stream and fed to a local amplifier, sound bar, or a pair of powered speakers. The output volume is adjustable via a control system using a keypad, touch screen, handheld remote, or mobile device.<sup>[6]</sup>

See also model [DM-RMC-4K-SCALER-C-DSP](#) for applications requiring stereo downmixing of multichannel audio.

## LAN Connectivity

Along with high-definition AV and control, DigitalMedia also integrates high-speed Ethernet networking for a total signal distribution solution. The DM-RMC-4K-SCALER-C includes a 10/100 Ethernet port, which can be used to provide a convenient LAN connection for a local network device.

## Embedded Device Control

The DM-RMC-4K-SCALER-C includes built-in RS-232, IR, and Ethernet control ports to enable programmable control of the display device connected to it (via a control system). It also offers an alternative to such conventional control methods by harnessing the CEC (Consumer Electronics Control) signal embedded in HDMI. Through its connection to the control system, the DM-RMC-4K-SCALER-C provides a gateway for controlling the display device right through the HDMI connection, potentially eliminating the need for any dedicated control wires or IR emitters. The DM-RMC-4K-SCALER-C also supports CEC over HDBaseT, enabling control of an HDBaseT source connected to the DM 8G+ input.

Two low-voltage relay ports are also included on the DM-RMC-4K-SCALER-C for control of a projection screen or lift.

## USB Signal Extension (optional)

DigitalMedia allows for the routing of USB signals alongside video and audio. USB signal extension is enabled on the DM-RMC-4K-SCALER-C by adding a [USB-EXT-DM](#) USB over Ethernet Extender Module<sup>[7]</sup>.

## Low-Profile Installation

The DM-RMC-4K-SCALER-C mounts conveniently to a wall, ceiling, or other flat surface. At just over an inch deep, it fits easily behind a flat panel display or above a ceiling-mounted projector. The unit can be powered using the wall mount power pack (included), or PoDM+ (Power over DigitalMedia Plus) for a true one-wire solution.<sup>[3,4]</sup> All connections and LED indicators are positioned on the sides, ensuring optimal access and visibility for a clean, serviceable installation. An array of indicators is provided for easy setup and troubleshooting.

Please refer to the [DigitalMedia Resources Webpage at <http://www.crestron.com/dmresources/>](#) for additional design tools and reference documents.

## SPECIFICATIONS

### Maximum Cable Lengths

Cable Type:	DM-CBL-ULTRA DM® Ultra Cable	DM-CBL-8G DM 8G® Cable	CAT5e (or better) <sup>[1]</sup>
Resolution:			
1080p60 Full HD	330 ft (100 m)	330 ft (100 m)	330 ft (100 m)
1920x1200 WUXGA			
1600x1200 UXGA			
2048x1080 DCI 2K			
2560x1440 WQHD	230 ft (70 m)	165 ft (50 m)	165 ft (50 m)
2560x1600 WQXGA			
3840x2160 4K UHD			
4096x2160 DCI 4K			

### Video

**Scaler:** 4K video scaler, motion-adaptive deinterlacer, intelligent frame rate conversion, Deep Color support, content-adaptive noise reduction, widescreen format selection (zoom, stretch, maintain aspect-ratio, or 1:1), video wall processing up to 8 wide x up to 8 high<sup>[9]</sup>

**Input Signal Types:** DM 8G+ & HDBaseT w/Deep Color, 3D<sup>[8]</sup>, & 4K

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

### Maximum Scaler Input & Pass-Through Resolutions:

Scan Type	Resolution	Frame Rate	Color Sampling	Color Depth
Progressive	4096x2160 DCI 4K & 3840x2160 4K UHD	24 Hz	4:4:4	30 bit
		30 Hz	4:4:4	24 bit
		30 Hz	4:2:2	36 bit
		60 Hz	4:2:0	24 bit
	2560x1600 WQXGA	60 Hz	4:4:4	36 bit
	1920x1080 HD1080p	60 Hz	4:4:4	36 bit
Interlaced	1920x1080 HD1080i	30 Hz	4:4:4	36 bit

### Maximum Scaler Output Resolutions:

Scan Type	Resolution	Frame Rate	Color Sampling	Color Depth
Progressive	4096x2160 DCI 4K & 3840x2160 4K UHD	24 Hz	4:4:4	30 bit
		30 Hz	4:4:4	24 bit
		30 Hz	4:2:2	36 bit
		60 Hz	4:2:0	24 bit
	2560x1600 WQXGA	60 Hz	4:4:4	36 bit
	1920x1080 HD1080p	60 Hz	4:4:4	36 bit

**NOTE:** Common resolutions are shown; other custom resolutions are supported at pixel clock rates up to 300 MHz

# DM-RMC-4K-SCALER-C 4K DM 8G+® Receiver & Room Controller w/Scaler

## Audio

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**Input Signal Types:** DM 8G+, HDBaseT

**Output Signal Type:** HDMI, analog stereo<sup>[6]</sup>

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

**Analog Formats:** Stereo 2-Channel<sup>[6]</sup>

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

**Analog Performance:** Frequency Response: 20 Hz to 20 kHz ±0.5 dB;

S/N Ratio: >95 dB 20 Hz to 20 kHz A-weighted;

THD+N: <0.005% @ 1 kHz;

Stereo Separation: >90 dB

**Analog Volume Adjustment:** -80 to 0 dB

## Communications

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**Ethernet:** 10/100 Mbps, auto-switching, auto-negotiating, auto-discovery, full/half duplex, DHCP

**RS-232:** 2-way device control and monitoring up to 115.2k baud with hardware and software handshaking (via control system)

**IR/Serial:** 1-way device control via infrared up to 1.1 MHz or serial TTL/RS-232 (0-5 Volts) up to 19.2k baud (via control system)

**DigitalMedia:** DM 8G+, HDCP 2.2, EDID, CEC, PoDM+, Ethernet

**HDBaseT:** HDCP 2.2, EDID, CEC, PoE+, Ethernet

**HDMI:** HDCP 2.2, EDID, CEC

*NOTE: Supports management of HDCP and EDID; supports management of CEC between the connected HDMI and/or HDBaseT device(s) and a control system*

## Connectors

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

Bidirectional RS-232 port;

Up to 115.2k baud, hardware and software handshaking support

**IR 1 – 2:** (1) 4-pin 3.5 mm detachable terminal block;

Comprises (2) IR/Serial ports;

IR output up to 1.1 MHz;

1-way serial TTL/RS-232 (0-5 Volts) up to 19200 baud

**AUDIO OUT L, R:** (1) 5-pin 3.5 mm detachable terminal block;

Balanced/unbalanced stereo line-level audio output<sup>[6]</sup>;

Output Impedance: 200 Ohms balanced, 100 Ohms unbalanced;

Maximum Output Level: 4 Vrms balanced, 2 Vrms unbalanced

**RELAY 1 – 2:** (1) 4-pin 3.5 mm detachable terminal block;

Comprises (2) normally open, isolated relays;

Rated 1 Amp, 30 Volts AC/DC;

MOV arc suppression across contacts

**Ground:** (1) 6-32 screw;

Chassis ground lug

**LAN:** (1) 8-pin RJ45 female, shielded;

10Base-T/100Base-TX Ethernet port

**HDMI OUT:** (1) 19-pin Type A HDMI female;

HDMI digital video/audio output (DVI compatible<sup>[2]</sup>)

**DM IN:** (1) 8-pin RJ45 female, shielded;

DM 8G+ input, HDBaseT compliant;

PoDM+ PD port (HDBaseT PoE+ compatible)<sup>[3,4]</sup>;

Connects to the DM 8G+ output of a DM switcher, transmitter, or other DM device, or to an HDBaseT device, via CAT5e, Crestron DM-CBL-8G, or Crestron DM-CBL-ULTRA cable<sup>[1]</sup>

**24VDC 1.25A MAX:** (1) 2.1 x 5.5 mm DC power connector;

24 Volt DC power input;

PW-2412WU power pack included

## Controls & Indicators

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**ACT:** (1) Green LED, indicates activity

**SETUP:** (1) Red LED and (1) recessed pushbutton, for Ethernet setup

**RESET:** (1) Recessed pushbutton, for hardware reset

**LAN:** (2) LEDs, green LED indicates Ethernet link status, amber LED indicates Ethernet activity

**HDMI:** (1) Green LED, indicates video signal presence at the HDMI output

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

**24VDC:** (1) Green LED, indicates operating power supplied via PoDM+, HDBaseT PoE+, or local power pack

## Power

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**Power Pack (included):** Input: 100-240 Volts AC, 50/60 Hz

Output: 1.25 Amps @ 24 Volts DC

Model: PW-2412WU

**Power over DM (PoDM):** IEEE 802.3at Type 2 Class 4 (25.5 W) compliant PoDM+ PD (Powered Device), capable of being powered by a PoDM+ PSE (Power Sourcing Equipment)<sup>[3]</sup>

**Power over HDBaseT:** IEEE 802.3at Type 2 Class 4 (25.5 W) compliant HDBaseT PoE+ PD (Powered Device), capable of being powered by an HDBaseT PoE+ PSE (Power Sourcing Equipment)<sup>[4]</sup>

**Power Consumption:** 18 Watts

## Environmental

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**Temperature:** 32° to 104° F (0° to 40° C)

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

**Heat Dissipation:** 63 BTU/hr

## Enclosure

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**Chassis:** Metal, black finish, with (2) integral mounting flanges, vented top, front, and bottom

**Mounting:** Freestanding, surface mount, or attach to a single rack rail

## Dimensions

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**Height:** 12.51 in (318 mm)

**Width:** 5.37 in (137 mm)

**Depth:** 1.08 in (28 mm)

# DM-RMC-4K-SCALER-C 4K DM 8G+® Receiver & Room Controller w/Scaler

## Weight

1.38 lb (625 g)

