



- Complete room solution enables secure wired and wireless presentation with AirMedia® 2.0 wireless presentation from laptops, smartphones, and tablet devices, while delivering enterprise-grade security and content encryption to protect privacy and ensure compliance with IT policies
- Use with optional Crestron AirBoard<sup>™</sup> Whiteboard Capture System to display and share whiteboard content
- Integration with Appspace® digital signage software platform for content display when system is not in use
- HDMI® input provides wired connectivity for sources
- Customizable welcome screen provides clear instructions for presenters, displaying space availability, meeting details, and other messages on-screen
- Natively integrates with Microsoft 365®, Outlook®, Google Calendar™, and other calendaring applications as well as Crestron Fusion® room scheduling and enterprise management services
- XiO Cloud® service support enables remote provisioning and management

The AirMedia® Presentation System 200 (AM-200) enables secure wired and wireless presentation in lounges, lobbies, and open spaces, and integrates with popular calendaring platforms to maximize use. It is ideal for organizations with a dispersed workforce, open floor plans, and reliance on mobile devices to present.

## Connect and Present

The AM-200 mounts invisibly behind a wall-mount display and enables wired or wireless presentation with autoswitching. It features AirMedia 2.0 wireless presentation capability, an HDMI® input, HDMI output to the display (HD or WUXGA), and auto-on/off display control via CEC, serial, or IR. Connecting a source selects that input automatically and instantly displays the source image on the display. There's no programming required, no dongles to plug in, and no remotes to lose or batteries to replace.

## AirMedia Wireless Presentation

Crestron AirMedia technology allows for wireless presentation of content from a personal computer, laptop, or mobile device via a Wi-Fi® wireless network or an optional wireless access point.¹ AirMedia enables presentation of Full HD video at frame rates up to 30 fps. Desktop and laptop computer users can present content using downloadable client software, the AirMedia extension for Google Chrome™ browser, or Miracast™¹ screen mirroring technology (Windows 10 computers only). Android and iOS mobile devices can present with the AirMedia app or the Crestron PinPoint™ app. For more information about AirMedia, visit www.crestron.com/airmedia.²

## **HDMI Connectivity**

In addition to AirMedia, the AM-200 includes an HDMI input for direct connection of a mini-PC or other local source, or a portable laptop computer via an optional wall plate or cable. The HDMI input supports HD 1080p signals.<sup>3</sup>

#### AirMedia Canvas

The AM-200 can be configured to simultaneously present two sources to the display using the AirMedia Canvas feature. AirMedia Canvas automatically configures the best possible layout to maximize screen coverage based on the number of active sources, the type of sources, and their aspect ratios.<sup>4</sup> A connected touch screen can also be used to manage sources and their position on the display.

### Native Appspace Functionality

The AM-200 integrates with the Appspace content management application for digital signage which allows the AM-200 to show Appspace content on a connected display when a space is not in use.

## Works with Crestron AirBoard™ Whiteboard Capture System

The AM-200 works with the Crestron AirBoard™ Whiteboard Capture System (CCS-WB-1). Simply pair the CCS-WB-1 with the AM-200, and all of the CCS-WB-1 controls are available on the associated touch screen.<sup>5</sup> Manage remote participants, start and stop a whiteboard session, route the whiteboard content to the associated display, and email a snapshot or timeline of the whiteboard session.<sup>6</sup>

## **Enhanced Onscreen Experience**

When no presentation source is connected, the AM-200 displays a customizable welcome screen on the room display with simple instructions for connecting and presenting. Integration with Microsoft Exchange Server® (for users of Outlook® and Microsoft 365® software), Google Calendar™, or Crestron Fusion® room scheduling allows the space's availability and details about the current scheduled meeting to appear on-screen. As the meeting progresses, notifications appear periodically to indicate how much time is left in the meeting and what's scheduled next for the space. Pop-up messages, sent from Crestron Fusion, may also appear in the event of an emergency or other important announcement.





