CCS-UC-1
Crestron Mercury®
Tabletop Conference System

Product Manual
Crestron Electronics, Inc.

Firmware v1.4095.00091.001 and later

Contents

CCS-UC-1: Crestron Mercury Tabletop Conference System

Introduction

The CCS-UC-1 Crestron Mercury® Conference Room System provides a single tabletop device that allows for room scheduling, presenting, conference calling, and video calling. For more information on features, capabilities, and specifications on the CCS-UC-1 and its accessories, visit www.crestron.com/mercury.

NOTE: Crestron has created several variations of the CCS-UC-1 for a variety of applications. Except where noted, the term "CCS-UC-1" will be used to describe all versions of the CCS-UC-1.

This product manual discusses the requirements, configuration instructions, and operating instructions for the CCS-UC-1 in a variety of environments and applications. For information on installing the CCS-UC-1, refer to the CCS-UC-1 DO Guide (Doc. 7843) at www.crestron.com/manuals.

Requirements

Administrator

This document is written for use by a facility's Information Technology (IT) administrator. The IT administrator should have the following knowledge and skills:

- General Skills
    - IP Networking
    - Basic PC Operation and Administration
    - Basic Smartphone and Tablet Operation
    - VoIP system administration (including SIP device management)
    - Calendaring system administration (for Exchange connectivity)
- Crestron-specific skills
    - Crestron Fusion® software (if applicable)
    - Crestron XiO Cloud™ service

Operating Environment

> **NOTE:** If the CCS-UC-1 is powered with PoE+ (IEEE 820.3at), PoE+ switches that utilize Link Layer Discovery Protocol (LLDP) must have LLDP enabled. Please coordinate with the IT Administrator who manages network infrastructure at the customer site to make sure the PoE+ ports have LLDP enabled. For more information, refer to "Troubleshooting" on page 101.

The CCS-UC-1 requires the following to make the most of its capabilities.

- Crestron Fusion software

- SIP Server

- Microsoft Exchange Server® software

Accessories

The CCS-UC-1 is available in several different models with a variety of accessories for a custom installation. Visit www.crestron.com/direct/ccs-uc-1 for more information. Other models are available as well. Refer to the model name listed on the underside of the device.

Configuration

Requirements

Configuration requires a computer with web browser software. The CCS-UC-1 and computer must be connected to a commonly accessible network.

Connect to the Device

To connect to the device, follow this procedure:

1. On the device, tap ℹ️. An information screen is displayed.

Information screen
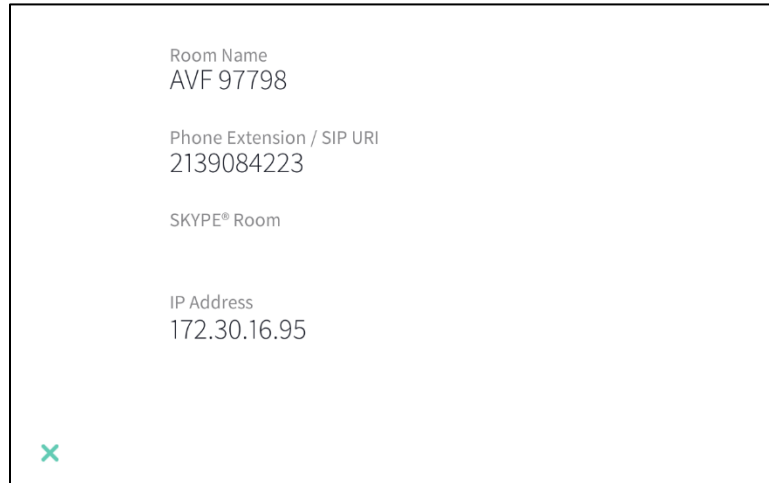
The information screen lists the Room Name, Phone Extension/SIP URI, SKYPE® Room (if configured), and IP address.

To list additional information, tap **X** and press and hold for approximately 10 seconds to display the **System Info** screen.
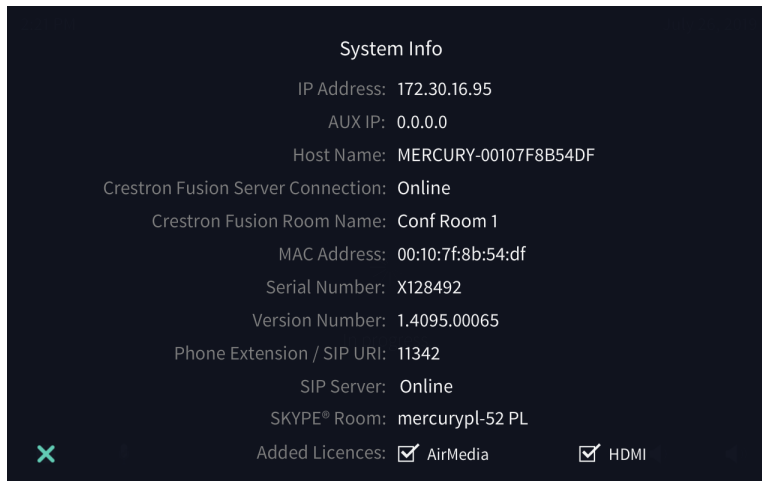
System Info Screen

2. Note the IP address and tap **X** to close the **System Info** screen.

3. On the computer, open a web browser and navigate to the IP address that was displayed on the **System Info** screen. The welcome screen is displayed.

Welcome Screen
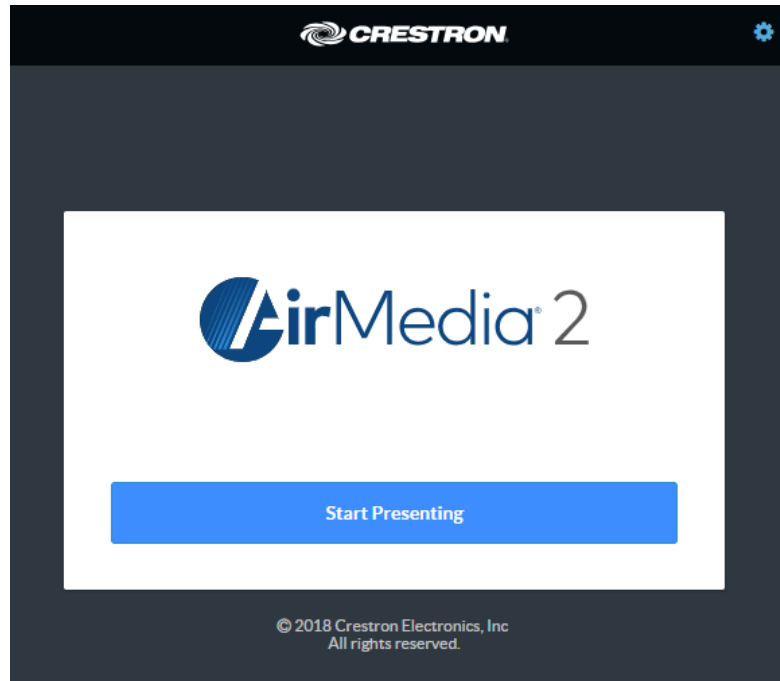
4. Click ⚙ to continue. A prompt for the user name and password is displayed.

   NOTE: Prior to displaying the prompt for login credentials, the web browser may display a security warning message regarding device configuration.

5. Enter the default user name ("admin") and password ("admin"), and click **Sign In** to continue. The device's **Status** screen is displayed.

Status Screen
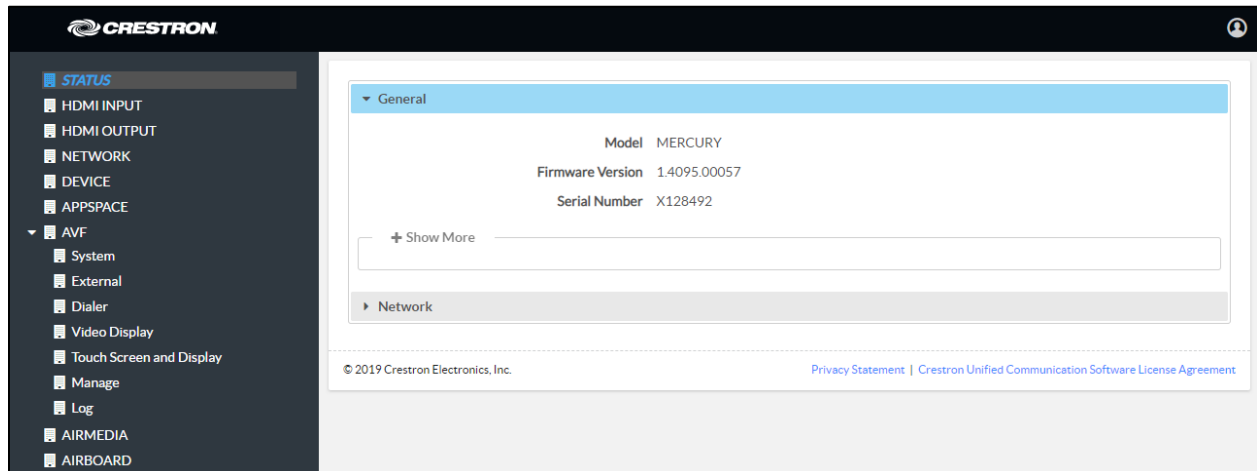
The **Status** screen displays information about the device and allows configuration of the device's operating parameters:

- **STATUS** contains general information about the device and network information.

- Click **General** to view general information.

- Click **Network** to view network information.

- **HDMI INPUT** configures the HDMI® input.

- **HDMI OUTPUT** displays information about the HDMI output.

  NOTE: On the CCS-UC-1-X, this screen is called **HDBT OUTPUT** and provides information about the HDBaseT® output.

- **NETWORK** configures the device for operation in a network environment.

- **DEVICE** is used to upload firmware, reboot the device, view the system log, enable connection to Crestron XiO Cloud service, configure SIP calling parameters, set the date and time, configure for use with Skype® for Business software, authentication management, and setting the device to work with Zoom Rooms™ software.

- **APPSPACE** is used to configure the device to work with the Appspace® content management application for digital signage.

- **AVF** configures the settings for Crestron Fusion integration, power management, dialing features, video display, touch screen and display functionality, and system logs.

- **AIRMEDIA** configures the device's AirMedia® presentation gateway functionality.

- **AIRBOARD** configures the device's functionality with the CCS-WB-1 Crestron AirBoard™ whiteboard capture system.

Log Out from the Device

To log out from the device and return to the welcome screen, click .

Configure the Device

Configure the device as required for the installation.

HDMI INPUT

Click **HDMI INPUT** to configure the HDMI input. The screen displays a selector for HDCP support, Extended Display Identification Data (EDID) profile selection, and information about the input signal (if present).

HDMI INPUT Screen
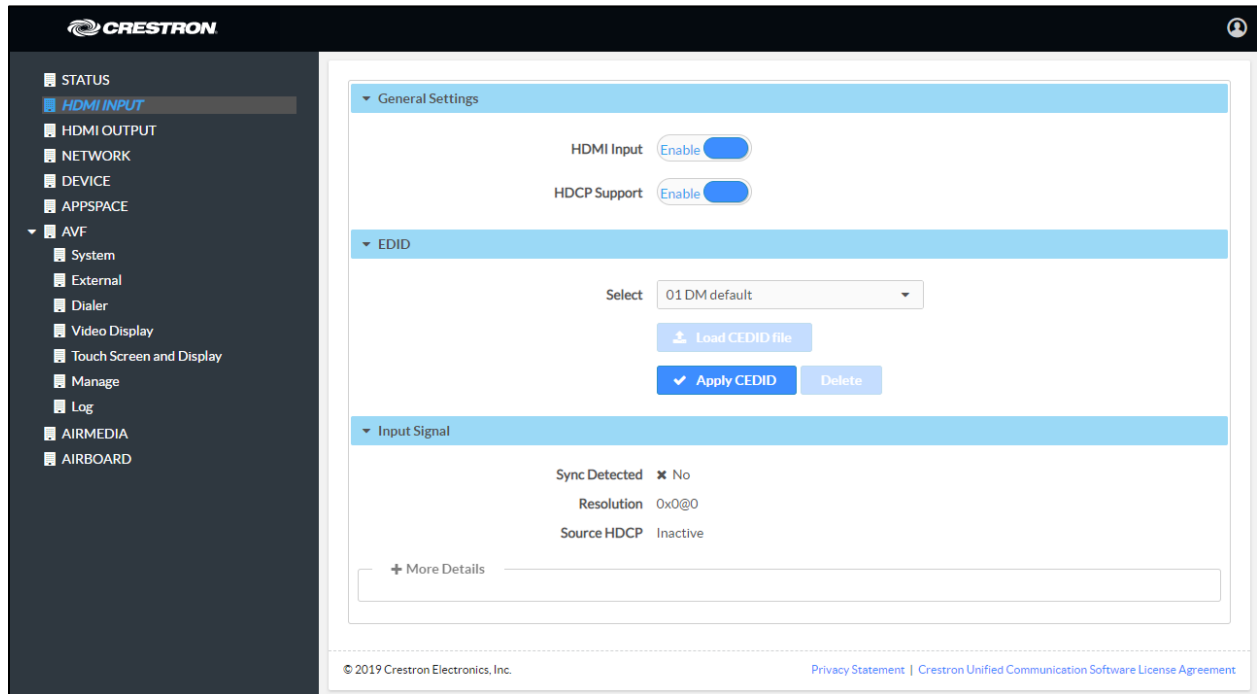
General Settings

HDMI Input

Set **HDMI Input** to **Enable** to allow a user to connect their device to the device's HDMI IN port. The default setting is **Enable**.

Set **HDMI Input** to **Disable** to prevent a user from using an HDMI connection from their device to the CCS-UC-1.

HDCP Support

Select whether **HDCP Support** should be set to **Enable** or **Disable**. When HDCP support is enabled, source signals that require HDCP compliance are allowed to pass through to the display that is connected to the HDMI output. When HDCP support is disabled, source signals that require HDCP compliance are not allowed to pass through to the connected display.

NOTE: When HDCP is enabled, the connected display must be HDCP compliant as well.

EDID

EDID is a data structure provided by a digital display to describe its capabilities to a video source (for example, graphics card or set-top box). It is what enables a computer to know what kinds of monitors are connected to it.

The EDID section of the **HDMI INPUT** screen specifies the EDID profile that is selected for use. Only source devices that use the selected EDID profile are allowed to send signals through the CCS-UC-1.

To select an EDID profile to support, select one of the profiles from the drop-down list, and click **Apply EDID**.

If a profile is not listed in the menu, a custom profile can be loaded onto the device. To load a custom EDID profile, follow this procedure:

1. From the **Select** drop-down list, select **Custom**.

2. Click **Load CEDID** file.

3. Click **Browse** and navigate to the location of the custom CEDID file.

4. Select the file to use and click **Open**.

5. Click **Send EDID**.

Input Signal

Click **More Details** to view details about the input signal connected to the HDMI input port.

HDMI OUTPUT

Click **HDMI OUTPUT** to display information about the connected display and output signal.

Click **More Details** to view details about the connected display and the output signal sent to the HDMI output port.

HDMI OUTPUT Screen
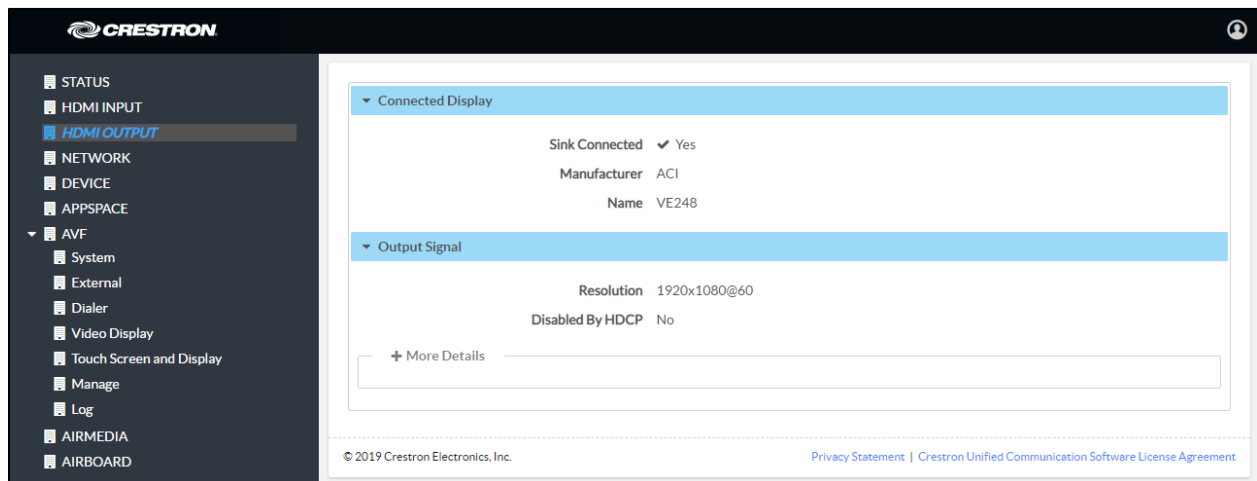
HDBT OUTPUT (CCS-UC-1-X Only)

Click **HDBT OUTPUT** to display information about the connected display and output signal.

Click **Connected Display** and **Output Signal** to view details about the connected display and the output signal sent to the HDBaseT output port.

HDBT OUTPUT Screen

NETWORK

Click **NETWORK** to configure the device for operating in a network environment. The screen displays controls for configuring the network settings, network proxy settings, and 802.1x authentication.

Network Setting

To configure the network settings follow this procedure:

NETWORK Screen - Network Setting

1. Enter a host name in the **Host Name** field and a domain name (optional) in the **Domain Name** field.

   NOTE: Use a host name and domain name as an alternative to IP addressing when connecting client computers to the device.

2. The CCS-UC-1 has two network adapters, **Adapter 1** and **Adapter 2**. **Adapter 1** is the name assigned to the LAN port and **Adapter 2** is the name assigned to the AUX port. Each network adapter can be set to have their IP address, subnet mask, default gateway, and DNS servers set manually, or obtain the settings from a DHCP server. Choose one of the following options for each network adapter.

    NOTE: On the CCS-UC-1-X, **Adapter 2** configures the TX OUT port. The TX OUT port can function as a direct HDBaseT output connection to an HDBaseT receiver or as an auxiliary LAN connection. If the TX OUT port is connected to an HDBaseT receiver, do not change any of the settings. If the TX OUT port is to be used as an auxiliary LAN connection, configure the port as required.

    −   Set **DHCP** to **Enabled** to use a DHCP server to provide the IP address, subnet mask, default gateway, and DNS server.

    −   Set **DHCP** to **Disabled** to manually enter the Ethernet parameters. When set to **Disabled**, the IP address, subnet mask, default gateway, and DNS servers must be manually entered.

3. Click **Save Changes** when done or **Revert** to return to the previous setting.

NOTE: Any changes made to the network settings will require the device to reboot.

Network Proxy Settings

The CCS-UC-1 can be configured to use a proxy server for http and https communications. To use a proxy server for network access follow this procedure:

NETWORK Screen – Network Proxy Settings

1. Set **Proxy** to **Enabled**.

2. Configure proxy servers for http and https communications in the **HTTP Settings** and **HTTPS Settings** sections respectively.

   – To use an http proxy server:

   i. Set **HTTP Proxy** to **Enabled**.

   ii. Enter the address of the proxy server in the **HTTP Proxy Address** field.

   iii. Enter the port number used by the http proxy server in the **HTTP Proxy Port** field.

   iv. Enter the username and password in the **Username** and **Password** fields.

– To use an https proxy server:

    i.   Set **HTTPS Proxy** to **Enabled**.

    ii.   Enter the address of the proxy server in the **HTTSP Proxy Address** field.

    iii.   Enter the port number used by the http proxy server in the **HTTPS Proxy Port** field.

    iv.   Enter the username and password in the **Username** and **Password** fields.

3. Click **Save Changes** when done or **Revert** to return to the previous setting

802.1x Configuration

Some networks require devices to use 802.1x port-based network access control for access to the network.

NETWORK Screen - 802.1x Configuration
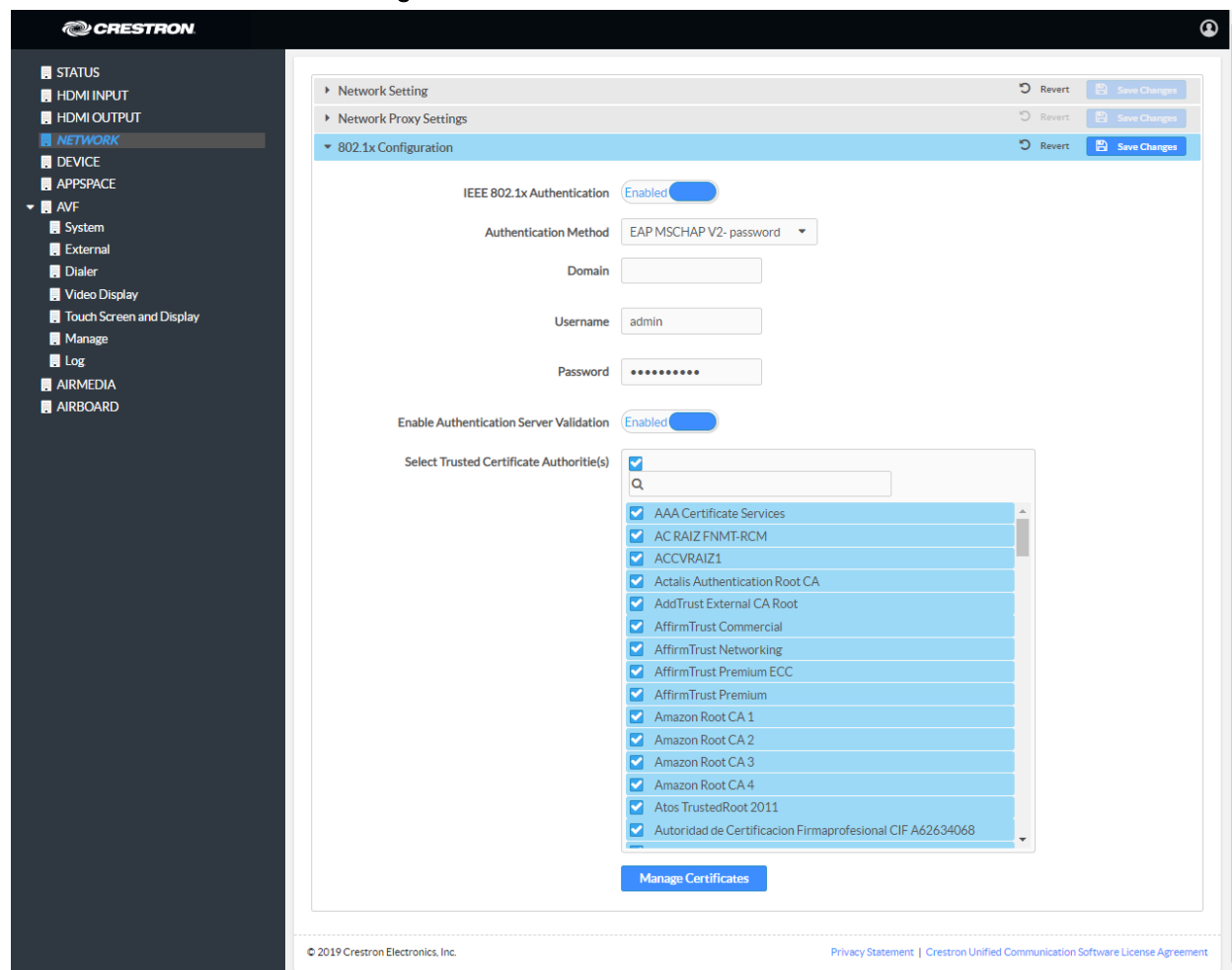
To use 802.1x, set **IEEE 802.1x Authentication** to **Enabled** and select the desired method of authentication.

- Certificate Authentication

  a. In the **Authentication Method** field, select **EAP-TLS Certificate**.

  b. Enter the domain name of the authentication server.

  c. Upload a machine certificate.

     i. Click **Manage Certificates** to manage certificates for 802.1x authentication. A list of certificates is displayed.