## MODELS & ACCESSORIES

### Available Models

**DM-RMC-4K-SCALER-C:** 4K DigitalMedia 8G+® Receiver & Room Controller w/Scaler

### Included Accessories

**PW-2412WU:** Wall Mount Power Pack, 24VDC, 1.25A, 2.1mm, Universal (Qty. 1 included)

### Available Accessories

**DM-PSU-ULTRA-MIDSPAN:** DigitalMedia™ Ultra Midspan PoDM++ Injector

**DM-CBL-ULTRA-PC:** DigitalMedia™ Ultra Patch Cables

**DM-CONN-ULTRA-RECP:** DigitalMedia™ Ultra Keystone RJ45 Jack

**DM-CBL-ULTRA-NP:** DigitalMedia™ Ultra Cable, Non-Plenum Type CMR

**DM-CBL-ULTRA-P:** DigitalMedia™ Ultra Cable, Plenum Type CMP

**DM-CBL-ULTRA-LSZH:** DigitalMedia™ Ultra Cable, Low Smoke Zero Halogen

**DM-CONN:** Connector for DM-CBL-ULTRA

**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

**CBL Series:** Crestron® Certified Interface Cables

**MP-WP Series:** Media Presentation Wall Plates

**MPI-WP Series:** Media Presentation Wall Plates - International Version

**CNSP-XX:** Custom Serial Interface Cable

**IRP2:** IR Emitter Probe w/Terminal Block Connector

**USB-EXT-DM:** USB over Ethernet Extender with Routing

**MP-AMP30:** Media Presentation Audio Amplifier

**MP-AMP40-70V:** Media Presentation Audio Amplifier, 70 Volt

**MP-AMP40-100V:** Media Presentation Audio Amplifier, 100 Volt

**SAROS SB-200-P:** Saros® Sound Bar 200, Powered

## Notes:

1. 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 Cable Lengths" table for a detailed overview. Crestron legacy cable models [DM-CBL](#) DigitalMedia Cable and [DM-CBL-D](#) DigitalMedia D 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. #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.
2. The HDMI output requires an appropriate adapter or interface cable to accommodate a DVI signal. [CBL-HD-DVI](#) interface cables are available separately.
3. To power the DM-RMC-4K-SCALER-C using PoDM+ (Power over DigitalMedia+) requires connection to a DM switcher or other equipment that has a PoDM+ PSE port. Any wiring that is connected to a PoDM+ 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.
4. To power the DM-RMC-4K-SCALER-C using HDBaseT PoE+ requires connection to a switcher or other equipment that has an HDBaseT PoE+ PSE port. Any wiring that is connected to an HDBaseT 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.
5. EDID (Extended Display Identification Data) is data embedded in an HDMI, DVI, or VGA signal that enables a display device to tell the source device what resolutions and formats it can support, allowing the source to configure itself automatically to feed the best signal that both devices can support.
6. The analog stereo audio output is only active when the DM-RMC-4K-SCALER-C is receiving a 2-channel stereo signal. For applications using a multichannel surround sound source, use model [DM-RMC-4K-SCALER-C-DSP](#) which provides a stereo downmix of the multichannel signal.
7. USB-EXT-DM USB over Ethernet Extender Modules are sold separately. Refer to the [USB-EXT-DM](#) spec sheet for more information.
8. Does not support scaling of 3D signals. Reverts to pass-through mode if a 3D signal and 3D-capable display are detected.
9. Video wall processing requires a separate DM-RMC-4K-SCALER-C for each individual display.

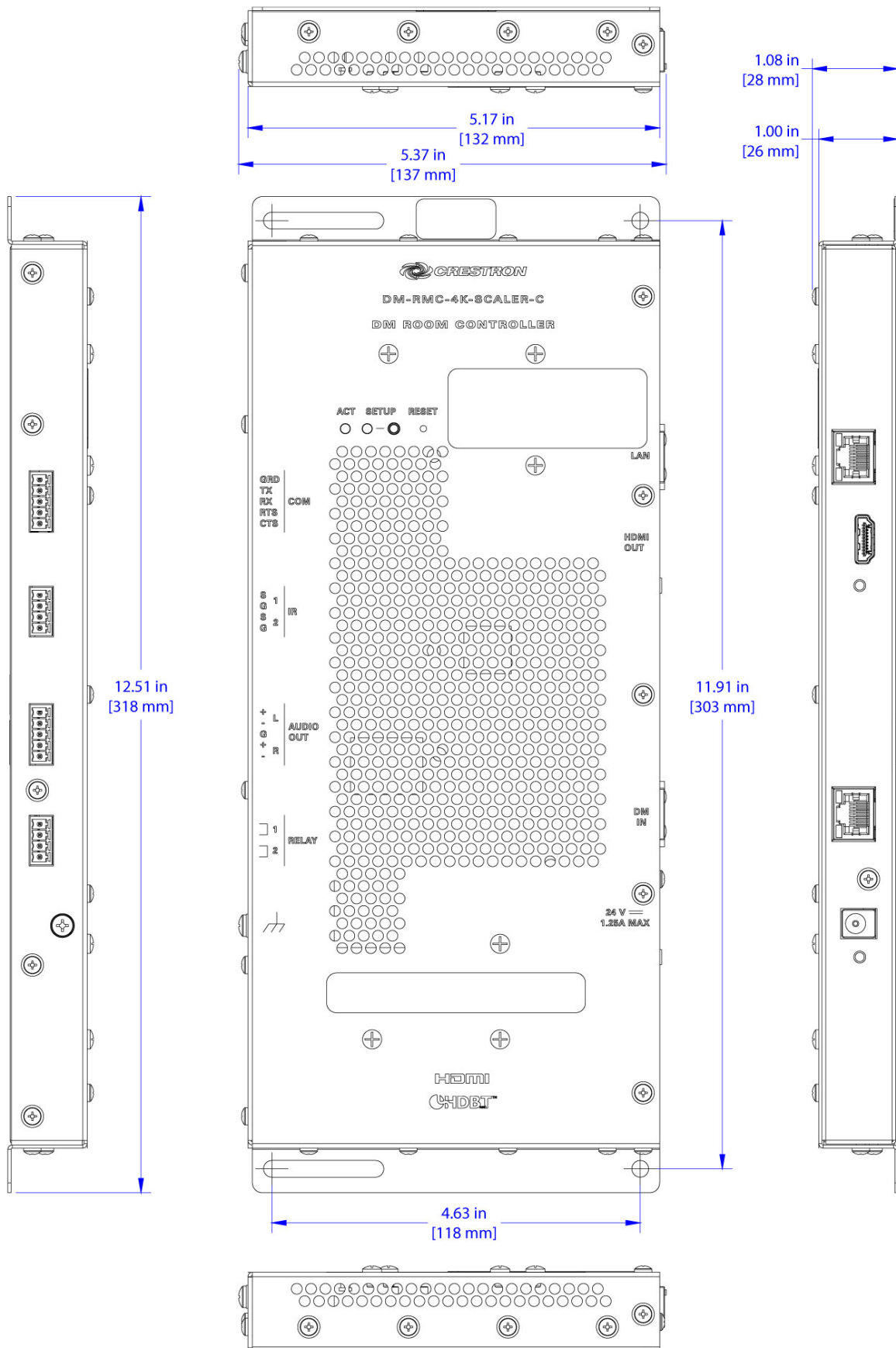
This product may be purchased from an authorized Crestron dealer. To find a dealer, please contact the Crestron sales representative for your area. A list of sales representatives is available online at [www.crestron.com/salesreps](http://www.crestron.com/salesreps) or by calling 800-237-2041.

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

Certain Crestron products contain open source software. For specific information, please visit [www.crestron.com/opensource](http://www.crestron.com/opensource).

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# DM-RMC-4K-SCALER-C 4K DM 8G+® Receiver & Room Controller w/Scaler



# 4K DigitalMedia 8G+® Transmitter 202

- > 4K DigitalMedia 8G+® transmitter and multimedia interface
- > Built-in 2x1 AV switcher with auto-switching
- > QuickSwitch HD™ technology achieves fast, reliable switching
- > Connects to a DM® switcher or receiver over a single CAT type twisted pair cable<sup>[1]</sup>
- > Supports cable lengths up to 330 ft (100 m) for all resolutions up to UHD and 4K using DM Ultra cable<sup>[1]</sup>
- > Supports cable lengths up to 330 ft (100 m) for 1080p, WUXGA, and 2K using DM 8G® cable or CAT5e<sup>[1]</sup>
- > Supports cable lengths up to 230 ft (70 m) for UHD and 4K using DM 8G cable, or 165 ft (50 m) using CAT5e<sup>[1]</sup>
- > HDBaseT® Certified — Enables direct connection to other HDBaseT certified equipment
- > Provides two 4K HDMI® inputs
- > Also supports DVI and Dual-Mode DisplayPort sources<sup>[5]</sup>
- > Handles digital video with resolutions up to 4K and Ultra HD
- > Handles 3D video and Deep Color
- > Handles Dolby® TrueHD, Dolby Atmos®, DTS-HD®, and uncompressed 7.1 linear PCM audio
- > Includes a local 4K HDMI output
- > HDCP 2.2 compliant
- > Detects and reports detailed video and audio input information
- > Performs automatic AV signal format management via EDID
- > Provides a 10/100 Ethernet LAN connection
- > Enables device control via CEC, IR, RS-232, and Ethernet
- > Enables USB HID signal extension for a local keyboard/mouse or computer
- > Compatible with Crestron® USB over Ethernet Extenders<sup>[4]</sup>
- > Compatible with Crestron Connect It™ Cable Caddies<sup>[6]</sup>
- > Allows quick, easy setup and diagnostics
- > Low-profile surface-mount design
- > Powered via the DM connection or local power pack (included)<sup>[2,3]</sup>



## 4K Ultra HD

Crestron DigitalMedia continues to advance the standard for digital AV signal distribution, delivering the world's first end-to-end 4K system solution. The DM-TX-4K-202-C features the latest DM 8G+ technology, providing support for the transport of 4K and Ultra HD video signals. Support for 4K video also ensures support for the latest generation of computers and monitors with native resolutions beyond 1080p and WUXGA.

## DigitalMedia 8G+®

As the leader in HDMI and control system technologies, Crestron developed DigitalMedia (DM®) to deliver the first complete HD AV distribution system to take HDMI to a higher level. DigitalMedia allows virtually any mix of HDMI and other AV sources to be distributed throughout a home, office, school, or virtually any other facility. The latest generation of DM is called DigitalMedia 8G™ (DM 8G®). Engineered for ultra-high bandwidth and ultimate scalability, DM 8G provides a true one-wire lossless transport for moving high-definition video, audio, and control signals over a choice of twisted-pair or fiber optic cable.

DM 8G over twisted-pair copper wire is called DigitalMedia 8G+ (DM 8G+). DM 8G+ handles uncompressed Full HD 1080p, Ultra HD, 2K, and 4K video signals with support for 3D, Deep Color, and HDCP 2.2. Audio capabilities include support for high-bitrate 7.1 audio formats like Dolby® TrueHD, Dolby Atmos®, and DTS-HD®, as well as uncompressed linear PCM. All signals are transported over a single CAT type wire, supporting 1080p, WUXGA, and 2K signals at distances up to 330 feet (100 m) using Crestron DM Ultra Cable, Crestron DM 8G Cable, or third-party CAT5e. Higher resolutions up to UHD and 4K are supported at distances up to 330 feet (100 m) using DM Ultra Cable, 230 feet (70 m) using DM 8G Cable, or 165 feet (50 m) using CAT5e.<sup>[1]</sup>

## HDBaseT® Certified

Crestron DigitalMedia 8G+ technology is designed using HDBaseT Alliance specifications, ensuring interoperability with other HDBaseT certified products. Via its DM 8G+ output, the DM-TX-4K-202-C can be connected directly to an HDBaseT compliant device without requiring a DM receiver.

