

Crestron **AM-100**
AirMedia™ Presentation Gateway

Operations Guide



Regulatory Compliance

As of the date of manufacture, the AM-100 has been tested and found to comply with specifications for CE marking and standards per EMC and Radiocommunications Compliance Labelling.



Federal Communications Commission (FCC) Compliance Statement

This device complies with part 15 of the FCC Rules. Operation is subject to the following conditions:

(1) This device may not cause harmful interference and (2) this device must accept any interference received, including interference that may cause undesired operation.

CAUTION: Changes or modifications not expressly approved by the manufacturer responsible for compliance could void the user's authority to operate the equipment.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna
- Increase the separation between the equipment and receiver
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected
- Consult the dealer or an experienced radio/TV technician for help

Industry Canada (IC) Compliance Statement

CAN ICES-3(B)/NMB-3(B)

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

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AirMedia Presentation Gateway: AM-100

Introduction

AirMedia™ by Crestron® delivers a very simple, low-cost wireless HD presentation solution. Using AirMedia, anyone can walk into a huddle room or any other meeting space with a laptop, tablet, or smartphone and present wirelessly through the room's HD display or projector. 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 HD content from your portable device.*

Features and Functions

- 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

(Continued on following page)

- * Wireless connection requires a wireless access point to be deployed on the same network as the AirMedia Presentation Gateway. 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.

Features and Functions

(Continued)

- Customizable welcome screen provides clear instructions for presenters
- Integrates seamlessly with Crestron Connected™ displays¹
- Compatible with virtually any display device¹
- Supports Full HD 1080p and UXGA display resolutions
- 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 infrastructure²

Total BYOD Support

AirMedia allows the user to “Bring Your Own Device” to any meeting or collaboration session, and share content through the big screen no matter the platform or operating system. AirMedia currently 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 StoreSM in iTunes[®] or Google PlayTM.

1. 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.
2. Wireless connection requires a wireless access point to be deployed on the same network as the AirMedia Presentation Gateway. Wired Ethernet connection is also supported. Performance quality for presentation of full-motion video content is dependent upon the performance of the network and computer.

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 users connect at once, switching from one device to the next for seamless collaboration on the fly.

Quad View

Using Quad View, up to four sources can be displayed simultaneously, enabling users to compare and contrast different content on screen at once without having to toggle back and forth.

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, participants and spectators can view the presentation through their own Web browsers. Remote View displays the presentation as still images, which can be refreshed on demand or set to refresh automatically every few seconds. Users 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 device. The installed application affords the highest performance and allows users 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.
- **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 user connects, and shutting it down after the last user 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/.

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 is not limited to standalone 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 also be controlled and monitored as part of a complete Crestron control system using a touch screen, wireless remote, mobile device or Crestron Fusion[™] Enterprise Management Software.

Customizable Welcome Screen

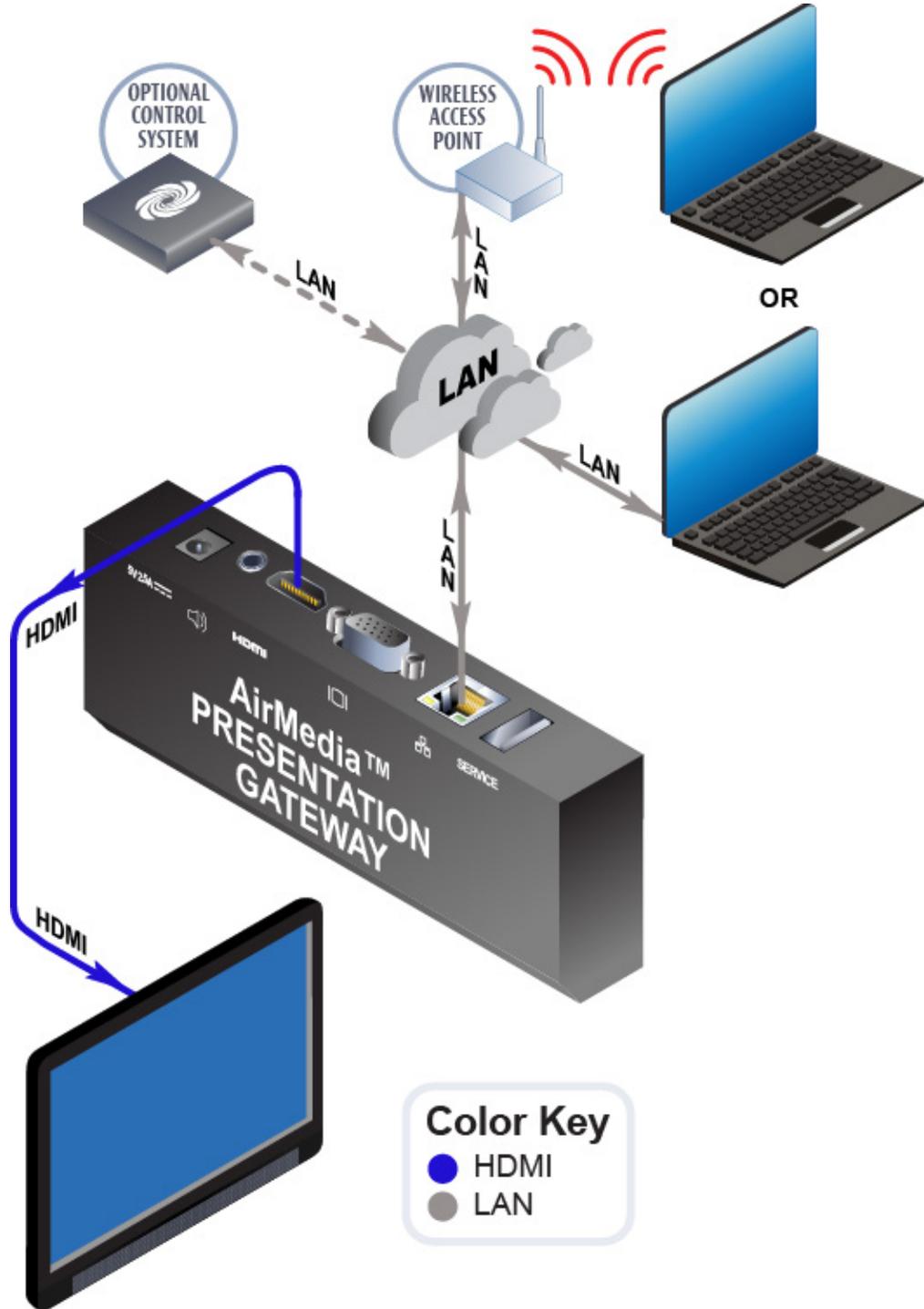
To facilitate a user-friendly experience, AirMedia provides a customizable home screen that appears on the room display to welcome meeting participants as they enter the room. The welcome screen can display the company logo and room name along with easy to follow instructions, enabling presenters to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

* 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.

Applications

The following diagram shows an AM-100 in a lecture hall application.

AM-100 in a Lecture Hall Application



Specifications

Specifications for the AM-100 are listed in the following table.

AM-100 Specifications

SPECIFICATION	DETAILS
Web Server & Client Software	
OS Support	Windows XP, Vista, 7, or 8; Mac OS X 10.5 thru 10.8; Apple iOS; Android
Users	Supports up to 32 users (presentation device connections)
Features	
Quad View	Allows simultaneous display of up to four presentation sources in a quad window
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 ¹
Control System Integration	Allows communication over IP with a Crestron control system for remote control and integration with other equipment and Crestron Fusion software
Video	
Output Signal Types	HDMI, RGB
Output Formats	HDMI, DVI ² , HD video up to 1080p60, computer up to UXGA

(Continued on following page)

AM-100 Specifications (Continued)

SPECIFICATION	DETAILS
Video (continued)	
Output Resolutions, Progressive	800 x 600 @ 60 Hz 1024 x 768 @ 60 Hz 1280 x 720 @ 60 Hz (720p60) 1280 x 768 @ 60 Hz 1280 x 800 @ 60 Hz 1360 x 768 @ 60 Hz 1440 x 900 @ 60 Hz 1600 x 1200 @ 60 Hz 1920 x 1080 @ 60 Hz (1080p60)
Output Resolutions, Interlaced	1920 x 1080 @ 30 Hz (1080i30)
Underscan	Up to 7.5%
Audio	
Output Signal Types Formats, HDMI	HDMI, analog stereo PCM 2-channel
Formats, Analog	Stereo 2-channel
Communications	
Ethernet	10/100 Mbps, auto-switching, auto-negotiating, full/half duplex, DHCP, Web server
Power Requirements	0.3 amps (maximum) @ 100-240 volts ac, 50/60 Hz power pack included
Power Pack	2.6 amps @ 5 volts dc