        Manage Certificates Dialog Box

Name	Expiry Date	Actions
Visa eCommerce Root	Jun 24 00:16:12 2022	🗑
Security Communication RootCA2	May 29 05:00:39 2029	🗑
DigiCert Global Root CA	Nov 10 00:00:00 2031	🗑
Security Communication EV RootCA1	Jun 6 02:12:32 2037	🗑
EC-ACC	Jan 7 22:59:59 2031	🗑
Go Daddy Class 2 Certification Authority	Jun 29 17:06:20 2034	🗑
thawte Primary Root CA - G2	Jan 18 23:59:59 2038	🗑
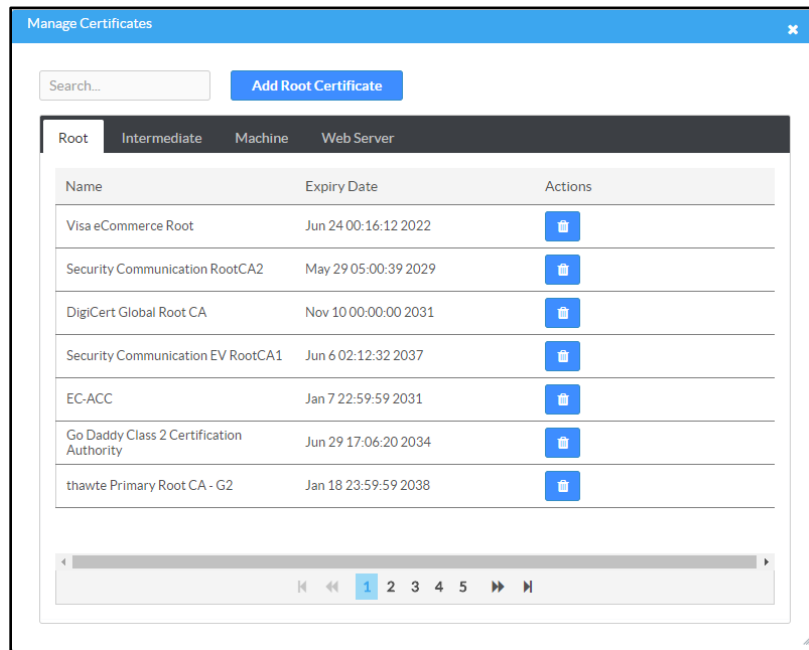
     ii. Click the **Machine** tab. The current machine certificate is displayed.

     iii. Click 🗑 to delete the certificate from the list of certificates.

     iv. Click **Add Machine Certificate**. The **Add Certificate** dialog box is displayed.

        Add Certificate Dialog Box
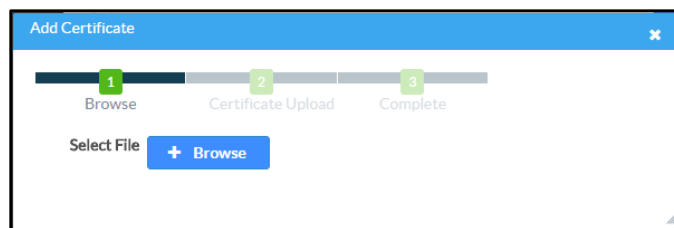
     v. Click **Browse**, select the certificate file, and click **Open**.

vi. When prompted, enter the password used to encrypt the file.

vii. Click **Load** to upload the certificate to the CCS-UC-1. A message confirming the upload is displayed.

viii. Click **OK** to close the **Add Certificate** dialog box.

d. If authentication server validation is not used, set **Enable Server Validation** to **Disabled** and continue to step 6. Otherwise, set **Enable Server Validation** to **Enabled** and select the trusted certificate authorities to use.

- To select all of the authorities, click the check box next to the search box. To unselect all of the authorities, click the check box again.

- To search for a specific authority, start typing the name of the authority in the search box and check the box next to the desired authority.

e. Click **Manage Certificates** to manage certificates for 802.1x authentication. A list of certificates is displayed.

Manage Certificates Dialog Box
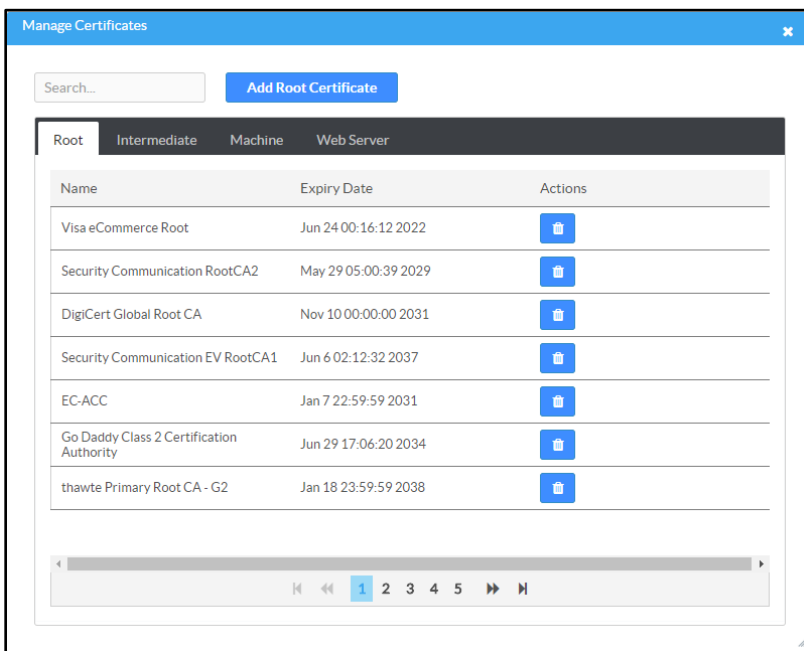
i. Click [🗑] to delete a certificate from the list of certificates.

ii. Click **Add Root Certificate**. The **Add Certificate** dialog box is displayed.

Add Certificate Dialog Box
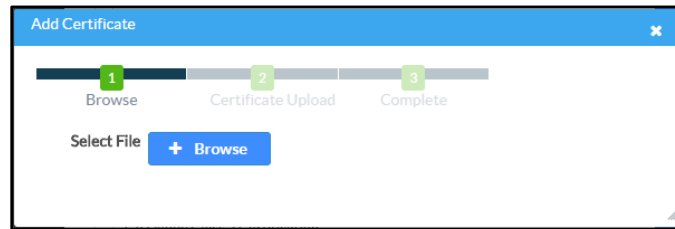
iii. Click **Browse**, select the certificate file, and click **Open**.

iv. Click **Load** to upload the certificate to the CCS-UC-1. A message confirming the upload is displayed.

v. Click **OK** to close the **Add Certificate** dialog box.

f. Click **Save Changes** when done or **Revert** to return to the previous setting.

- Password Authentication

a. In the **Authentication Method** field, select **EAP-MSCHAP V2-password**.

b. Enter the domain name of the authentication server, the user name, and the password in their respective fields.

c. Set **Enable Server Validation** to **Enabled** and select the trusted certificate authorities to use.

- To select all of the authorities, click the check box next to the search box. To unselect all of the authorities, click the check box again.

- To search for a specific authority, start typing the name of the authority in the search box and check the boxes next to the desired authorities.

d. To load a custom certificate, click **Manage Certificates** and follow this procedure:

i. Click the **Root** tab to manage certificates for 802.1x authentication.

Manage Certificates Dialog Box: Root Tab
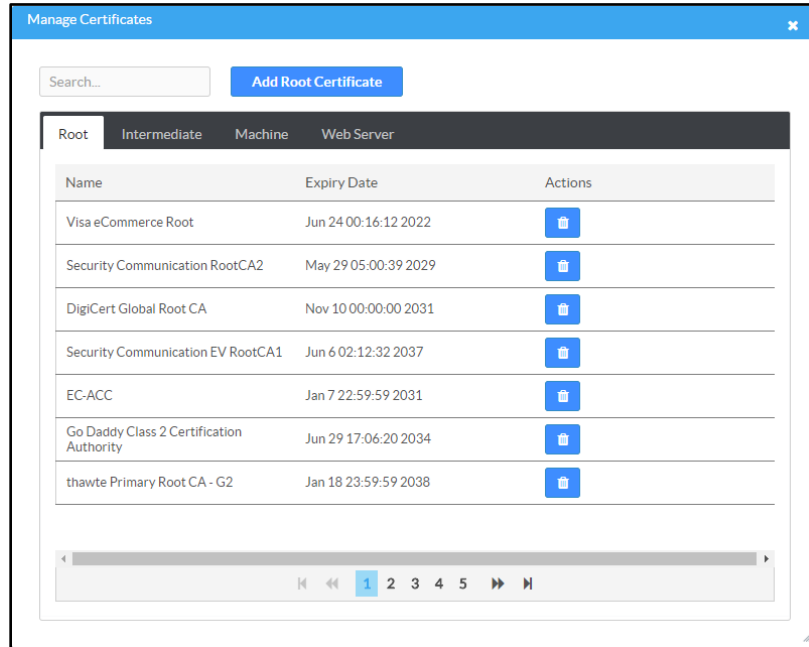
ii. Click **Add Root Certificate**. The **Add Certificate** dialog box is displayed.

Add Certificate Dialog Box
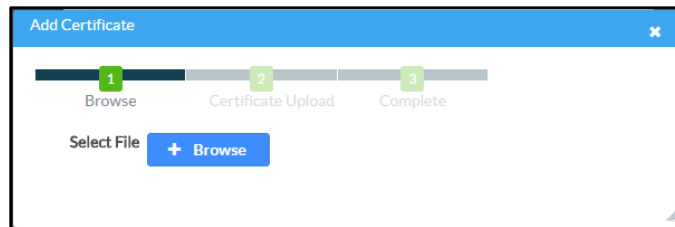
iii. Click **Browse**, select the certificate file, and click **Open**.

iv. Click **Load** to upload the certificate to the CCS-UC-1. A message confirming the upload is displayed.

v. Click **OK** to close the **Add Certificate** dialog box.

e. Click **Save Changes** when done, or **Revert** to return to the previous setting.

DEVICE

Click **DEVICE** to upload firmware, restore factory settings, download system logs, manage cloud settings, manage auto update settings, configure the device for SIP calling, configure the date and time, configure the device for Skype for Business, authentication management, and set the device's application.

Device Management

DEVICE Screen - Device Management

Firmware

To upload device firmware, follow this procedure:

1. Click **Firmware Upgrade**.

2. Click **Browse** and navigate to the location of the firmware file.

3. Select the file to use and click **Open**.

4. Click **Load** to load the firmware.

Maintenance

Click **Restore** to restore the factory settings. Click **Reboot** to reboot the device.

Device Logs

Click **Download Logs** to download the device's system logs to the PC.

Cloud Settings

The Cloud Settings section configures the device's ability to connect to the cloud and be managed by the Crestron XiO Cloud service. By default, the **Cloud Configuration Service Connection** is set to **Enabled**. To disable the connection, set **Cloud Configuration Service Connection** to **Disabled**. For more information, refer to "Crestron XiO Cloud Service" on page 58.

Auto Update

DEVICE Screen - Auto Update
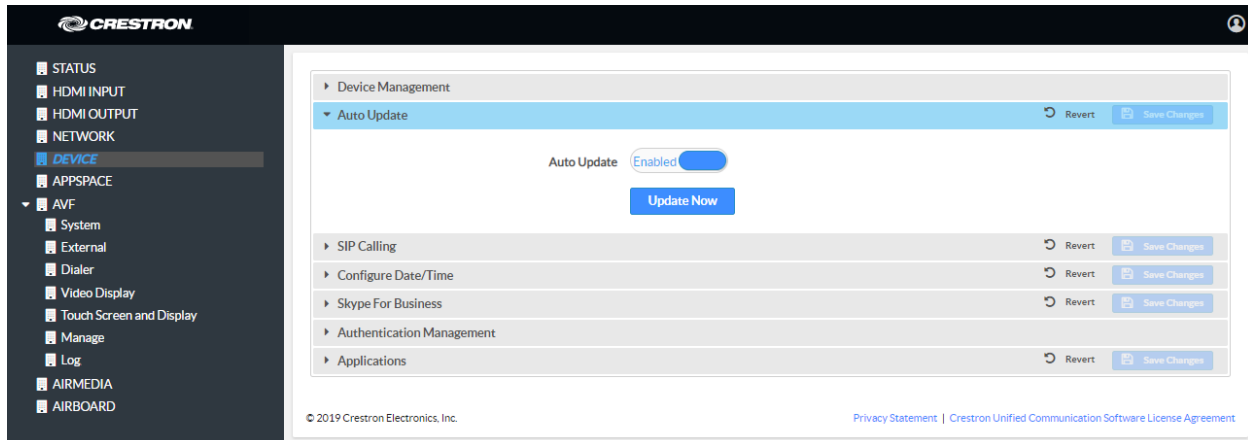
The device can automatically check for firmware updates and update as needed. To allow auto updating, set **Auto Update** to **Enabled**. To turn off auto updating, set **Auto Update** to **Disabled**.

To check for available updates, click **Update Now**.

Session Initiation Protocol (SIP) Calling

DEVICE Screen - SIP Calling
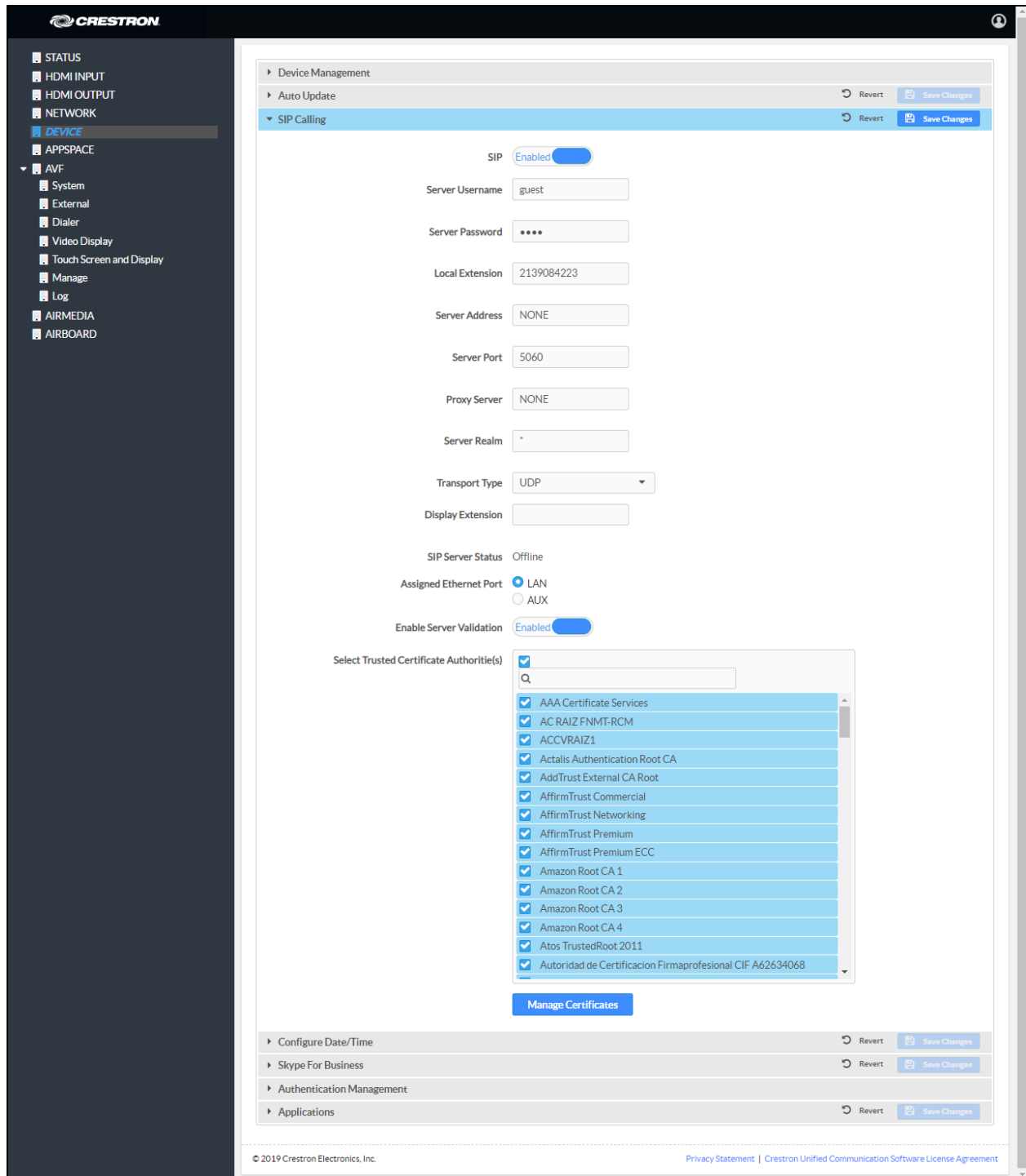
To configure the device to make phone calls using a SIP server, follow this procedure:

1. Set **SIP** to **Enabled.**

2. Select the transport protocol to use for SIP calling from the **Transport Type** drop-down list. Consult with the VoIP administrator for the proper setting.

3. Enter the IP address of the SIP server in the **Server Address** field.

4. Enter the port number to be used within the SIP network in the **Server Port** field.

   NOTE: Port 5060 is the default port used by most SIP servers. Check with the VoIP network administrator for port availability.

5. Enter the user name and password in the **Server Username** and **Server Password** fields.

6. Enter the name of the SIP server realm in the **Server Realm** field.

   NOTE: Many SIP servers do not require a realm and the default value "*" can be used.

7. Enter the local extension number in the **Local Extension** field.

8. Enter the SIP proxy server's IP address or host name in the **Proxy Server** field.

   NOTE: A proxy IP address is not always required. When a proxy IP address is not required, the default value "NONE" can be used.

9. Select the Ethernet port on the CCS-UC-1 to use for SIP calling. Select **LAN** if the LAN port on the CCS-UC-1 connects to the SIP server. Select **AUX** if the AUX port on the CCS-UC-1 connects to the SIP server.

10. If server validation is not used, set **Enable Server Validation** to **Disabled**. Otherwise, set **Enable Server Validation** to **Enabled** and select the trusted certificate authorities to use.

    − To select all of the authorities, click the check box next to the search box. To unselect all of the authorities, click the check box again.

    − To search for a specific authority, start typing the name of the authority in the search box and check the boxes next to the desired authorities.

- To load a custom certificate, click **Manage Certificates** and follow this procedure:

  i. Click the **SIP** tab to manage certificates for use with a SIP server. If present, the current SIP certificate is displayed.

  Manage Certificates Dialog Box: SIP Tab
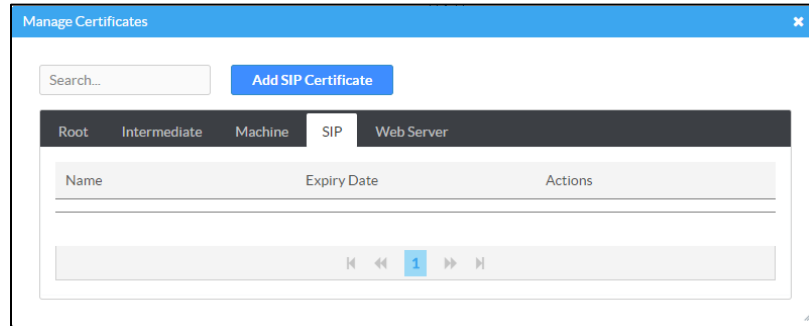
  ii. Click **Add SIP Certificate**.

  iii. Click **Browse**, select the certificate file, and click **Open**.

  iv. When prompted, enter the password used to encrypt the file.

  v. Click **Load** to upload the certificate to the CCS-UC-1. A message confirming the upload is displayed.

  vi. Click **OK** to close the **Add Certificate** dialog box.

11. Click **Save Changes** when done or **Revert** to return to the previous setting. The device will reboot.

12. Verify the status of the connection to the SIP server in the **Status** field.

For additional details on configuring the CCS-UC-1 to operate with specific SIP servers, refer to the DOCUMENTATION tab at www.crestron.com/direct/ccs-uc-1.

Configure the Date and Time

DEVICE Screen - Configure Date/Time
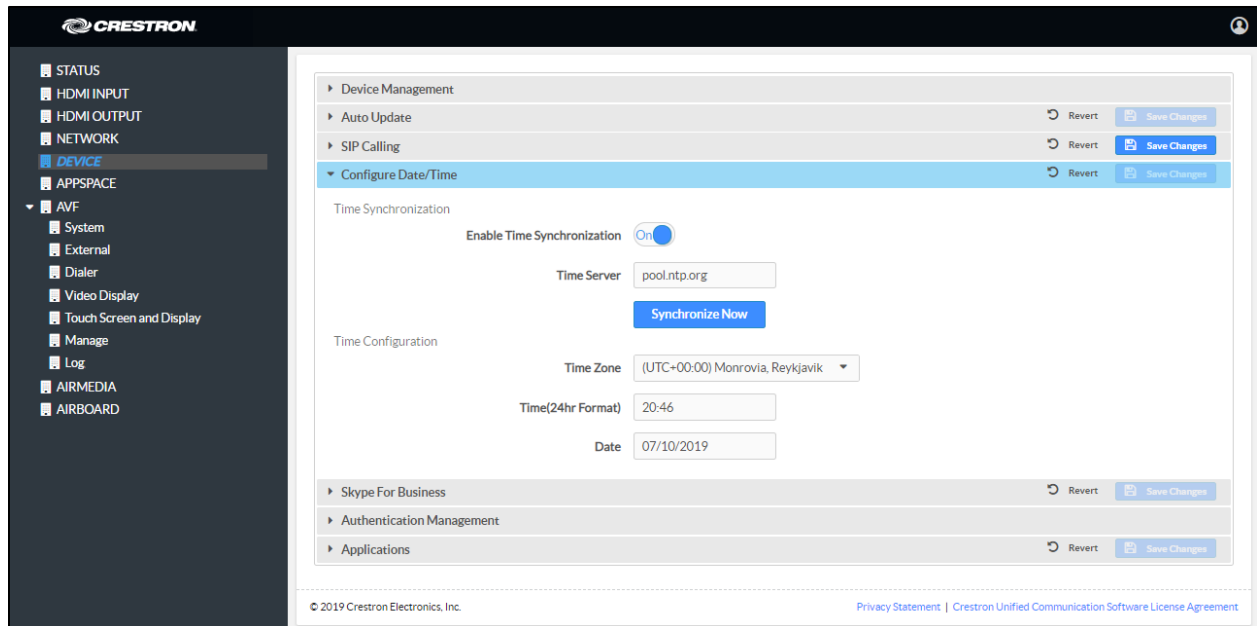
The device's internal clock can be synchronized with a time server or set manually.

NOTE: When connected to Crestron Fusion software, the time is automatically set from the Crestron Fusion software. Any settings made here do not apply.

- Use Time Server Synchronization

    a. Set **Enable Time Synchronization** to **On**.

    b. Enter the time server's IP address or host name in the **Time Server** field.

    c. Click **Synchronize Now** to sync Crestron Mercury with the specified time server.

    d. Click **Save Changes** when done or **Revert** to return to the previous setting.

- Set the Time Manually

    a. Set **Enable Time Synchronization** to **Off**.

    b. Select the time zone from the **Time Zones** list.

    c. Enter the time (in 24 hour format) in the **Time(24hr Format)** field.

    d. Select the date from the **Date** field.

    e. Click **Save Changes** when done or **Revert** to return to the previous setting.