The DM-TX-4K-202-C provides a versatile interface for computers and high-definition AV sources as part of a complete Crestron® DigitalMedia™ system. It functions as a DM 8G+® transmitter and switcher with two HDMI® inputs. It also functions as a control module, providing RS-232 and IR control ports, plus Ethernet and USB HID ports for a total connectivity solution. It connects to the head end or display location using a single CAT type twisted pair cable.<sup>[1]</sup> In addition to DM 8G+, it is also compatible with HDBaseT®, allowing it to be connected directly to the input of an HDBaseT certified display device. Its low-profile, surface-mountable design makes it ideal for installation beneath a conference table, inside a lectern or equipment rack, or at virtually any other location in a boardroom, classroom, auditorium, or residence.

# DM-TX-4K-202-C 4K DigitalMedia 8G+<sup>®</sup> Transmitter 202

## Multimedia Computer/AV Interface

The DM-TX-4K-202-C provides two independent 4K HDMI inputs to accommodate connections from mobile devices, computers, and AV sources with resolutions up to UHD and DCI 4K. These inputs can also handle DVI and Dual-Mode DisplayPort signals using an appropriate adapter or interface cable. Switching between the two inputs can be configured to switch automatically or be controlled through a Crestron control system.

A single CAT type cable connects the DM-TX-4K-202-C to a DM switcher or receiver, or to an HDBaseT device, transporting video, audio, control, networking, and power signals all through one simple RJ45 connection.<sup>[1,2,3]</sup> Used with a single DM 8G+ Receiver/Room Controller and optional Crestron control system, the DM-TX-4K-202-C affords a simple solution for extending a computer or AV signal to a single display. As part of a larger system using a DM-MD series switcher, multiple DM-TX-4K-202-Cs may be deployed to enable the distribution of several sources at different locations to feed multiple displays throughout any room or larger facility.

## Local HDMI Output

An HDMI output is included to enable pass-through of the selected source to feed a local display, monitor, or sound system.

## LAN Connectivity

Along with high-definition AV and control, DigitalMedia also integrates high-speed Ethernet networking for a total signal distribution solution. The DM-TX-4K-202-C includes a 10/100 Ethernet port, which can be used to provide a convenient LAN connection for a local network device.

## Embedded Device Control

The DM-TX-4K-202-C includes built-in IR, RS-232, and Ethernet control ports to enable programmable control of the devices connected to it (via a control system). It also offers an alternative to such conventional control methods by harnessing the CEC (Consumer Electronics Control) signal embedded in HDMI. Through its connection to the control system, the DM-TX-4K-202-C provides a gateway for controlling the connected source devices right through their HDMI connections, potentially eliminating the need for any dedicated control wires or IR emitters.

## USB Signal Extension

The DM-TX-4K-202-C functions as a versatile USB keyboard/mouse extender with both host and device ports provided onboard. This allows a computer (or other USB HID-compliant host) to be connected to the DM-TX-4K-202-C and controlled remotely by a USB HID keyboard and/or mouse located elsewhere. Alternately, the keyboard/mouse may be connected locally and used to control a remote computer. Routing of the USB HID signals is handled through the DigitalMedia system. Support for other types of USB devices can be enabled using Crestron USB over Ethernet Extenders ([USB-EXT-DM](#))<sup>[4]</sup>.

## Crestron Connect It™

A Crestron Connect It Cable Caddy ([TT-100 series](#)) offers a convenient tabletop connectivity solution that works seamlessly with the DM-TX-4K-202-C. The cable caddy gets its power and control from the DM-TX-4K-202-C through a simple USB connection.

## Compact and Versatile

The DM-TX-4K-202-C is designed to be mounted to a flat surface or placed on a shelf. It is compact enough to fit discreetly inside a presentation lectern or beneath a table, and can even be attached to a rack rail in the back of an equipment cabinet. The unit can be powered using the wall mount power pack (included), or PoDM (Power over DigitalMedia) for a true one-wire solution.<sup>[2,3]</sup> An array of indicators is provided on the unit for easy setup and troubleshooting.



DM-TX-4K-202-C – Left, Front, & Right Views

# DM-TX-4K-202-C 4K DigitalMedia 8G+® Transmitter 202

Please refer to the DigitalMedia Resources Webpage at <http://www.crestron.com/dmresources/> for additional design tools and reference documents.

## SPECIFICATIONS

### Maximum Cable Lengths

Cable Type:	DM-CBL-ULTRA DM® Ultra Cable	DM-CBL-8G DM 8G® Cable	CAT5e (or better) <sup>[1]</sup>
Resolution:			
1080p60 Full HD	330 ft (100 m)	330 ft (100 m)	330 ft (100 m)
1920x1200 WUXGA			
1600x1200 UXGA			
2048x1080 DCI 2K			
2560x1440 WQHD	230 ft (70 m)	165 ft (50 m)	
2560x1600 WQXGA			
3840x2160 4K UHD			
4096x2160 DCI 4K			

### Video

**Switcher:** 2x1 auto-switching digital inputs; Crestron QuickSwitch HD technology

**Input Signal Types:** HDMI w/Deep Color, 3D, & 4K (DVI & Dual-Mode DisplayPort compatible<sup>[5]</sup>)

**Output Signal Types:** DM 8G+ & HDBaseT w/Deep Color, 3D, & 4K; HDMI w/Deep Color, 3D, & 4K (DVI compatible<sup>[5]</sup>)

### Maximum Resolutions:

Scan Type	Resolution	Frame Rate	Color Sampling	Color Depth
Progressive	4096x2160 DCI 4K or 3840x2160 4K UHD	24 Hz	4:4:4	30 bit
		30 Hz	4:4:4	24 bit
		30 Hz	4:2:2	36 bit
		60 Hz	4:2:0	24 bit
	2560x1600 WQXGA	60 Hz	4:4:4	36 bit
	1920x1080 HD1080p	60 Hz	4:4:4	36 bit
Interlaced	1920x1080 HD1080i	30 Hz	4:4:4	36 bit

*NOTE: Common resolutions are shown; other custom resolutions are supported at pixel clock rates up to 300 MHz*

### Audio

**Switcher:** 2x1 audio-follow-video

**Input Signal Types:** HDMI (Dual-Mode DisplayPort compatible<sup>[5]</sup>)

**Output Signal Types:** DM 8G+ & HDBaseT, HDMI

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

### Communications

**Ethernet:** 10/100 Mbps, auto-switching, auto-negotiating, auto-discovery, full/half duplex, DHCP

**USB:** Supports signal extension of USB HID class devices, supports a TT-100 series cable caddy<sup>[6]</sup>, supports computer console (for setup)

**RS-232:** 2-way device control and monitoring up to 115.2k baud with hardware and software handshaking (via control system)

**IR/Serial:** 1-way device control via infrared up to 1.1 MHz or serial TTL/RS-232 (0-5 Volts) up to 19.2k baud (via control system)

**DigitalMedia:** DM 8G+, HDCP 2.2, EDID, CEC, PoDM, Ethernet

**HDBaseT:** HDCP 2.2, EDID, CEC, RS-232, PoE, Ethernet

**HDMI:** HDCP 2.2, EDID, CEC

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

### Connectors

**HDMI IN 1 – 2:** (2) 19-pin Type A HDMI female;  
HDMI digital video/audio inputs;  
(DVI & Dual-Mode DisplayPort compatible<sup>[5]</sup>)

**DM OUT:** (1) 8-pin RJ45 female, shielded;  
DM 8G+ output, HDBaseT compliant;  
PoDM PD port (HDBaseT PoE compatible)<sup>[2,3]</sup>;  
Connects to the DM 8G+ input of a DM switcher, receiver, or other DM device, or to an HDBaseT device, via CAT5e, Crestron DM-CBL-8G, or Crestron DM-CBL-ULTRA cable<sup>[1]</sup>

**24VDC 0.75A:** (1) 2.1 x 5.5 mm DC power connector;  
24 Volt DC power input;  
PW-2407WU power pack included

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

**USB HID:** (1) USB Type A female;  
USB 2.0 host port for connection of a mouse/keyboard or other USB HID-compliant device (USB signal extension & routing), or for connection of a Crestron TT-100 series device (Crestron Connect It)<sup>[6]</sup>

**COMPUTER:** (1) USB Type B female;  
USB 2.0 device port for computer console (setup), or for connection to a computer or other USB HID-compliant host (USB signal extension & routing)

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

**HDMI OUT:** (1) 19-pin Type A HDMI female;  
HDMI digital video/audio output (DVI compatible<sup>[5]</sup>)

**COM:** (1) 5-pin 3.5 mm detachable terminal block;  
Bidirectional RS-232 port;  
Up to 115.2k baud, hardware and software handshaking support

**IR:** (1) 2-pin 3.5 mm detachable terminal block;  
IR/Serial port;  
IR output up to 1.1 MHz;  
1-way serial TTL/RS-232 (0-5 Volts) up to 19200 baud

# DM-TX-4K-202-C 4K DigitalMedia 8G+® Transmitter 202

## Controls & Indicators

**HDMI IN 1 – 2:** (2) Green LEDs, each indicates HDMI signal presence at the corresponding HDMI input

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

**24VDC:** (1) Green LED, indicates operating power supplied via PoDM, HDBaseT PoE, or local power pack

**LAN:** (2) LEDs, green LED indicates Ethernet link status, amber LED indicates Ethernet activity

**HDMI OUT:** (1) Green LED, indicates HDMI signal presence at the HDMI output

**SETUP:** (1) Red LED and (1) recessed pushbutton for Ethernet setup

**RESET:** (1) Recessed pushbutton for hardware reset

## Power

**Power Pack (included):** Input: 100-240 Volts AC, 50/60 Hz  
Output: 0.75 Amps @ 24 Volts DC  
Model: PW-2407WU

**Power over DM (PoDM):** IEEE 802.3at Type 1 Class 3 (12.95 W) compliant PoDM PD (Powered Device), capable of being powered by a PoDM PSE (Power Sourcing Equipment)<sup>[2]</sup>

**Power over HDBaseT:** IEEE 802.3at Type 1 Class 3 (12.95 W) compliant HDBaseT PoE PD (Powered Device), capable of being powered by an HDBaseT PoE PSE (Power Sourcing Equipment)<sup>[3]</sup>

## Environmental

**Temperature:** 32° to 104°F (0° to 40°C)

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

**Heat Dissipation:** 20.2 BTU/hr

## Enclosure

**Chassis:** Metal, black finish, with (2) integral mounting flanges; vented top, front, and bottom

**Mounting:** Freestanding, surface mount, or attach to a single rack rail

## Dimensions

**Height:** 11.02 in (280 mm)

**Width:** 5.29 in (135 mm)

**Depth:** 1.08 in (28 mm)

## Weight

1.43 lb (647 g)