(Continued on following page)

AM-100 Specifications (Continued)

SPECIFICATION	DETAILS
Environmental	
Installation Location	Indoor use only
Temperature	32° to 104° F (0° to 40° C)
Humidity	10% to 90% RH (non-condensing)
Heat Dissipation	16 Btu/h
Enclosure	
Chassis	Metal, black
Mounting	Freestanding or surface mount (surface mount bracket included)
Dimensions	
Height	1.10 in (28 mm) (without bracket) 1.21 in (31 mm) (with bracket)
Width	6.15 in (156 mm)
Depth	2.39 in (61 mm)
Weight	9 oz (238 g)
Included Accessory	Wall mount bracket
Available Accessory	
CBL Series	Crestron Certified Interface Cables

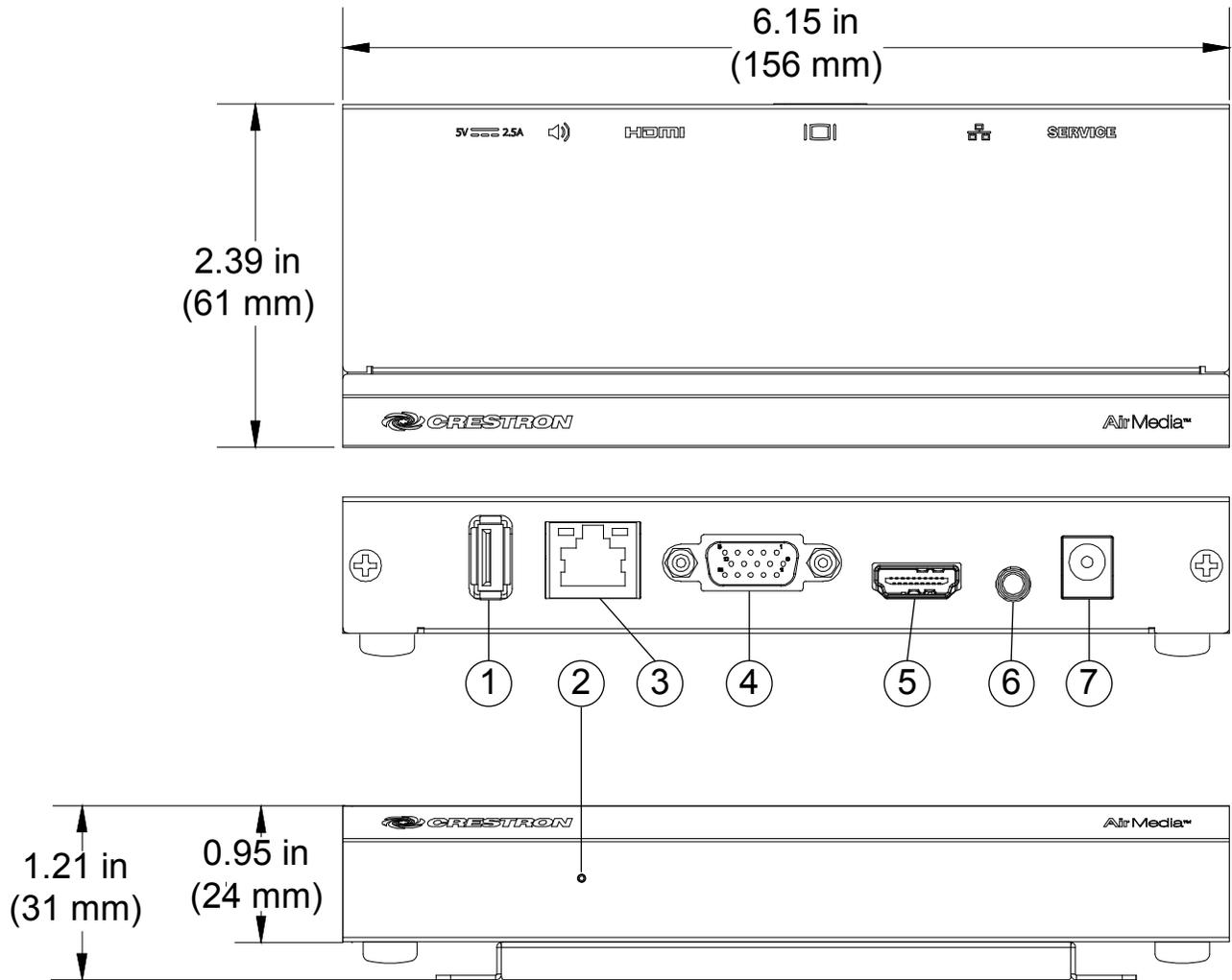
1. Use of a Crestron Connected display device enables direct control over IP. Other display devices may be controlled by adding a Crestron control system with custom programming. Visit www.crestron.com/products/crestron_connected/ for more information about Crestron Connected products.
2. HDMI requires an appropriate adapter or interface cable to accommodate a DVI signal. CBL-HD-DVI interface cables available separately.

Physical Description

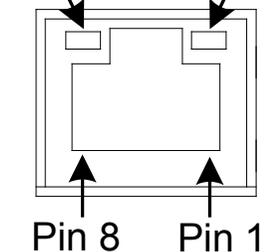
This section provides information on the connections, controls and indicators available on the AM-100.

AM-100 Physical View

AM-100 Overall Dimensions

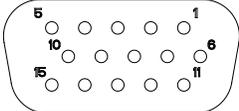
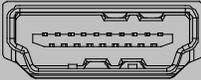
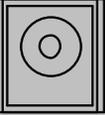


Connectors, Controls & Indicators

#	CONNECTORS, CONTROLS & INDICATORS	DESCRIPTION																		
1	USB	Not used																		
2	Power LED	(1) LED, indicates operational status: Green: Operational Red: Booting Flashing Red/Green: Programming firmware																		
3	<p>LAN</p> <p>Green LED Yellow LED</p>  <p>Pin 8 Pin 1</p>	<p>(1) 8-pin RJ-45 with 2 LED indicators; 10/100BASE-T Ethernet port; Green LED indicates link status; Yellow LED indicates Ethernet activity</p> <table border="1"> <thead> <tr> <th>PIN</th> <th>SIGNALS</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>TX+</td> </tr> <tr> <td>2</td> <td>TX-</td> </tr> <tr> <td>3</td> <td>RX+</td> </tr> <tr> <td>4</td> <td>Connected to pin 5</td> </tr> <tr> <td>5</td> <td>Connected to pin 4</td> </tr> <tr> <td>6</td> <td>RX-</td> </tr> <tr> <td>7</td> <td>Connected to pin 8</td> </tr> <tr> <td>8</td> <td>Connected to pin 7</td> </tr> </tbody> </table>	PIN	SIGNALS	1	TX+	2	TX-	3	RX+	4	Connected to pin 5	5	Connected to pin 4	6	RX-	7	Connected to pin 8	8	Connected to pin 7
PIN	SIGNALS																			
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(Continued on following page)

Connectors, Controls & Indicators (Continued)

#	CONNECTORS, CONTROLS & INDICATORS	DESCRIPTION																																
4	RGBHV OUT 	Standard HD15 connector configured to optimize performance <table border="1" data-bbox="935 562 1300 1220"> <thead> <tr> <th>PIN</th> <th>SIGNALS</th> </tr> </thead> <tbody> <tr><td>1</td><td>Red Video</td></tr> <tr><td>2</td><td>Green Video</td></tr> <tr><td>3</td><td>Blue Video</td></tr> <tr><td>4</td><td>Reserved</td></tr> <tr><td>5</td><td>Ground</td></tr> <tr><td>6</td><td>Red Ground</td></tr> <tr><td>7</td><td>Green Ground</td></tr> <tr><td>8</td><td>Blue Ground</td></tr> <tr><td>9</td><td>No Connect</td></tr> <tr><td>10</td><td>Ground</td></tr> <tr><td>11</td><td>No Connect</td></tr> <tr><td>12</td><td>No Connect</td></tr> <tr><td>13</td><td>Horizontal Sync</td></tr> <tr><td>14</td><td>Vertical Sync</td></tr> <tr><td>15</td><td>No Connect</td></tr> </tbody> </table>	PIN	SIGNALS	1	Red Video	2	Green Video	3	Blue Video	4	Reserved	5	Ground	6	Red Ground	7	Green Ground	8	Blue Ground	9	No Connect	10	Ground	11	No Connect	12	No Connect	13	Horizontal Sync	14	Vertical Sync	15	No Connect
PIN	SIGNALS																																	
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9	No Connect																																	
10	Ground																																	
11	No Connect																																	
12	No Connect																																	
13	Horizontal Sync																																	
14	Vertical Sync																																	
15	No Connect																																	
5	HDMI OUT 	(1) 19-pin Type A HDMI female; HDMI digital audio/video output																																
6	AUDIO OUT 	(1) 3.5 mm mini TRS line out jack																																
7	5V 2.6A 	(1) 2.1 x 5.5 mm dc power connector; 5 volt dc power input; Power pack included																																

Setup

Network Wiring

When wiring the Ethernet network, consider the following:

- Use Crestron power supplies for Crestron equipment.
- Provide sufficient power to the system.

