AM-101 AirMedia® Presentation Gateway

> Enables wireless presentation of HD content using laptops, tablets, and smartphones
> Low cost, easy to use, and easy to deploy across any number of rooms
> Compatible with Windows®, OS X®, Apple® iOS®, and Android™
> Displays up to four presentation sources at once in Quad View
> Integrates with DigitalMedia™, CaptureLiveHD®, Crestron RL®, and other systems
> Customizable welcome screen provides clear instructions for presenters
> Integrates seamlessly with Crestron Connected® displays[2]
> Compatible with virtually any display device[2]
> Supports display resolutions up to Full HD 1080p and UXGA/WUXGA
> Provides HDMI®, VGA, and analog audio outputs
> Choice of connection methods accommodates all types of users and organizations
> Supports up to 32 simultaneous presenter connections
> Remote View allows viewing and saving of presentation images through a web browser
> Compact form factor fits easily behind flat panels and above projectors
> Leverages existing wired and wireless network infrastructure and security policies[3]
> Desktop applications for PC and Mac® can be silently deployed enterprise-wide by the IT department
> No software installation required for guest PC and Mac users
> Free downloadable app for iOS and Android mobile devices
> Integrates with Crestron® control systems via Ethernet
> Fully managed over the network using Crestron Fusion® or SNMP
> Protects privacy with secure network communication and AV content encryption[3]

With AirMedia® anyone can walk into a room and wirelessly present PowerPoint®, Excel®, Word and PDF documents, as well as photos, on the room display from their personal Apple® iOS® or Android™ mobile device. MacBook® and PC laptops can be connected seamlessly as well, making presentations from most any device fast and easy. There are no wires to hook up, no complicated settings to configure, and no AV or control system is required. Simply connect via the local Wi-Fi® network and start sharing content from your portable device.[1]

Present Anything — Without Wires
Bring your own device to a meeting or collaboration session and share your content through the big screen without hooking up any wires. AirMedia supports Windows® and OS X® computers, as well as Apple iOS and Android mobile devices. Presenters using a Mac® or PC can connect to AirMedia without any special software installed, while iPad® and other mobile device users need only download the free AirMedia app from the App Store® or Google Play™.

Leverage the Power of Your PC or Mac®
When using a PC or Mac with AirMedia your entire desktop is shared. Anything you see on your desktop will be sent to the display. Give a presentation or collaborate on a project … AirMedia will share anything.

You can even share dynamic content such as videos, supporting frame rates of 15 fps and beyond.[1]

Present Using Your Mobile Device
AirMedia can present Microsoft® Office documents (PowerPoint, Word, Excel), as well as PDFs and photos, from a smartphone or tablet device. Open the document in AirMedia and it is shared on the room display. Deliver dynamic and interactive presentations by simply paging through as you would any other application. There’s no more being tied to a laptop or podium. You can even share your apps using the “Shot&Show” feature. Simply take a screen shot and AirMedia will show it. Device mirroring can also be used to share content from a compatible Apple iOS device.

Multi-User Support
Imagine 32 devices all connected and ready to share, but instead of a clutter of cables entangled across the tabletop or floor, there are just people and their Wi-Fi enabled devices. AirMedia lets up to 32 participants connect at once, switching from one to the next for seamless collaboration on the fly.
Quad View
Using Quad View mode, up to four sources can be displayed simultaneously, enabling participants to compare and contrast different content on screen at once without having to toggle back and forth.

Moderator Mode
For classrooms and other environments with many presenters, moderator mode (Layout Control) allows the instructor or meeting leader to easily control the presentation using the AirMedia web page or a Crestron touch screen. With up to 32 participants connected, the moderator can continually control whose content is being displayed, and adjust where that content is positioned in the Quad View.

Play, Pause, Stop
Presenting with AirMedia is simple using intuitive Play, Pause, and Stop buttons that appear right on your device’s screen. Clicking the Play button selects your device as the presentation source, sending whatever is on your screen to the room display. When done presenting, just click the Stop button to stop displaying your device.

While presenting, it is often necessary to navigate away from your presentation to find some other related content. AirMedia lets you pause the presentation, freezing the current image on screen so others can continue to view it while you look through your personal files and emails. Once you’ve located the new content and brought it up on your device, simply click Play to resume the presentation.