## MODELS & ACCESSORIES

### Available Models

**DM-TX-4K-202-C:** 4K DigitalMedia 8G+® Transmitter 202

### Included Accessories

**PW-2407WU:** Wall Mount Power Pack, 24VDC, 0.75A, 2.1mm, Universal (Qty. 1 included)

### Available Accessories

**DM-PSU-ULTRA-MIDSPAN:** DigitalMedia™ Ultra Midspan PoDM++ Injector

**DM-CBL-ULTRA-PC:** DigitalMedia™ Ultra Patch Cables

**DM-CONN-ULTRA-RECP:** DigitalMedia™ Ultra Keystone RJ45 Jack

**DM-CBL-ULTRA-NP:** DigitalMedia™ Ultra Cable, Non-Plenum Type CMR

**DM-CBL-ULTRA-P:** DigitalMedia™ Ultra Cable, Plenum Type CMP

**DM-CBL-ULTRA-LSZH:** DigitalMedia™ Ultra Cable, Low Smoke Zero Halogen (Available only in Europe)

**DM-CONN:** Connectors for DM-CBL-ULTRA DigitalMedia Ultra Cable

**DM-CBL-8G-NP:** DigitalMedia 8G™ Cable, non-plenum

**DM-CBL-8G-P:** DigitalMedia 8G™ Cable, plenum

**DM-8G-CONN:** Connectors for DM-CBL-8G DigitalMedia 8G™ Cable

**DM-8G-CRIMP:** Crimping Tool for DM-8G-CONN

**DM-8G-CONN-WG:** Connectors with Wire Guide for DM-CBL-8G

DigitalMedia 8G™ Cable

**DM-8G-CRIMP-WG:** Crimping Tool for DM-8G-CONN-WG

**CBL Series:** Crestron® Certified Interface Cables

**MP-WP Series:** Media Presentation Wall Plates

**MPI-WP Series:** Media Presentation Wall Plates - International Version

**CNSP-XX:** Custom Serial Interface Cable

**IRP2:** IR Emitter Probe w/Terminal Block Connector

**USB-EXT-DM:** USB over Ethernet Extender with Routing

### Notes:

1. 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 Cable Lengths" table for a detailed overview. Crestron legacy cable models **DM-CBL** DigitalMedia Cable and **DM-CBL-D** DigitalMedia D 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. #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.
2. To power the DM-TX-4K-202-C using PoDM (Power over DigitalMedia) requires connection to a DM switcher or other equipment that has a PoDM PSE port. Any wiring that is connected to a PoDM 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.
3. To power the DM-TX-4K-202-C using HDBaseT PoE requires connection to a switcher or other equipment that has an HDBaseT PoE PSE port. Any wiring that is connected to an HDBaseT 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.
4. USB-EXT-DM USB over Ethernet Extender Modules are sold separately. Refer to the [USB-EXT-DM](#) spec sheet for more information.
5. 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.
6. Crestron Connect It Cable Caddy (TT-100 series) sold separately. Refer to the [TT-100](#) spec sheet for more information.

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

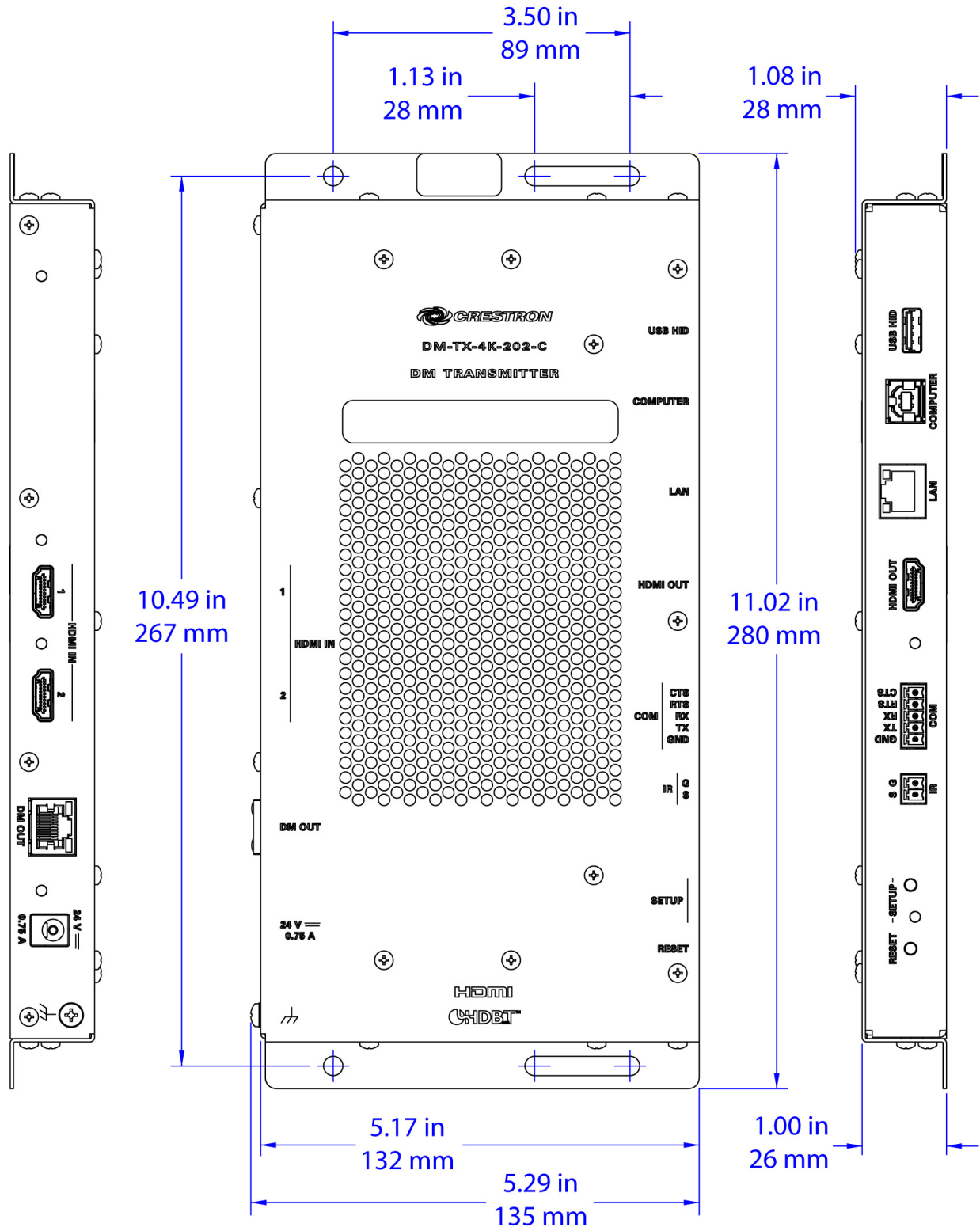
The specific patents that cover Crestron products are listed online at: [patents.crestron.com](http://patents.crestron.com).

Certain Crestron products contain open source software. For specific information, please visit [www.crestron.com/opensource](http://www.crestron.com/opensource).

# DM-TX-4K-202-C 4K DigitalMedia 8G+<sup>®</sup> Transmitter 202

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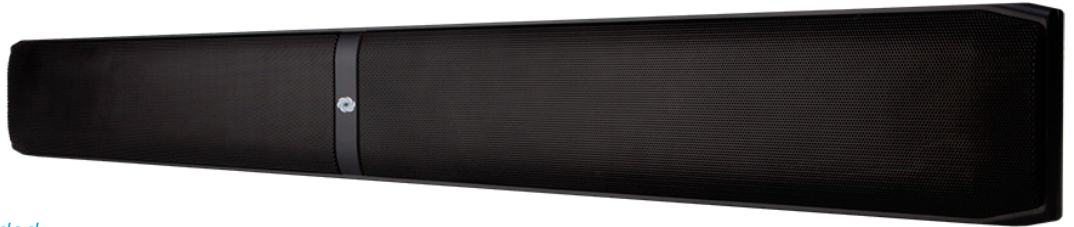
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# SAROS SB-200-P

## Saros® Sound Bar 200, Powered

- > High-quality, full-range amplified stereo sound bar
- > Delivers enhanced sound quality and performance for use with any flat panel display
- > Mounts to a wall or sits on a shelf
- > Balanced or unbalanced stereo line-level audio input<sup>[1]</sup>
- > Unbalanced stereo audio cable included
- > Powers on and off automatically
- > 100 to 240 Volt AC powered



The Saros® SB-200-P is a stereo sound bar designed to provide enhanced audio performance for a flat panel display. Its full-range, front-firing speakers offer an improvement over the small, rear-facing speakers typical of many display devices. The bracket included with the sound bar allows for attachment to a wall surface, or the unit can be placed on a shelf below or above the display.

Built-in amplification allows for direct connection to the line-level audio output of the display device, or to the output of an audio preamp, switcher, mixer, tv tuner, codec, or Crestron **DM® receiver**.<sup>[1]</sup> The amplifier powers on automatically when an audio input signal is detected, and powers off if no signal is detected for several minutes.

The SAROS SB-200-P sound bar is ideally suited for use with the **Crestron RL® 2** Group Collaboration System and other unified communication and videoconferencing systems. It is equally well-suited for use in any small to medium sized room or public space in a hotel, restaurant, museum, medical center, airport, office building, or residence.