## XiO Cloud Provisioning and Management Service

The AM-200 is compatible with the XiO Cloud service, which enables installers and IT managers to deploy and manage thousands of devices in the amount of time it previously took to manage just one. The XiO Cloud service allows for system alerts and network management and provisioning. For more information, visit www.crestron.com/xiocloud.

## Crestron Fusion Room Monitoring

AM-200 presentation spaces can be managed and centrally monitored through the Crestron Fusion enterprise management service. By adding an optional wireless occupancy sensor, the AM-200 can report and log when people are present in the space, turning the display on and off accordingly, and returning unused spaces to inventory to maximize availability for new bookings. Crestron Fusion software supports room scheduling, and can integrate with a variety of third-party calendaring applications. In the event of a technical issue, instant alerts notify the help desk to rapidly resolve problems and maximize uptime and workflow. For more information about Crestron Fusion, visit www.crestron.com/fusion.

## **Enterprise-Grade Security**

The AirMedia Presentation System is an enterprise-grade solution that can be deployed across hundreds of spaces, and set up easily using just a web browser, Crestron Fusion, or XiO Cloud service. It employs standard network security protocols, including 802.1x network access control, Active Directory® authentication, and AES content encryption, to protect privacy and ensure compliance with your organization's IT policies.

## Add-on Control Options

Manual control of the AM-200 can be enabled by adding a Crestron TSW-760 or TSW-1060 series touch screen. The touch screen provides a small-screen view of the room schedule and meeting details, with controls for input source selection, display power on/off, and display volume and mute, plus a help page. Additional control options include a wireless 4-button keypad (ZUMMESH-KP10AMBATT series<sup>7</sup>), which provides simple on/off and volume control, a Power over Ethernet occupancy sensor (CEN-ODT-C-POE), and a wireless occupancy sensor (ZUMMESH-PIR-OCCUPANCY-BATT) for enhanced automation and room monitoring functionality. The wireless keypad and wireless occupancy sensor require the addition of the AV Bridge accessory (ZUMMESH-AVBRIDGE or ZUMMESH-AVBRIDGE-I), which connects to the AM-200 via USB.

## **Specifications**

## Communications

Ethernet

100 Mbps, auto-switching, auto-negotiating, auto-discovery, full/half duplex, TCP/IP, UDP/IP, DHCP, SSL, TLS, SSH, SFTP (SSH File Transfer Protocol), IEEE 802.1x, Active

Directory authentication, HTTPS web browser setup and XiO Cloud service, 802.3af and

802.3at Type 1 compliant

**AirMedia** Via Ethernet: IPv4, mDNS, TLS, AES<sup>2</sup>;

Via wireless access point: IEEE 802.11/b/g/n/ac, 2.4 GHz or 5 GHz

NOTE: The wireless access point requires the AM-USB-WIFI or AM-USB-WF-I AirMedia USB Adapter with Wi-Fi Connectivity (sold

separately).1

USB Host USB 2.0 for optional AV Bridge

(ZUMMESH-AVBRIDGE or

ZUMMESH-AVBRIDGE-I (sold separately)) for

use with wireless keypad control and occupancy sensing<sup>7</sup> or the AirMedia USB Adapter with Wi-Fi Connectivity (AM-USB-WIFI or AM-USB-WF-I (sold separately)) for use with Miracast screen

mirroring technology

**USB Device** USB 2.0 for computer console (installer setup

and firmware update)