Remote Viewing
The onscreen presentation is only part of the AirMedia experience. Using Remote View mode, participants and spectators can view the presentation through their own web browsers. Remote View displays the presentation as static images, which can be refreshed on demand or set to refresh automatically every few seconds. Remote viewers can even save images of the presentation to their personal device for later review.

Connection Methods
To accommodate a full range of presentation environments, users, and IT preferences, AirMedia offers several ways for a presenter to connect:

- **Installed Application** — This option installs a small software application directly onto each presentation computer. The installed application affords the highest performance and allows presenters to scan the local network for AirMedia gateways, connecting automatically if only one gateway is found, or displaying a list of gateways to choose from when multiple gateways are found. Alternately, a preset list of gateways can be deployed, eliminating the need to scan the network. Each gateway is clearly identified by its room name or some other friendly term. The Installed App method allows organizations to manage user rights, and includes the option to assign PIN codes to each individual gateway. Installation of the application can be deployed silently to personal computers across the enterprise, ensuring everyone in the organization is ready and able to connect to any approved AirMedia device with a single mouse click.

- **Web Browser** — Great for guest presenters, this option requires nothing to be pre-installed. Presenters simply follow the instructions displayed on the room display to point their web browsers to the web address of the local AirMedia gateway. A small utility runs on the presenter’s computer, allowing the presentation to begin without hassle. As an option, the presenter may choose to download the utility software, allowing them to connect directly to that same gateway in the future without using the web browser.

- **USB Thumb Drive** — As an alternative to using the web browser method, the utility software may be loaded on a USB thumb drive providing a hardware dongle that simply plugs into the presenter’s computer.

Crestron Connected® Display Control
Pairing AirMedia with a Crestron Connected projector or flat-panel display offers a seamless presentation solution. The AirMedia gateway communicates directly over the network with the display device, turning it on when a participant connects, and shutting it down after the last participant disconnects. Controls are also provided for turning the display on and off manually.

For more information about Crestron Connected products, please visit [www.crestron.com/products/crestron_connected/](http://www.crestron.com/products/crestron_connected/).

Easy Installation
At just over an inch thick, the compact AirMedia gateway device fits easily above a projector or behind a flat panel display. A surface mounting bracket is included for attachment to a wall or ceiling, with HDMI® and VGA/analog audio outputs provided for connection to the display device. AirMedia connects to existing Ethernet infrastructure and takes advantage of your organization’s Wi-Fi network, affording an optimal wireless interface for laptops and mobile devices.
System Integration
AirMedia isn’t limited to small, single-display applications. It can be used with DigitalMedia™, CaptureLiveHD®, Crestron RL®, and other AV systems to provide a wireless option alongside DM®, HDMI, and other interfaces. AirMedia can be integrated and controlled as part of a complete Crestron control system using a touch screen, wireless remote, or mobile device.

Network Management
Managing multiple AirMedia gateways is enabled over the network using Crestron Fusion® Enterprise Management Software or SNMP (Simple Network Management Protocol). Crestron Fusion provides a comprehensive integrated platform for creating truly smart buildings that save energy and enhance worker productivity. SNMP support allows integration with third-party IT management software, allowing network administrators to directly manage AirMedia gateways on the network in an IT-friendly format.

AV Content Encryption
To ensure your content is protected, video and audio are encrypted over the network using the 256-bit Salsa20 stream cipher.\(^3\)

Customizable Welcome Screen
To facilitate a user-friendly experience, AirMedia provides a customizable home screen that appears on the room display to welcome meeting participants as they enter the room. The welcome screen can display the company logo and room name along with easy to follow instructions, enabling presenters to connect their devices and start presenting quickly for maximum productivity.