## SPECIFICATIONS

### Features & Performance

**Woofers:** (2) 3 inch (76 mm) polypropylene cone w/rubber surround  
**Passive Radiator:** (2) 3 x 4-3/8 inch (76 x 112 mm) polypropylene cone w/rubber surround  
**Tweeters:** (2) 1 inch (25 mm) polyester dome  
**Amplifier Power:** 20 Watts per channel, stereo  
**Frequency Response:** 100 Hz to 20 kHz (±3 dB)  
**Output Sensitivity:** 83 dB SPL @ 1 meter, both channels driven @ 1 Watt  
**Input Sensitivity:** 0.75 Vrms per channel for full rated output

### Connections

**BALANCED AUDIO INPUTS:** (1) 5-pin 3.5 mm detachable terminal block; Balanced stereo line-level audio input<sup>[1]</sup>;  
Maximum Input Level: 0.85 Vrms;  
Input Impedance: 10k Ohms

**UNBALANCED AUDIO INPUTS:** (2) RCA female;  
Unbalanced stereo line-level audio input<sup>[1]</sup>;  
Maximum Input Level: 0.85 Vrms;  
Input Impedance: 10k Ohms;

*NOTE: Right-angle plugs may be required for wall mount applications. A 59 inch (150 cm) right-angle RCA to straight RCA stereo cable is included.*

**100-240V~50/60Hz 50W:** (1) IEC 60320 C8 main power inlet;  
Mates with removable power cord, included

### Controls & Indicators

**100-240V~50/60Hz 50W:** (1) Rocker switch, turns main power on or off  
**PWR:** (1) Blue LED, indicates an audio input signal has triggered the amplifier to turn on

### Power Requirements

**Main Power:** 50 Watts (500 mA maximum) @ 100-240 Volts AC, 50/60 Hz

### Environmental

**Temperature:** 41° to 104° F (5° to 40° C)  
**Humidity:** 10% to 90% RH (non-condensing)



# SAROS SB-200-P Saros® Sound Bar 200, Powered

## Construction

**Enclosure:** Plastic housing with perforate metal grille, black

**Mounting:** Freestanding or wall mount (bracket included)

## Dimensions

**Height:** 4.18 in (106 mm)

**Width:** 40.60 in (1031 mm)

**Depth:** 2.78 in (71 mm);

2.96 in (76 mm) with wall mount bracket

## Weight

7.8 lb (3.6 kg)

## MODELS & ACCESSORIES

### Available Models

SAROS SB-200-P-B: Saros® Sound Bar 200, Powered, Black

### Available Accessories

CBL Series: Crestron® Certified Interface Cables

#### Notes:

1. The SAROS SB-200-P has a fixed input level. It must be connected to an audio source equipped with adjustable audio output level.

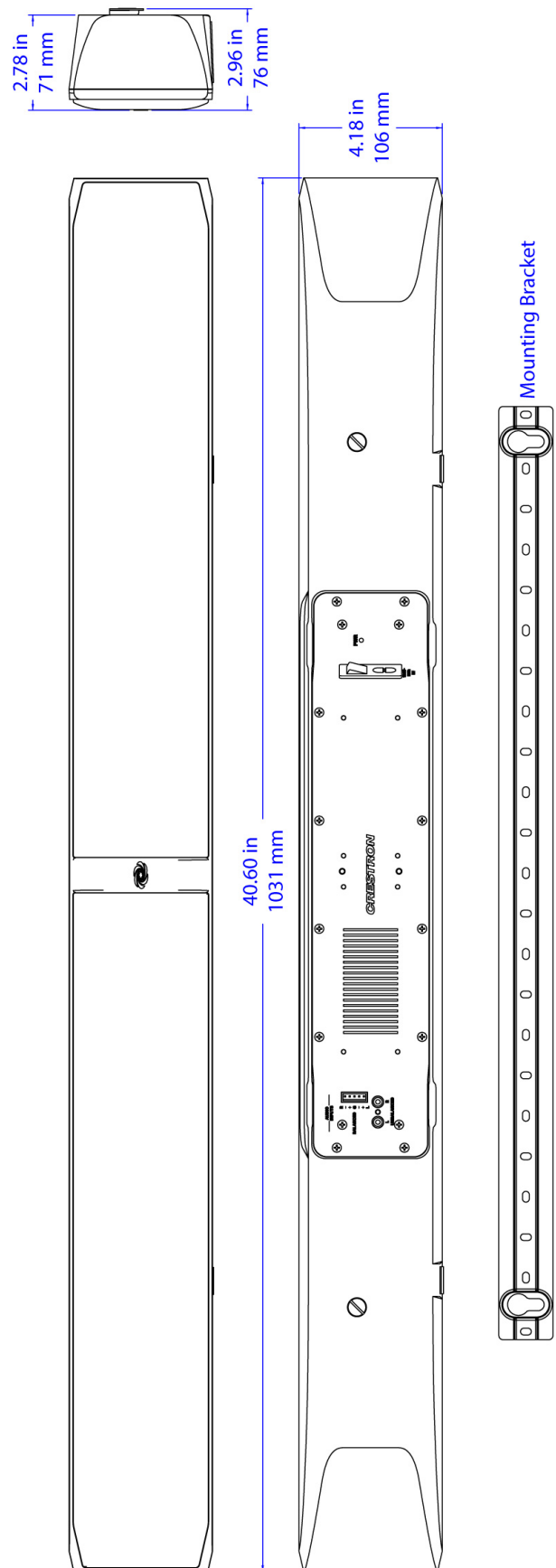
This product may be purchased from an authorized Crestron dealer. To find a dealer, please contact the Crestron sales representative for your area. A list of sales representatives is available online at [www.crestron.com/salesreps](http://www.crestron.com/salesreps) or by calling 800-237-2041.

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

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# TSW-1060

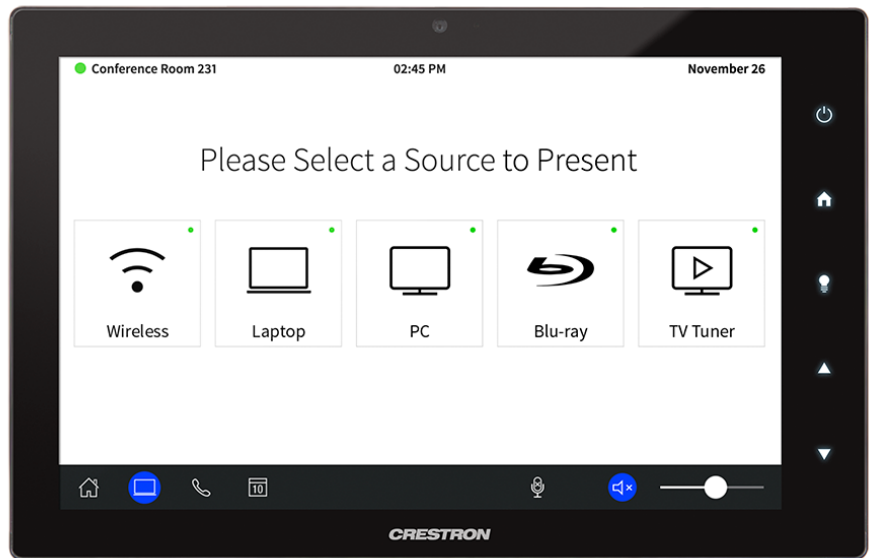
## 10.1" Touch Screen

- > Ultra clean, modern appearance
- > Thin profile and compact footprint
- > Affordable and easy to install
- > 10.1" widescreen active-matrix color display
- > 1280 x 800 WXGA 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<sup>[1,2]</sup>
- > H.264 or MJPEG streaming video display
- > Built-in 5 MP H.264 IP camera<sup>[2]</sup>
- > Built-in microphone and speakers<sup>[2]</sup>
- > Rava® SIP intercom and phone technology<sup>[2]</sup>
- > Native Sonos® app
- > Crestron Fusion® room scheduling<sup>[4]</sup>
- > Built-in PinPoint™ beacon<sup>[2,5]</sup>
- > Customizable audio feedback
- > Built-in web browsing<sup>[1]</sup>
- > 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<sup>[6]</sup>
- > Multi-surface and ADA compliance mounting options available<sup>[3]</sup>
- > Tabletop and swivel mount options available<sup>[3]</sup>
- > 5 RU rack mount option available<sup>[3]</sup>
- > 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 multiroom entertainment experience.

With its clean, contemporary design highlighted by edge-to-edge glass and stunning HD color graphics, the Crestron TSW-1060 touch screen makes an elegant statement on any wall, tabletop, lectern, or equipment rack.



Perfectly at home in the most contemporary residence or modern office building, its high-tech good looks underline its power for simplifying everyday tasks and functions throughout any facility.

The TSW-1060 delivers the ultimate touch screen experience in an unobtrusive, space-saving design. It features a brilliant, high-definition 10.1 inch capacitive touch screen display with Smart Graphics® and 5 soft-touch buttons. PoE connectivity and a range of mounting options make installation a breeze for both new and retrofit applications. Additional advanced features include the abilities to control any function using voice commands, view security cameras and other video sources, communicate using built-in video intercom and phone capabilities, manage meeting room scheduling, browse the Internet, and enjoy full access to your Sonos® Home Sound System.<sup>[1]</sup>

### Smart Graphics®

Crestron touch screens use Smart Graphics to deliver the ultimate user experience and the ultimate value by enabling the creation of dynamically rich user interfaces with incredible efficiency and unparalleled functionality. Using Smart Graphics, programmers can swiftly integrate fluid gesture-driven controls, animated feedback, rich metadata, embedded apps and widgets, and full-motion video for a deeply engaging and ultra-intuitive touch screen experience.

Crestron Smart Graphics offers these enhancements and more:

- Cool-looking graphical buttons, sliders, knobs, and gauges that are intuitive and fun to use
- Kinetic effects to enhance the feeling of realism, with lists and toolbars that scroll with momentum at the flick of a fingertip
- Drag-and-drop objects that snap into place, offering an easy way to switch sources
- Dashboard widgets to personalize the touch screen with clocks, weather, news, and other information<sup>[1]</sup>
- A power-saving screensaver that allows display of time, temperature, and other text content at a reduced brightness level

# TSW-1060 10.1" Touch Screen



TSW-1060-W-S – Shown in White



TSW-1060-B-S with TSW-1060-TTK-B-S Tabletop Kit

- 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-1060 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-1060 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-1060 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.<sup>[1,2]</sup>

## 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-1060 to display live streaming video from an IP camera, a streaming encoder (Crestron [CEN-NVS200](#), [DM-TXRX-100-STR](#), or similar<sup>[3]</sup>), 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-1060's integrated microphone and speakers.<sup>[2]</sup>

## Built-in Camera

A 5 megapixel camera is built into the TSW-1060 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<sup>[3]</sup>) 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.<sup>[2]</sup>

## 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-1060, enabling enhanced control of Sonos products as part of a complete Crestron system. The app checks for updates nightly so it's always current.<sup>[1]</sup>

## Room Scheduling

The TSW-1060 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-1060 allows anyone to see at-a-glance if the room is

# TSW-1060 10.1" Touch Screen

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-1060 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](#)<sup>[3]</sup>) can be added for enhanced visibility.<sup>[4]</sup>

## 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.<sup>[2,5]</sup>

## Web Browsing

Using its built-in web browser, the TSW-1060 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-1060. Of course, the web browser may also be used to simply browse the Internet, check traffic conditions, or look up a recipe.<sup>[1]</sup>

## On-Screen Keyboard

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

## Multi-Touch Support

The TSW-1060'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.

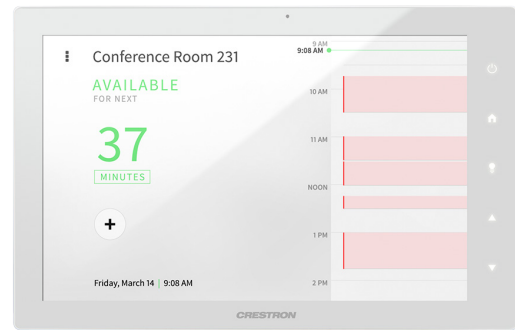
## Single-Wire Connectivity

A simple Ethernet LAN connection is all that is required to wire the TSW-1060, containing all control, video, intercom, and power signals within a single wire.