Skype for Business

DEVICE Screen – Skype for Business
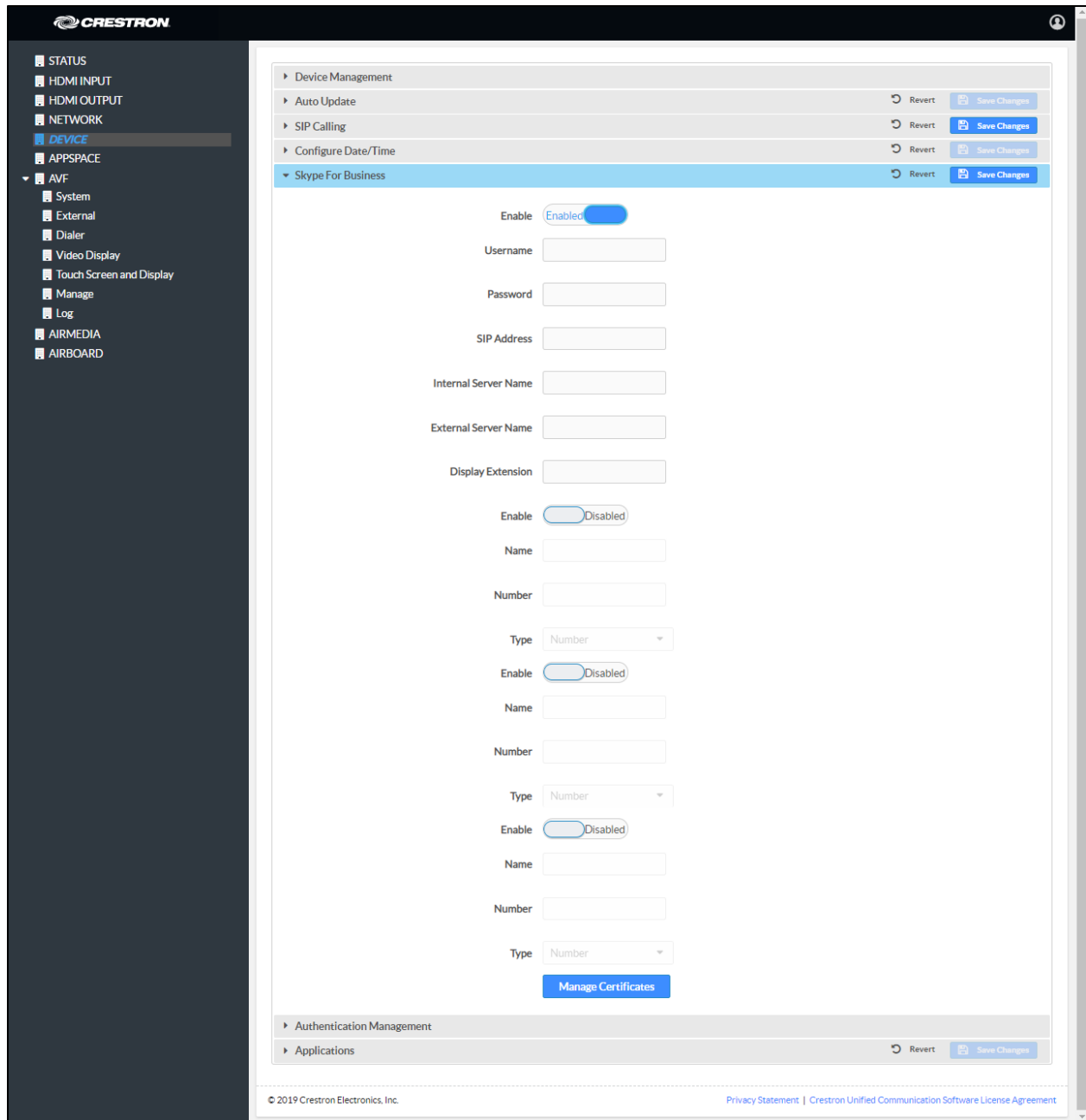
The CCS-UC-1 can be configured to operate as a Skype® for Business client that can host meetings, make phone calls, and perform other Skype for Business functions.

For information on supported versions of Skype for Business, refer to Answer ID 5829 in the Online Help on the Crestron website (www.crestron.com/onlinehelp).

Use the following table and procedure to configure the device for Skype for Business.

Required Fields

USER is HOSTED BY	SIP ADDRESS and USER PRINCIPAL NAME (UPN)	REQUIRED FIELDS
On-premises Skype for Business Server	SIP address and UPN may be the same	**Username:** UPN or domain\username **Password:** Password **SIP Address:** SIP address
Office 365® Application	SIP address and UPN are traditionally the characters before "@onmicrosoft.com"	**Username:** UPN **Password:** Password **SIP Address:** SIP address

1. Set **Enable** to **Enabled**.

2. Refer to the table above to determine the required fields and configure the **Username**, **Password**, and **SIP Address** fields as required.

   NOTE: If the Office 365 account uses modern authentication, the login's password must be entered on the touch screen after the parameters have been saved in step 6.

3. If automatic discovery for mobile clients hasn't been configured, enter the following information:

   − **Internal Server Name**: https://webdir.online.lync.com/Autodiscover/autodiscoverservice.svc/Root

   − **External Server Name**: https://webdir.online.lync.com/Autodiscover/autodiscoverservice.svc/Root

   NOTE: If these fields are left blank, the client uses autodiscovery. If the Skype for Business deployment does not use autodiscovery, these fields should be filled with the appropriate information. These addresses are valid only for Office 365 users and are different for On-premises Skype for Business Server deployments.

4. The device can provide up to four speed dial entries. To configure a speed dial entry, perform the following procedure:

   a. Set **Enable** to **Enabled**.

   b. Enter the "friendly" name of the speed dial entry in the **Name** field.

   c. Enter the email address, phone number, or meeting URL in the **Number** field.

   NOTE: The information entered in the **Number** field must be formatted for the selected **Type** in step d below.

d. Select the type of entry to be assigned from the **Type** drop-down list.

- **Number:** Select **Number** to have the speed dial button dial a phone number.

- **Email:** Select **Email** to have the speed dial button create an ad hoc meeting with a Skype for Business contact's email address.

- **URL:** Select **URL** to have the speed dial button automatically join a Skype for Business meeting.

5. If the installation uses an on-premises Skype for Business deployment that requires a private root certificate, click **Manage Certificates** to manage certificates for authentication. A list of certificates is displayed.

Manage Certificates Dialog Box
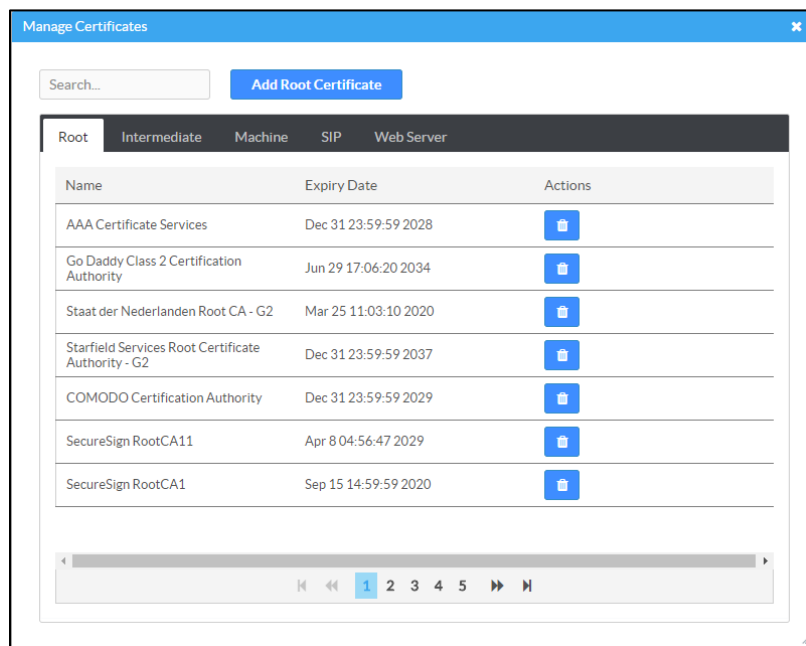
a. Click to delete a certificate from the list of certificates.

b. Click **Add Root Certificate**. The **Add Certificate** dialog box is displayed.

Add Certificate Dialog Box
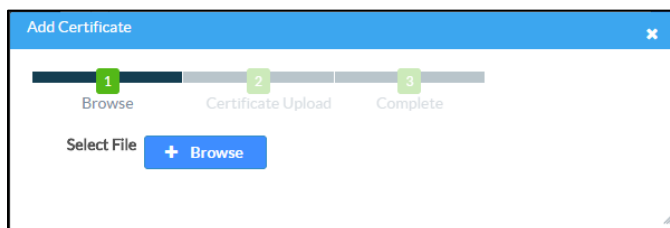
c. Click **Browse**, select the certificate file, and click **Open**.

d. Click **Load** to upload the certificate to the CCS-UC-1. A message confirming the upload is displayed.

e. Click **OK** to close the **Add Certificate** dialog box.

6. Click **Save Changes** when done or **Revert** to return to the previous setting.

If the Office 365 account uses modern authentication, a login screen is displayed on the touch screen as shown below.

Office 365 Login Screen
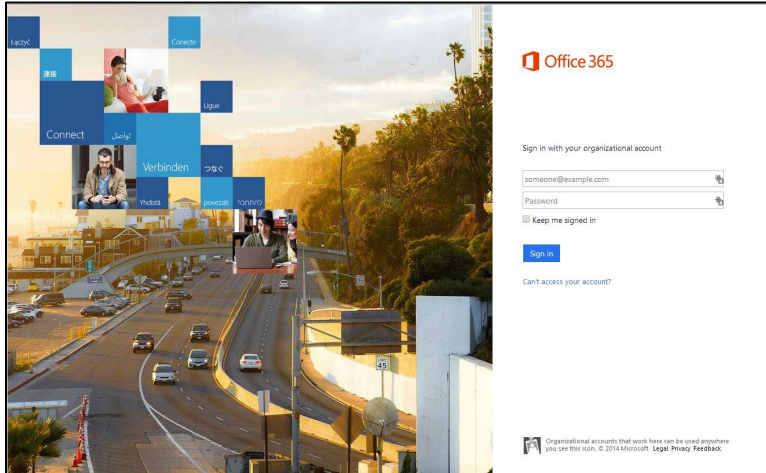
1. Tap inside the password field. A keyboard is displayed.

2. Enter the account password associated with the displayed user name and tap **Go**.

Authentication Management

DEVICE Screen - Authentication Management
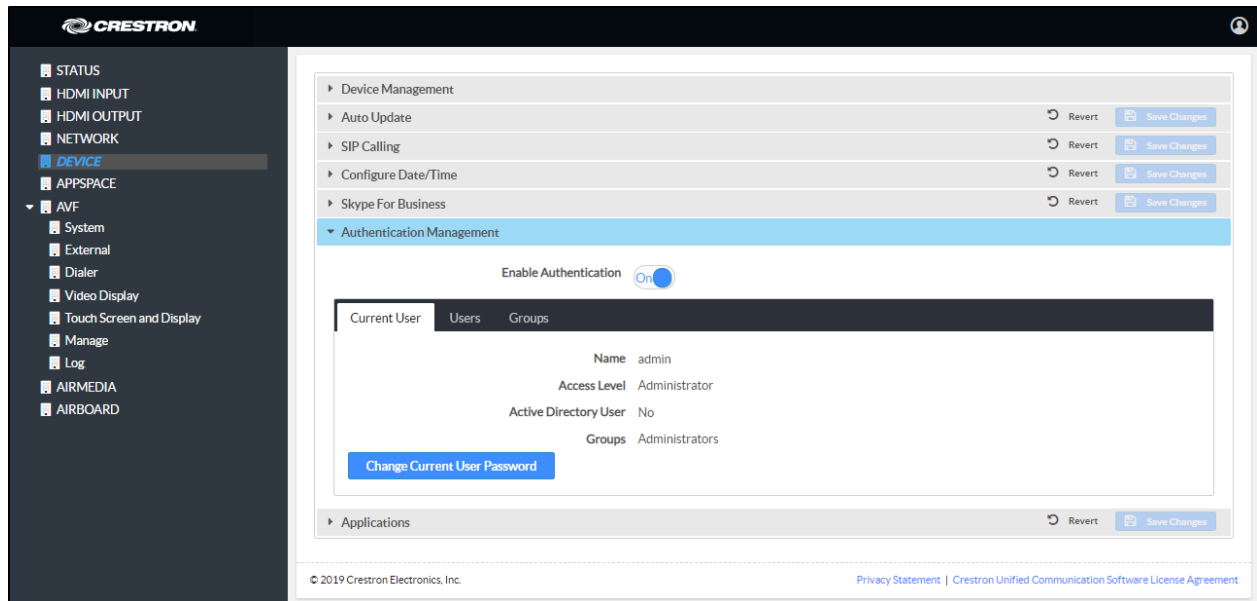
This section is used to set the password for the current user, and manage authorized users and user groups. By default, **Enable Authentication** is set to **On**.

- Current User

  a. Click the **Current User** tab to set the current user's password.

  b. Click **Change Current User Password** to change the current user's password.

  c. Enter the new password in the **Password** field.

  d. Confirm the new password in the **Confirm Password** field.

  e. Click **OK** to set the new password or click **Cancel** to cancel.

- Users

  Click the **Users** tab to manage authorized users. A list of authorized users is displayed.

DEVICE Screen - Authentication Management: Users Tab
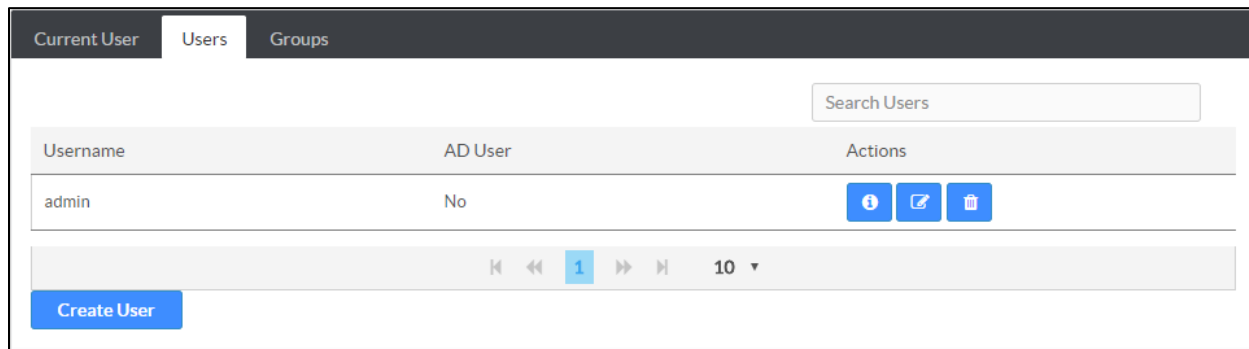
- Click to view details about a user.

- Click to update a user's information.

- Click to delete the user from the list of authorized users.

- Click **Create User** to add a user. The **Create User** dialog box is displayed.

  Create User Dialog Box

  i.   Enter the user name in the **Name** field.

  ii. Enter the user password in the **Password** field.

  iii. Confirm the password in the **Confirm Password** field.

  iv. Select the user's group memberships from the **Groups** drop-down list.

  v.   Select whether the user is a member of the Active Directory® credential management group with the **Active Directory Group** switch.

  vi. Click **OK** to save the user or click **Cancel** to cancel.

- Groups

    Click the **Groups** tab to configure user groups. A list of user groups is displayed.

DEVICE Screen - Authentication Management: Groups Tab
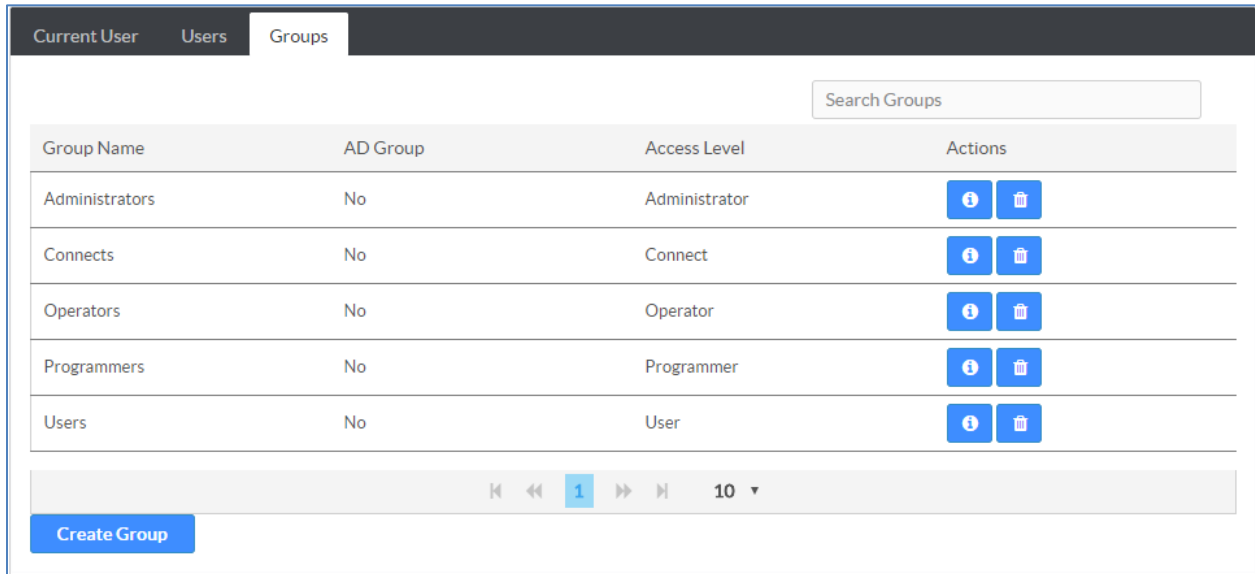
- Click [ⓘ] to view details about a group.

- Click [🗑] to delete the group from the list of groups.

- Click **Create Group** to add a group to the list of user groups. The **Create Group** dialog box is displayed.

    Create Group Dialog Box
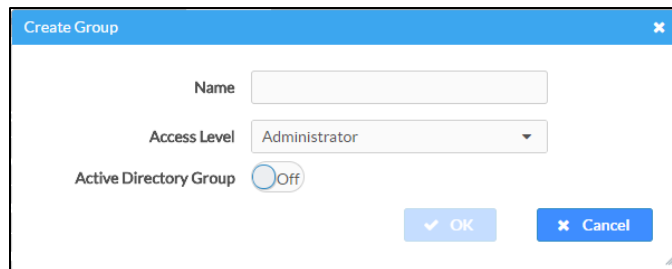
    i.   Enter the group name in the **Name** field.

    ii. Select the group's access level from the **Access Level** drop-down list.

        - **Administrator** grants full access to the system settings and device functions

        - **Connect** grants access to the device functions

        - **Operator** grants read access to the system settings and full access to the device functions

- **Programmer** grants access to program/project specific settings/ReadOnly to the rest, read/write access to the file system, no access to the setup project

- **User** grants access to the device functions

iii. Click **OK** to save the group or click **Cancel** to cancel.

Applications

DEVICE Screen - Applications
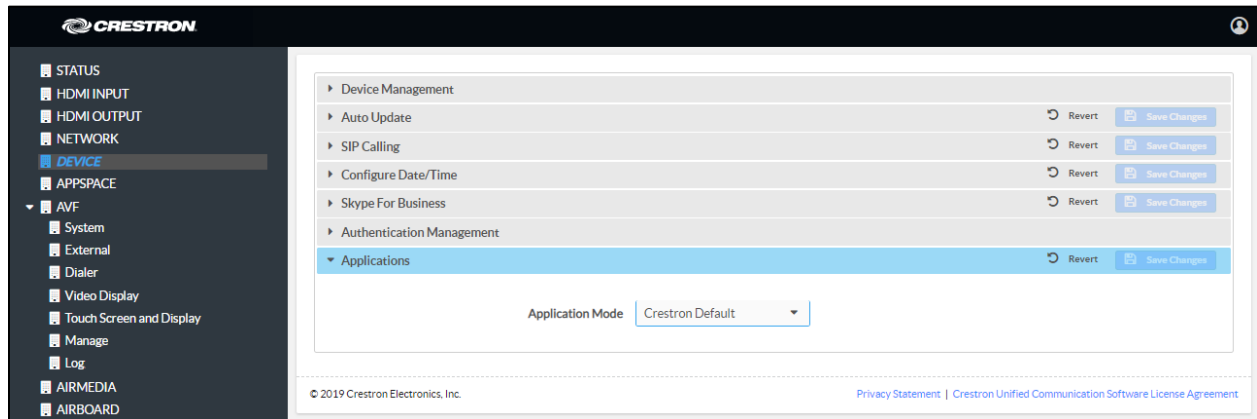
This section is used to select the application to run. The device can run one of three application modes:

- Select **Crestron Default** to have the device work as described in "Operation" on page 62.

- Select **Zoom Rooms** to have the device work as a Zoom room controller used to control a Zoom room conference system.

  For more information on using the CCS-UC-1 as a Zoom room controller, refer to https://www.crestron.com/Products/Featured-Solutions/Zoom-Room-Solutions and https://support.crestron.com/app/answers/answer_view/a_id/5829#MercuryZoom.

- Select **Teams Video** to have the device work as a controller for a Crestron Flex UC system with Microsoft Teams® software. Settings for using the device as part of a Crestron Flex UC system are displayed.

  NOTE: After selecting **Teams Video**, click **Save Changes** and allow the device to reboot. After the reboot is complete, the settings can be specified.

DEVICE Screen – Applications (Teams Video Settings Shown)
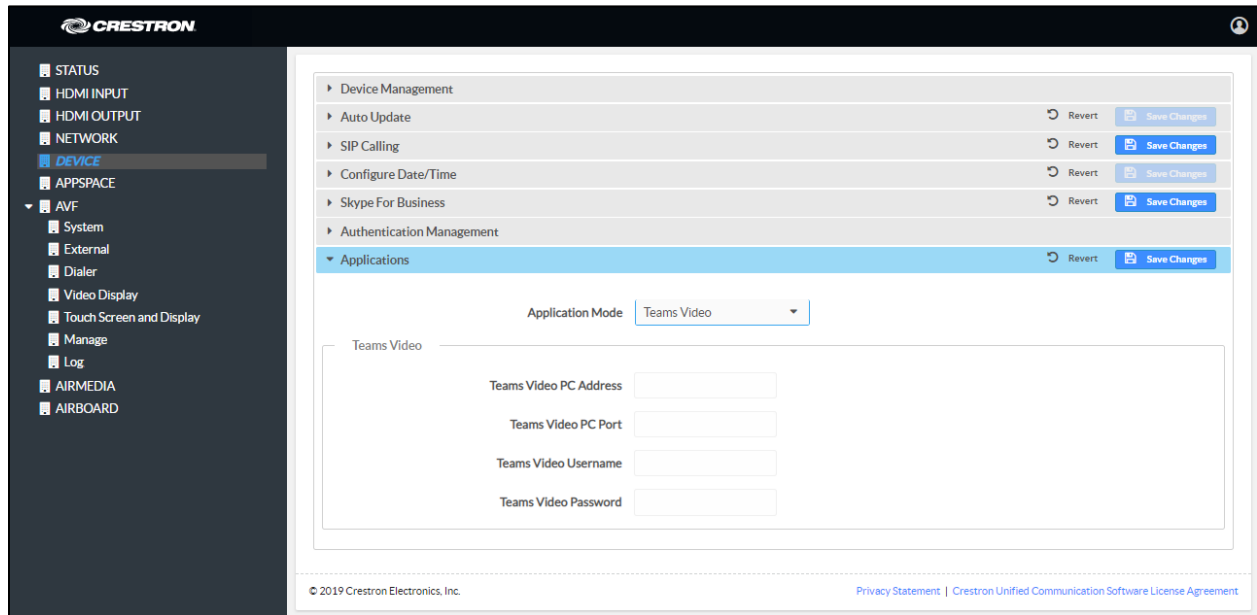
To configure the device for use with a Crestron Flex Microsoft Teams UC system, enter the following information:

- **Teams Video PC Address**: Enter the IP address or host name of the UC-ENGINE running Microsoft Teams software.

  > **NOTE:** The host name is printed on a label on the UC-ENGINE or UC-ENGINE-SD (mounted on the UC-BRKT-100-ASSY or UC-BRKT-100-SD-ASSY). For more information, refer to the UC-M150-T Quick Start (Doc. 8366) or UC-M130-T Quick Start (Doc. 8464) at www.crestron.com/manuals.

- **Teams Video Port:** By default, port number 49500 is used. If a different port number has been configured on the PC running Microsoft Teams software, enter it here.

- **Teams Video Username:** Enter the login username for the Microsoft Teams software host PC. (The default username is "admin".)

- **Teams Video Password:** Enter the login password for the Microsoft Teams software host PC. (The default password is "sfb".)

For more information on configuring a Crestron Mercury UC system with Microsoft Teams software, refer to the UC Video Conference Systems for Microsoft Teams Supplemental Guide (Doc. 8360) at www.crestron.com/manuals.

Click **Save Changes** when done or **Revert** to return to the previous setting. The device will reboot.

APPSPACE

The CCS-UC-1 can display content from an Appspace account when the device is not in use (determined by the built-in occupancy sensor).

NOTES:

- An active Appspace account is required.

- Appspace video service is not supported.

- To use Appspace when the device is in Standby, the Power Settings must be set to "**Occupancy Based With Signage**" as described in "Power Settings" on page 35.

Click **APPSPACE** to configure the device's operation with the Appspace platform.