Unlike other Crestron network devices, the AM-100 does not use Cresnet[®] for communications between the device and the control system. The AM-100 requires the use of a high-speed Ethernet connection for control system communications.

For general information on connecting Ethernet devices in a Crestron system, refer to the Crestron e-Control[®] Reference Guide (Doc. 6052) at www.crestron.com/manuals.

Identity Code

NOTE: The latest software can be downloaded from the Crestron Web site (www.crestron.com/software).

The IP ID is set from the AM-100's "Network Setup" screen. For details, refer to "IP Setup" on page 23. The IP IDs of multiple AM-100 devices in the same system must be unique.

When setting the IP ID, consider the following:

- The IP ID of each unit must match an IP ID specified in the Crestron Studio[™] or SIMPL Windows program.
- Each device using IP to communicate with a control system must have a unique IP ID.

Supplied Hardware

A wall-mount bracket is included to mount the AM-100 to a surface. The hardware supplied with the AM-100 is listed in the following table.

Supplied Hardware for the AM-100

DESCRIPTION	QUANTITY
Bracket	1
Screw	2
Washer	2

Installation**Ventilation**

The AM-100 should be used in a well-ventilated area.

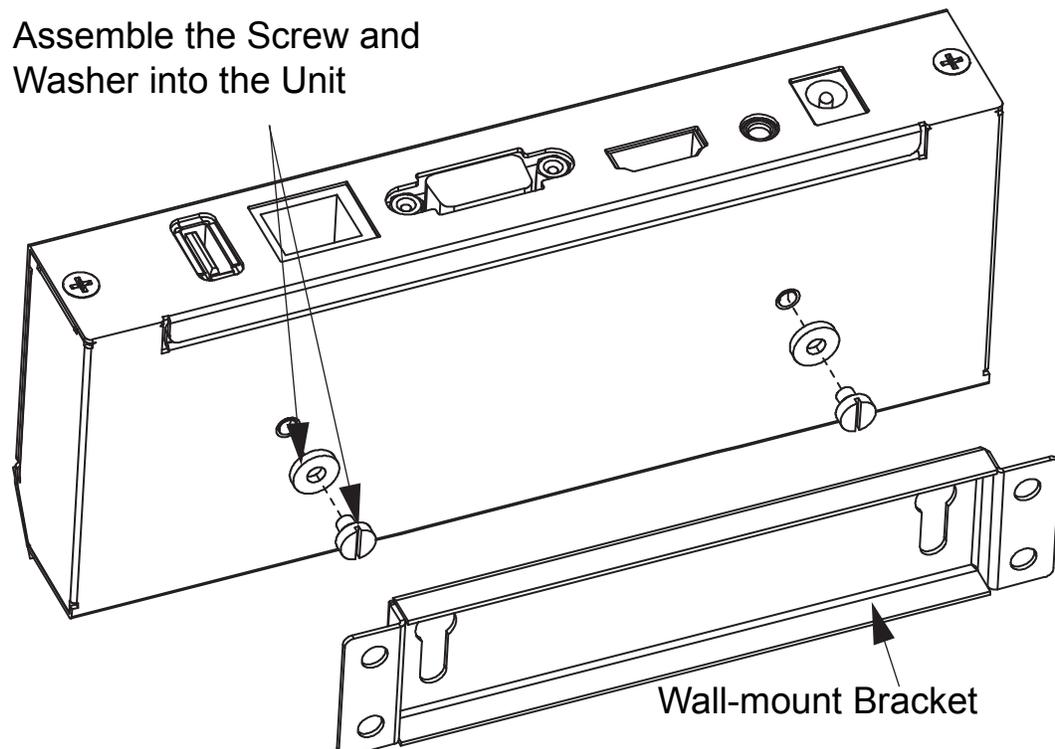
To prevent overheating, do not operate this product in an area that exceeds the environmental temperature range listed in the table of specifications. Consider using forced air ventilation to reduce overheating. Consideration must be given if installed in a closed or multi-unit rack assembly since the operating ambient temperature of the environment may be greater than the room ambient temperature. Contact with thermal insulating materials should be avoided on all sides of the unit.

Wall Mounting

The AM-100 can be mounted using the included wall-mount bracket. Refer to the following illustration for installation instructions.

Supplied Hardware for the AM-100

Assemble the Screw and Washer into the Unit

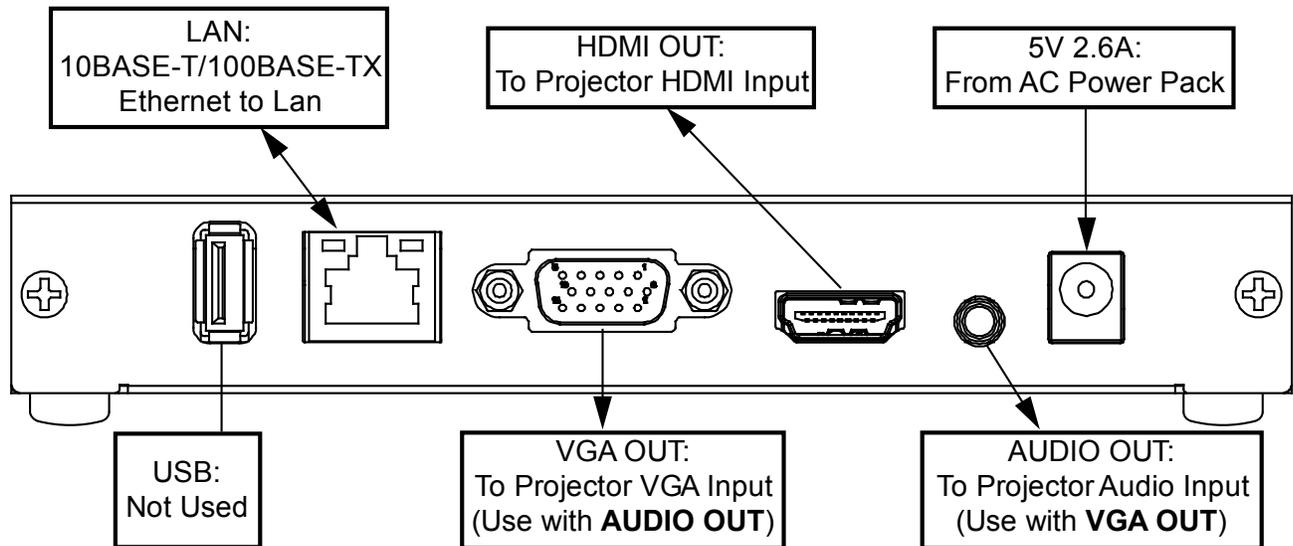


Hardware Hookup

Make the necessary connections as called out in the illustration that follows this paragraph. Apply power after all connections have been made.

When making connections to the AM-100, use Crestron power supplies for Crestron equipment.

Hardware Connections for the AM-100



NOTE: Typical installation uses only the **HDMI OUT** or the **VGA OUT-AUDIO OUT** connection.

NOTE: To prevent overheating, do not operate this product in an area that exceeds the environmental temperature range listed in the table of specifications.

Configuration

Make all connections as described in “Hardware Hookup” on page 15.
The connected display device shows the AM-100 welcome screen.