## Power over Ethernet

Using PoE technology, the TSW-1060 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](#)<sup>[3]</sup>) simply connects in line with the LAN cable at a convenient location. Crestron PoE switches ([CEN-SW-POE-5](#) or [CEN-SWPOE-16](#)<sup>[3]</sup>) may also be used to provide a total networking solution with built-in PoE.

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



Room scheduling application

## Wall or Lectern Mounting Options

Using the bracket provided, the TSW-1060 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-1060 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.<sup>[6]</sup>

When installing the TSW-1060 in place of an older Crestron touch screen (APAD, CT-1000, LC-1000, TPS-4L, TPS-6L, TPS-2000L, or TPS-3100L), Crestron offers Retrofit Mounting Brackets ([TSW-60-RMB](#) series<sup>[3]</sup>), which facilitate replacement without having to tear out the old mounting hardware or patch the wall.<sup>[6]</sup>

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](#)<sup>[3]</sup>). 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-1060-TTK](#)<sup>[3]</sup>), the TSW-1060 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-SMK](#)<sup>[3]</sup>).

## Rack Mount Option

The TSW-1060 can be mounted in a 19" EIA equipment rack using the optional Rack Mount Kit ([TSW-1060-RMK-2](#)<sup>[3]</sup>). When rack mounted, the touch screen occupies five rack spaces.

# TSW-1060 10.1" Touch Screen

## SPECIFICATIONS

### Touch Screen Display

**Display Type:** TFT active matrix color LCD  
**Size:** 10.1 inch (257 mm) diagonal  
**Aspect Ratio:** 16:10 WXGA  
**Resolution:** 1280 x 800 pixels  
**Brightness:** 400 nits (cd/m<sup>2</sup>)  
**Contrast:** 950:1  
**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<sup>[1]</sup>, multi-language on-screen keyboard, screensaver, single scalable streaming video window, native Sonos app<sup>[1]</sup>, native room scheduling application<sup>[4]</sup>, 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 Bokmal, 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)  
**Web Browser:** Arabic, Bulgarian, Catalan, Chinese, Croatian, Czech, Danish, Dutch, English, Filipino, Finnish, French, German, Greek, Hebrew, Hindi, Hungarian, Indonesian, Italian, Japanese, Korean, Latvian, Lithuanian, Norwegian Bokmal, Pashto, Persian, Polish, Portuguese, Romanian, Romansh, Russian, Serbian, Slovak, Slovenian, Spanish, Swedish, Thai, Turkish, Ukrainian, Vietnamese  
**Room Scheduling<sup>[4]</sup>:** Chinese (Simplified), Chinese (Traditional), Danish, Dutch (Netherlands), English (US), English (UK), French, German, Hebrew, Italian, Japanese, Korean, Norwegian, Portuguese (Brazil), Portuguese (Portugal), Russian, Spanish, Swedish

### Memory

**RAM:** 2 GB DDR3L  
**Storage:** Firmware/Application: 4 GB Class 10 microSD card;  
System: 4 GB eMMC  
**Maximum Project Size:** 600 MB

### Communications

**Ethernet:** 10/100 Mbps, auto-switching, auto-negotiating, auto-discovery, full/half duplex, TCP/IP, UDP/IP, CIP, DHCP, SSL, TLS, SSH, SFTP (SSH File Transfer Protocol), IEEE 802.1X, SNMP, IPv4 or IPv6, IEEE 802.3at compliant  
**USB:** USB 2.0 host for room availability hallway sign<sup>[3,4]</sup>  
**Bluetooth:** Crestron PinPoint proximity detection beacon<sup>[2,5]</sup>

### Streaming Decoder

**Video Formats:** H.264 (MPEG-4 part 10 AVC), MJPEG  
**Audio Formats:** AAC stereo  
**Bitrates:** Up to 25 Mbps (20 Mbps maximum recommended)  
**Streaming Input Resolutions:** Up to 1920x1080@30fps  
**Streaming Protocol:** RTSP

### Streaming Encoder & Camera<sup>[2]</sup>

**Camera Resolution:** 5.0 MP  
**Field of View:** 50° horizontal  
**Video Format:** H.264 (MPEG-4 part 10 AVC)  
**Streaming Output Resolution:** 1280x720  
**Streaming Protocol:** RTSP, ONVIF discovery

### Audio

**Features:** Built-in microphone and speakers, Rava SIP Intercom, multi-language voice recognition<sup>[1,2]</sup>  
**Audio Feedback Formats:** MP3

### Connectors

**LAN PoE:** (1) 8-pin RJ45 connector, female, with 2 LED indicators; 10Base-T/100Base-TX Ethernet port and 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<sup>[3,4]</sup>

### Power

#### Power over Ethernet:

- IEEE 802.3at Type 2 compliant PoE+ PD (Powered Device);
- Normally requests 15 Watts from an 802.3at Type 2 PSE with LLDP advanced power management;
- With room scheduling and USB enabled, requests 18 Watts from an 802.3at Type 2 PSE with LLDP;
- Requests 30 Watts (PoE+ Class 4) from an 802.3at Type 2 PSE without LLDP;
- Requests 15.4 Watts (PoE Class 0) from an 802.3af (or 802.3at Type 1) PSE

# TSW-1060 10.1" Touch Screen

*Note: Enabling the USB port requires use of an 802.3at Type 2 PoE+ 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:** 6.59 in (168 mm)  
**Width:** 10.23 in (260 mm)  
**Depth:** 1.52 in (39 mm)  
*Dimensions do not include the mounting bracket*

## Weight

23.9 oz (675 g)

## Compliance

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

## MODELS & ACCESSORIES

### Available Models

**TSW-1060-B-S:** 10.1" Touch Screen, Black Smooth  
**TSW-1060-W-S:** 10.1" Touch Screen, White Smooth  
**TSW-1060-NC-B-S:** 10.1" Touch Screen without Camera, Microphone, or PinPoint™ Beacon; Black Smooth  
**TSW-1060-NC-W-S:** 10.1" Touch Screen without Camera, Microphone, or PinPoint™ Beacon; White Smooth

### Available Accessories

**TSW-1060-TTK:** Tabletop Kit for TSW-1060  
**TSW-560/760/1060-SMK:** Swivel Mount Kit for TSW-1060-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-1060-RMB-3:** Retrofit Mounting Bracket – Converts TPS-6L to TSW-1060  
**TSW-1060-RMB-4:** Retrofit Mounting Bracket – Converts TPS-3100L to TSW-1060

**TSW-760/1060-MSMK:** Multi-Surface Mount Kit for TSW-760 & TSW-1060

**TSW-560/760-RMK-2:** Rack Mount Kit for TSW-1060

**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:

- Voice recognition, web browsing, weather information, Sonos app, and certain other functions require an Internet connection.
- The camera, microphone, and PinPoint beacon (Bluetooth) are included on models TSW-1060-B-S and TSW-1060-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-1060-NC-B-S and TSW-1060-NC-W-S, which have no physical camera, microphone, or Bluetooth transceiver installed.
- Item(s) sold separately. Refer to each product's spec sheet for complete information.
- 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. The touch screen must be powered by a PoE+ power source when a hallway sign is connected via USB.
- PinPoint beacon functionality will be enabled through a future update. When enabled, the TSW-1060 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.
- 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-BBI** back boxes, allowing the TSW-1060 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-BBI, without modification to the wall. If replacing an APAD, CT-1000, LC-1000, TPS-4L, TPS-6L, TPS-2000L, or TPS-3100L device, use the appropriate **TSW-60-RMB** retrofit mounting bracket (sold separately).

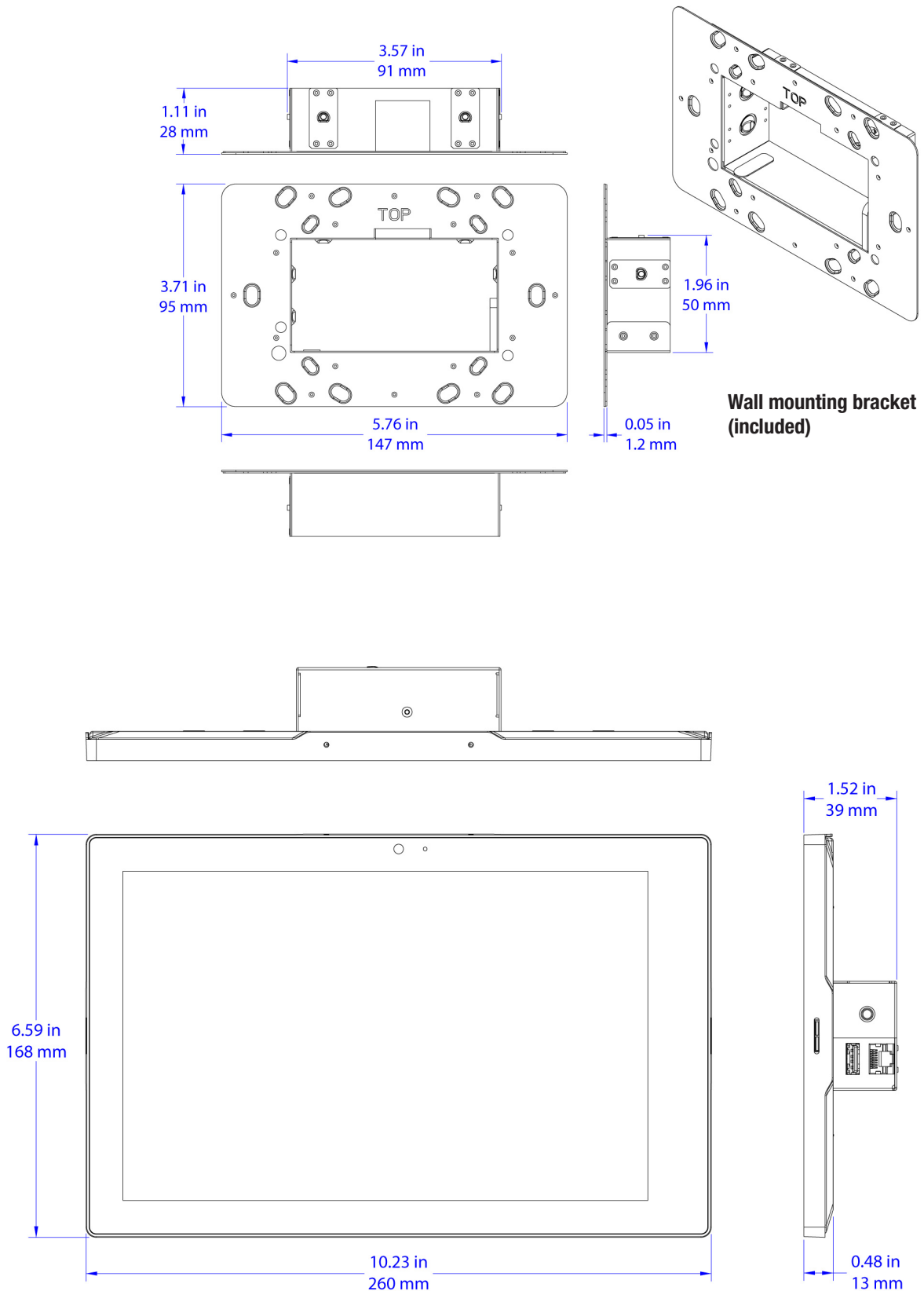
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# TSW-1060 10.1" Touch Screen



# TSW-1060-TTK

## Tabletop Kit for TSW-1060

- > Converts a TSW-1060 to a stylish 10.1" tabletop touch screen
- > Provides a 38° fixed operating angle
- > Allows permanent mounting using the optional swivel mount kit <sup>[1]</sup>
- > Provides the choice of a rear or bottom wire exit

The TSW-1060-TTK provides a stylish and convenient tabletop enclosure for a [TSW-1060 Touch Screen](#). The touch screen is angled when installed in the enclosure. The complete assembly may be placed on any flat, level surface.