APPSPACE Screen
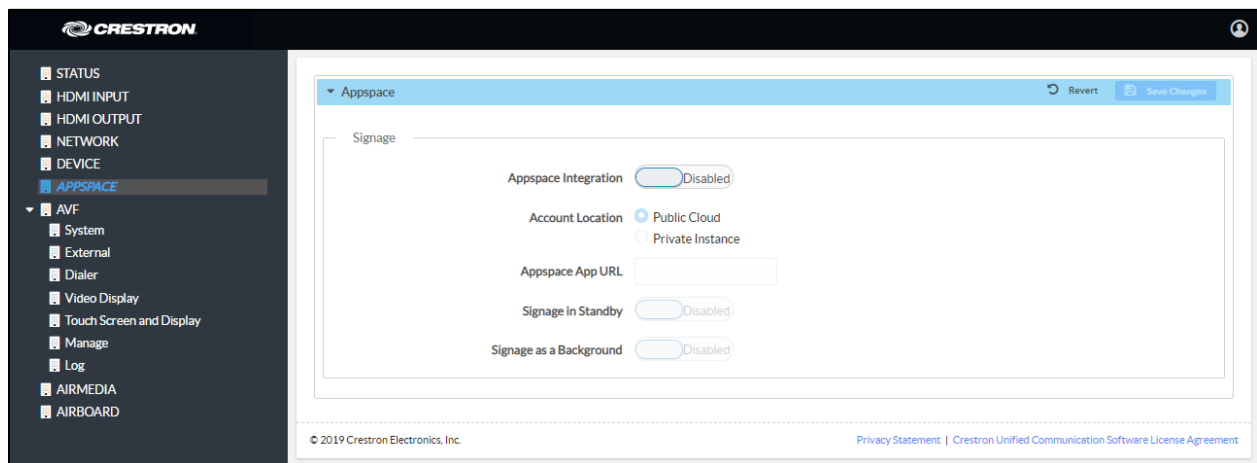
To configure the device for use with Appspace:

1. Set **Appspace Integration** to **Enabled** to enable Appspace when the CCS-UC-1 goes to sleep based on occupancy (Standby). When enabled, the display on the CCS-UC-1 turns off and the connected display will show Appspace content.

   NOTE: To use Appspace when the device is in Standby, the Power Settings must be set to "**Occupancy Based With Signage**" as described in "Power Settings" on page 35.

2. Choose the **Account Location**.

   - **Public Cloud**: Select this option to use the Appspace public web app.

   - **Private Instance**: Select this option to use a privately hosted instance of the Appspace web app.

3. Enter the **Appspace App URL**. This is the URL where a privately hosted instance of the Appspace web app can be found. Leave blank if the **Public Cloud** account location is selected.

4. Set **Signage in Standby** to **Enabled** to display Appspace content when the CCS-UC-1 goes to sleep based on occupancy. Set to **Disabled** to turn off the feature.

5. Set **Signage as a Background** to **Enabled** to display Appspace content on the connected display behind the calendar, date/time, system name, connection info and branding portions of the display.

    NOTE: When set to **Enabled**, the **Enable Custom Backgrounds** and **Interval Between Backgrounds** options on the Room Schedule screen (described in "Display Customization" on page 50) are disabled.

6. Click **Save Changes** when done or **Revert** to return to the previous setting.

.AV Framework (AVF)

Click **AVF** to configure the device's .AV Framework™ platform functionality. Click ▶ to display links for configuring system settings, controlling Crestron Fusion® and calendar settings, configuring the dialer, configuring the connected video display, configuring touch screen and connected display operation, managing the system's configuration, and viewing activity logs.

System

The **System** screen specifies the room name, the local language setting, the time format, the date format, and manages the power settings.

AVF Screen - System

System Settings

To configure the system settings, follow this procedure:

1. Click **System** to display the **AVF** (System) screen.

2. In the **Room Name** field, enter the name of the room where the device is installed.

3. In the **Language** field, select the local language from the drop-down list.

4. In the **Time Format** field, select the time format from the drop-down list (**12 hour** or **24 hour**).

5. In the **Date Format** field, select the date format from the drop-down list.

Power Settings

Configure power settings to manage the system's power usage. To configure the power settings, follow this procedure:

1. Select one of the following modes from the **Standby** drop-down list.

   – **Always On** sets the following:

      ▪ The connected display will be on during business hours (defined in step 2).

      ▪ The system will wake up based on occupancy outside of business hours.

      ▪ The touch screen will always be on.

      ▪ Changes reported by the built-in occupancy sensor will be ignored.

   – **Based on Occupancy** sets the following:

      ▪ The built-in occupancy sensor will be used to determine when the room is occupied or vacant.

      ▪ When the room is occupied the system will be on.

      ▪ When the room is vacant the system will be off.

      ▪ The connected display will be on when the room is occupied and off when the room is vacant.

      ▪ The touch screen will be on when the room is occupied and off when the room is vacant.

      ▪ Crestron Fusion power events will be ignored.

      ▪ Connecting an active HDMI input source will turn on the room.

      ▪ Connecting to the device by an AirMedia connection will not turn on the room.

- **Occupancy Based With Signage** sets the following:

  - The built-in occupancy sensor will be used to determine when the room is occupied or vacant.

  - When the room is occupied the system will be on.

  - When the room is vacant, the system will be operating in standby mode during defined business hours and off outside of business hours (defined in step 2).

  - The connected display will be on when the system is in standby mode, and off when the system is off.

  - The touch screen will be on when the room is occupied, and off when the room is vacant.

  - When in the standby mode, digital signage that is configured to run during standby mode will be displayed.

  - Crestron Fusion power events will be ignored.

  - Connecting an active HDMI input source will not turn on the room.

  - Connecting to the device by an AirMedia connection will not turn on the room.

  NOTE: This setting must be selected if Appspace is to be used.

2. For each day of the week, define business hours:

   - **Enable** sets whether the day is part of the business hours schedule. Set the switch to **Enable** to have the day included in the business hours schedule. Set the switch to **Disable** to remove the day from the business hours schedule.

   - **Display On** sets the time the connected display will turn on. To set the on time, click the hour, then click the exact time.

   - **Display Off** sets the time the connected display will turn off. To set the off time, click the hour, then click the exact time.

3. Click **Save** to save the settings.

The following table shows each power option's ability for each **Standby** setting.

Operation versus Standby Setting

	Standby Setting		
OPERATION	**Always On**	**Occupancy Based**	**Occupancy Based With Signage**
Always On	✓	✖	✖
Front Display Content During Standby	✖	✖	✓
Allow Fixed Schedule Power Control	✖	✖	✓
Allow Occupancy Power Control	✖	✓	✓

External

The **External** screen displays the settings for operating with Crestron Fusion.

AVF Screen - External
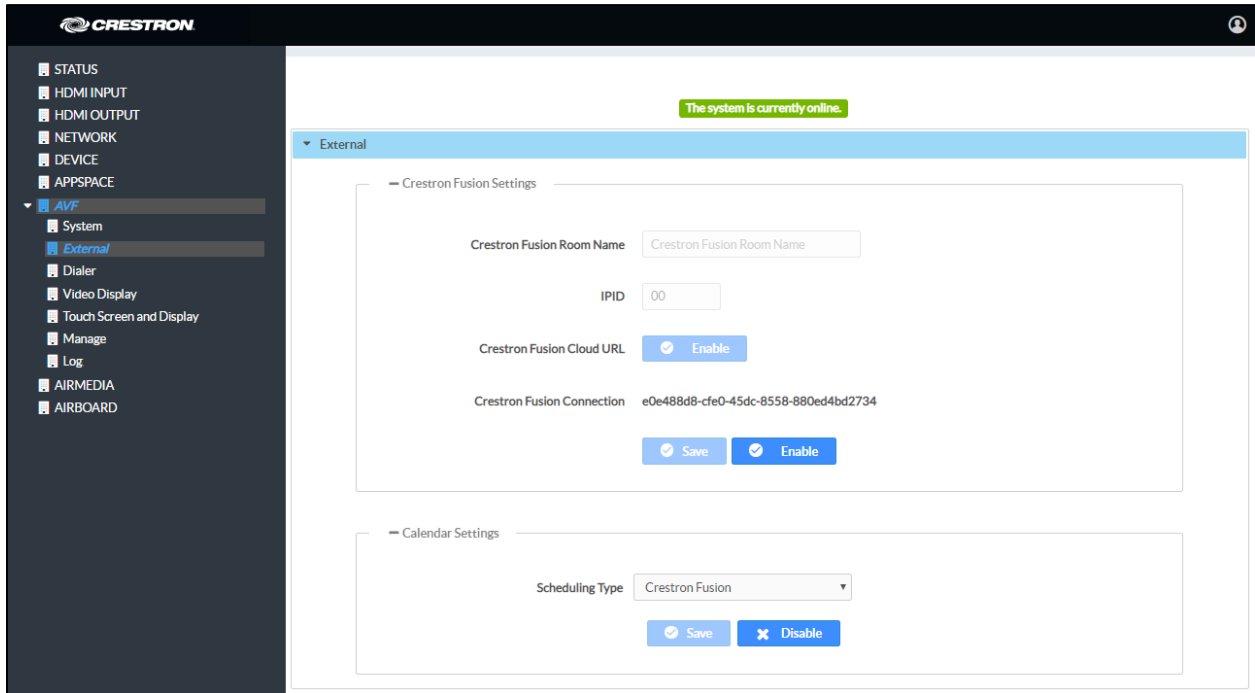
Crestron Fusion Settings

To configure the Crestron Fusion settings, follow this procedure:

1. In the **Crestron Fusion Room Name** field, enter the name to be used by the Crestron Fusion server.

2. In the **IPID** field, enter the IP ID number to be used by the Crestron Fusion server.

3. In the **Crestron Fusion Cloud URL** field, click **Enable** to allow autodiscovery by the Crestron Fusion server.

4. Click **Save** to save the settings or click **Disable** to disable the settings.

Upon completion, the device should be brought into Crestron Fusion software as a processor. For details, refer to the Crestron Fusion help file.

Calendar Settings

To configure the calendar settings, follow this procedure:

1. Select the scheduling type from the drop-down list.

    − Select **Crestron Fusion** to use Crestron Fusion for calendar functions.

– Select **SchedulingType Exchange** to use Microsoft Exchange Server for calendar functions.

i. Enter the URL of the Exchange server in the **Exchange EWS URL** field.

ii. Enter the domain name used by the Exchange server in the **Domain** field.

iii. Enter the name of the conference room in the **Username** field.

iv. Enter the password of the conference room in the **Password** field.

v. Enter the Calendar email address in the **Calendar email address** field.

NOTE: The Calendar email address is required only for accounts using Impersonation.

vi. (Optional) Check the **Outlook Use Certificate** box to use an Outlook® certificate. Click **Upload** and follow the instructions to upload a certificate.

For more information, refer to Answer IDs 5829 and 5830 in the Online Help on the Crestron website (www.crestron.com/onlinehelp).

2. Click **Save** to save the settings or click **Disable** to disable the settings.

For additional information on configuring Exchange or Office 365 with the CCS-UC-1, refer to "Appendix: Configure Exchange for Use with CCS-UC-1" on page 102.

Dialer

The **Dialer** screen configures the Bluetooth® connectivity settings, the speed keys for quick dialing via SIP, one-touch keys for initiating phone calls for a meeting, and configures the device to use Lightweight Directory Access Protocol (LDAP) to look up names in an LDAP directory.

AVF Screen - Dialer

See below for configuration instructions. When done, click **Save** to save the settings.

Dialer

- General

    The **General** section configures the device's Bluetooth functionality.

    - To turn on the Bluetooth function, set **Disable Bluetooth** to **Disable**. To turn off the Bluetooth function, set **Disable Bluetooth** to **Enable.**

    - In the **Bluetooth Device Name** field, enter the device's Bluetooth broadcast name. This is the name that is displayed on a list of Bluetooth connections when a user attempts to connect their Bluetooth device to the CCS-UC-1.

    - Choose the Bluetooth Pairing Mode.

        - **Timeout**: Set the mode to **Timeout** to break the Bluetooth connection between the Bluetooth device and the CCS-UC-1 after the **Bluetooth Idle Disconnect Time** has elapsed. The connection between the device and the CCS-UC-1 will also break if a different function is selected.

        - **Persistent**: Set the mode to **Persistent** to maintain the Bluetooth connection after a call ends. The Bluetooth connection is maintained even if a different function is selected.

    - Select the appropriate settings to disable **Audio** or **USB** connectivity.

        NOTE: Disabling Audio, Bluetooth, or USB connectivity removes the respective connection options from the user interface.

- Speed Keys

    Configure **Speed Keys** for use when dialing from the "Audio" function. Refer to "Make a Call with an Office Session Initiation Protocol (SIP) System" on page 81 for details.

    1. Select **Enable** for the speed key to be displayed on the device. The **Name** and **Number** fields are displayed.

    2. In the **Name** field, enter the name to be displayed on the device.

    3. In the **Number** field, enter the phone number to be dialed when the speed key is pressed. Enter any required dialing codes.

        NOTE: If supported by the SIP server, special characters can be entered as well.

    4. Repeat steps 1 through 3 for each speed key.

    5. Click **Save** to save the changes.

- One Touch

  To configure a button that initiates a specified phone call for a meeting, enter a Regular Expression (Regex) pattern that will search for phone numbers within the schedule body. For example, if the scheduled event contains a section with a phone number, such as "MeetingId:NNNNNNNNNN" (where NNNNNNNNNN is the conference call's phone number), a pattern of "MeetingId:(\d+,*\d*)" can be used.

  NOTES:

  - The scheduling software must make use of the expression "MeetingId:NNNNNNNNNN" (where NNNNNNNNNN is the conference call's phone number) and place it in the body of the email message that schedules the meeting.

  - If none of the Regex fields are filled, the **JOIN** button does not appear on the CCS-UC-1 home screen.

  Click **Save** to save the changes.

Lightweight Directory Access Protocol (LDAP)

LDAP is an Internet protocol that the CCS-UC-1 can use to look up contacts from a server. The CCS-UC-1 can be configured to search for telephone contacts in an LDAP directory. The amount of search results can be controlled by using filters, allowing for searches within departments, locations, etc.. For more information, refer to Answer ID 5852 in the Online Help on the Crestron website (www.crestron.com/onlinehelp).

NOTE: Knowledge of the LDAP server and its directory information tree are required to configure the CCS-UC-1 for use with the LDAP server.

To configure the CCS-UC-1 to access and look up members in an LDAP directory, perform the following procedure:

1. Set **Enable LDAP** to **Enable**.

2. Select the **Authentication Method** from the drop-down list.

3. Configure the fields highlighted in red. Fields that are not highlighted are optional and are not required for operation.

   - **Kerberos Auto Discovery**

     - **Username:** Enter the user name for logging the device into the LDAP server.

     - **Password** (required)**:** Enter the password associated with the **Username**.

     - **LDAP Domain**: Enter the fully qualified domain associated with the login credentials supplied in the **Username** and **Password** fields. For example, MyCompany.MyCompany.com.

- **DN:** Enter the path in the directory information tree to start the search. For example, dc=Mycompany,dc=MyCompany,dc=com.

- **Search:** Enter the LDAP search string to use. Add search filters as necessary to narrow the search.

  Sample: (&(**XX**=%QUERY%)(objectCategory=person)(objectClass=user))

  Where **XX** is the name of the Display Attribute, and the subsequent terms are search filters.

  %QUERY% will be replaced with the search string.

  NOTE: Must contain "%QUERY%" and must start with "(" and end with ")".

- **Display Attribute:** Enter the name of the LDAP field associated with the attribute used for displaying a user name.

- **Location** (optional): Enter the name of the LDAP field associated with the attribute used for listing a location.

- **Department Attribute** (optional): Enter the name of the LDAP field associated with the attribute used for listing a department.

- **Phone Attribute**: Enter the name of the LDAP field associated with the attribute used for listing a phone number.

− **Kerberos Server**

- **Username:** Enter the user name for logging the device into the LDAP server.

- **Password:** Enter the password associated with the **Username**.

- **LDAP Domain**: Enter the fully qualified domain associated with the login credentials supplied in the **Username** and **Password** fields. For example, MyCompany.MyCompany.com.

- **Host**: Enter the fully qualified host name or the IP address of the LDAP server.

- **Port**: Enter the port number used by the LDAP server to listen for LDAP queries. The default value is 389.

- **DN:** Enter the path in the Directory Information Tree to start the search. for example dc=Mycompany,dc=MyCompany,dc=com.

- **Search:** Enter the LDAP search string to use. Add search filters as necessary to narrow the search.

    Sample: (&(**XX**=%QUERY%)(objectCategory=person)(objectClass=user))

    Where **XX** is the name of the Display Attribute, and the subsequent terms are search filters.

    %QUERY% will be replaced with the search string.

    NOTE: Must contain "%QUERY%" and must start with "(" and end with ")".

- **Display Attribute:** Enter the name of the LDAP field associated with the attribute used for displaying a user name.

- **Location** (optional): Enter the name of the LDAP field associated with the with the attribute used for listing a location.

- **Department Attribute** (optional): Enter the name of the LDAP field associated with the attribute used for listing a department.

- **Phone Attribute**: Enter the name of the LDAP field associated with the attribute used for listing a phone number.

- **Server**

    - **Username:** Enter the user name for logging the device into the LDAP server.

    - **Password:** Enter the password associated with the **Username**.

    - **Host**: Enter the host name or the IP address of the LDAP server.

    - **Port**: Enter the port number used by the LDAP server to listen for LDAP queries.

    - **DN:** Enter the path in the Directory Information Tree to start the search. for example dc=Mycompany,dc=MyCompany,dc=com.

    - **Search:** Enter the LDAP search string to use. Add search filters as necessary to narrow the search.

        Sample: (&(**XX**=%QUERY%)(objectCategory=person)(objectClass=user))

        Where **XX** is the name of the Display Attribute, and the subsequent terms are search filters.

        %QUERY% will be replaced with the search string.

        NOTE: Must contain "%QUERY%" and must start with "(" and end with ")".

    - **Display Attribute:** Enter the name of the LDAP field associated with the attribute used for displaying a user name.

- **Location** (optional): Enter the name of the LDAP field associated with the with the attribute used for listing a location.

- **Department Attribute** (optional): Enter the name of the LDAP field associated with the attribute used for listing a department.

- **Phone Attribute**: Enter the name of the LDAP field associated with the attribute used for listing a phone number.

4. Click **Connect** to connect to the LDAP server. If a connection to the LDAP server is made, the **Search** button becomes active and a test query can be performed. If a connection to the LDAP server cannot be made, the **Search** button is inactive and does not work.

5. Click **Search** to run a test search. The **Search LDAP** dialog box is displayed.

Search LDAP Dialog Box

a. Enter the search term in the **Query** field.

b. Click **General Search**. Search results are displayed in the lower half of the dialog box.

c. Click **x** to close the **Search LDAP** dialog box.

For more information, refer to Answer ID 5852 in the Online Help on the Crestron website (www.crestron.com/onlinehelp).

Video Display

The **Video Display** screen configures the device for operation with the connected display. If detectable, the device shows the display's manufacturer and product name and shows it on the Video Display screen. The CCS-UC-1 supports CEC, Crestron Connected®, IP, serial, and infrared profiles for a variety of manufactuers.

AVF Screen - Video Display
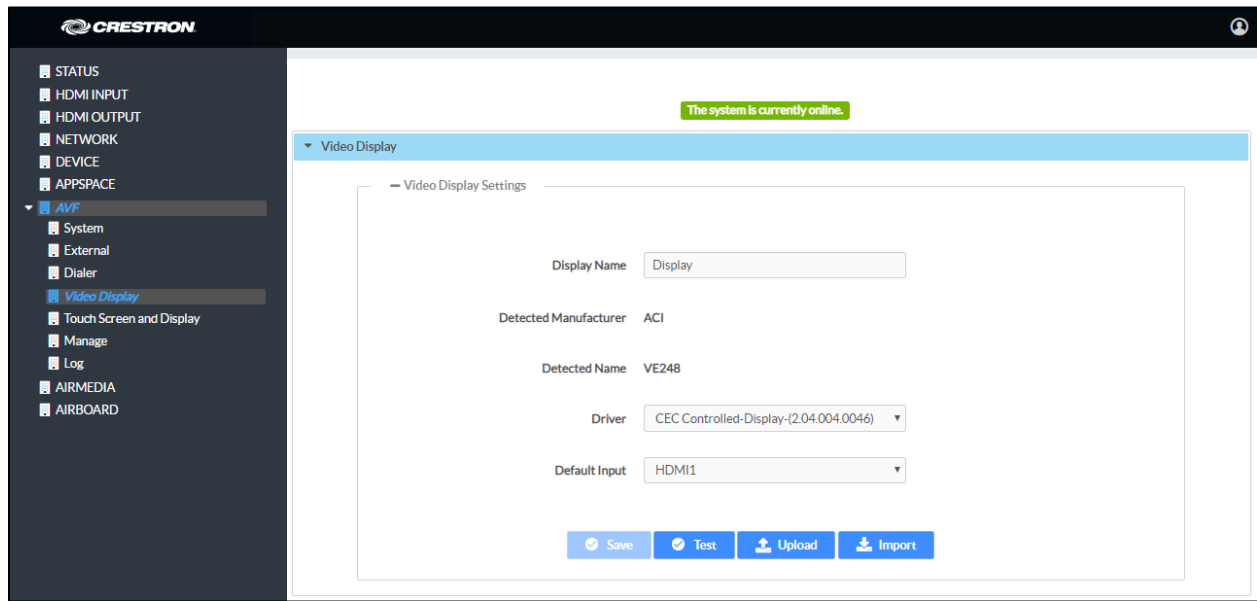
To configure the device to work with a connected display, follow this procedure:

1. In the **Display Name** field, enter a name for the connected display.

2. In the **Driver** drop-down list, select the driver for the connected display device.

3. Depending on the detected manufacturer, different controls are displayed. Complete the required fields to use the selected display device.

4. Click **Save** to save the settings.

5. Click **Test** to display controls for testing the control commands.

If the connected display has a custom driver file, it can be uploaded to the device. To upload a custom device driver:
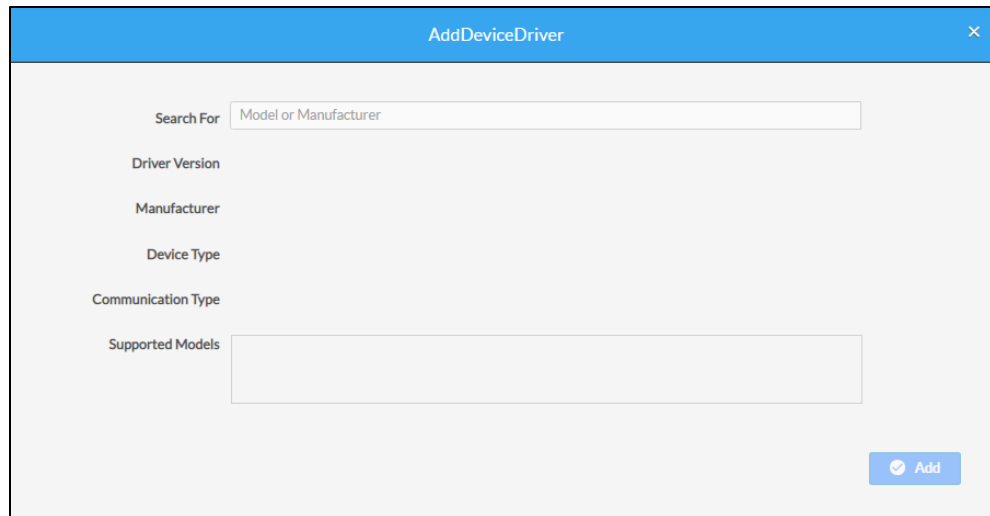
1. Click **Upload**. A warning message is displayed.

2. Click **OK** to proceed.

3. Navigate to the location of the display device driver file.

4. Select the file and click **Open**.

You can search Crestron's cloud-based driver database for a specific driver.

NOTE: The CCS-UC-1 must be able to reach the Internet to search the cloud-based driver database. If a proxy server is used for Internet access, the CCS-UC-1 must be configured for use with the proxy server. For details, refer to "Network Proxy Settings" on page 11.

1. Click **Import**. A warning message is displayed.

2. Click **OK** to proceed. The **AddDeviceDriver** screen is displayed.

AddDeviceDriver Screen
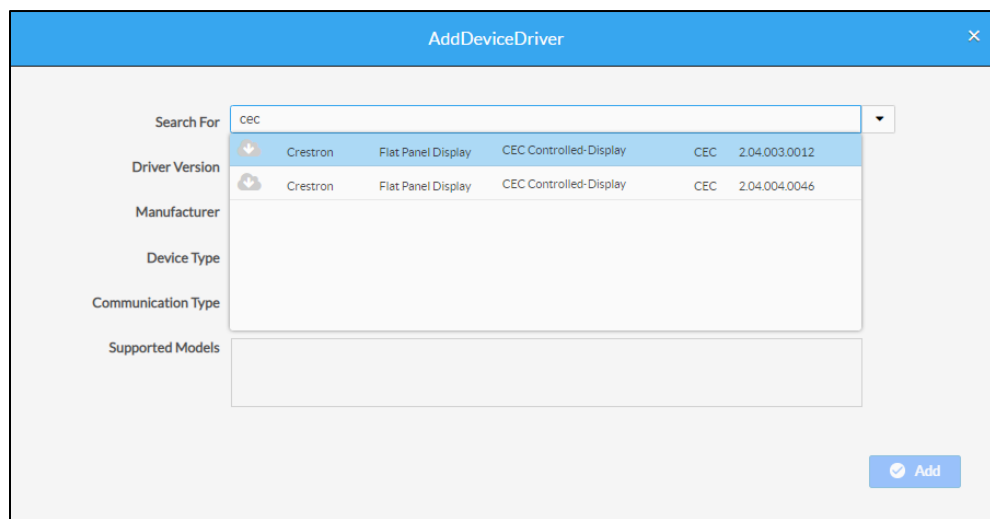
3. Enter a model or manufacturer name in the **Search For** field. Results are displayed in a drop down list from the **Search For** field.