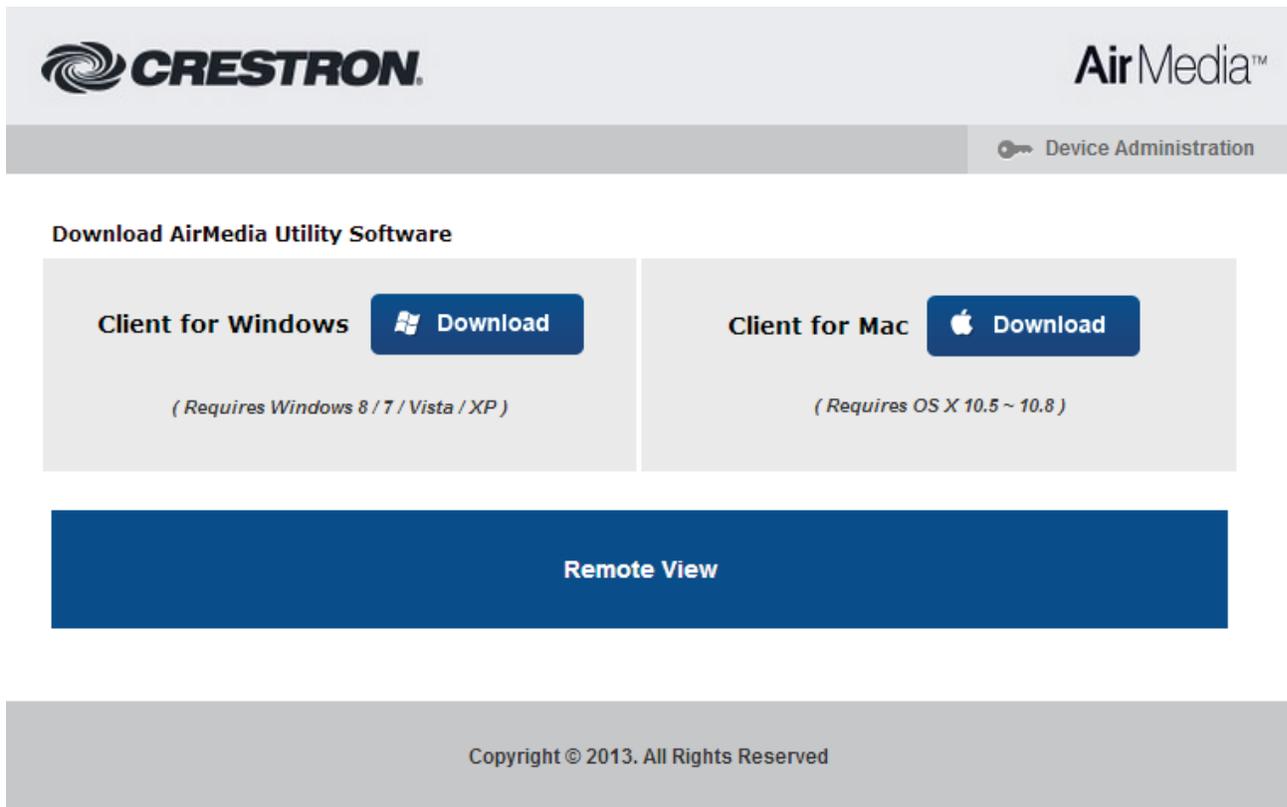
AM-100 Welcome Screen



1. On the computer, open a Web browser and navigate to the Web address or the IP address that is displayed on top-left of the AM-100 welcome screen. The download screen is displayed.

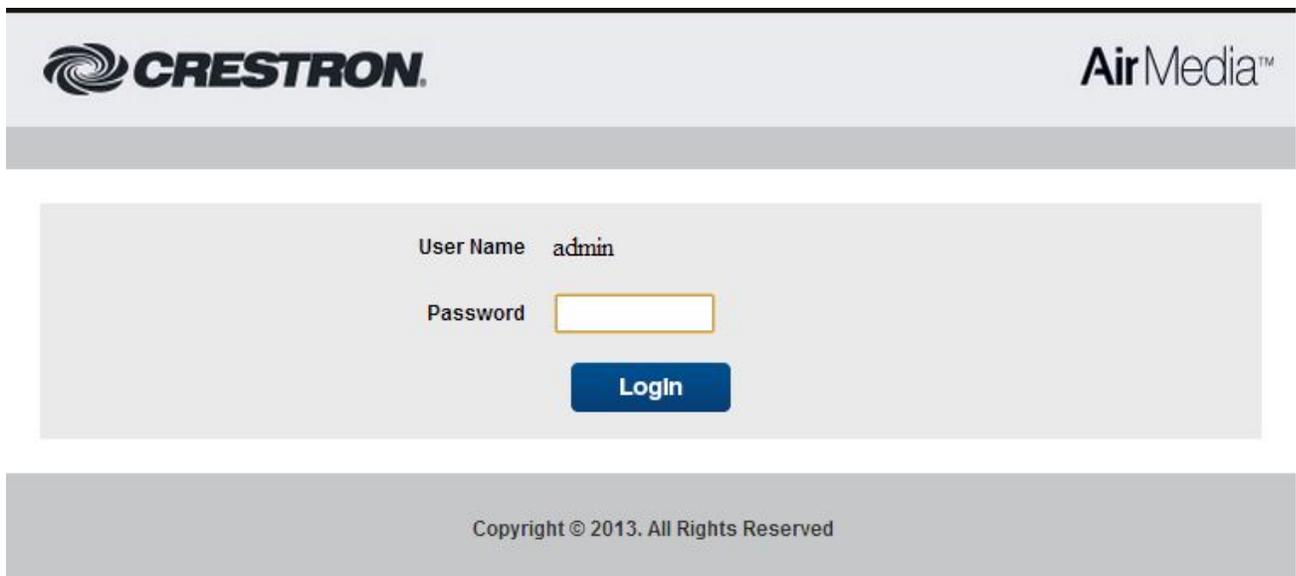
NOTE: By default, the AM-100 displays the IP address in parentheses to assist in configuration of the device. The IP address can be hidden so that the end user only sees a friendly URL (i.e., <http://AirMedia-019647>). For details, refer to “OSD Setup” which starts on page 24.

Download Screen



2. Click **Device Administration**. The *Admin Login* screen is displayed.

Admin Login Screen



3. Enter the admin password (the default password is *admin*) and click **Login**. The “Device Administration” menu showing the “System Status” screen is displayed.

“Device Administration” Menu Showing the “System Status” Screen

The screenshot displays the "System Status" screen within the "Device Administration" menu. The interface includes a navigation sidebar on the left with options such as "System Status", "Device Setup", "Network Setup", "OSD Setup", "Change Password", "Firmware Upgrade", "Remote View Setup", "Reset to Default", and "Reboot System". The main content area is divided into three sections: "Model", "Network Status", and "Connection Status".

Model	
Name	Crestron AirMedia
Firmware Version	1.0.2.1
Network Status	
IP Address	172.30.16.31
Subnet Mask	255.255.255.0
Default Gateway	172.30.16.1
MAC Address	00:12:5F:01:AF:4A
Connection Status	
Status	Idle
Total Users	0

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NOTE: Changes made in any section of the “Device Administration” menu require that the AM-100 be rebooted for the settings to take effect. For details, refer to “Reboot System” on page 29 for details.

The “Device Administration” menu is divided into nine sections:

- *System Status* — Select to display the operational status of the AM-100.
- *Device Setup* — Select to set the AM-100’s output resolution, under scan setting, and access code.
- *Network Setup* — Select to set the AM-100’s parameters for operating in a network environment.
- *OSD Setup* — Select to configure the AM-100’s onscreen display.
- *Change Password* — Select to change the admin password.

- *Firmware Upgrade* — Select to import or export the system configuration to match other AM-100 devices and upgrade the AM-100's firmware.
- *Remote View Setup* — Select to specify the auto refresh interval.
- *Reset to Default* — Select to reset the AM-100 to the default settings.
- *Reboot System* — Select to reboot the AM-100.

System Status

Click **System Status** to display the operational status of the AM-100.

“Device Administration” Menu Showing the “System Status” Screen

Model	
Name	Crestron AirMedia
Firmware Version	1.0.2.1
Network Status	
IP Address	172.30.16.31
Subnet Mask	255.255.255.0
Default Gateway	172.30.16.1
MAC Address	00:12:5F:01:AF:4A
Connection Status	
Status	Idle
Total Users	0

The “System Status” screen displays the device’s name (hostname), its firmware version, network status (IP address, subnet mask, default gateway, and MAC address), and connection status.

Device Setup

Click **Device Setup** to configure the output resolution, under scan setting, and access code.

“Device Administration” Menu Showing the “Device Setup” Screen

Output Resolution

The output resolution is set from the *Output Resolution* drop-down menu.

To adjust the output resolution, select a resolution setting from the *Output Resolution* drop-down menu.

To apply any changes, click **Apply**. To cancel, click **Cancel**.

Under Scan

The amount of under scan applied to the displayed image is set from the *Under Scan* menu.

To adjust the amount of under scan applied to the displayed image, select an amount.

To apply any changes, click **Apply**. To cancel, click **Cancel**.

Code

An access code can be used to limit access to the AM-100. The code feature can be disabled, randomly generated, or fixed to a specific value.