An optional swivel mount accessory ([TSW-560/760/1060-SMK](#)) is available separately and provides a means for permanently mounting the enclosure while retaining the ability to rotate it for optimal positioning. The swivel range can be customized using optional limit screws, with a maximum of 330-degree rotation allowed. The swivel mount may be installed on any flat table, desk, or counter top surface with a thickness of 1 inch (25 mm) minimum to 1-3/8 inch (35 mm) maximum.

Wiring may be passed out the rear of the enclosure through a grommet and strain relief, or routed through the bottom for a very clean, cordless appearance. The rear wire opening can accommodate a single cable up to 1/4 inch (6 mm) diameter such as standard CAT5. The bottom opening measures 29/32 inch (23 mm) diameter, while the swivel mount<sup>[1]</sup> can accommodate wiring up to 11/16 inch (17 mm) diameter

## SPECIFICATIONS

### Enclosure

Plastic, black or white; 38° fixed angle device opening; freestanding or swivel mount installation <sup>[1]</sup>

### Dimensions

**Height:** 4.12 in (105 mm), 4.25 in (108 mm) with swivel mount <sup>[1]</sup>

**Width:** 7.86 in (200 mm)

**Depth:** 5.15 in (131 mm)

#### With touch screen installed:

**Height:** 5.45 in (139 mm), 5.58 in (142 mm) with swivel mount <sup>[1]</sup>

**Width:** 10.23 in (260 mm)

**Depth:** 5.80 in (148 mm)

### Weight

17.3 oz (491 g), 41.2 oz (1166 g) with touch screen installed

## MODELS & ACCESSORIES

### Available Models

**TSW-1060-TTK-B-S:** Tabletop Kit for TSW-1060, Black Smooth

**TSW-1060-TTK-W-S:** Tabletop Kit for TSW-1060, White Smooth



Shown with TSW-1060 Touch Screen (Sold Separately)

### Available Accessories

**TSW-560/760/1060-SMK:** Swivel Mount Kit for TSW-560-TTK, TSW-760-TTK & TSW-1060-TTK

Notes:

1. TSW-560/760/1060-SMK Swivel Mount Kit 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](http://www.crestron.com/salesreps) or by calling 800-237-2041.

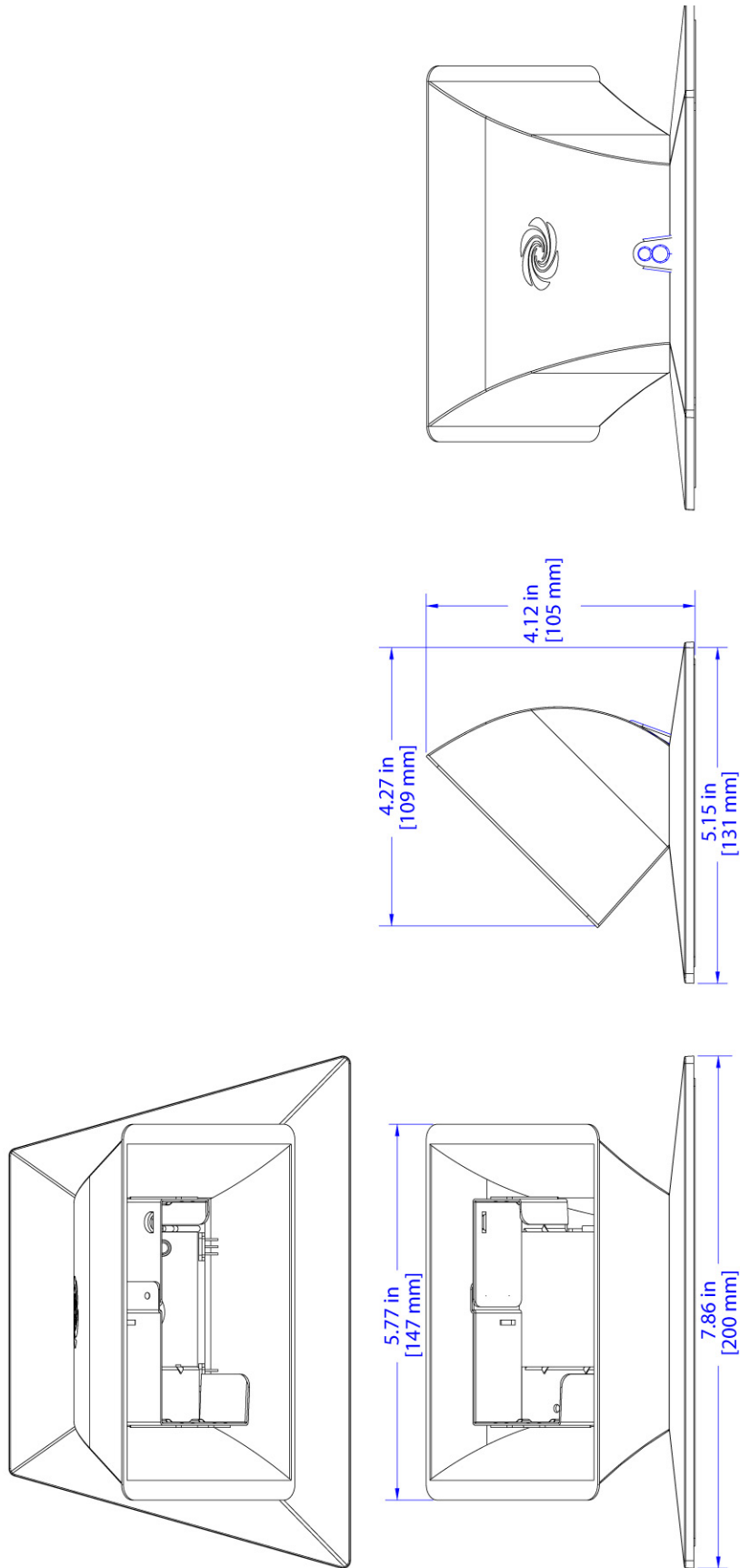
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# TSW-1060-TTK Tabletop Kit for TSW-1060

## CAD DRAWINGS



# GLS-ODT-C-CN

## Dual-Technology Occupancy Sensor with Cresnet<sup>®</sup>, 2000 sq ft

- > Ceiling-mount occupancy sensor
- > Dual-technology motion detection
- > 360 degree coverage pattern
- > 2,000 sq ft coverage area
- > Discreet, low-profile appearance
- > Extremely accurate and reliable sensing
- > Fully digital circuitry for low cost and high reliability
- > Built-in ambient light recognition
- > External photosensor input
- > Control system communications via Cresnet<sup>®</sup>
- > Grace Occupancy feature

The Crestron<sup>®</sup> GLS-ODT-C-CN sensor features accurate, dual-technology occupancy detection in a large room or space and delivers a powerful and cost-effective solution for reducing energy consumption and enhancing the functionality of lighting and environmental systems. The GLS-ODT-C-CN is a low-profile, ceiling-mounted occupancy sensor designed for areas up to 2,000 square feet, making it great for use in large spaces such as auditoriums, warehouses, and building lobbies. Reliable Cresnet<sup>®</sup> wired communications directly connects the sensor to a Crestron control system for integrated control of lighting, climate, and other devices in the room.

### Dual-Technology Occupancy Sensing

Achieving consistent and dependable occupancy sensing is accomplished using a combination of ultrasonic and passive infrared (PIR) sensing technologies. Ultrasonic motion detection is highly sensitive to small movements over a large area, while passive infrared sensing ensures superior immunity to false triggers from vibrations, inanimate objects, or movement in an adjacent corridor. Ultrasonic motion detection can be turned on for Side A, Side B, or both sides of the occupancy sensor to avoid false occupancy readings when the sensor is facing a hallway or doorway. The GLS-ODT-C-CN provides independent sensitivity adjustment for each sensor type for optimum performance in any space.

### Walk-Through Mode

This sensor detects momentary occupancy and automatically turns the lights off after 90 seconds with the built-in Walk-Through feature, reducing unnecessary energy consumption.

### Grace Occupancy Feature

When the lights turn off in a room programmed to vacancy only mode, a 15-second grace period starts during which the room lights can be turned on again by simply waving a hand to trigger the sensor.

### Ambient Light Recognition

A built-in photosensor detects the amount of ambient light in the room. When enabled, the photosensor can override the occupancy sensor's signal to turn on the lights if the ambient light level is above a set threshold, preventing lights from turning on when there is sufficient daylight in the room and also performing daylight harvesting and dimming when appropriate. Programming logic must be included to utilize this override feature.



### Versatile Installation

The GLS-ODT-C-CN achieves a discreet, nearly hidden appearance when installed on a typical drywall or droptile ceiling. Hardware is included for fast and simple mounting in a standard 4-inch octagon box or in a hole created with the help of the provided cutout template. The sensor includes a built-in Cresnet connection for data and power and an input for an optional external photosensor. For easy wiring, the 5-pin Cresnet connector is detachable.

### Cresnet

The GLS-ODT-C-CN uses the dependable Cresnet wired network for communication between devices. Cresnet provides a simple solution for configuring and wiring keypads and sensors as part of any complete Crestron system. Cresnet is the communications backbone for Crestron lighting dimmers, keypads, shades, thermostats, and many other devices. This flexible 4-wire bus provides data communications and 24 Volts DC power for all of the devices on the Cresnet network.

