User manual

AV Control System

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REVISION 1

Introduction

Safety Conditions

For safety and proper operation, please observe the following conditions:

- 1. Do not open the devices. Inside are components under high voltage.
- 2. Do not use or store devices in excessively low or high temperatures, or in conditions of high humidity.
- 3. Ensure proper ventilation to allow for adequate air circulation and prevent damage to the devices.
- 4. Disconnect the device from power in case of liquid spillage or excessive humidity.
- 5. All repairs must be conducted by specialized service personnel authorized by the device/system manufacturer.
- 6. Do not use any chemical substances to clean the devices and their enclosures.
- 7. Do not place devices near open flames or in areas exposed to direct sunlight.
- 8. Do not use devices near water or in highly humid environments.
- 9. Ensure proper grounding of electrical devices to prevent electric shock.
- 10. Do not use devices with damaged power cables or plugs.

Introduction

Automation System

The audiovisual system has been designed to allow both local and remote management using Crestron automation technology. The operation of individual devices has been streamlined for intuitive system usage.

The control system manages the following devices, depending on the equipment available in each room:

- Projectors and projection screens: power on/off, source selection.
- Monitors: power on/off, source selection.
- Equipment in RACK cabinets in the server room.
- Devices installed above suspended ceilings (control unit, array microphone, speakers).
- Camera.



NOTE: Only authorized personnel have access to devices located in RACK cabinets.

All initial settings of the system have been configured to facilitate facility usage according to its intended purpose, based on the selected operating mode.

Control Elements

System control – Type C

Control keyboard – Operation Example



Presentation Start - Powers on the projector, extends the screen, sets the audio to "starting level," and selects the source according to the pressed button marked with number 1, 2, 3, 4 or 5.

NOTE: To access the camera and microphone on an external device (e.g., user's laptop), connect the USB cable protruding from the lectern socket. Use the touch panel to choose how you want to utilize the camera and microphone. The connected device should detect the external camera and sound card.

NOTE: The "LAPTOP HDMI" source is automatically selected upon detecting a signal on the HDMI cable connected to the lectern socket.

- Start presentation with selected source "Microsoft Teams" (MTR)
- 2. Start presentation with selected source "Laptop" (desktop connection)
- 3. Start presentation with selected source "Computer"
- 4. Start presentation with selected source "AirMedia" (wireless presentation)
- 5. Start presentation with selected source "Interactive Monitor"
- 6. Roll up projection screen
- 7. Roll out projection screen
- 8. Power On/Off projector
- Activate camera position (Works only when Tracking mode is OFF)
- 10. Enable microphone volume adjustment mode (use the knob on the right side of the panel after pressing the microphone volume adjustment button).

Microphone volume adjustment mode automatically exits after about 5 seconds and returns to presentation volume adjustment mode.

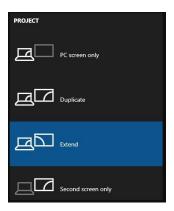


NOTE: To use the system, it is necessary to start a presentation. After shutting down the system, most devices are disconnected from power to save energy.

- 1. Presentation Shutdown Turns off the projector, rolls up the screen, and sets the volume level to 0.
- 2. Volume Level Bar in the respective mode (presentation/microphone).
- 3. Volume Adjustment Knob (default set in presentation volume adjustment mode). To increase the volume level in the respective mode, turn the knob to the right. To decrease the volume level, turn the knob to the left.
- 4. Mute Sound the blue backlighting of the button on the panel indicates that the sound has been muted. To unmute, press the button again. To mute a specific microphone, press the button located below the MICROPHONE display. Muting is indicated by a red LED on the microphone.



NOTE: The preview monitor defaults to displaying the image from the "Computer PWR" (when the "COMPUTER PWR" source is selected). The monitor mode can be changed using the key combination (Windows) + **P** on the keyboard. Available options include duplicating the image on both the projector and the preview monitor or displaying separate images on the projector and monitor. Select the desired mode from the list displayed on the screen:



Microsoft Teams Room operation

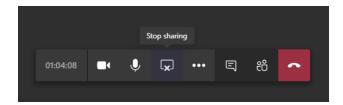
On the control panel, select the "Microsoft Teams" option. The application will automatically start sharing the detected signal (unless a different source was previously selected). If no signal is detected, the application overlay will be displayed.

To change the source, select the desired input (e.g., Laptop HDMI) on the control panel. The new source will be automatically displayed and shared within the Microsoft Teams Room system. If you press the "Microsoft Teams" button again, the system will continue to share the previously selected source.

You can stop sharing content by clicking the "Stop Presenting" button on the control panel.



Additionally, sharing can be stopped during a meeting by selecting the "Stop sharing" button.



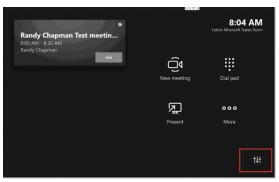
NOTE: The appearance and location of the button may vary depending on the version.

Camera operation

The camera will initialize to its default position upon system startup.