AddDeviceDriver Screen, Search Results

4. Click the desired driver from the drop-down list. Driver details are displayed below the **Search For** field.

5. Click **Add** to add the driver to the device. The window screen closes and the driver is selected as the display device and the device is taken offline.

AVF Screen - Video Display, driver selected
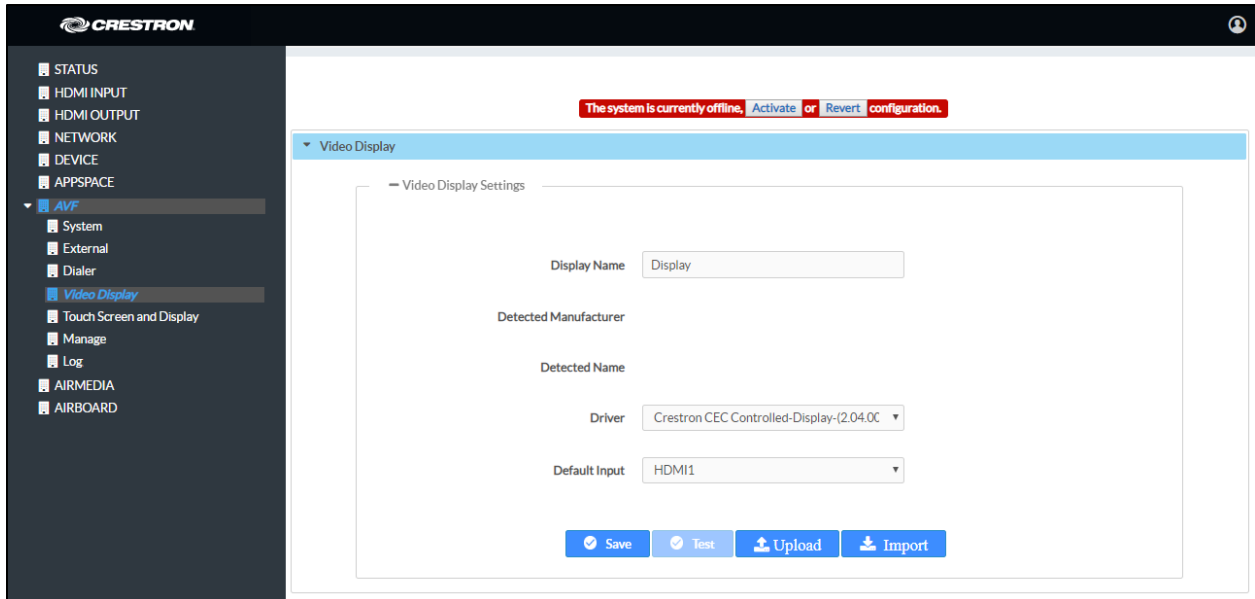
Activate the configuration as described in "Manage" on page 50.

Touch Screen and Display

Click **Touch Screen and Display** to customize the function and appearance of the touch screen and the connected display.

AVF Screen – Touch Screen and Display

General

The General section specifies what information is displayed on the touch screen and connected display.

- Set **Hide Meeting Subject** to **Disable** to have the meeting's subject shown. To hide the meeting's subject, set **Hide Meeting Subject** to **Enable**.

- Select **Hide Meeting Organizer** to **Disable** to have the meeting's organizer shown. To hide the meeting's organizer, set **Hide Meeting Organizer** to **Enable**.

- Set **Show Broadcast Message on Touch Screen** to **Enable** to show broadcast messages on the device's touch screen (broadcast messages are automatically displayed on the connected display). To prevent broadcast messages from showing on the device's touch screen, set **Show Broadcast Message on Touch Screen** to **Disable**.

- Enter the amount of minutes an emergency broadcast message is displayed in the **Emergency Broadcast Timeout** field.

  NOTE: Emergency broadcasts are sent from Crestron Fusion. For more information on emergency broadcasts, refer to the Crestron Fusion® Software SSI Module Programming for SW-FUSION Reference Guide (Doc. 7898) at www.crestron.com/manuals.

- Enter the amount of minutes a non-emergency broadcast message is displayed in the **Non Emergency Broadcast Timeout** field.

When all changes are made, click **Save** to save the settings.

Display Notifications

The **Display Notifications** section configures how notifications are displayed while the device is in use.

- Set **Enable Call Notification** to **Enable** to allow call notifications to be displayed while presenting. Set **Enable Call Notification** to **Disable** to disable notifications for incoming calls.

- Enter the amount of time (in seconds) a call notification message is displayed in the **Call Notification Timeout** field.

- Enter the amount of time before the meeting's remaining time is displayed in the **Time Remaining Message Starts** field.

- Enter the amount of time the meeting's time remaining message is displayed in the **Time Remaining Message Duration** field.

- Enter the amount of time before the next meeting's information is displayed in the **Next Meeting Information Shown** field.

When all changes are made, click **Save** to save the settings.

Display Customization

The **Display Customization** section configures what is shown on the display device when not in use.

- Set **Hide Wired Cable Connection** to **Disable** and enter information in **Cable Connection Details** to display instructions for using cable connections. To hide information on cable connections, set **Hide Wired Cable Connection** to **Enable**.

- To show the clock and calendared events on the center of the display device, set **Show Calendar or Clock Overlay** to **Enable**. To remove the clock and calendared events from the center of the display device, **Show Calendar or Clock Overlay** to **Disable**.

- Set **Show Background Overlay** to **Enable** to place a monochrome filter over the background images. Set **Show Background Overlay** to **Disable** the filter and show background images in full color.

- A custom logo can be displayed in the lower right corner of the display device when the system is not in use. To use a logo or other graphic, set **Enable Custom Logo Graphic** to **Enable**, and enter the URL where the graphic is located in the **Custom Logo Graphic URL** field. When set to **Disable**, the Crestron logo is displayed.

  NOTE: The optimal image size is 480 x 94 pixels. Custom graphics that are larger than 480 x 94 pixels are scaled down while maintaining their aspect ratio. Custom graphics that are smaller than 480 x 94 pixels are not scaled up and should be resized for optimal image display.

- A slideshow of custom backgrounds can be shown on the display device when the system is not in use. To use custom backgrounds, select Enable Custom Backgrounds and enter the URL where the background images are stored in the **Add Custom Background Url** field. To specify the length of time that each background image is displayed, enter a time (in seconds) in the **Interval Between Backgrounds** field.

  NOTES:

  - When Appspace is enabled, custom backgrounds cannot be used. For information on using Appspace, refer to "APPSPACE" on page 32.

  - The interface has been designed to use most of the screen area for informational purposes. This feature is intended to for use with corporate colors, branding, and aesthetics to the particular organization and should not be used to add custom instructions for room users.
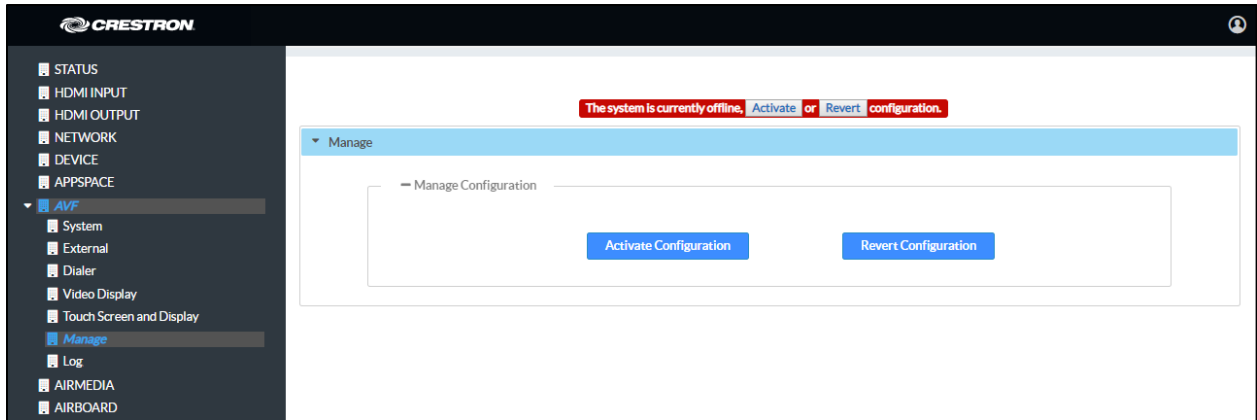
When all changes are made, click **Save** to save the settings.

Manage

The **Manage** screen is used to enact the changes made in the web pages or revert to the previous settings.
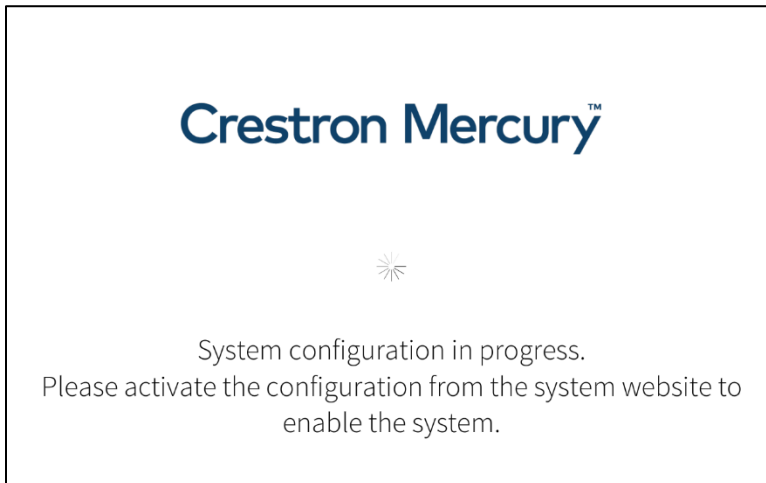
When changes are made to the AVF settings, the device goes offline and the screen below is shown.
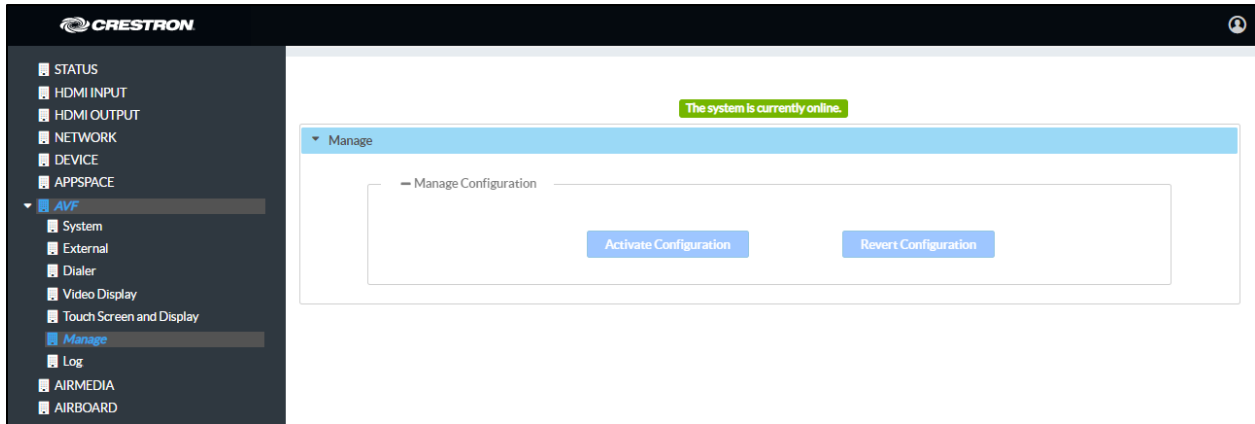
AVF Screen - Manage - System Offline

Additionally, the device shows the following screen.

Front Panel, System Configuration in Progress

Click **Activate Configuration** to carry out the changes that were made, or click **Revert Configuration** to revert back to the previously saved settings. The screen below is shown.
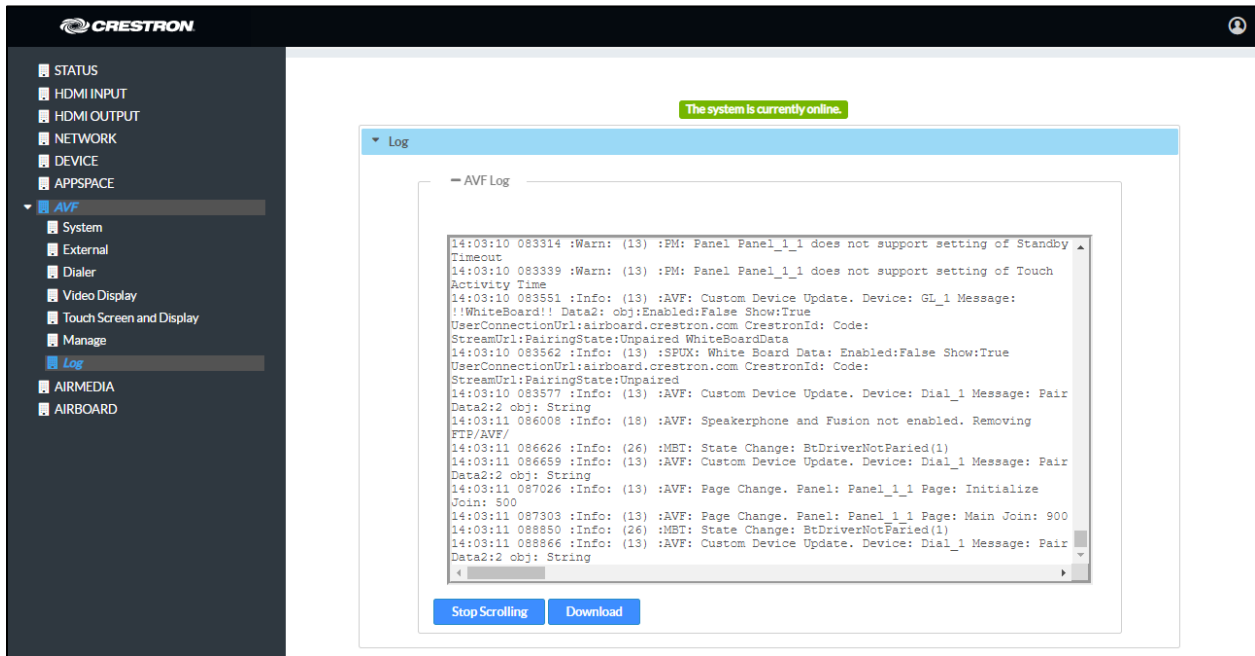
AVF Screen - Manage - System Online

Log

The **Log** screen is used to view and download the device's message logs for analysis.

AVF Screen - Log

- Click the up or down arrows to scroll through the message log.

- Click **Stop Scrolling** to pause the message log. Click **Scrolling** to resume.

- Click **Download** to download the message log.

AirMedia

Click **AIRMEDIA** to configure the device's AirMedia functionality. The **Airmedia** screen is displayed.

> **NOTE:** For additional details on deploying AirMedia, refer to the AirMedia Deployment Guide (Doc 7693) at www.crestron.com/manuals.

AIRMEDIA Screen
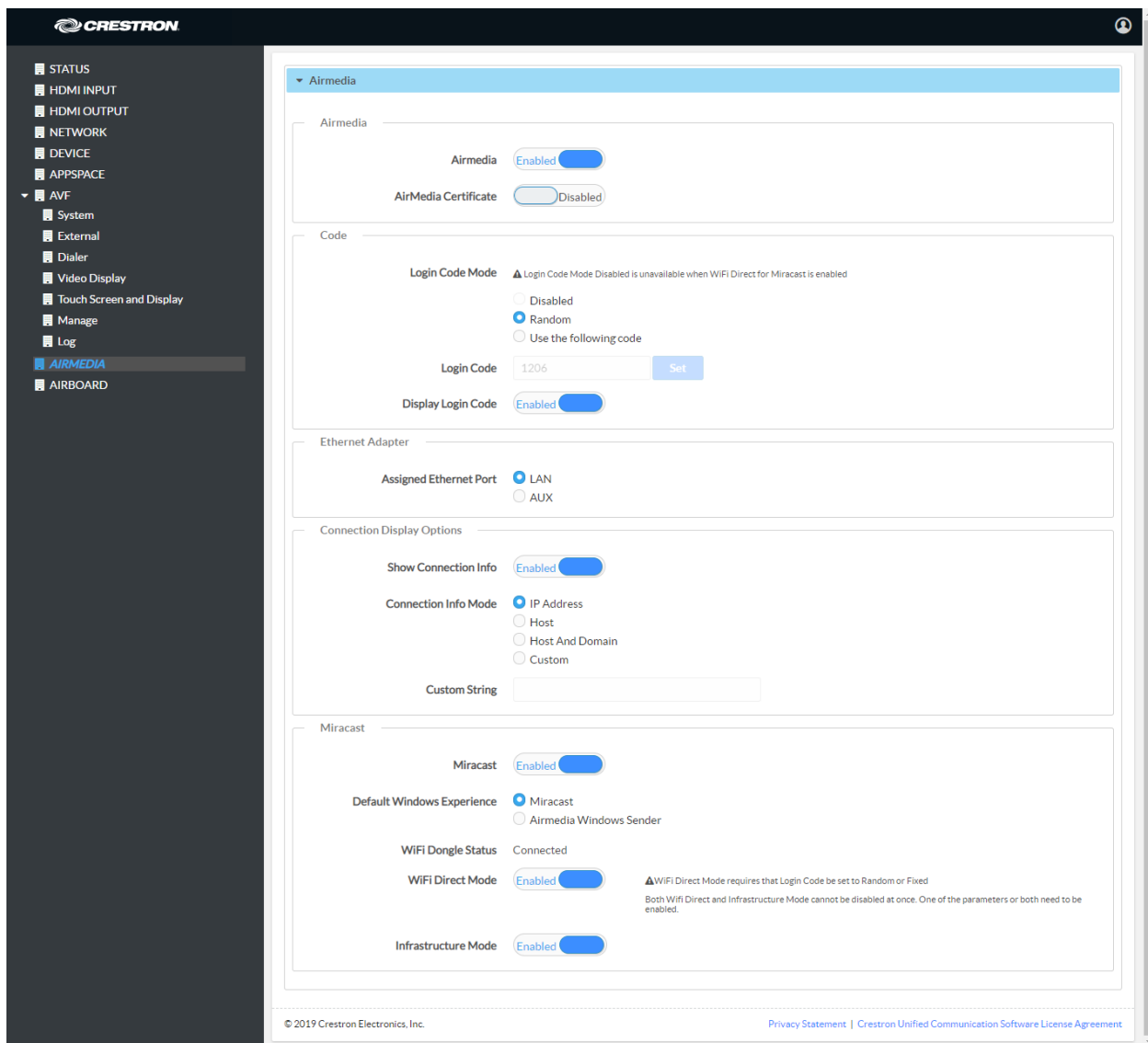
Airmedia

To enable AirMedia for wireless presentation, set **Airmedia** to **Enabled**. To turn off **AirMedia**, set **Airmedia** to **Disabled**.

AirMedia supports the use of third party certificates for encrypting connections between a transmitter and the CCS-UC-1. To use a certificate, set **AirMedia Certificate** to **Enabled**.

NOTES:

- The device will use the same certificate used for 802.1x authentication. For details, refer to "802.1x Configuration" on page 12.

- When disabled or if no certificate is installed, AirMedia will use a built-in self-signed certificate

Code

A code can be used to limit access to the device. The code feature can be disabled, randomly generated, or fixed to a specific value. Select one of the following Login Code Modes to specify how the access code is used:

- **Disabled** allows any user with the device's IP address or host name to open a client connection without entering an access code.

  NOTE: If the installation will allow Microsoft® Windows® 10 devices to connect wirelessly to AirMedia with Miracast® devices, the **Disabled** setting cannot be used.

- **Random** sets the device to randomly generate an access code. A new code is generated when the last connected presenter disconnects from the device. The access code is displayed on the device's screen when AirMedia is selected.

- **Use the following code** sets the device to display a user-specified, four-digit access code. Enter a code in the **Login Code** field and click **Set**.

  To show the access code on the device's screen when AirMedia is selected, set **Display Login Code** to **Enabled**. To hide the login code, set **Display Login Code** to **Disabled**.

Ethernet Adapter

Select which of the CCS-UC-1's Ethernet port connections (**LAN** for the LAN port or **AUX** for the AUX port) is to be used for presenting by AirMedia.

NOTE: On the CCS-UC-1-X, selecting **AUX** will use the TX OUT port if it is connected to a LAN.

Connection Display Options

Select whether connection information is displayed on the connected display device as well as what connection information is displayed.

- Set **Show Connection Info** to **Enabled** to display connection information on the display device. Set **Show Connection Info** to **Disabled** to hide connection information.

- If **Show Connection Info** is set to **Enabled**, select the **Connection Info Mode** to determine what connection information is presented to room visitors.

  – Select **IP Address** to show the IP address to use for connecting to the system.

- – Select **Host** to show the host name to use for connecting to the system.

- – Select **Host And Domain** to show the host name and domain name to use for connecting to the device.

- – Select **Custom** to a custom string to use for connecting to the system. If a custom string is to be used, enter it in the **Custom String** field.

Miracast

Miracast technology allows users to wirelessly share content from a Microsoft® Windows® 10 device via the CCS-UC-1. Miracast technology is built into the Microsoft Windows 10 operating system, so no software installation is required.

NOTE: An AM-USB-WIFI or AM-USB-WIFI-I AirMedia Wi-Fi® USB Adapter (sold separately) must be installed on the CCS-UC-1 to use the Miracast feature. For details, refer to the AM-USB-WIFI/AM-USB-WIFI-I quick start guide (Doc. 8494) available at www.crestron.com/manuals.

A Miracast connection consists of two phases. The discovery phase and the connection phase. During the discovery phase, the Windows 10 device uses Wi-Fi based discovery to find compatible receivers such as the CCS-UC-1. Once the CCS-UC-1 is discovered by the Windows 10 device, it is presented in a list on the device. The user can then select the CCS-UC-1 from the list for connection to the Windows 10 device.

During the connection phase, the Windows 10 device will first attempt to connect to the CCS-UC-1 via the existing network infrastructure. If the connection over infrastructure fails, the Windows 10 device will connect to the CCS-UC-1 using a Wi-Fi Direct® connection to the AM-USB-WIFI AirMedia Wi-Fi Adapter that is installed on the CCS-UC-1.

NOTE: Miracast operation requires that **WiFi Direct Mode, Infrastructure,** or **Wifi Direct Mode** and **Infrastructure** be set to **Enabled**.

1. Set **Miracast** to **Enabled**. A dialog box prompting a reboot will appear. Select **Yes**. The CCS-UC-1 will reboot.

2. After the reboot procedure is complete, log in and navigate to the **Miracast** section.

3. Set the **Default Windows Experience** to **Miracast** so that instructions for using **Miracast** will appear in the web browser when starting the presentation. A dialog box prompting a reboot will appear. Select **Yes** to reboot the CCS-UC-1.

   NOTE: If **Airmedia Windows Sender** is selected as the **Default Windows Experience**, Windows 10 users will be prompted to download and use the AirMedia client software to present content instead of using Miracast.

4. Set **WiFi Direct Mode** to **Enabled** so that if the initial connection to the network infrastructure fails, a Wi-Fi point-to-point connection (Wi-Fi Direct®) will occur.

5. Set **Infrastructure Mode** to **Enabled** to connect using the existing network infrastructure (default setting). Otherwise, set **Infrastructure Mode** to **Disabled** to connect using Wi-Fi Direct only.

Crestron Airboard

Click **AIRBOARD** to configure the device's functionality with the Crestron AirBoard Whiteboard Capture System (CCS-WB-1). The **AIRBOARD** screen is displayed.