### IR Remote

A variety of parameters can be set for the GLS-ODT-C-CN by using the [GLS-REMOTE-ODT/OIR](#) remote (sold separately). This IR remote eliminates the need for a ladder when commissioning or setting up any system. The installer can simply stand underneath the sensor and use the remote to complete setup functions and fine-tune the sensor's settings after installation. The remote provides all of the following functionality:

- Adjusts the sensitivity for vacancy and occupancy states separately
- Enables or disables Walk-Through mode
- Changes settings for Timeout feature
- Turns LEDs ON/OFF during normal operation
- Sets or changes the Cresnet ID
- Uses Force Vacancy or Factory Reset

## SPECIFICATIONS

### Sensing

**Sensor Technology:** Passive infrared and ultrasonic (40 kHz)  
**Ambient Light Recognition:** Built-in photosensor (0-1000 lux)  
**Coverage Area:** 2,000 sq ft  
**Coverage Pattern:** 360 degrees

### LED Indicators

**IR:** (1) Red LED, indicates PIR detection  
**Ultrasonic:** (1) Green LED, indicates ultrasonic detection

### Controls

(1) Pushbutton located behind the front cover for testing the unit

### IR Remote (Sold Separately)

#### Parameters and Settings Available Via IR Remote:

- Separate occupancy and vacancy sensitivity settings
- Timeout (30s, 2m, 5m, 10m, 15m, 30m)
- Walk-Through mode “Short Timeout” (Enable/Disable)
- LEDs (Enable/Disable)
- PIR sensitivity (High, Med, Low, OFF), with the option to set separate occupancy and vacancy settings
- US sensitivity (High, Med, Low, OFF), with the option to set separate occupancy and vacancy settings
- US detection (Side A only, Side B only, Both)
- ID of sensor
- Factory Reset
- Force Vacancy
- (4) Custom buttons for future additional features

### Connections

**EXT:** (1) 5-pin 3.5 mm detachable terminal block;  
Cresnet® slave port and external photosensor input

### Environmental

**Temperature:** 32° to 104° F (0° to 40° C)  
**Humidity:** 10% to 90% RH (non-condensing)

### Power Requirements

**Current Consumption:** 45 mA at 24 Volts DC  
**Cresnet Power Usage:** 1 Watt

### Enclosure

**Housing:** Plastic, white  
**Mounting:** Mounts to a 4” (102 mm) octagon box or ~3-1/2” (88 mm) diameter hole created by provided cutout template;  
Includes mounting screws and integral toggle clamps;  
A 1-1/2” (38 mm) minimum mounting depth is recommended

### Dimensions

**Diameter:** 4.80 in (122 mm)  
**Depth:** 2.30 in (59 mm) overall, 0.97 in (25 mm) exposed

### Weight

5.1 oz (144 g)

### Standards & Certifications

UL60730-1, FCC, CE, C-Tick, IC, Plenum Rated, California Title 24 Code

## MODELS & ACCESSORIES

### Available Models

**GLS-ODT-C-CN:** Dual-Technology Occupancy Sensor with Cresnet®, 2000 sq ft

### Available Accessories

**GLS-REMOTE-ODT/OIR:** IR Remote for GLS-ODT-C-CN & GLS-OIR-C-CN

**GLSA-ODT/OIR-FP-500:** Occupancy Sensor Lens, 500 sq ft

**CRESNET-NP-TL-B250:** Cresnet® Control Cable, non-plenum, teal, 250 ft box

**CRESNET-NP-BK-B500:** Cresnet® Control Cable, non-plenum, black, 500 ft box

**CRESNET-NP-OR-B500:** Cresnet® Control Cable, non-plenum, orange, 500 ft box

**CRESNET-NP-TL-B500:** Cresnet® Control Cable, non-plenum, teal, 500 ft box

**CRESNET-NP-TL-SP500:** Cresnet® Control Cable, non-plenum, teal, 500 ft spool

**CRESNET-NP-TL-SP1000:** Cresnet® Control Cable, non-plenum, teal, 1000 ft spool

**CRESNET-P-BK-SP500:** Cresnet® Control Cable, plenum, black, 500 ft spool

**CRESNET-P-OR-SP500:** Cresnet® Control Cable, plenum, orange, 500 ft spool

**CRESNET-P-TL-SP500:** Cresnet® Control Cable, plenum, teal, 500 ft spool

**CRESNET-P-TL-SP1000:** Cresnet® Control Cable, plenum, teal, 1000 ft spool

#### Notes:

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

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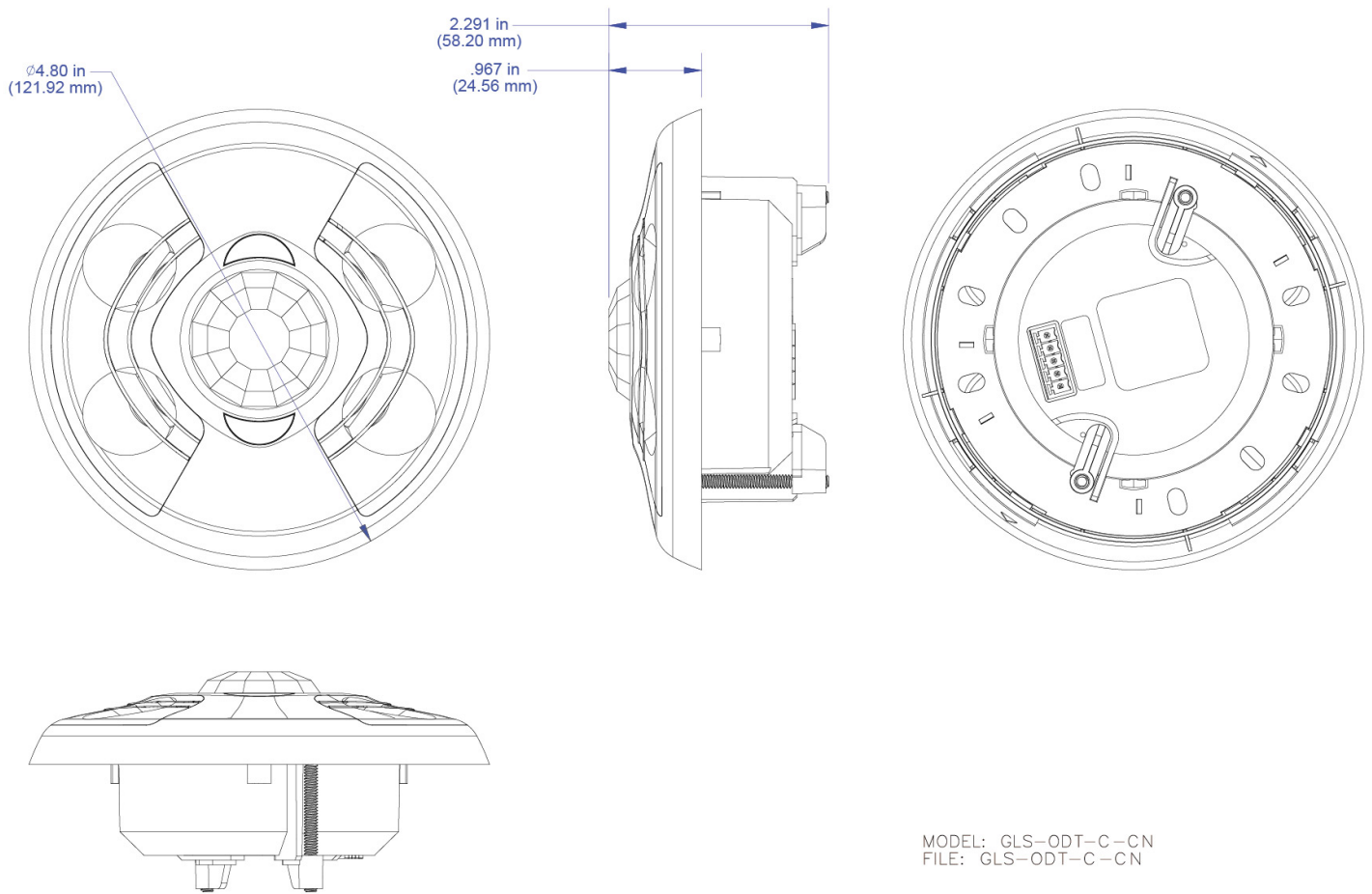
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# GLS-ODT-C-CN

Dual-Technology Occupancy Sensor with Cresnet<sup>®</sup>, 2000 sq ft

## CAD DRAWING



# CBL-HD

## Crestron® Certified HDMI® Interface Cable

- > High-speed Category 2 HDMI® cable
- > 24k gold-plated 19-pin Type A connectors
- > High-flex CL3-rated jacket
- > Crestron® guaranteed end-to-end system performance
- > Supports 4K60 4:4:4 video, 18 Gbps bandwidth @ up to 20 ft (6.1 m)
- > Supports 4K60 4:2:0 and 4K30 4:4:4 video @ 30 ft (9.1 m)
- > RoHS compliant
- > Available in 1.5, 3, 6, 12, 20, and 30 ft lengths

Crestron® Certified Interface Cables complete the total Crestron package, ensuring high-performance, end-to-end Crestron quality for every installation. A variety of cables is offered to support all types of analog and digital video and audio signals. A durable yet flexible CL3-rated jacket affords excellent handling with allowance for in-wall installation. Stylish and rugged connectors achieve an ultra-reliable connection with a designer appearance befitting the most high-end system.

The CBL-HD model is a high-speed Category 2 HDMI® cable featuring 24k gold-plated HDMI Type A male connectors at each end. A variety of popular lengths up to 30 feet is offered. Full 4K60 4:4:4 video is supported using any length up to 20 feet (6.1 meters). The 30 foot (9.1 meter) model supports 4K30 4:4:4 and 4K60 4:2:0 maximum.

#### Notes:

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

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

Certain Crestron products contain open source software. For specific information, please visit [www.crestron.com/opensource](http://www.crestron.com/opensource).

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#### Available Models

- CBL-HD-1.5:** Crestron® Certified HDMI® Interface Cable, 18 Gbps, 1.5 ft (0.45 m)
- CBL-HD-3:** Crestron® Certified HDMI® Interface Cable, 18 Gbps, 3 ft (0.91 m)
- CBL-HD-6:** Crestron® Certified HDMI® Interface Cable, 18 Gbps, 6 ft (1.8 m)
- CBL-HD-12:** Crestron® Certified HDMI® Interface Cable, 18 Gbps, 12 ft (3.6 m)
- CBL-HD-20:** Crestron® Certified HDMI® Interface Cable, 18 Gbps, 20 ft (6.1 m)
- CBL-HD-30:** Crestron® Certified HDMI® Interface Cable, 10.2 Gbps, 30 ft (9.1 m)