**RS-232** 2-way display device control up to 115.2k baud

with hardware and software handshaking

IR/Serial 1-way display device control via infrared up to

 $1.1 \, \text{MHz}$  or serial TTL/RS-232 (0-5 V) up to

19.2k baud

**HDMI Input** HDCP 1.4, EDID; Supports management of

HDCP and EDID

HDMI Output HDCP 1.4, EDID, CEC; Supports management

of HDCP and EDID

AirMedia<sup>2</sup>

OS Support Apple® iOS®, Android™, Windows® 7, Windows

8, Windows 10, macOS®, Chrome OS™

Video Frame Up to 30 fps, audio supported

Rate

**NOTE:** Audio is not supported on Android devices





Output Resolutions 640x480@60Hz, 800x600@60Hz, 1024x768@60Hz, 1280x720@50Hz (720p50), 1280x720@60Hz (720p60), 1280x800@60Hz, 1366x768@60Hz, 1440x900@60Hz, 1600x900@60Hz, 1600x1200@60Hz, 1680x1050@60Hz, 1920x1080@50Hz (1080p50), 1920x1080@60Hz (1080p60)

NOTE: All video inputs will be scaled to the selected HDMI output resolution.

Bitrate Peak

0.25 to 8.5 Mbps, variable depending on content complexity

**Bitrate Average**  1.4 Mbps typical

#### **NOTES:**

- The bitrate for Apple native mirroring may deviate from above depending on the OS version and content
- The AirMedia Extension for the Google® Chrome browser relies on web technologies for screen sharing that are built-in to the web browser. Performance variations with motion video (quality and frame rate) may occur based upon the encoding capabilities of the Chrome OS device and the nature of the content being displayed (i.e., highmotion video).

Audio Format Stereo

## Video

Input Signal Types

AirMedia, HDMI (DVI & Dual-Mode DisplayPort<sup>™</sup> compatible<sup>3</sup>);

Simultaneous display of two sources with AirMedia Canvas<sup>4</sup>

Types

Output Signal HDMI (DVI compatible<sup>3</sup>)

Maximum Input Resolution 1920x1080@60Hz (HD 1080p60), 4:4:4, 36 bit color depth

NOTE: Other input resolutions are supported at pixel clock rates up to 148 MHz; interlaced video is not supported.

Output Resolutions 640x480@60Hz, 800x600@60Hz, 1024x768@60Hz8, 1280x720@50Hz (720p50), 1280x720@60Hz (720p60), 1280x800@60Hz8, 1366x768@60Hz8, 1440x900@60Hz8, 1600x900@60Hz9, 1600x1200@60Hz, 1680x1050@60Hz8,

1920x1080@50Hz (1080p50), 1920x1080@60Hz (1080p60),

1920x1200@60Hz

NOTE: All video inputs will be scaled to the selected HDMI output resolution.

Logo File Support

Background & GIF, JPEG, PNG

#### **Audio**

Input Signal Types

AirMedia, HDMI (Dual-Mode DisplayPort

compatible<sup>3</sup>)

Output Signal Type

**HDMI** 

Input/Output

2 channel LPCM

Format

NOTE: Audio input signals are passed to the output without any processing. Volume control capability requires a display device with discrete volume, up, down, and mute commands available via CEC, IP, IR, or RS-232.

#### Connectors

Console

(1) Micro-USB Type B connector, female; USB 2.0 device port for computer console

(installer setup)

IR

(1) 4-pin 3.5 mm detachable terminal block; IR/Serial output port for display device control;

IR output up to 1.1 MHz;

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

NOTE: IR port #2 is not used. IRP2 emitter sold separately.

COM

(1) 5-pin 3.5 mm detachable terminal block; Bidirectional RS-232 port for display device control:

Up to 115.2k baud, hardware and software handshaking support

**HDMI INPUT** (1) HDMI Type A connector, female;

HDMI digital video/audio input;

(DVI & Dual-Mode DisplayPort compatible<sup>3</sup>)



**HDMI OUTPUT** (1) HDMI Type A connector, female;

HDMI digital video/audio output;

(DVI compatible<sup>3</sup>)

(1) USB Type A connector, female; **USB** 

USB 2.0 host port for AV Bridge

(ZUMMESH-AVBRIDGE or

ZUMMESH-AVBRIDGE-I (sold separately))

or AirMedia USB Adapter with Wi-Fi Connectivity (AM-USB-WIFI or AM-USB-WF-I (sold separately))