AIRBOARD Screen - Disabled
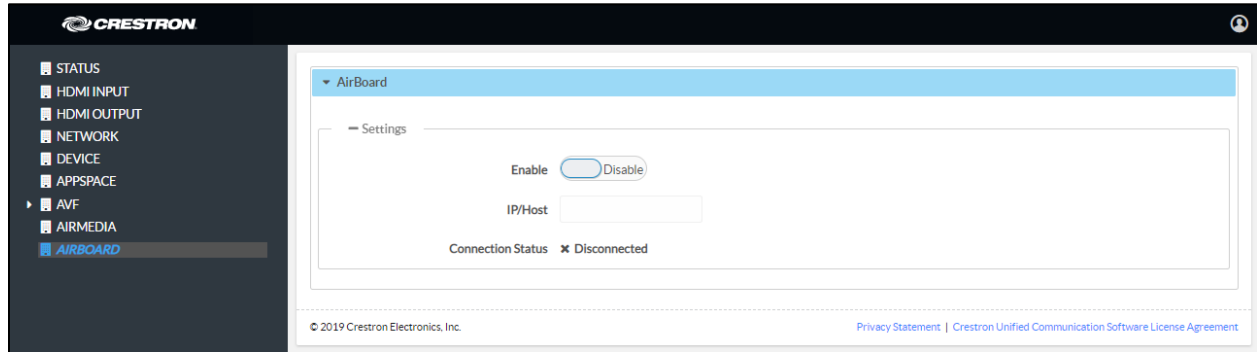
Settings

Configure the CCS-UC-1 to work with the CCS-WB-1.

1. Set **Enable** to **Enable**. To disable the feature, set **Enable** to **Disable.**

2. Enter the CCS-WB-1 IP address or host name in the **IP/Host** field.

3. Click **Save**. The connection status, pairing status, and the **Pair** button will be displayed.

   NOTE: After saving the IP address, it may take up to 1 minute for the connection status to change from disconnected to connected.

AIRBOARD Screen – Ready for Pairing
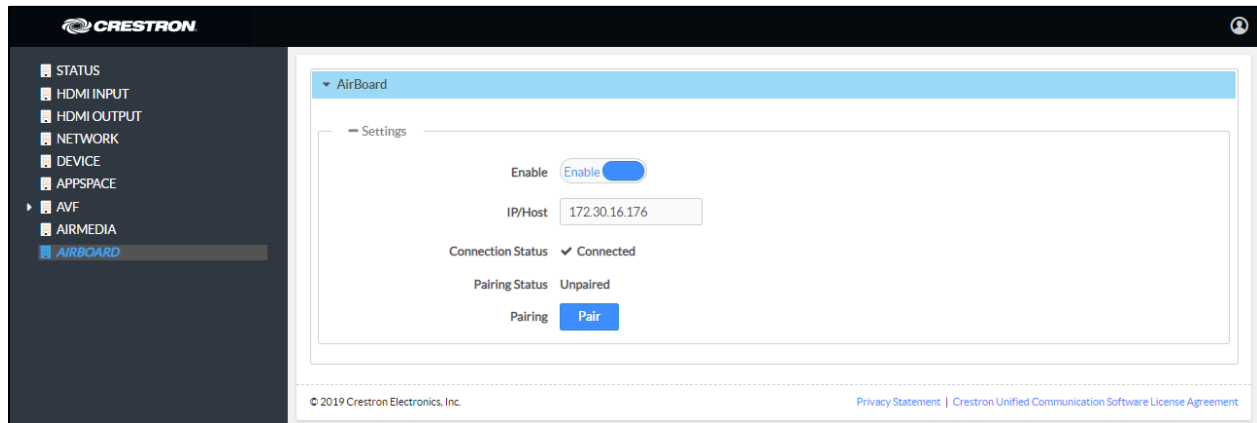
4. Click **Pair** to pair the CCS-UC-1 with the CCS-WB-1.

5. On the CCS-WB-1 control pad, press the blue button to pair the device. The display will update to show additional configuration controls.

AIRBOARD Screen – Configuration
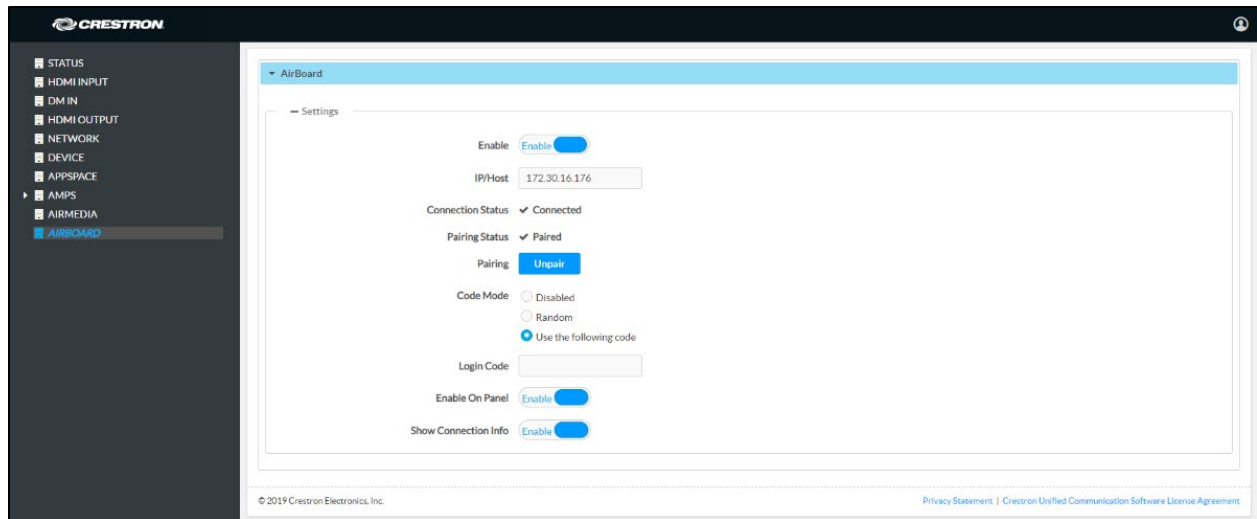
6. Select one of the following Code Modes to specify how the access code is used.

    – **Disabled** allows any user with the device's IP address or host name to open a client connection without entering an access code.

    – **Random** sets the device to randomly generate an access code. A new code is generated when the last connected participant disconnects from the device. The access code is displayed on the system's screen.

    – **Use the following code** sets the device to display a user-specified, four-digit access code. Enter a code in the **Login Code** field.

7. Set **Enable On Panel** to **Enable** to show the **AirBoard** input option on the **Present a Source** screen. Set **Enable On Panel** to **Disable** to remove the **AirBoard** option.

8. Set **Show Connection Info** to **Enable** to display connection information on the PinPoint splash screen on the HDMI output when no source is active. Set **Show Connection Info** to **Disable** to stop displaying connection information.

Crestron Airboard Functional Recommendations and Notes:

*   A Crestron Airboard recording session must be initiated before it can be routed to the display.

*   If the CCS-UC-1 is rebooted, the presentation routing to the display is stopped. However, the active Crestron Airboard session is not.

*   When unpairing a CCS-WB-1, it must be unpaired from the web user interface before it can be paired again with another system.

- The CCS-WB-1 does not distinguish between the organizer and participants. Any allowed participant can accept or invite any other participant into the session. Any participant who knows the login code can join an active session and share a link with the login code to any other person, allowing them to join the session without explicit knowledge of the organizer.

Enterprise Deployment Options

Crestron has two options for deploying multiple CCS-UC-1 devices across an enterprise. These tools can assist in deploying any number of CCS-UC-1 devices that an organization may need to deploy.

For more information, refer to Answer ID 5719 in the Online Help on the Crestron website (www.crestron.com/onlinehelp).

Crestron XiO Cloud Service

The Crestron XiO Cloud™ service requires devices to be claimed so they can be managed by the service. To claim a single device or multiple devices, perform one of the following procedures.

Claim a Single Device

1. Record the MAC address and serial number that are labeled on the shipping box or on a sticker attached to the device. The MAC address and serial number are required to add the device to the Crestron XiO Cloud environment.

   NOTE: Use the MAC address labelled "MAC Address."

2. Open a web browser, and log in to the Crestron XiO Cloud service at https://portal.crestron.io.

3. Click the **ENVIRONMENT** menu button (☰) to display the Environment menu.

   Environment Menu
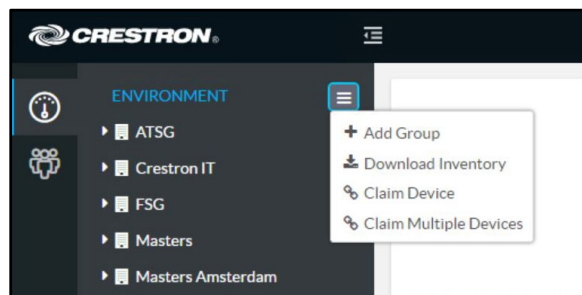
4. Click **Claim Device**. The **Claim Device** dialog box is displayed.

Claim Device Dialog Box

5. Enter the MAC address and serial number recorded in step 1 in the **MAC Address** and **Serial Number** fields, respectively.

6. Click **Claim**. A message indicating a successful claiming displays.

   NOTE: If an error message displays stating the device does not exist, connect the device to a network that has access to the Internet, wait 15 minutes, and then try again.

7. Click **X** to close the dialog box. The host name of the claimed device appears in the device tree under the group **Unassociated Devices**.

The device can now be managed or assigned to a group. For information on creating environments, managing devices, and managing users with the Crestron XiO Cloud service, refer to the Crestron XiO Cloud Service User Guide Guide (Doc. 8214) at www.crestron.com/manuals.

Claim Multiple Devices

1. Record all of the MAC addresses and respective serial numbers in a comma delimited, CSV file, and then save it to a location that is accessible to the computer used to access the Crestron XiO Cloud service. The CSV file should be formatted as shown below:

   CSV File Format

   ```
   MAC Address,Serial Number
   00.10.7e.8b.81.b6,17284712
   00.10.7e.8b.8c.87,17284570
   00.10.7e.96.83.93,1716JBG01207
   00.10.7e.96.92.0a,1716JBG01550
   00.10.7e.8b.87.c1,17284670
   ```

NOTES:

- MAC addresses and serial numbers are labeled on the shipping box or on a sticker attached to the device.

- Use the MAC address labelled "MAC Address."

2. Open a web browser, and log in to the Crestron XiO Cloud service at https://portal.crestron.io.

3. Click the **ENVIRONMENT** menu icon (▤) to display the Environment menu.

Environment Menu
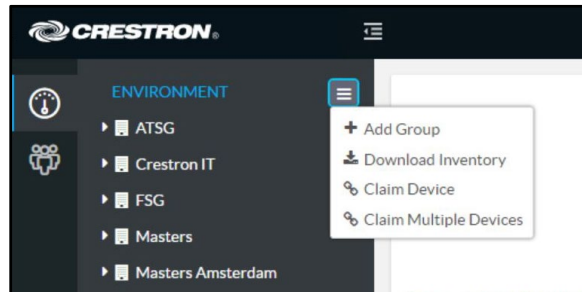
4. Click **Claim Multiple Devices** from the drop-down menu. The **Claim Multiple Devices** dialog box is displayed.

Claim Multiple Devices Dialog Box
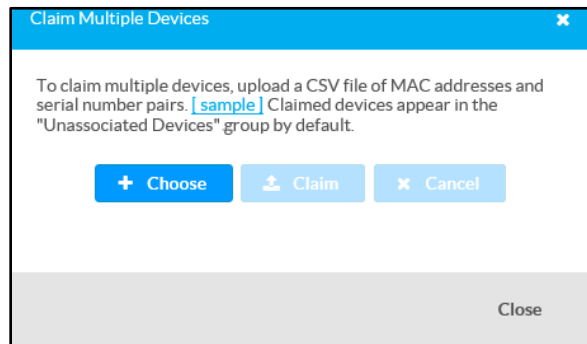
5. Click **Choose** and select the CSV file created in step 1.

6. Click **Claim** to claim all of the devices listed in the file. A message indicating the claim status of each device is displayed.

NOTE: If an error message displays stating the device does not exist, connect the device to a network that has access to the Internet, wait 15 minutes, and then try again.

7. Click **X** to close the dialog box. The host names of the claimed devices appear in the device tree under the group **Unassociated Devices**.

The devices can now be managed or assigned to a group. For information on creating environments, managing devices, and managing users with the Crestron XiO Cloud

service, refer to the Crestron XiO Cloud User Guide (Doc. 8214) at
www.crestron.com/manuals.

Crestron Deployment Tool for PowerShell® Software

Crestron has developed a tool for customers without Crestron XiO Cloud service to allow deployment of multiple devices without the need to configure each device individually. With this tool, an administrator may input all the configuration settings in a single data file, and then use PowerShell® task-based command-line shell and scripting language to configure multiple devices across an enterprise.

Operation

Introduction

This section provides instructions for using the device.

All user interaction is done through the CCS-UC-1's touch screen. Upon startup, the home screen is displayed.

Home Screen, Room Available

Time — 12:20 PM   July 25, 2019 — Date

Room name — Conf Room 1

Availability —
available
for the rest of the day   RESERVE NOW — Reserve button

Information

Microphone mute   Display Function menu   Volume down   Volume up

Home Screen, Room Reserved

Time — 12:00 PM   July 26, 2019 — Date

Room name — Conf Room 1

Availability —
available for next
05 min   RESERVE NOW — Reserve button

Information

Microphone mute   Display Function menu   Volume down   Volume up

Home Screen, Room In Use

Time → 12:07 PM   July 26, 2019 → Date

Room name → Conf Room 1

Availability →

reserved for next

28 min

meeting

Production Schedule

12:05 PM - 12:35 PM | Al Stem

JOIN SKYPE® MEETING → JOIN button

Information →

Microphone mute   Display Function menu   Volume down   Volume up

The footer contains controls that are always available.

- Tap ⓘ to view information about the device.

Information screen

Room Name
AVF 97798

Phone Extension / SIP URI
2139084223

SKYPE® Room

IP Address
172.30.16.95

✕
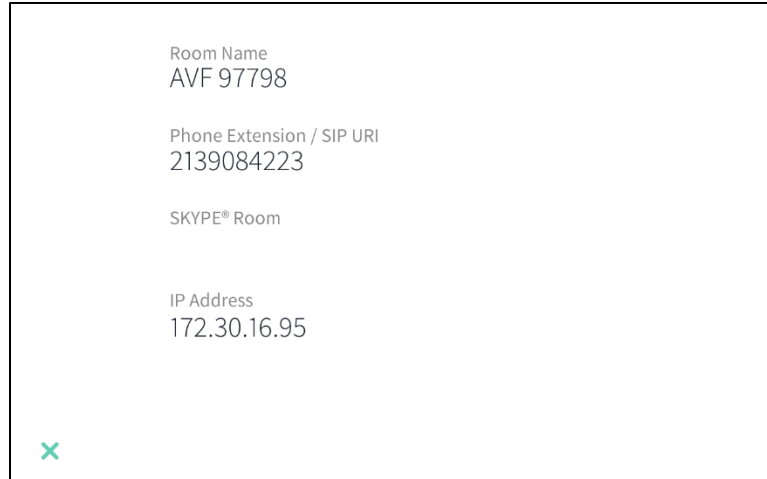
- Press and hold ⓘ to view the System Info screen.

System Info screen
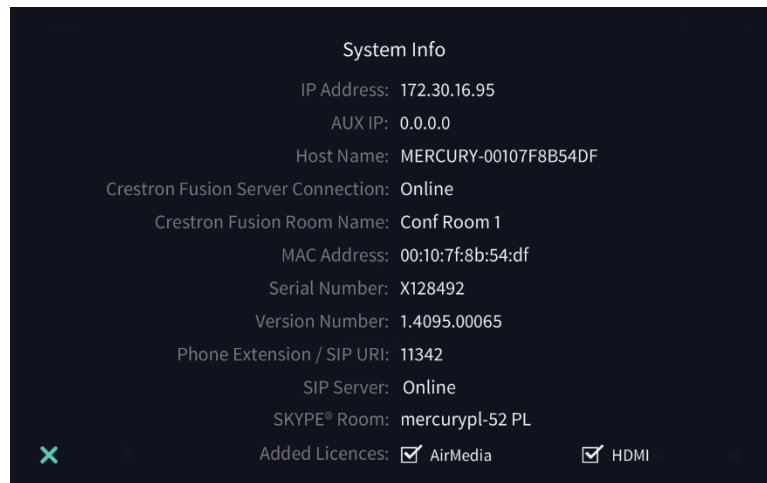
- Tap 🎤 (or the mute bar on top of the device) to mute the built-in microphone and connected CCS-UCA-MIC microphone pods. When muted, the button is framed in red and the microphone icons on the tops of the CCS-UC-1 and connected CCS-UCA-MIC microphone pods turn red. To unmute, tap 🎤 (or the mute bar on top of the device).

- Tap 🔊 or 🔉 to raise or lower the volume.

The Function Menu

Tap 🔼 to display the function menu.

Function Menu
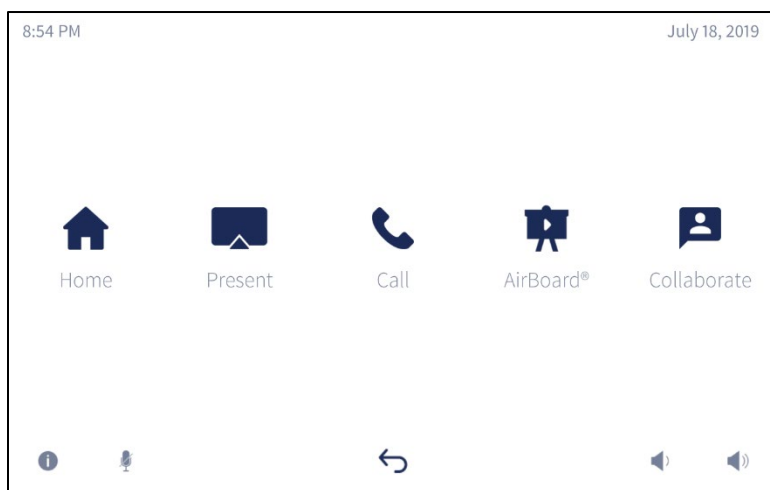
- Tap 🏠 (**Home**) to display the home screen.

- Tap (**Present**) to view presentation options. For details, refer to "Present Content" on page 70.

- Tap to view phone call options. For details, refer to "Answer a Phone Call" on page 79 and "Make a Phone Call" on page 80.

- Tap to share whiteboard content using the Crestron AirBoard Whiteboard Capture System.

- Tap to run a web conference. For details, refer to "Crestron AirBoard Whiteboard Capture" on page 93.

- Tap to view information about the device.

- Tap to mute the built-in microphone and (optional) connected CCS-UCA-MIC microphone pods. When muted, the button is framed in red and the microphone icons on the tops of the CCS-UC-1 and connected CCS-UCA-MIC microphone pods turn red. To unmute, tap (or the mute bar on top of the device).

- Tap to return to the previous screen.

- Tap or to raise or lower the volume.

Join or Schedule a Meeting

The Home screen is used to join a scheduled event or to reserve the conference room.

Tap to display the Home screen. The Home screen displays the current status of the room.

Reserved (Join a Skype for Business Meeting)

If the room is in use, the display on the device indicates as such.

Home Screen, Room In Use

12:07 PM	July 26, 2019

Conf Room 1

reserved for next

28 min

meeting
Production Schedule
12:05 PM - 12:35 PM | Alon Stempel
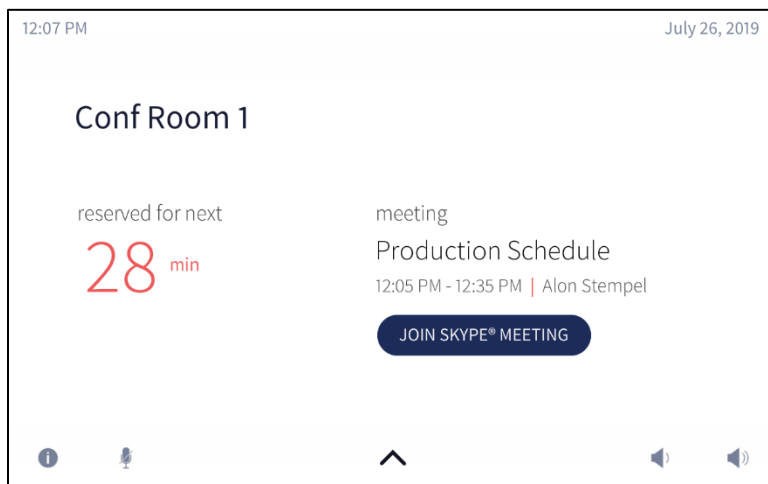
JOIN SKYPE® MEETING

Tap **JOIN SKYPE® MEETING** to join the scheduled event. The CCS-UC-1 will call into the Skype for Business meeting and will be placed in a virtual lobby.

Virtual Lobby
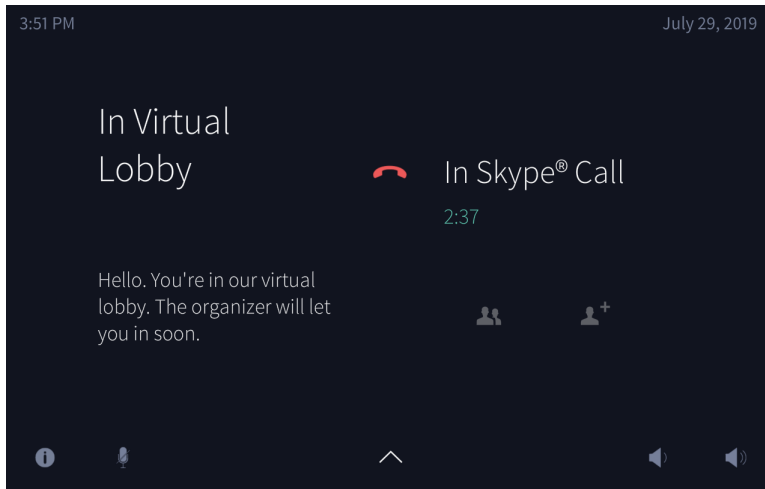
Once the meeting organizer admits the participant into the call, the display will show updated information and controls.

In Skype® Call
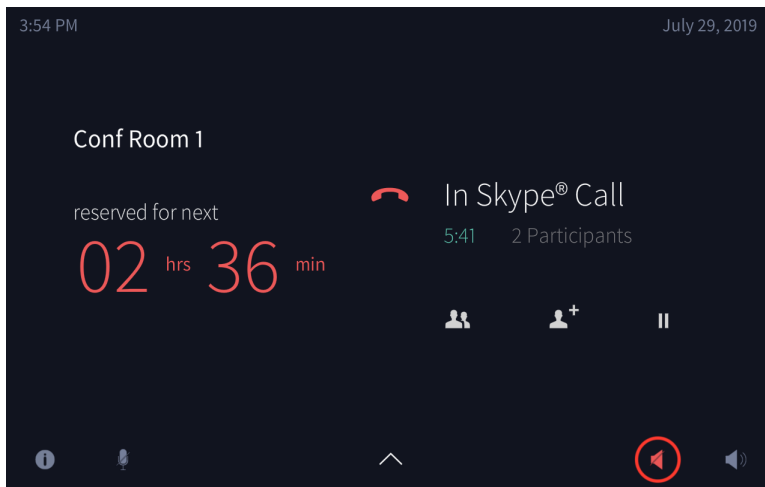
The following functions are available during a Skype for Business meeting.

- View participants

    Tap ![icon] to view members of the Skype for Business call. The **Participants** screen is displayed.

    Participants Screen
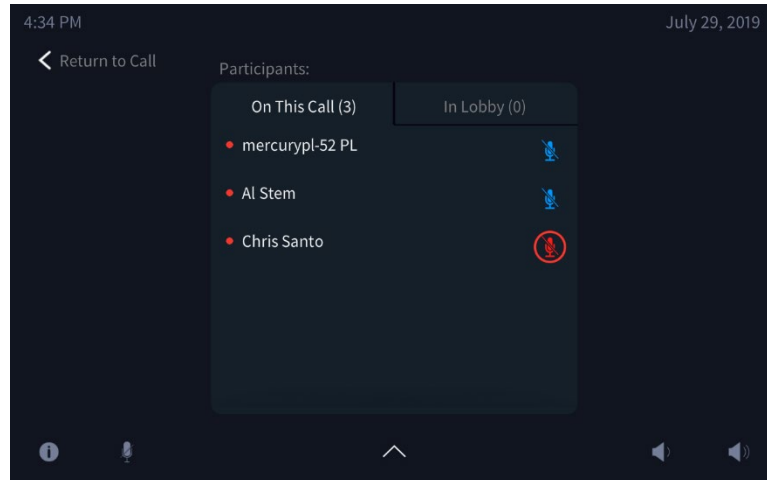
    – Tap **On This Call** to view current call participants.