To specify how access codes are used. Select one of the following options from the “Code” menu:

- *Disabled* — Any user with the AM-100’s IP address or hostname can open a client connection without entering an access code.
- *Random* — The AM-100 can randomly generate an access code. A new code is generated when the last connected presenter disconnects from the AM-100. The access code is displayed on the top-right of the *AM-100 Welcome* screen as shown on page 16.
- *Use the following code* — The AM-100 can display a user-specified, four-digit, access code. The access code is displayed on the top-right of the *AM-100 Welcome* screen as shown on page 16.

To apply any changes, click **Apply**. To cancel, click **Cancel**.

Network Setup

Click **Network Setup** to configure the AM-100’s parameters for operating in a network environment.

“Device Administration” Menu Showing the “Network Setup” Screen




Device Administration > Network Setup
Logout

System Status

Device Setup

Network Setup

OSD Setup

Change Password

Firmware Upgrade

Remote View Setup

Reset to Default

Reboot System

Host Name and Domain Name	Host Name	<input type="text" value="AirMedia-01af4a"/>
	Domain Name	<input type="text"/>
	Note: For maximum compatibility, host names less than 15 characters are recommended allow char: [0-9], [A-Z], [a-z], [-].	
IP Setup	<input checked="" type="radio"/> Obtain an IP address automatically <input type="radio"/> Use the following IP address	
	IP Address	<input type="text" value="192"/> . <input type="text" value="168"/> . <input type="text" value="100"/> . <input type="text" value="10"/>
	Subnet Mask	<input type="text" value="255"/> . <input type="text" value="255"/> . <input type="text" value="255"/> . <input type="text" value="0"/>
	Default Gateway	<input type="text" value="192"/> . <input type="text" value="168"/> . <input type="text" value="100"/> . <input type="text" value="10"/>
	DNS Server	<input type="text" value="192"/> . <input type="text" value="168"/> . <input type="text" value="100"/> . <input type="text" value="10"/>
Crestron Control System	IP Address or Hostname	<input type="text"/>
	IPID	<input type="text" value="05"/> ▼
	Communication Status	Offline
Crestron Connected™ Device	IP Address or Hostname	<input type="text"/>
	Communication Status	Offline
	CurrentSource	None
	Source	<input type="text" value="None"/> ▼ <input type="button" value="Set"/>
	Automatic Power On	<input checked="" type="radio"/> Immediately <input type="radio"/> After Code Entry
	Power Off Time Out	<input type="text" value="0"/> minutes <input type="button" value="Set"/>
	Power Control	<input type="button" value="Power On"/> <input type="button" value="Power Off"/>
	Power Status	Unknown
	Lamp Hours	0 hours
	Device Status	No Error

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Host Name and Domain Name

Use a host name and domain name as an alternative to IP addressing when connecting client computers to the AM-100.

NOTE: When specifying a host name, Crestron recommends using a host name that is less than 15 characters.

NOTE: To use a host name, the AM-100's *IP Setup* must be set to *Obtain an IP address automatically* or if using a static IP address, the domain name must be specified in the *Domain Name* field.

To use a host name, enter a host name (less than 15 characters) in the *Host Name* field.

A domain name can also be entered in the *Domain Name* field.

To apply any changes, click **Apply**. To cancel, click **Cancel**.

IP Setup

In the *IP Setup* section, the IP address, subnet mask, default gateway and DNS server of the AM-100 can be set. The settings can be set manually or obtained from a DHCP server.

To use a DHCP server to provide the IP address, subnet mask, default gateway, and DNS server, select *Obtain an IP address automatically*. Otherwise, select *Use the following IP address* and enter the Ethernet parameters.

To apply any changes, click **Apply**. To cancel, click **Cancel**.

Crestron Control System

The *Crestron Control System* section specifies the control system that controls the AM-100.

- *IP Address or Hostname* — Enter the IP Address or host name of the Crestron control system that controls the AM-100 and click **Apply**.
- *IP ID* — Enter the IP ID that identifies the AM-100 in the control system's program and click **Apply**.
- *Communication Status* — Indicates the status of the communication link between the control system and the AM-100.

To apply any changes, click **Apply**. To cancel, click **Cancel**.

Crestron Connected Device

The *Crestron Connected Device* section specifies the Crestron Connected display device that is connected to the AM-100. Once specified, basic status information and controls are displayed.

To specify the Crestron Connected device, enter the IP address or host name of the Crestron Connected device.

To apply changes to the *Source* and *Power Off Time Out* settings, click **Set**.

To apply any other changes, click **Apply**. To cancel, click **Cancel**.

NOTE: The **Apply** button does not affect changes made to the *Source* and *Power Off Time Out* settings.

OSD Setup

Click **OSD Setup** to specify a logo image for display and determine if the AM-100's IP address is displayed.

“Device Administration” Menu Showing the “OSD Setup” Screen

The screenshot displays the Crestron AirMedia OSD Setup interface. At the top, the Crestron logo is on the left and the AirMedia logo is on the right. Below the logos, there is a navigation bar with 'Device Administration' and 'OSD Setup' (the active page), and a 'Logout' button. A left-hand navigation menu lists various system settings, with 'OSD Setup' highlighted in blue. The main content area is divided into two sections: 'Change Logo Image' and 'Display Option'. The 'Change Logo Image' section features a 'Logo Image' dropdown menu currently set to 'Default', a 'Restore to default' button, a 'File Name' input field with a 'Browse...' button, and an 'Image File Upload' button. A note below this section states: 'Files must be in JPEG file format. Maximum file size is 510 kilobytes. Please see the manual for additional considerations.' The 'Display Option' section includes a 'Display of IP address' label and radio buttons for 'On' (selected) and 'Off'. At the bottom right of the main content area are 'Apply' and 'Cancel' buttons. The footer of the screen reads 'Copyright © 2013. All Rights Reserved'.

The “OSD Setup” screen displays the file name of the logo in use. The screen allows the administrator to restore the default logo image, select and upload a new logo file, and show or hide the AM-100’s IP address in the *AM-100 Welcome* screen.

- *Logo Image* — Displays the file name of the logo image. If the default logo image is used, “Default” is displayed.
- *Restore to default* — Click **Restore to Default** to use the default logo image.
- *Browse/Image File Upload* — Click **Browse** to specify a file to be used as a logo image and click **Image File Upload** to upload the chosen file.

When choosing a file, observe the following:

- ⇒ The logo image must be in JPG format.
- ⇒ The maximum file size is 510 kB.
- ⇒ For a given native display resolution, use the following table to create a properly sized logo.

Native Display Resolution and Logo Image Size

Native Display Resolution	Logo Image Size
800 x 600	800 x 500
1280 x 720	1280 x 600
1024 x 768	1024 x 640
1360 x 768	1360 x 640
1280 x 800	1280 x 667
1400 x 900	1400 x 750
1920 x 1080	1920 x 900
1600 x 1200	1600 x 1000

- *Display Option* — The IP address can be displayed or hidden from the *AM-100 Welcome* screen. To display the IP address, select *On* and click **Apply**. To hide the IP address, select *Off* and click **Apply**.

To apply any changes, click **Apply**. To cancel, click **Cancel**.

Change Passwords

Click **Change Passwords** to set a new admin password.

“Device Administration” Menu Showing the “Change Passwords” Screen

The screenshot displays the Crestron AirMedia web interface. At the top left is the Crestron logo, and at the top right is the AirMedia logo. Below the logo is a navigation bar with 'Device Administration' and 'Change Password' tabs, and a 'Logout' button. A left-hand navigation menu lists various system settings, with 'Change Password' highlighted. The main content area shows the 'Device Administration' section with two input fields for 'Enter New Password' and 'Confirm New Password', and an 'Apply' button. The footer contains the copyright notice: 'Copyright © 2013. All Rights Reserved'.

To change the admin password:

1. Enter a new password in the *Enter New Password* field.
2. Enter the new password in the *Confirm New Password* field and click **Apply**.

Firmware Upgrade

Click **Firmware Upgrade** to import or export device configuration settings or upload new firmware.

“Device Administration” Menu Showing the “Firmware Upgrade” Screen

The screenshot displays the Crestron AirMedia web interface. At the top, the Crestron logo is on the left and the AirMedia logo is on the right. Below the logos, there are navigation tabs for "Device Administration" and "Firmware Upgrade", with a "Logout" button on the far right. A blue sidebar on the left contains a menu with the following items: System Status, Device Setup, Network Setup, OSD Setup, Change Password, Firmware Upgrade (highlighted), Remote View Setup, Reset to Default, and Reboot System. The main content area is titled "System Configuration" and contains several sections:

- An "Export System configuration" section with an "Export" button.
- An "Import" section with a "Choose File" button, the text "No file chosen", and an "Import" button.
- A table showing "Firmware Version" as 1.0.2.1 and "Release Date" as 20130702.
- A warning message: "Please ensure that no users are connected before beginning the upgrade."
- A "File Name" section with a "Choose File" button, the text "No file chosen", and an "Upgrade" button.