LAN PoE (1) 8-pin RJ-45 connector, female;

100Base-TX Ethernet port and PoE PD port

24 VDC 0.75 A (1) 2.1 x 5.5 mm DC power connector;

24 Volt DC power input;

PW-2407WU power pack sold separately

Ground (1) 6-32 screw;

Chassis ground lug

## **Controls & Indicators**

**PWR** (1) Green LED, indicates operating power

supplied via the local power pack or PoE,

flashes while booting

**RESET** (1) Recessed push button for hardware reset

**SETUP** (1) Red LED and (1) recessed push button,

not used

**ONLINE** (1) Green LED (not used)

HDMI IN & OUT (2) Green LEDs, indicate HDMI signal

presence at the HDMI input or output

(2) LEDs, green LED indicates Ethernet link LAN PoE

status, amber LED indicates Ethernet

activity

#### **Power**

Power over **Ethernet** 

IEEE 802.3at Type 1 (802.3af compatible) Class O (12.95 W) PoE Powered Device

**Power Pack** (sold

Input: 100-240 VAC, 50/60 Hz; Output: 0.75 A @ 24 VDC;

Model: PW-2407WU separately)

Power Consumption 8 W (typical)

## **Environmental**

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

Humidity 10% to 95% RH (non-condensing)

Heat

27.3 BTU/hr

Dissipation

#### **Enclosure**

Chassis Metal, black finish, with (2) integral mounting

flanges, vented sides

Mounting Freestanding, surface mount, or attach to a

single rack rail

#### **Dimensions**

Height 6.42 in. (163 mm) Width 7.40 in. (188 mm) Depth 1.35 in. (34 mm)

## Weight

1 lb 3.6 oz (554 g)