    – Tap ![mic icon] next to a participant name to mute their microphone.

    – Tap **In Lobby** to view waiting invitees.

    – Tap Return to Call to exit the Participants screen.

- End the call

    Tap ![end call icon] to end the call.

- Place a Call on Hold

    Tap ![pause icon] to place the call on hold. Tap ![play icon] to resume the call.

- Add a Participant

  a. Tap ![person add icon] to add participants.

  b. Type the name of the participant to add. Search results are listed.

  Add Participants
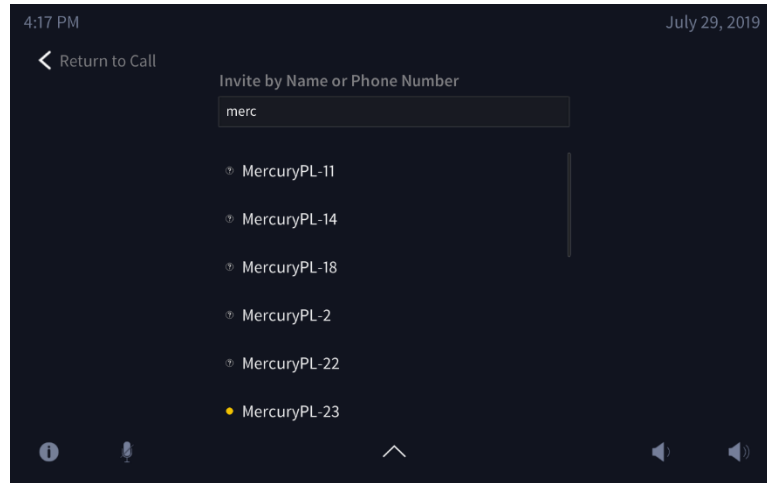
  c. Tap the name of the participant to add.

  d. Tap **Return to Call** to return to the call.

Available (Create a New Meeting)

If the room is available for use, the display on the device indicates as such.

Home Screen - Available Room - Limited Time
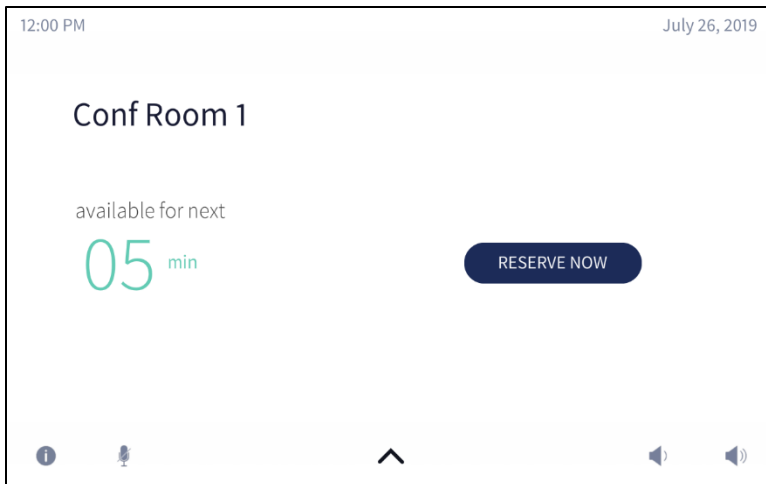
Home Screen - Available Room - Remainder of Day
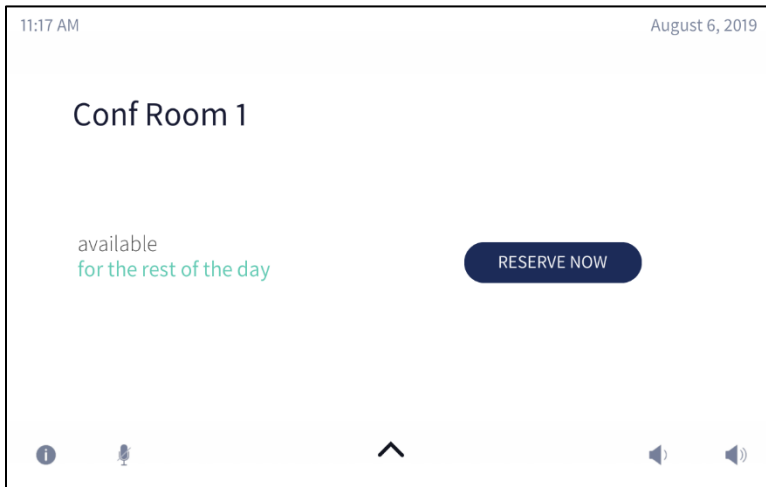
The user can either use the room for the remaining time available or create a new meeting for another time. To create a new meeting, follow this procedure:

1. Tap **RESERVE NOW >** to reserve the room. The **New Meeting** screen is displayed.

New Meeting Screen
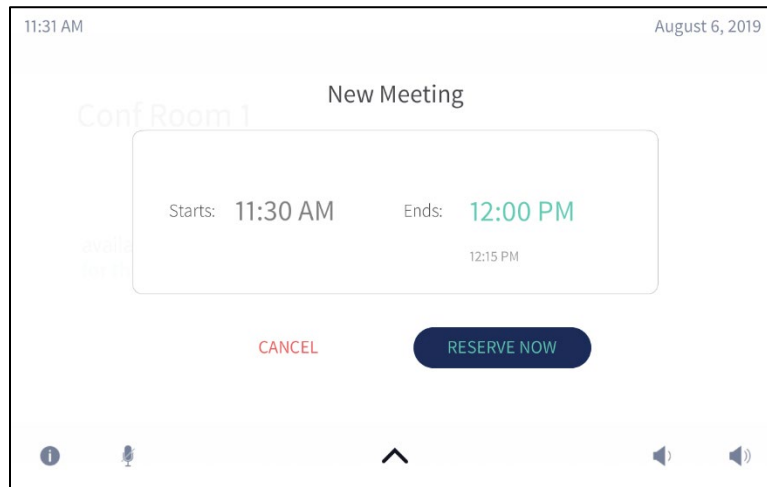
The meeting start and end times are automatically populated for the next available 30-minute block (for example, 5:30 to 6:00, 5:45 to 6:15, 6:00 to 6:30, *etc.*). When reserving a meeting space within a current 30-minute block, the start time is rounded down to the nearest 5-minute increment. For example, tapping **RESERVE NOW** at 5:44 pm creates a meeting with a start time of 5:40. If **RESERVE NOW** is tapped at 5:46 pm, the meeting start time would be 5:45 pm. The meeting end time may be set by the user.

NOTE: **RESERVE NOW** Meetings may only be scheduled for the current day from the device.

2. Scroll through the available end times to select the duration of the meeting. The user can reserve the room for three different amounts of time.

   – Until the current half hour interval ends (If the current time is 5:44 pm, the end time for this option is 6:00 pm.) This is the default setting.

   – Until the current half hour interval ends plus 30 minutes (If the current time is 5:44 pm, the end time for this option is 6:30 pm.)

   – Until the current half hour interval ends plus 60 minutes (If the current time is 5:44 pm, the end time for this option is 7:00 pm.)

   NOTE: These options are available only if a meeting is not already scheduled during that timeframe.

3. Tap **RESERVE NOW** to book the room.

Present Content

Depending on the configuration, the CCS-UC-1 can present content from an HDMI source, a CCS-WB-1 Crestron Airboard Whiteboard Capture System, or AirMedia. To view the different presentation options, tap [icon]. The **Present a Source** screen is displayed.

Present a Source Screen
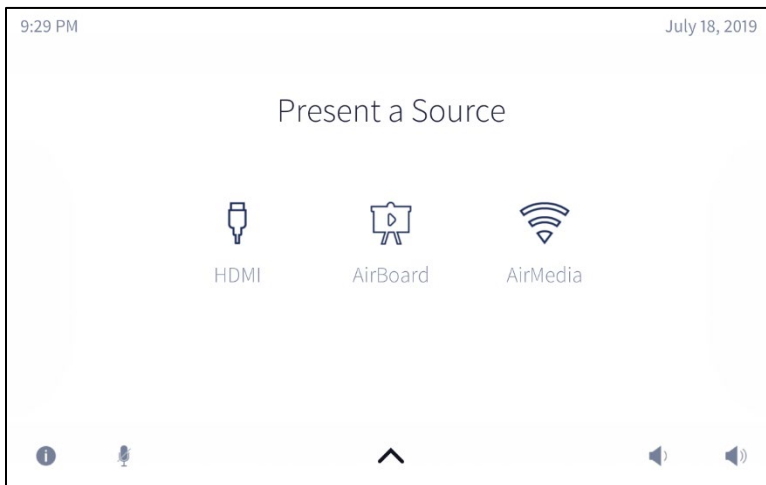
- Tap [icon] to present via a wired HDMI connection.

- Tap [icon] or to display content from a paired Crestron AirBoard device.

- Tap [icon] to present wirelessly using AirMedia technology.

- Alternatively, connect a source to the wired HDMI cable or connect to the AirMedia address to present automatically.

NOTE: To present with full motion video, select HDMI.

Present via HDMI

To present to a room using a wired HDMI connection:

1. Tap ⬒. The **Connect Your Device** screen is displayed.

    Connect Your Device Screen
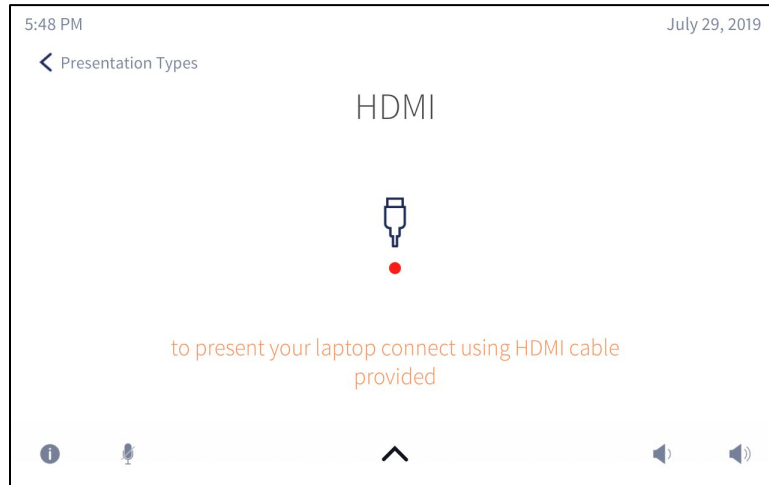
2. Connect the presentation source to the HDMI cable that is connected to the CCS-UC-1.

3. When done presenting, tap **Stop**. To return to the previous screen, tap **< Presentation Types**.
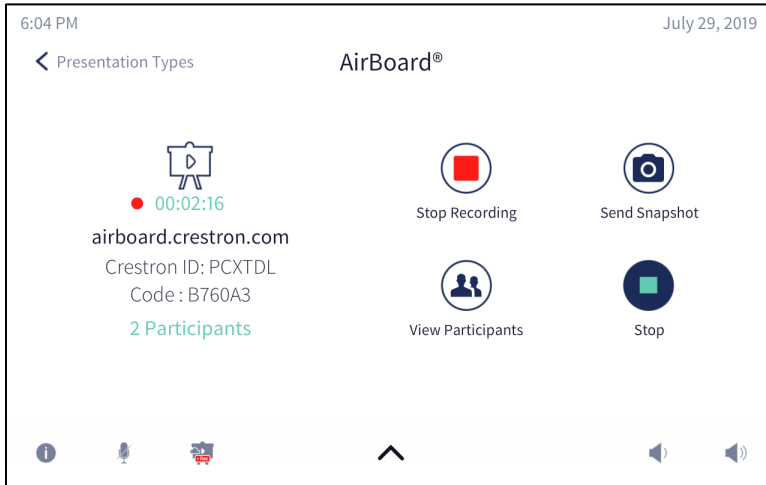
Present Crestron AirBoard Content

Tap ⬚ to display, record, and share content from a paired Crestron AirBoard device. The view from the Crestron AirBoard device is displayed on the connected display and controls are shown on the CCS-UC-1.

NOTE: A Crestron AirBoard recording session begins immediately after tapping ⬚. Tapping ⬛ stops the presentation on the connected display device, but does not stop the recording session.

AirBoard Controls

Tap ⬛ to stop the presentation on the connected display device.

NOTE: Tapping ⬛ stops the presentation on the connected display device, but does not stop the recording session.

For information on managing a Crestron AirBoard session, refer to "Crestron AirBoard Whiteboard Capture" on page 93.

Present via AirMedia

The CCS-UC-1 can present content from a computer or a mobile device.

A user can use a client application to present a Windows® or Mac® (hereafter referred to as "computer") desktop. The computer must be able to access the CCS-UC-1 over the network.

Crestron also offers a stand-alone application for enterprise deployments. This application features additional connection methods and device management.

When the CCS-UC-1 is equipped with a AM-USB-WIFI or AM-USB-WIFI-I AirMedia® USB Adapter with Wi-Fi® Connectivity and configured for Miracast operation, a Windows 10 computer can present content without using the client application. For details on configuring the CCS-UC-1 for Miracast operation, refer to "Miracast" on page 55.

Google Chrome® web browser users can use the AirMedia extension to easily present web browser and desktop content.

Mobile devices can present their content using the Crestron AirMedia app or the Crestron PinPoint™ mobile app, which are available for iOS® and Android™ devices. Both apps may be used for full screen sharing on devices running Android 5.0 Lollipop and above or iOS 8 and above. Download the latest version of these apps from the App Store® app or Google Play™ store.

For downloads and more information, visit present.crestron.com

NOTE: For additional details on using AirMedia, refer to the AirMedia Deployment Guide (Doc 7693) at www.crestron.com/manuals.

1. Tap 🛜 to start an AirMedia session. The **AirMedia**® screen is displayed.

   Connect to AirMedia® Screen
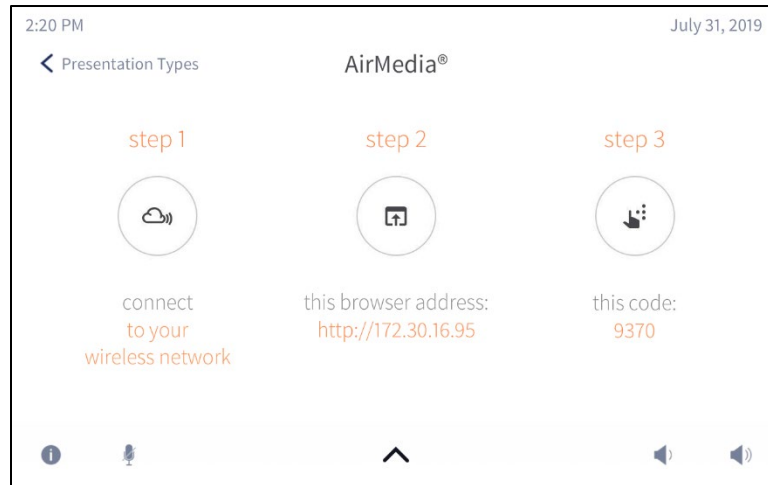
2. Connect the computer or mobile device to the local wireless network.

Once connected to the wireless network, devices can present content in a variety of ways.

Present with a Computer

A computer can use the AirMedia client application, native mirroring capabilities, and other methods to share content.

1. Open a web browser on the computer, and navigate to the web address or IP address displayed on CCS-UC-1. The welcome screen is displayed.

Welcome Screen

2. Click **Start Presenting**. The CCS-UC-1 detects the computer's operating system and provides appropriate instructions for presenting content.

AirMedia Client Application

Follow the instructions to download the AirMedia client application. Once the application is downloaded, content can be presented.

NOTES:

- If the AirMedia client software is to be used for presentation, it requires no installation. The application will be downloaded and run locally

- If using the AirMedia client application on a Mac, the AirMedia client application must be run from within the disk image file. Do not drag the application out of the disk image file.

- If the CCS-UC-1 is equipped with the AM-USB-WIFI(-I) AirMedia USB Adapter with Wi-Fi Connectivity, Windows 10 computers can use the native mirroring capability to present content. For details, refer to "Windows 10 Native Mirroring Capability" on page 77 for details.

1. Run the client application. The **Enter Code** dialog box is displayed.

    Enter Code Dialog Box

    NOTE: If a code is not displayed, the presentation controls are displayed.

2. Enter the code displayed on the display device and click **OK**. The client establishes a connection between the computer and the CCS-UC-1. The client also displays the presentation controls on the computer while the contents of the computer screen are shown on the display connected to the CCS-UC-1.

    Presentation Controls
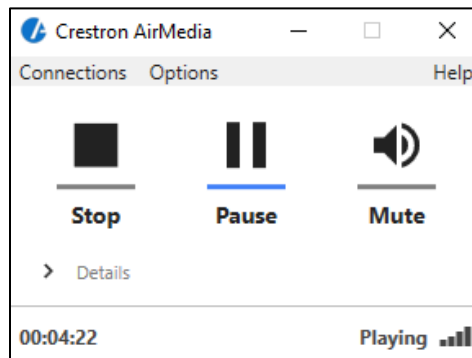
3. Direct the presentation with the following controls:

    – ■ Stop showing the computer's screen.

    – ▶ Start showing the computer's screen.

    – ▋▋ Freeze the computer's screen.

    – ◀⟩ Mute the audio output to the device.

    – **-** Minimize the presentation control screen.

    – **X** Close the client application and the connection between the computer and the device.

    – Click **Details** for additional controls and information.

       ▪ The Video Source control allows the user to select between the primary desktop, additionally attached desktops, or an extended desktop (if available).

▪ Information about the connected user, the name of the receiver, the IP address, and access code are displayed.

– Click **Options > Settings** to customize AirMedia settings. Adjust the settings below and click **OK** to save the changes or click **Cancel** to cancel.

AirMedia Settings Dialog Box
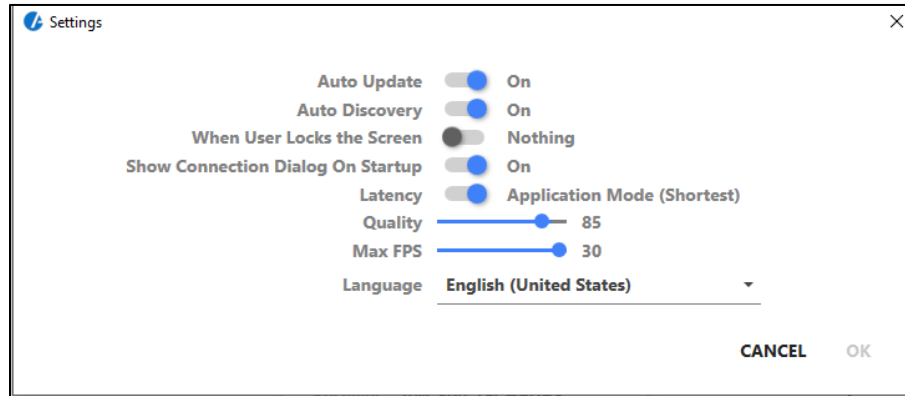
▪ **Auto Update** should be set to **On**.

▪ **Auto Discovery** should be set to **On**.

▪ **When User Locks the Screen** sets the operation of the client software when the connected computer is locked. Choose from **Stop** (the client stops sharing), **Pause** (the client pauses sharing), and **Nothing** (nothing happens).

▪ **Show Connection Dialog on Startup** selects whether connection information is displayed when the client starts.

▪ **Latency** selects the amount of latency in transmitting the signal from the computer to the CCS-UC-1. Select **Application Mode (shortest)** for the least amount of latency (best for slides) or **Video Mode (Pre-Buffer)** for a longer amount of latency, but suitable for buffering shared video.

▪ Set the **Quality** of the projected signal (**0** to **100** percent).

▪ Set the **Max FPS** (frames per second) refresh rate (**1** to **30**).

▪ Select the **Language** displayed by the client application.

NOTE: The application must be restarted when switching languages.

Windows 10 Native Mirroring Capability (Miracast)

NOTES:

- Windows 10 users can use the native mirroring capability if the CCS-UC-1 is equipped with the AM-USB-WIFI(-I) AirMedia USB Adapter with Wi-Fi Connectivity.

- Windows 10 users can also download and use the AirMedia client application to present content. To use the client application, click **Want to connect with the Airmedia Application instead?** and follow the instructions for using the AirMedia client. Refer to "AirMedia Client Application" on page 74 for details.

1. Press ⊞+**K**. A list of devices is displayed.

2. Click on the CCS-UC-1 device.

3. Enter the code shown on the CCS-UC-1 display.

Google Chrome with the AirMedia Sender Extension
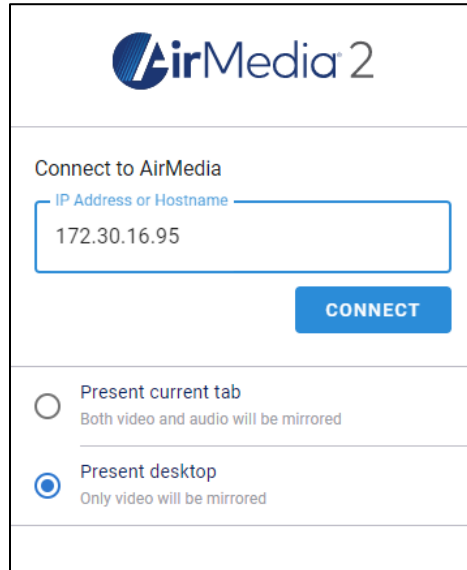
Use the AirMedia Sender extension for Google Chrome software to present content from the Google Chrome web browser or the computer desktop.

The AirMedia Sender extension allows a user to present the content of a web browser tab with audio and video or the computer's desktop content with video only.

The AirMedia Sender extension is available from the Chrome® Web Store at https://chrome.google.com/webstore/detail/airmedia-sender/ljophmlbljnjodcbogmdogcpclifenpk. Once the AirMedia Sender extension is installed, it is ready for use.

1. In the Google Chrome web browser, click . The AirMedia Sender controls are displayed.

AirMedia Sender Controls

2. Enter the CCS-UC-1's IP address or hostname in the **IP Address or Hostname** field.

3. Select what content is to be presented.

  − Select **Present current tab** to present the active tab in the Google Chrome web browser.

    NOTE: Video and audio content are mirrored to the connected display device.

  − Select **Present desktop** to present the computer's desktop contents. If the computer is connected to several displays, one of the extended desktops can be presented.

    NOTE Only video is mirrored to the connected display device.

4. Click **CONNECT**.

5. Enter the PIN code (if required) and click **OK.**

  − If **Present current tab** was selected in step 3, the current tab in the Google Chrome browser is presented.

– If **Present desktop** was selected in step 3, select the screen to present, and click **Share**. Otherwise, click **Cancel**.

Share your entire screen
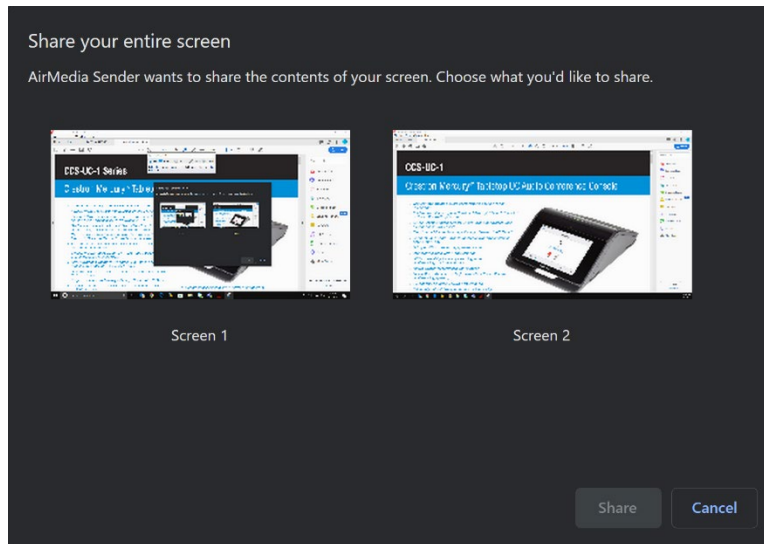
From a Mac

Follow the instructions for downloading the client application. Once the client application is downloaded, content can be presented.

1. Run the client application.

2. Follow the on-screen instructions.

Present with a Wireless Device

Crestron offers AirMedia presentation apps for iOS and Android devices

1. Download the Crestron AirMedia app or Crestron Pinpoint app from the device's app store.

2. Start the Crestron AirMedia app or the Crestron Pinpoint app.

3. Follow the on-screen instructions for connecting to a CCS-UC-1 and presenting content.

Answer a Phone Call

Depending on the configuration, a CCS-UC-1 can receive a call from another extension or an outside number. To answer a call, follow either of these procedures:

Not in Use

When a call is received, the **Incoming** screen with caller ID information (if available) is displayed.