 At the bottom of the page, a footer reads "Copyright © 2013. All Rights Reserved".

Device settings can be imported from another device or exported to a file for use on another on another device.

Export & Import System Configuration Settings

To export the system configuration file, click **Export**.

To import a system configuration file:

1. Click **Browse...** to select a file to import. The file has the *.conf* extension.
2. Click **Import** to import the configuration file and change the AM-100's settings.

Upgrade Firmware

To update the AM-100's firmware:

1. Click **Browse...** to select the desired firmware file. The file has the *.img* extension.
2. Click **Upgrade** to update the AM-100's firmware.

NOTE: Firmware upgrades may take up to 30 minutes.

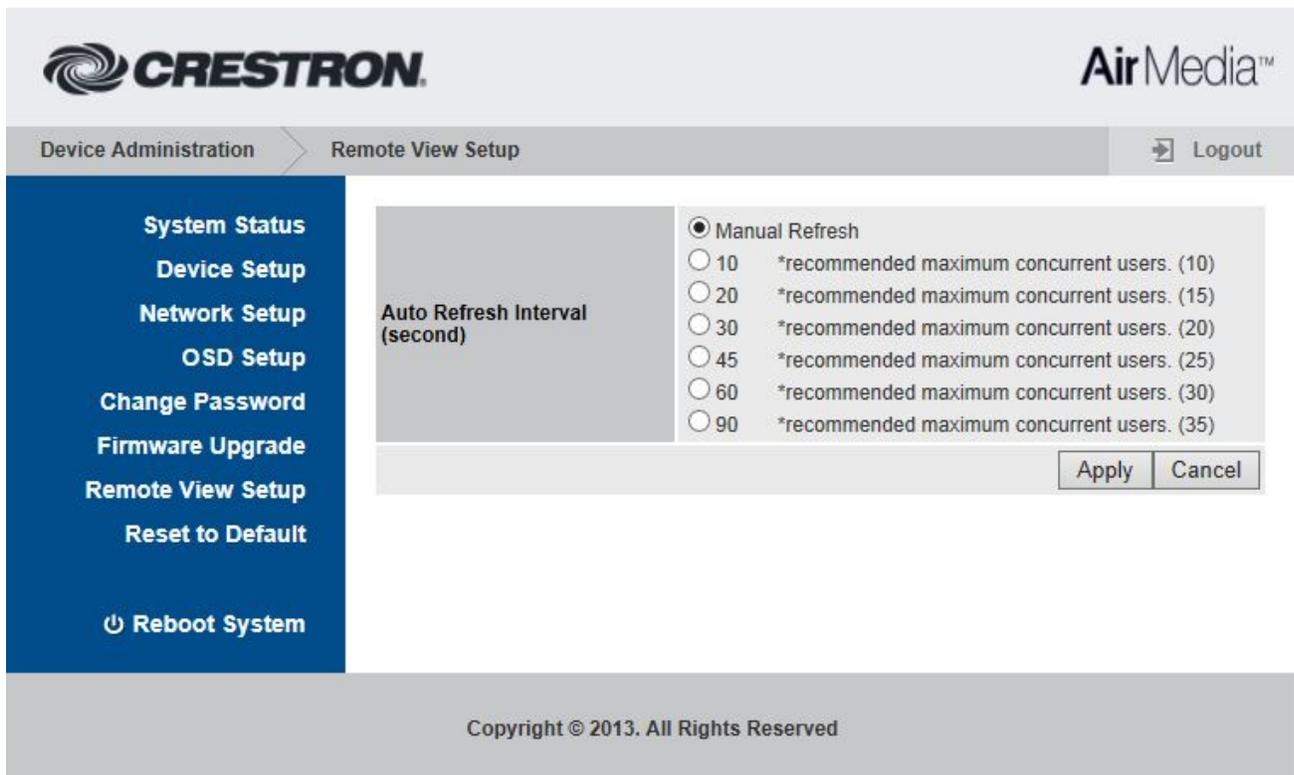
NOTE: Ensure that all users are disconnected from the AM-100 before upgrading the firmware.

NOTE: To update multiple AM-100s across an enterprise, use the AirMedia Update Tool which is available for download from the Crestron Web site (www.crestron.com/software).

Remote View Setup

Click **Remote View Setup** to set the automatic refresh interval for remote viewers.

“Device Administration” Menu Showing the “Remote View Setup” Screen

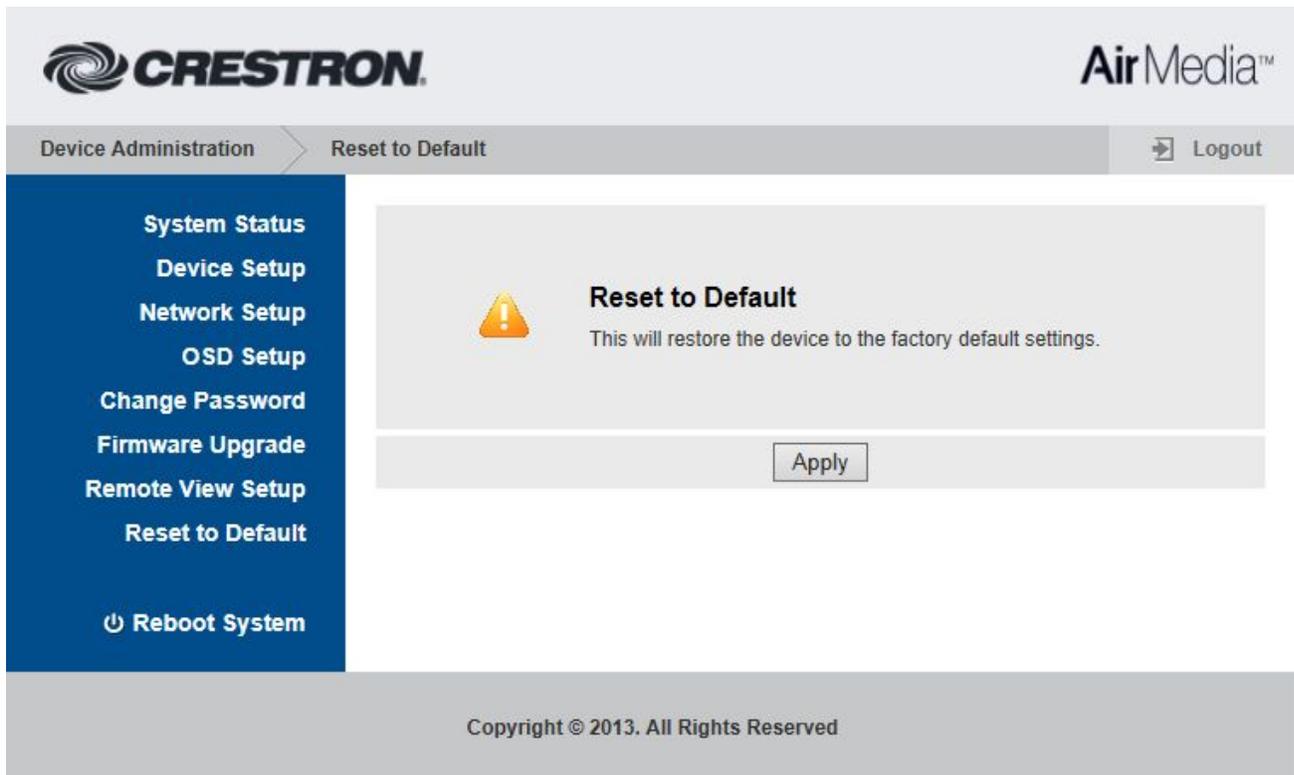


The screenshot displays the Crestron AirMedia web interface. At the top, the Crestron logo is on the left and the AirMedia logo is on the right. Below the logos, there is a navigation bar with "Device Administration" and "Remote View Setup" tabs, and a "Logout" button. A blue sidebar on the left contains a menu with the following items: System Status, Device Setup, Network Setup, OSD Setup, Change Password, Firmware Upgrade, Remote View Setup (highlighted), Reset to Default, and Reboot System. The main content area shows the "Auto Refresh Interval (second)" settings. It includes a radio button for "Manual Refresh" (which is selected) and a list of radio buttons for intervals: 10, 20, 30, 45, 60, and 90. Each interval has a note: "*recommended maximum concurrent users. (10)", "(15)", "(20)", "(25)", "(30)", and "(35)" respectively. At the bottom right of the settings area, there are "Apply" and "Cancel" buttons. At the very bottom of the page, there is a copyright notice: "Copyright © 2013. All Rights Reserved".