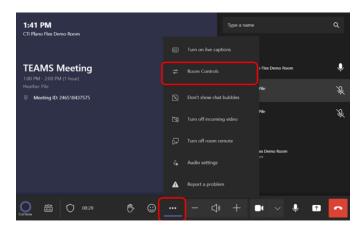
Camera control is operated using a touch panel. To access the camera control tab, press the "Room Controls" button.

NOTE: The appearance and location of the button may vary depending on the version.





During an ongoing meeting, the "Room Controls" tab is located under the "..." button.



Room Controls Functions



- Camera Control Tab allows to recall a saved camera position or enable different tracking modes for the selected camera. Available camera modes include Auto Framing, Speaker Tracking, Presenter Tracking, Multi Focus, PTZ.
- Camera Layout Tab adjust the camera layout settings.
- Recall Saved Camera Position quickly access to previously saved camera positions.
- PTZ Mode enables manual control of the camera's position.

Available tracking modes:

- **Auto Framing** automatically recognizes the number and positions of participants. Frames the first participant and dynamically adjusts as more participants enter, eliminating the need for manual configuration.
- **Speaker Tracking** frames the speaker in real-time (not suitable for large rooms with high levels of noise).
- **Presenter Tracking** frames the presenter in real-time within a specified area (typically around the whiteboard).
- Multi Focus frames multiple presenters simultaneously (up to 9 people).
- PTZ (default) manual camera control.

Camera operation on an external device

To access cameras and microphones on external devices, connect the USB cable from the lectern's connection panel to your external device. After connecting, a prompt will appear on the touch panel regarding how to use the peripheral devices. Select the appropriate mode:

- Present content in this mode, the Microsoft Teams Room system will utilize the connected peripheral devices.
- Host a meeting from your computer in this mode, the peripherals are made available for use on your external device.

Microphone operation

In the room, there is a handheld microphone available, charged via a docking station located on the RACK cabinet countertop or near the lectern. Components of the microphone include:



- LED indicator representing device status: Flashing: Connecting to the docking station
 - Solid red: Microphone muted Solid green: Microphone connected and active.
- Button for muting/activating the microphone. Holding down the button toggles the microphone on/off.
- Display showing key information such as battery status and microphone range.

Array microphone operation

The array microphone automatically detects and selects the active speaker, adapting to changes in real-time. To use the array microphone on an external device, first make the peripherals available in the Microsoft Teams Room system and then select the Shure processor as the input source.

Wireless presentation – operating example

The Crestron AirMedia wireless presentation system can be operated using various devices such as Android and iOS smartphones, as well as Windows and macOS computers. After selecting the appropriate source on the control keyboard, basic system information and available wireless connections will appear on the screen, located at the bottom (highlighted with a red frame in the diagram below).



Below are descriptions of various types of wireless connections.

AirMedia application

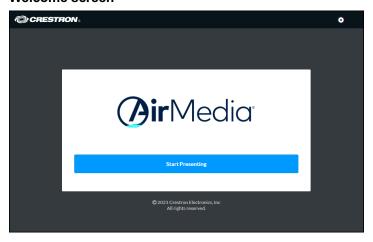
The receiver utilizes a client application for screen sharing on Windows or Mac systems. Mobile devices can share content using the Crestron AirMedia app, available on iOS and Android™ devices. Both applications support full screen sharing on Android 5.0 Lollipop (or newer) and iOS 8 (or newer). The apps are downloadable from the App Store® or Google Play™ store.

Establishing a connection to the computer

To establish a connection between your computer and the receiver, follow these steps:

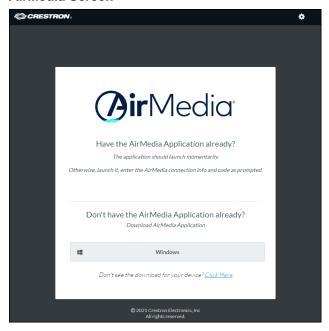
1. Open a web browser on your computer and navigate to the web address displayed on the screen. The welcome screen will appear.

Welcome screen



2. Select **Start Presenting** from the options. This will display the AirMedia screen.

AirMedia Screen



3. Choose the button corresponding to your computer's operating system to download the client application. The client application does not require installation. Once downloaded, it will run locally.



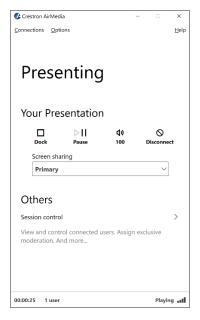
Application on Windows Computer

To share content from a Windows computer:

1. Launch the client application. The following window will appear on the screen:



- 2. Select the **Connect option** under the desired receiver or enter the device address manually in the search bar and press Enter.
- 3. If a code is required, enter the code "2024". Once the connection is established, the client application will display presentation control options.



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- 4. Control the presentation using the following control elements:
 - ☐ Stop the presentation: When stopped, the computer stops sharing its screen but remains connected to the receiver.
 - Start or freeze the computer screen.
 - Ontrol the output volume of the display.

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O Disconnect the connection between the computer and the receiver.

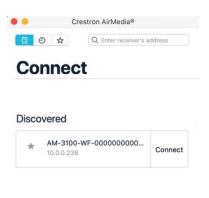
Use the **Screen Sharing** dropdown menu to select the connected screen for presentation. The system allows for up to 30 presenters to be connected simultaneously.