SPECIFICATIONS

Features

Users: Supports up to 32 users (presentation device connections)
Quad View: Allows simultaneous display of up to four presentation sources in a quad window
Moderator Mode (Layout Control): Enables a single moderator to control the presentation via a web browser or control system touch screen
Remote View: Allows up to 40 remote users to connect via a web browser to view and save images of the presentation
Display Control: Controls the display device over IP as part of the presentation \(^2\)
Control System Integration: Allows communication over IP with a Crestron control system for remote control and integration with other equipment
Network Management: Supports enterprise management and monitoring using SNMP or Crestron Fusion® software

Windows® and OS X® Client Software

OS Support: Windows XP, Windows Vista™, Windows 7, Windows 8, Window 10, Mac® OS X (versions 10.5 thru 10.11)
Video Frame Rate: 15 fps (typical), audio supported

Mobile Apps

OS Support: Apple® iOS®, Android™

Supported Files: MS PowerPoint® (.ppt, .pptx), MS Word (.doc, .docx), MS Excel® (.xls, .xlsx), PDF (.pdf), JPEG (.jpg, .jpeg)

Shot&Show: Shares a static image of any app by using the screen shot function
Device Mirroring: Shares the screen image and audio from an Apple iOS or Mac OS X device

Video

Output Signal Types: HDMI® (DVI compatible\(^4\)), VGA/RGBHV
Output Resolutions, Progressive: 800x600@60Hz, 1024x768@60Hz, 1280x720@60Hz (720p60), 1280x800@60Hz, 1280x1024@60Hz, 1360x768@60Hz, 1400x1050@60Hz, 1440x900@60Hz, 1600x1200@60Hz, 1920x1080@60Hz (1080p60), 1920x1200@60Hz
Output Resolutions, Interlaced: 1920x1080@30Hz (1080i30)
Underscan: Up to 7.5%

Audio

Output Signal Types: HDMI, analog stereo
Formats, HDMI: PCM 2-channel
Formats, Analog: Stereo 2-channel

Communications

Ethernet: 10/100 Mbps, auto-switching, auto-negotiating, full/half duplex, TCP/IP, UDP/IP, CIP, DHCP, SSL, TLS, SSH, SNMP, IPv4, HTTPS web server, Salsa20

Connectors

5VDC 2.6A: (1) 2.0 x 3.0 mm DC power connector, 5 Volt DC power input, Universal power pack included
AUDIO: (1) 3.5 mm TRS mini phone jack, unbalanced stereo line-level audio output
HDMI: (1) HDMI Type A connector, female, HDMI digital video/audio output (DVI compatible\(^4\))
VGA: (1) HD15 connector, female, RGBHV (VGA) video output
LAN: (1) 8-pin RJ45 connector , female; 10Base-T/100Base-TX Ethernet port
SERVICE: (1) USB Type A connector, female, for factory use only

Controls & Indicators

PWR: (1) Bi-color LED, red indicates booting, flashing red indicates updating firmware, green indicates operating normally
LAN (rear): (2) LEDs, green LED indicates Ethernet link status, amber LED indicates Ethernet activity
Reset (bottom): (1) Pushbutton, resets the AM-101 to its factory settings

Power Requirements

Power Pack: 2.6 Amps @ 5 Volts DC; 0.3 Amps (maximum) @ 100-240 Volts AC, 50/60 Hz power pack included
AM-101  AirMedia® Presentation Gateway

Environmental

Temperature: 32° to 104° F (0° to 40° C)
Humidity: 10% to 90% RH (non-condensing)
Heat Dissipation: 16 BTU/hr

Enclosure

Chassis: Metal, black
Mounting: Freestanding or surface mount (surface mount bracket included)

Dimensions

Height: 1.10 in (28 mm);
     1.21 in (31 mm) with bracket
Width: 6.15 in (156 mm)
Depth: 2.39 in (61 mm)

Weight
8.4 oz (238 g)

MODELS & ACCESSORIES

Available Models
AM-101: AirMedia® Presentation Gateway

Available Accessories
CBL-Series: Crestron® Certified Interface Cables

Notes:

1. Wired Ethernet connection is also supported. Performance quality for presentation of full-motion video content is dependent upon the performance of the network and presentation device.
2. Use of a “Crestron Connected” display device enables direct control over IP. Other display devices may be controlled by adding a Crestron control system with custom programming. Visit www.crestron.com/products/crestron_connected/ for more information about Crestron Connected products.
3. Content encryption is not supported by the AirMedia App for Android.
4. HDMI requires an appropriate adapter or interface cable to accommodate a DVI signal. CBL-HD-DVI interface cables are available separately.

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

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

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

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