Using the recommended maximum amount of concurrent users shown, select a refresh interval (in seconds) from the list and click **Apply**. To cancel, click **Cancel**.

Reset to Default

Click **Reset to Default** to reset the AM-100 to the factory settings.

“Device Administration” Menu Showing the “Reset to Default” Screen

The screenshot displays the Crestron AirMedia web interface. At the top left is the Crestron logo, and at the top right is the AirMedia logo. Below the logos is a navigation bar with 'Device Administration' and 'Reset to Default' tabs, and a 'Logout' button. A blue sidebar on the left contains a menu with the following items: System Status, Device Setup, Network Setup, OSD Setup, Change Password, Firmware Upgrade, Remote View Setup, Reset to Default, and Reboot System. The main content area shows a warning icon (a yellow triangle with an exclamation mark) next to the heading 'Reset to Default'. Below the heading is the text: 'This will restore the device to the factory default settings.' At the bottom of this area is an 'Apply' button. The footer of the page contains the text: 'Copyright © 2013. All Rights Reserved'.

To reset the AM-100 to the factory settings, click **Apply**.

Reboot System

To reboot the AM-100, click **Reboot System** and click **Apply**.

Operation

The AM-100 uses client software to share a PC or Mac (hereafter referred to as “computer”) desktop. The computer should be able to access the AM-100 over the network.

NOTE: Mobile devices can share their content using the AirMedia app which is available for iOS and Android devices. Download the latest version from the App Store in iTunes or Google Play.

1. On the computer, open a Web browser and navigate to the Web address or the IP address that is displayed on top-left of the *AM-100 Welcome* screen as shown on page 16. The download screen is displayed.

Download Screen

CRESTRON AirMedia™

Device Administration

Download AirMedia Utility Software

Client for Windows [Download](#)
(Requires Windows 8 / 7 / Vista / XP)

Client for Mac [Download](#)
(Requires OS X 10.5 ~ 10.8)

Remote View

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2. Click on the **Download** icon for the computer’s operating system and follow the instructions for installing the client software.

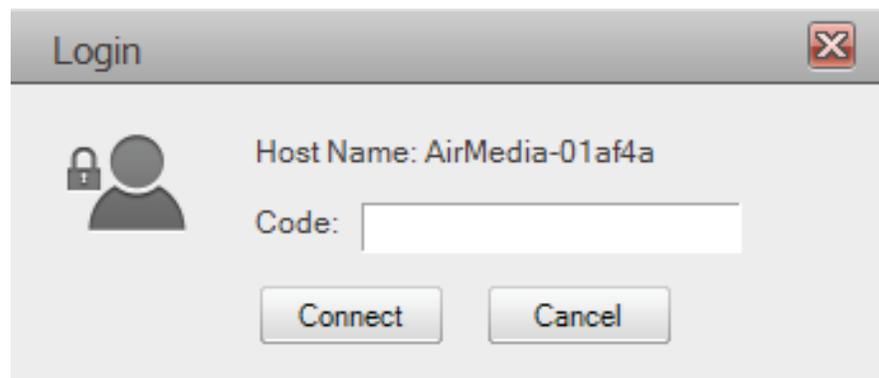
NOTE: When used on a Mac, the AirMedia application must be run from within the disk image file. Do not drag the application out of the disk image file.

NOTE: Crestron also offers a stand-alone application for enterprise deployments. This application features additional connection methods and device management. For details, visit the Crestron Web site.

Run the AM-100 Client

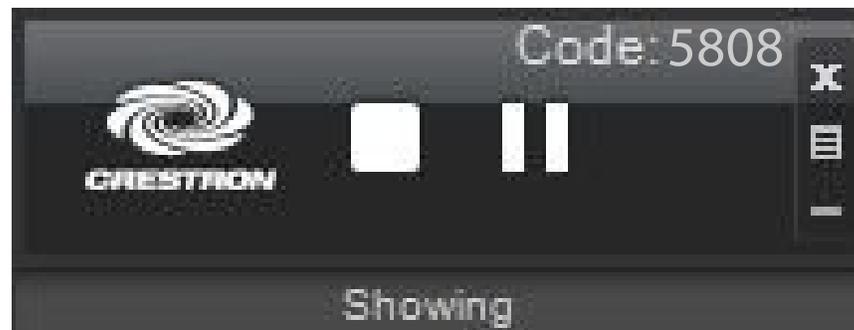
1. Run the client software. The “Login” screen is displayed.

“Login” Screen



2. In the *Code* field, enter the code displayed on the AM-100 welcome screen shown on page 16 and click **Connect**. The client establishes a connection between the computer and the AM-100 while displaying the presentation control screen on the computer.

Presentation Control Screen



Whatever is on the computer display is shown on the display connected to the AM-100.

NOTE: The application mutes the PC's local audio, since the audio is transmitted to the device and played through the display's speakers.

Control the Presentation

Use the following controls to direct the presentation:

- Stop showing the computer's screen.
- ▶ Start showing the computer's screen.
- || Freeze the computer's screen.
- ✕ Close client application and the connection between the computer and the AM-100.
- ☰ Display a popup menu of additional options. For details, refer to "Other Controls" which starts on page 32.
- Minimizes the Presentation Control screen.

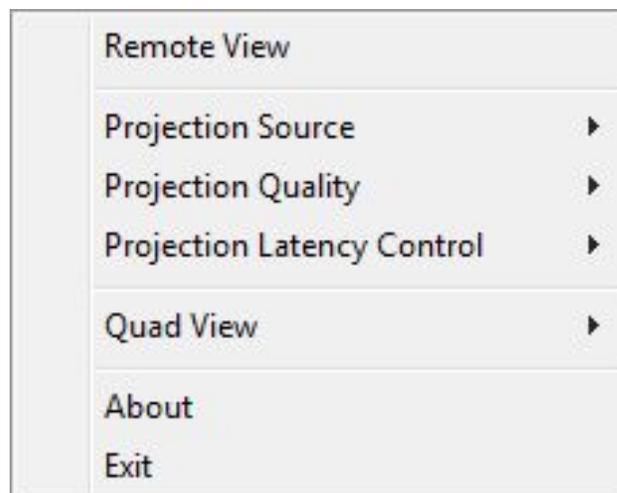
Other Controls

Once a link between the computer and the AM-100 has been established, the AM-100 can be configured for a custom installation.

To configure the AM-100:

1. Use the mouse to click the menu button (☰). A popup menu is displayed.

Popup Menu



2. Use the mouse to configure one of the following options:

- **Remote View** — Enable *Remote View* to allow the device to serve images of the desktop via the built-in Web server.

NOTE: Remote View is not available when Quad View is in use.

- **Projection Source (Windows Only)** — Allows the user to share a secondary desktop. This is similar to the *Extend* mode in Windows for multiple displays.
- **Projection Quality** — Improves the quality of the transmitted image, but uses more bandwidth. The user's computer should be connected to the AM-100 via a wired Ethernet connection when using this setting.
- **Projection Latency Control** — Reduces the latency of the projected image, but is more computationally intense.
- **Quad View** — Selects the position of the screen when multiple PCs are showing to the AM-100. For details, refer to “Quad View” which starts below.

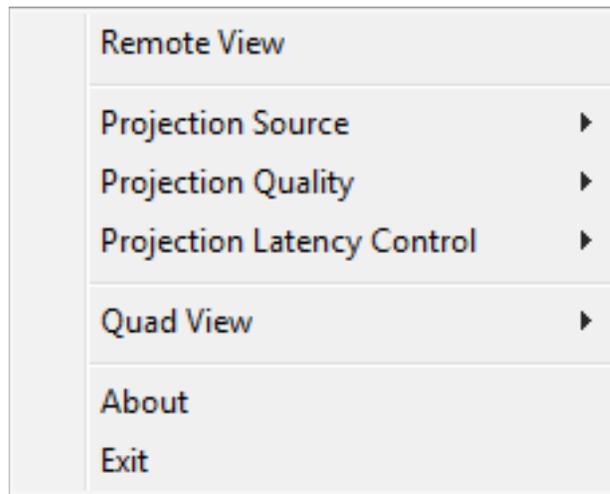
Quad View

Up to four computers can simultaneously share their desktops with the AM-100. Shared desktops are arranged in a quad view with each computer using one quarter of the projected image.

NOTE: Although the AM-100 can support up to 32 connected computers for sharing, only four desktops can be displayed simultaneously.