Use the back arrow to return to presentation control elements on the computer.

Application on Mac Computer

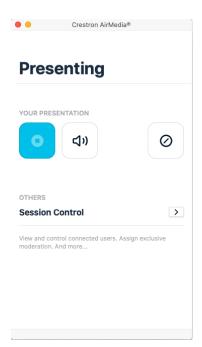
To share content from Mac computer:

1. Launch the client application. A window will appear on the screen with a list of all detected AirMedia devices.



2. Select the **Connect option** under the desired receiver or enter the device address manually in the search bar and press Enter.

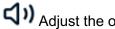
If a code is required, enter the code "2024". Follow the instructions displayed on the screen to proceed with the presentation. Select the **OK button** to return to the presentation controls.



Guide the presentation using the following controls:



Stop the presentation.



Adjust the output volume of the display.



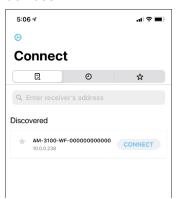
Disconnect the computer from the receiver.

Select the "Session Control" option for additional controls and information about all presenters. Use the back arrow to return to the presentation controls on the computer.

iOS connection

To share content from an iOS device using the built-in screen mirroring feature.

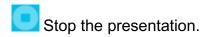
1. Open the AirMedia app. You will see a window displaying a list of all detected AirMedia devices.



- 2. Select the Connect option under the desired receiver or enter the device address manually in the search bar and press Enter.
- If a code is required, enter the code "2024" on the displaying device and select **OK button**. 3. Follow the on-screen instructions for screen mirroring.
- Follow the instructions displayed on the screen and select **OK button**. 4.



Control the presentation using the following controls:



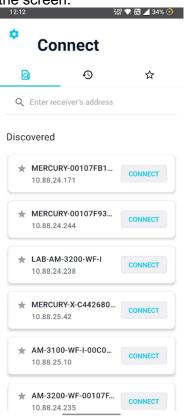
Object between the device and the receiver.

Select **Session Control** to open the **menu** where you can find a list of individual presenters along with their corresponding presentation controls. The system allows for a maximum of 30 presenters connected simultaneously.

Android connection

To share content from an Android device:

1. Open the AirMedia app. A window with a list of all detected AirMedia devices will appear on the screen.

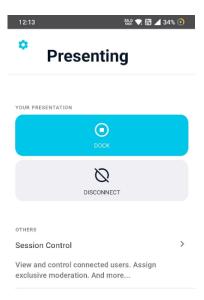


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- 2. Select **Connect option** under the desired receiver or manually enter the device address in the search bar and press Enter.
- 3. If a code is required, enter the code "2024" on the displaying device and select **OK button**. Follow the on-screen instructions for screen mirroring.
- 4. Choose **Start Now** to begin the presentation.

To end the presentation, choose one of the following options:

- **Dock:** Stop the presentation from the Android device but remain connected to the receiver.
- **Disconnect:** Stop the presentation from the Android device and disconnect from the receiver.



Connect via Miracast

Miracast is a protocol and wireless technology that allows screen mirroring to a receiver without the need for installing applications on a Windows computer. To conduct a presentation using Miracast with the AirMedia receiver:

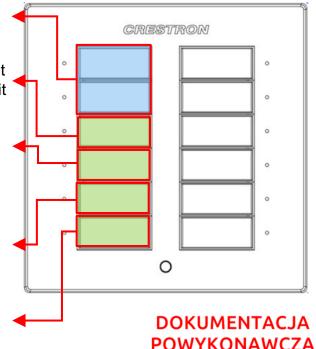
- 1. Use the keyboard shortcut (Windows) + K.
- 2. Select the desired receiver from the list.
- 3. If a code is required, enter the code "2024".

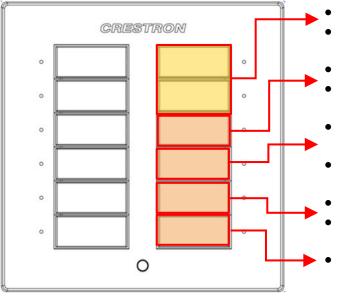
Auxiliary Keyboard Operation:

If the room is equipped with an integrated lighting and blinds control system, an auxiliary button panel is located near the lectern. This panel is used to control the room's lighting and blinds.

Button functions:

- Short press open the blinds
- Long press roll up the blinds
- Short press turn on the 1st lighting circuit
- Long press brighten the 1st lighting circuit
- Short press turn on the 2nd lighting circuit
- Long press brighten the 2nd lighting circuit
- Short press turn on the 3rd lighting circuit
- Long press brighten the 3rd lighting circuit
- Short press turn on all lighting ciucuits





- Short press close the blinds
- Long press roll out the blinds
- Short press turn off the 1st lighting circuit
- Long press dim the 1st lighting ciucuit
- Short press turn off the 2nd lighting circuit
- Long press dim the 2nd lighting ciucuit
- Short press turn off the 3rd lighting circuit
- Long press dim the 2nd lighting circuit
- Short press turn off all lighting circuits



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