## Compliance

## Regulatory Model: AM-200

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

## Model

#### AM-200

Media Presentation System 200

## **Available Accessories**

## AM-USB-WIFI

AirMedia® USB Adapter with Wi-Fi® Connectivity

### AM-USB-WF-I

AirMedia® USB Adapter with Wi-Fi® Connectivity, International

## **CEN-ODT-C-POE**

Dual-Technology Occupancy Sensor, PoE

## CEN-SW-POE-5 5-Port PoE Switch

## CEN-SW-POE-16

16-Port Managed PoE Switch

## PW-2407-WU

Wall Mount Power Pack, 24 VDC, 0.75 A, 2.1 mm, Universal

#### PWE-4803RU

PoE Injector

## SW-FUSION-C-3

Crestron Fusion® Cloud; 250 rooms; 3-year

#### SW-FUSION-P-L

Crestron Fusion® On-premises; Unlimited rooms; lifetime

## SW-HS-x-C

Crestron Fusion® Cloud Room Scheduling

## SW-HS-x-P

Crestron Fusion® On-premises Room Scheduling





#### **SW-XIOC-API**

XiO Cloud® Provisioning and Management Service, REST API License

#### SW-XIOC-EM

XiO Cloud® Provisioning and Management Service, Endpoint Management License

#### SW-XIOC-S

XiO Cloud® Provisioning and Management Service, Support License

#### TSW-760

7 in. Touch Screen

#### TSW-1060

10 in. Touch Screen

#### **ZUMMESH-AVBRIDGE**

AV Bridge - Wireless Control Integration Module

#### **ZUMMESH-AVBRIDGE-I**

AV Bridge - Wireless Control Integration Module, International

#### **ZUMMESH-KP10AMBATT**

AirMedia® Wireless Keypad for AM-200 & AM-300, Battery-Powered

#### ZUMMESH-PIR-OCCUPANCY-BATT

Züm® Wireless Battery-Powered Occupancy Sensor

#### Notes:

- Requires the AM-USB-WIFI or AM-USB-WF-I (sold separately). Use of the AM-USB-WIFI or AM-USB-WF-I prevents use of the ZUMMESH-AVBRIDGE, ZUMMESH-AVBRIDGE-I, ZUMMESH-KP10AMBATT, and ZUMMESH-PIR-OCCUPANCY-BATT.
- AirMedia wireless presentation requires a wired network connection between the AM-200 and an external Wi-Fi wireless access point (not included). Laptops may alternately connect to AirMedia using a wired Ethernet connection. Full-motion video performance is dependent upon the performance of the network and the sending device. Computer client software and mobile device apps are available for download at https://www.crestron.com/airmedia.
- Using an appropriate adapter or interface cable, the HDMI input can support DVI and Dual-Mode DisplayPort sources, and the HDMI output can provide a DVI signal. CBL-HD-DVI interface cables are available separately.
- 4. When the AirMedia Canvas feature is enabled, the 4:2:0 color space is used for high definition sources connected to the HDMI input port. When the AirMedia Canvas feature is disabled, the 4:4:4 color space is used. If the 4:4:4 color space is required by sources connected to the HDMI input port, the AirMedia Canvas feature should be disabled.
- A touch screen (such as the <u>TSW-760</u> or <u>TSW-1060</u> (sold separately)) is required for operation.
- Crestron AirBoard integration with the AM-200/300 is entirely configuration-based. When the Crestron AirBoard device is paired with the AM-200/300, programmatic control is not supported in SIMPL Windows or SIMPL# Pro. If custom program controls for a Crestron AirBoard device are required, use a DGE-100 in place of an AM-200/300.
- Wireless keypad functionality is limited to power and volume control, and requires use of a display device that supports discrete power on, power off, volume up, and volume down commands via CEC, IP, IR, or RS-232.
- 8. With or without reduced blanking.
- 9. With reduced blanking only.

This product may be purchased from select authorized Crestron dealers and distributors. To find a dealer or distributor, please contact the Crestron sales representative for your area. A list of sales representatives is available online at <a href="https://www.crestron.com/How-To-Buy/Find-a-Representative">www.crestron.com/How-To-Buy/Find-a-Representative</a> or by calling 855-263-8754

This product is covered under the Crestron standard limited warranty. Refer to www.crestron.com/warranty for full details.

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

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

Crestron, the Crestron logo, AirMedia, Crestron AirBoard, Crestron Fusion, PinPoint, XiO Cloud, and Züm are either trademarks or registered trademarks of Crestron Electronics, Inc. in the United States and/or other countries. Apple and macOS are either trademarks or registered trademarks of Apple, Inc. in the United States and/or other countries. Appspace is either a trademark or a registered trademark of Appspace Inc. in the United States and/or other countries. IOS is either a trademark or registered trademark of Cisco Systems, Inc. in the United States and/or other countries. Android, Chrome, Chrome OS, Google, and Google Calendar are either trademarks or registered trademarks of Google Inc. in the United States and/or other countries. HDMI and the HDMI logo are either trademarks or registered trademarks of HDMI Licensing LLC in the United States and/or other countries. Active Directory, Microsoft, Microsoft Exchange Server, Microsoft 365, Miracast, Outlook, and Windows are either trademarks or registered trademarks of Microsoft Corporation in the United States and/or other countries. UL is either a trademark or registered trademark of Underwriters Laboratories, Inc. in the United States and/or other countries. DisplayPort is either a trademark or registered trademark of Video Electronics Standards Association in the United States and/or other countries. Wi-Fi is either a trademark or registered trademark of Wi-Fi Alliance in the United States and/or other countries. Other trademarks, registered trademarks, and trade names may be used in this document to refer to either the entities claiming the marks and names or their products. Crestron disclaims any proprietary interest in the marks and names of others. Crestron is not responsible for errors in typography or photography.

Specifications are subject to change without notice.

©2020 Crestron Electronics, Inc.

Rev 09/23/20