To share multiple desktops simultaneously:

1. Connect the computer to the AM-100 as described in “Run the AM-100 Client” on page 31.
2. Connect up to three other computers as described in “Run the AM-100 Client” on page 31.
3. Use the mouse to click the menu button (☰). A popup menu is displayed.

Popup Menu

4. Click **Quad View** and select the position for the shared desktop.

NOTE: If another computer is already sharing the selected position, the position is replaced by the newly shared desktop. Desktop playback ceases on the “booted” computer.

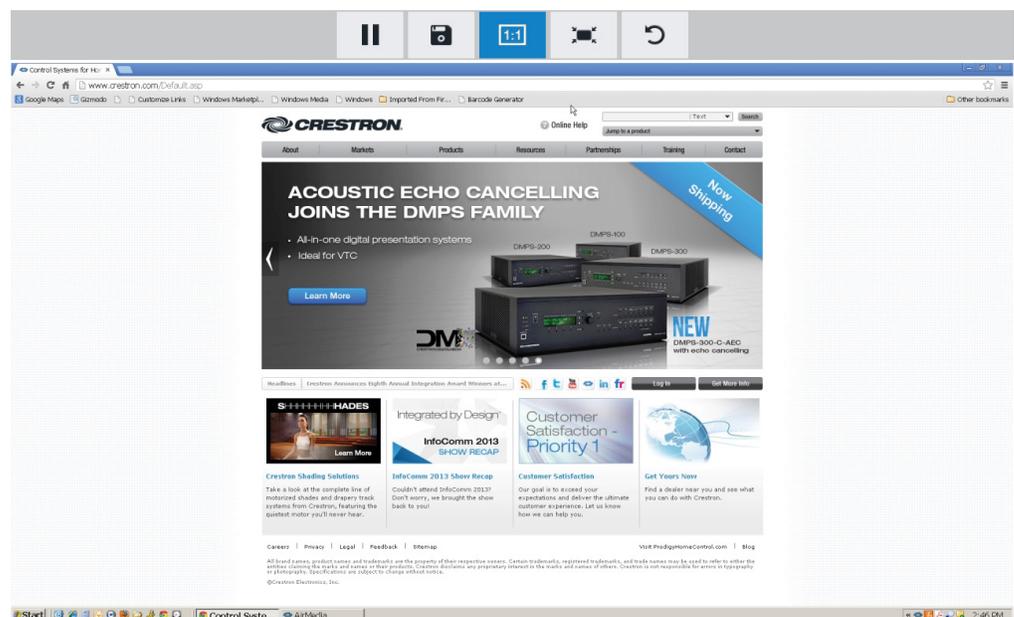
NOTE: If “Full” is chosen, any other shared desktops are replaced by the newly shared desktop. Desktop playback ceases on the “booted” computers.

Remote View

If *Remote View* is enabled, users can view desktop images via the AM-100's built-in Web server. To remotely view images:

1. On a remote computer, open a Web browser and navigate to the Web address or IP address supplied from the user sharing their desktop. The *Download* screen as shown on page 30 is displayed.
2. Click **Remote View**. The shared desktop is displayed in the Web browser as a Web page.

Remote View Web Page



3. Use the following buttons when viewing the AM-100's output in a Web browser.

-  Pause the currently displayed image.
-  Save the currently displayed image.
-  View the currently displayed image at actual size.
-  View the currently displayed image at full-screen size.
-  Refresh the image.

Problem Solving

Troubleshooting

The following table provides corrective action for possible trouble situations. If further assistance is required, please contact a Crestron customer service representative.

AM-100 Troubleshooting

TROUBLE	POSSIBLE CAUSE(S)	CORRECTIVE ACTION
Device does not function.	Device is not communicating with the network.	Check the device's "Network Setup" screen on the "Device Administration" menu for a valid IP address. NOTE: The device defaults to the IP address 192.168.100.10 if there is no network connection or if it could not obtain an address from a DHCP server. Verify the network connection to the device.
	Device is not receiving power from a Crestron power source.	Use the provided Crestron power source. Verify connections.

(Continued on following page)

AM-100 Troubleshooting (Continued)

TROUBLE	POSSIBLE CAUSE(S)	CORRECTIVE ACTION
Power LED does not illuminate.	Device not connected to power pack.	Connect device to power pack.
	LED stays red.	Firmware update has failed. Contact Crestron True Blue Support.
Cannot connect to the device	Device is not connected to the LAN.	Connect device to the LAN.
	Device did not obtain an IP address (indicated by IP address 192.168.100.10).	Check Ethernet cable connection.
		Check Ethernet settings.
Wi-Fi network is not connected to the AM-100's network	Establish network connection between Wi-Fi network and AM-100's network.	
Remote users cannot view shared content.	AM-100 is not set for <i>Remote View</i> .	Enable <i>Remote View</i> feature as described in "Other Controls" on page 32.
Slow content delivery.	High volume of network traffic	Manage network traffic to allow faster data flow.
		Use wired connections instead of Wi-Fi connections.
No video output to display device	Display device is not properly connected or configured.	Check display connections and settings.

Reference Documents

All documents mentioned in this guide are available at www.crestron.com/manuals.

List of Related Reference Documents

DOCUMENT TITLE
Crestron e-Control Reference Guide

Further Inquiries

To locate specific information or resolve questions after reviewing this guide, contact Crestron's True Blue Support at 1-888-CRESTRON [1-888-273-7876] or, for assistance within a particular geographic region, refer to the listing of Crestron worldwide offices at www.crestron.com/offices.

To post a question about Crestron products, log onto Crestron's Online Help at www.crestron.com/onlinehelp. First-time users must establish a user account to fully benefit from all available features.

Future Updates

As Crestron improves functions, adds new features and extends the capabilities of the AM-100, additional information may be made available as manual updates. These updates are solely electronic and serve as intermediary supplements prior to the release of a complete technical documentation revision.

Check the Crestron Web site periodically for manual update availability and its relevance. Updates are identified as an "Addendum" in the Download column.

Return and Warranty Policies

Merchandise Returns / Repair Service

1. No merchandise may be returned for credit, exchange or service without prior authorization from Crestron. To obtain warranty service for Crestron products, contact an authorized Crestron dealer. Only authorized Crestron dealers may contact the factory and request an RMA (Return Merchandise Authorization) number. Enclose a note specifying the nature of the problem, name and phone number of contact person, RMA number and return address.
2. Products may be returned for credit, exchange or service with a Crestron Return Merchandise Authorization (RMA) number. Authorized returns must be shipped freight prepaid to Crestron, 6 Volvo Drive, Rockleigh, N.J. or its authorized subsidiaries, with RMA number clearly marked on the outside of all cartons. Shipments arriving freight collect or without an RMA number shall be subject to refusal. Crestron reserves the right in its sole and absolute discretion to charge a 15% restocking fee plus shipping costs on any products returned with an RMA.
3. Return freight charges following repair of items under warranty shall be paid by Crestron, shipping by standard ground carrier. In the event repairs are found to be non-warranty, return freight costs shall be paid by the purchaser.

Crestron Limited Warranty

Crestron Electronics, Inc. warrants its products to be free from manufacturing defects in materials and workmanship under normal use for a period of three (3) years from the date of purchase from Crestron, with the following exceptions: disk drives and any other moving or rotating mechanical parts, pan/tilt heads and power supplies are covered for a period of one (1) year; touch screen display and overlay components are covered for 90 days; batteries and incandescent lamps are not covered.

This warranty extends to products purchased directly from Crestron or an authorized Crestron dealer. Purchasers should inquire of the dealer regarding the nature and extent of the dealer's warranty, if any.

Crestron shall not be liable to honor the terms of this warranty if the product has been used in any application other than that for which it was intended or if it has been subjected to misuse, accidental damage, modification or improper installation procedures. Furthermore, this warranty does not cover any product that has had the serial number altered, defaced or removed.

This warranty shall be the sole and exclusive remedy to the original purchaser. In no event shall Crestron be liable for incidental or consequential damages of any kind (property or economic damages inclusive) arising from the sale or use of this equipment. Crestron is not liable for any claim made by a third party or made by the purchaser for a third party.

Crestron shall, at its option, repair or replace any product found defective, without charge for parts or labor. Repaired or replaced equipment and parts supplied under this warranty shall be covered only by the unexpired portion of the warranty.

Except as expressly set forth in this warranty, Crestron makes no other warranties, expressed or implied, nor authorizes any other party to offer any warranty, including any implied warranties of merchantability or fitness for a particular purpose. Any implied warranties that may be imposed by law are limited to the terms of this limited warranty. This warranty statement supersedes all previous warranties.

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Operations Guide – DOC. 7463B
(2036012)
07.13

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