Incoming Screen
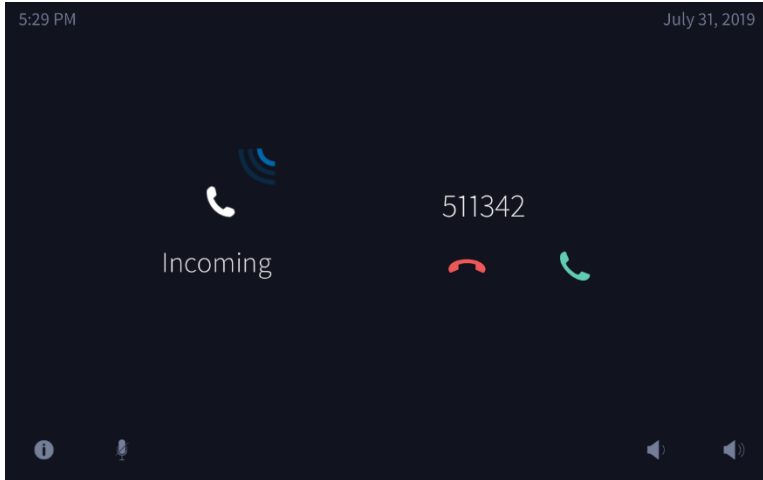
Tap 📞 to answer the call or 📞 to ignore the call.

Make a Phone Call

Depending on how it is configured, the CCS-UC-1 can make phone calls using an office phone system, a Bluetooth enabled phone, a connected computer running an audio call application, or the built-in Skype for Business application. To view the different calling options, tap 📞. The **Make a Call** screen is displayed.

Make a Call Screen
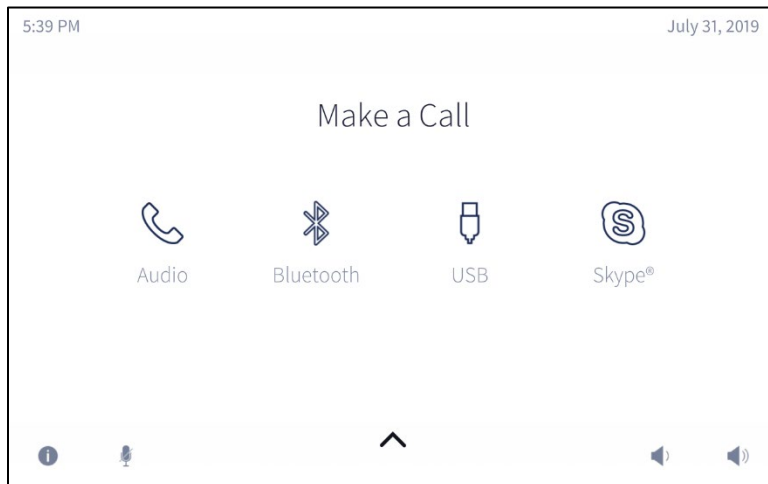
During a call, a user has the ability to navigate to other screens (for example **Present**). While using another function, the edge of the screen will change to green. Tap the green edge to quickly navigate back to the call controls.

Return to Call Control
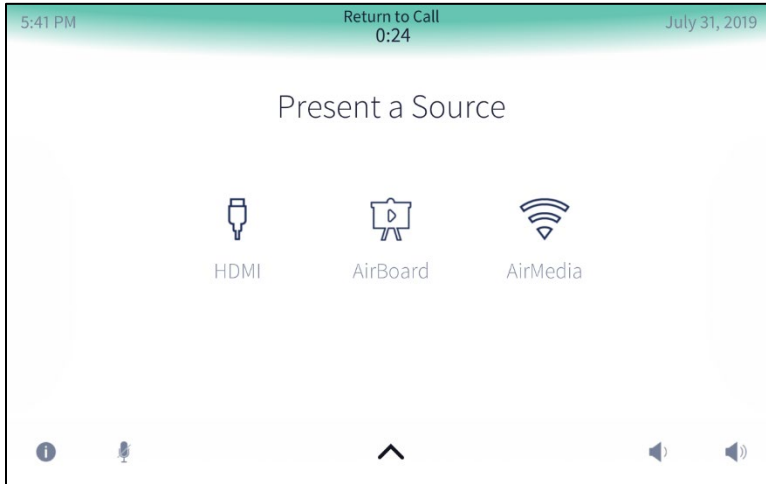
Make a Call with an Office Session Initiation Protocol (SIP) System

When configured, the CCS-UC-1 can make phone calls using an office's SIP system. For information on compatible SIP systems, visit www.crestron.com/mercury.

To make a call with the office SIP system, follow this procedure:

1. Tap 📞. The dialing screen is displayed.

   Dialing Screen
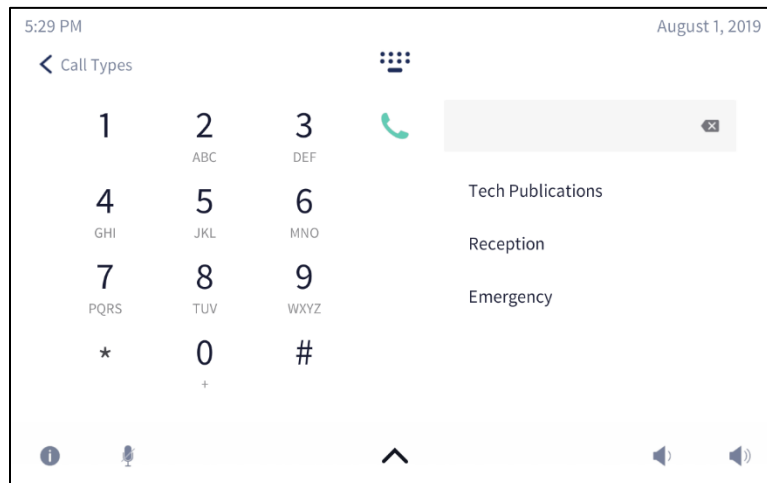
2. Calls can be dialed from the speed dial listings, the numeric keypad, or searching an address book. Choose one of the following options to make a call:

   – **Speed Dial:** Tap a speed dial button to call. The device calls the number stored for the speed dial button.

- **Numeric Keypad:** Tap the number to call with the numeric keypad, and then tap 📞.

- **Address Book:** Tap ⠿ to search the local address book for a specific contact. The **Find Contact to Call** screen is displayed.

Find Contact to Call Screen
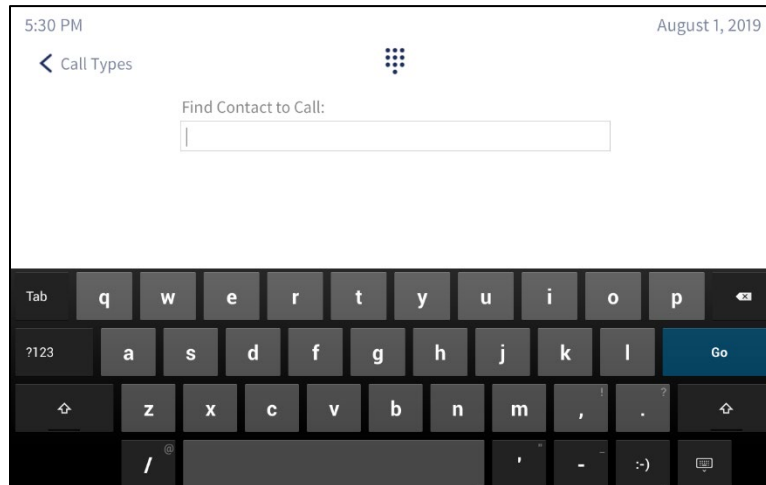
i. Use the on-screen keyboard to enter the contact name. The CCS-UC-1 shows the search results on the display. Otherwise, tap **Dialer** to cancel and return to the previous screen.

ii. Tap 📞 next to the name of the contact to call.

The **In Audio Call** screen is displayed.

In Audio Call Screen
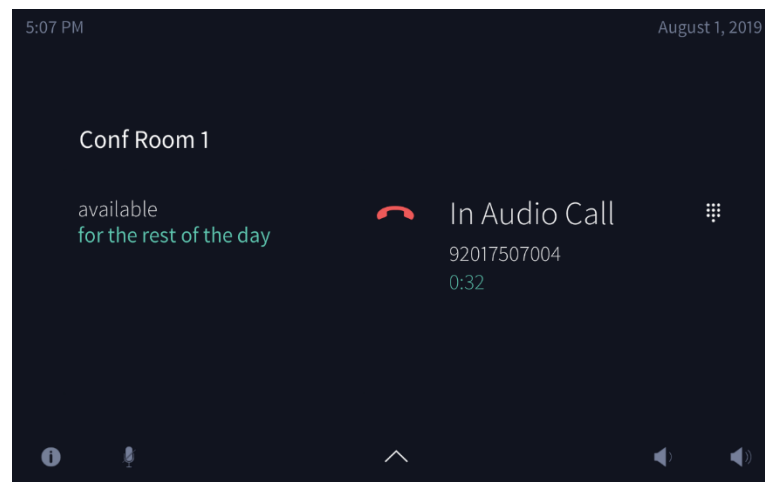
- Tap 📞 to end the call.

– Tap ⣿ to use a keypad to send dual tone multi frequency (DTMF) tones (to enter extensions, check voicemail, etc.). The keypad screen is displayed.
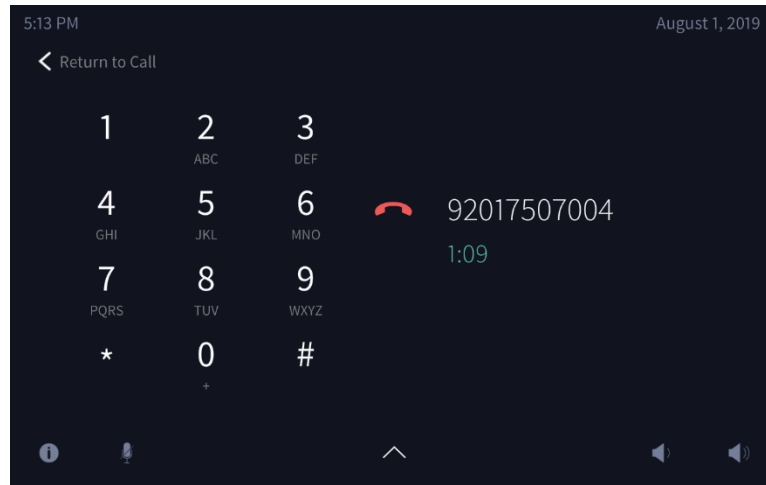
Keypad Screen

- Tap numbers to send DTMF tones.

- Tap **Return to Call** to exit the keypad screen.

Make a Call with a Bluetooth Phone

When configured, the CCS-UC-1 can make phone calls using a Bluetooth enabled phone to carry the call while using the CCS-UC-1 as a speakerphone.

Note the following when connecting a Bluetooth phone to the CCS-UC-1.

- The CCS-UC-1 cannot access the Bluetooth phone's contacts or other information.

- Bluetooth pairing can operate in one of two modes:

  – Timeout: The pairing between a Bluetooth enabled phone and the CCS-UC-1 is dropped and forgotten after a set amount of inactivity has elapsed. To make a call, the phone must be reconnected to the CCS-UC-1.

  – Persistent: The Bluetooth connection is maintained as long as the phone is in range of the CCS-UC-1. Once out of range, the connection is terminated.

To make a call with a Bluetooth phone:

1. Tap ✳. The **Connect Your Device** screen is displayed, indicating the Bluetooth name of the CCS-UC-1.

    Connect Your Device Screen
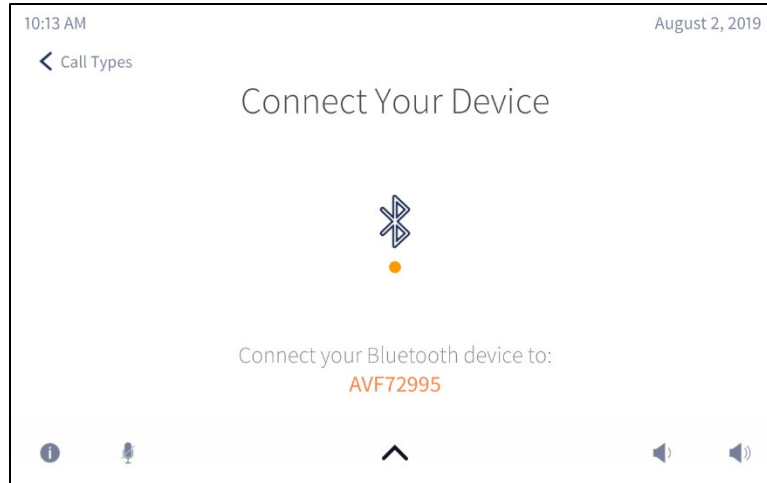
2. On the Bluetooth phone, connect to the device matching the Bluetooth name of the CCS-UC-1. The CCS-UC-1 indicates that it is connecting with a Bluetooth device and then displays the dialing screen.
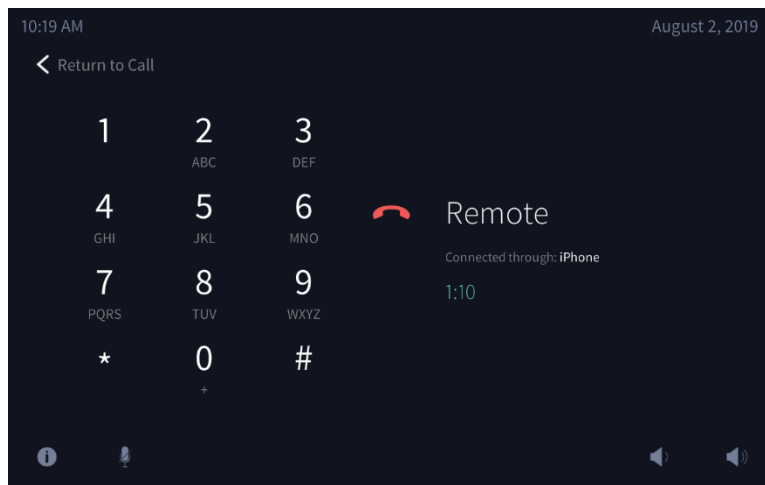
    Dialing Screen
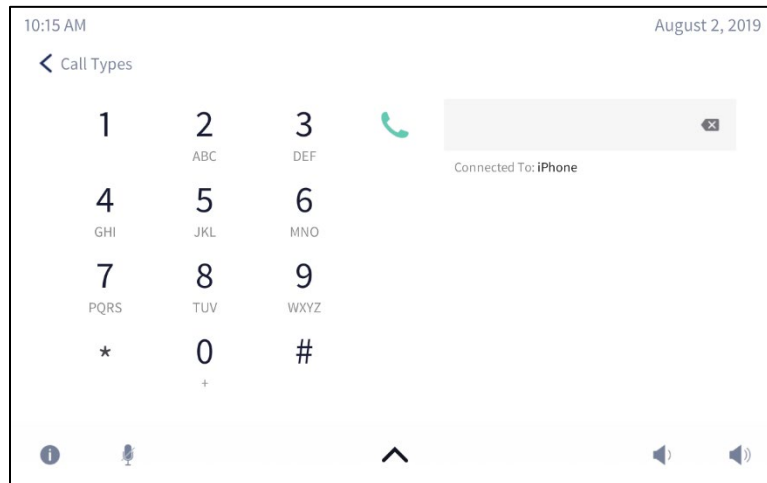
3. Tap the number to call and tap 📞. The **In Bluetooth Call** screen is displayed.

In Bluetooth Call Screen
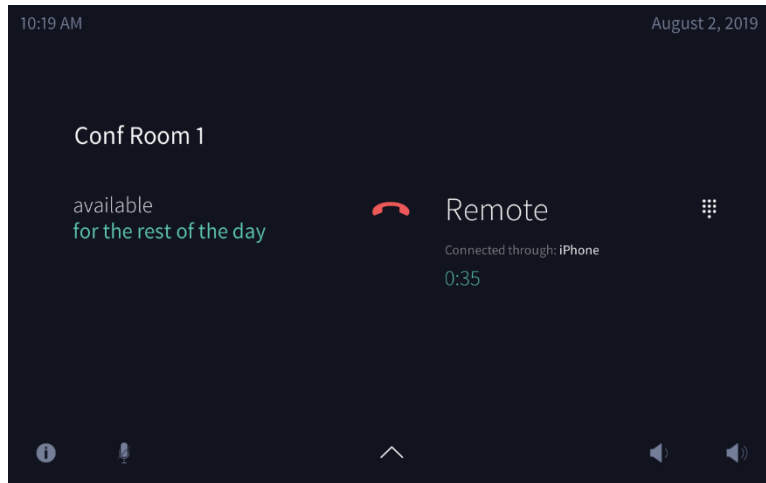
- Tap 📞 to end the call.

- Tap ⣿ to use a keypad to send DTMF tones (to enter extensions, check voicemail, etc.). The keypad screen is displayed.

Keypad Screen

- Tap numbers to send DTMF tones.

- Tap **Return to Call** to exit the keypad screen.

Make a Call with a Connected Computer

When configured, the CCS-UC-1 can make phone calls using a connected computer that is running audio calling software while using the CCS-UC-1 as a speakerphone.

NOTE: The CCS-UC-1 does not provide an Internet connection to the computer to make a call. The computer must have its own Internet connection.

To make a call with a connected computer, follow this procedure:

1. Tap ⎘. The **USB Call** screen is displayed.

    USB Call Screen
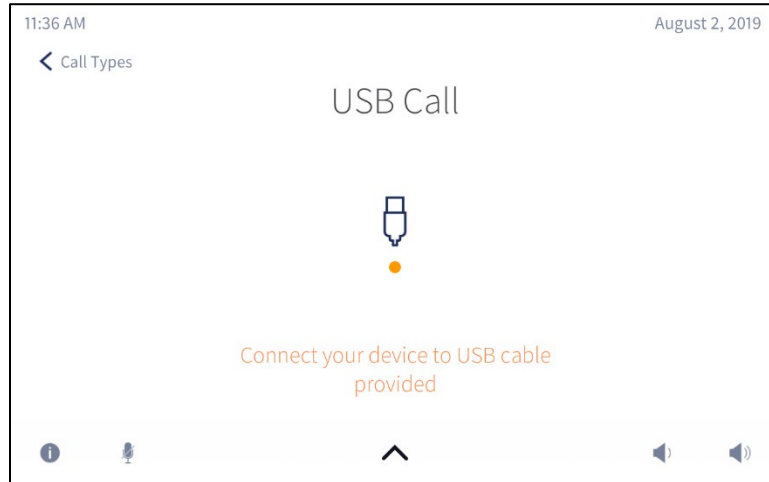
2. Connect the USB cable from the CCS-UC-1 to the computer that is running the audio call software. The **USB Connected** screen is displayed.

    USB Connected Screen
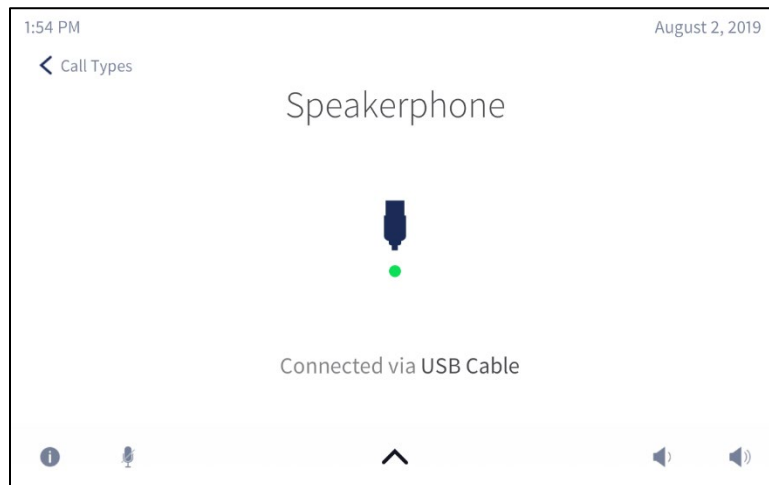
3. On the computer, use the audio call software to make and end the phone call.

4. When done, disconnect the computer.

Skype for Business

When configured, the CCS-UC-1 can make Skype for Business calls using the built-in Skype for Business application.

Make a Skype for Business Call

Skype for Business calls can be made to a Skype for Business user, a speed dial entry, or a phone number. Choose one of the following options to make a Skype for Business call:

Call Skype for Business Users
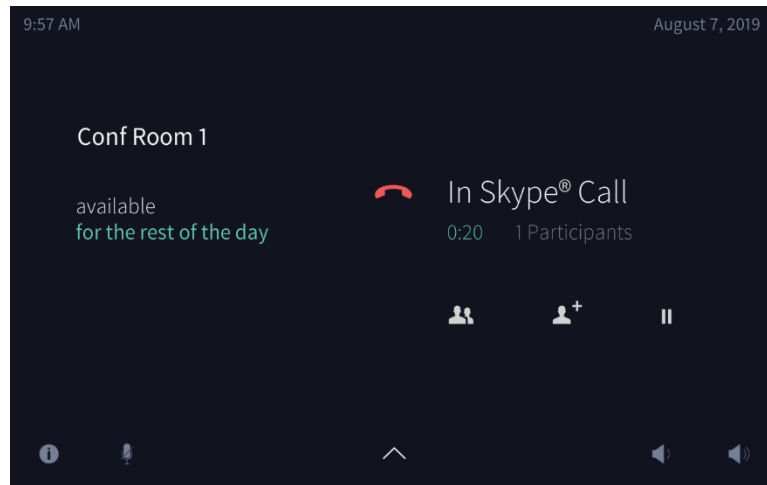
1. Tap ⓢ. The **Find Contact to Call** screen is displayed.

   Find Contact to Call Screen
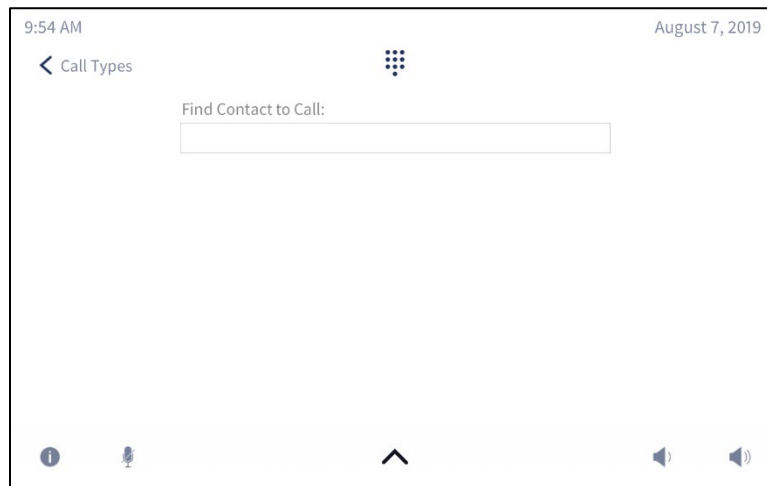
2. Use the on-screen keyboard to enter the contact name or email address. The CCS-UC-1 shows the search results on the display.

3. Tap 📞 next to the name of the contact to be called. When the call is answered, the **In Skype Call** screen is displayed.
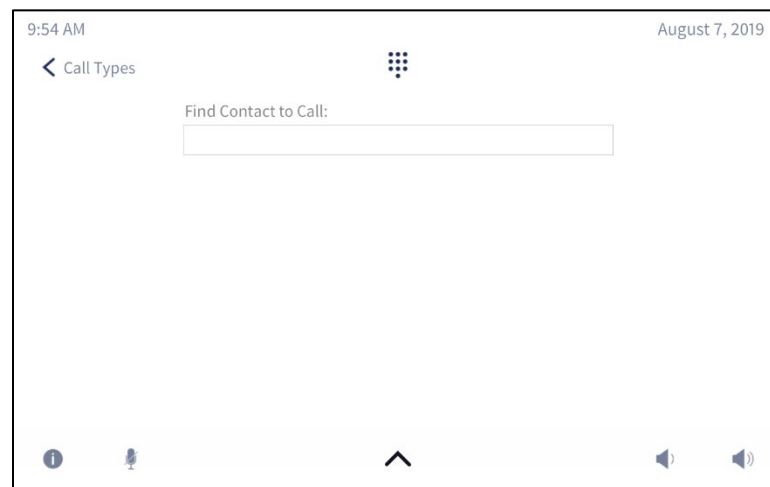
In Skype Call Screen

Call Using Speed Dial

When configured, the Skype for Business application can use a speed dial button to make a call. To use a speed dial button, follow this procedure:
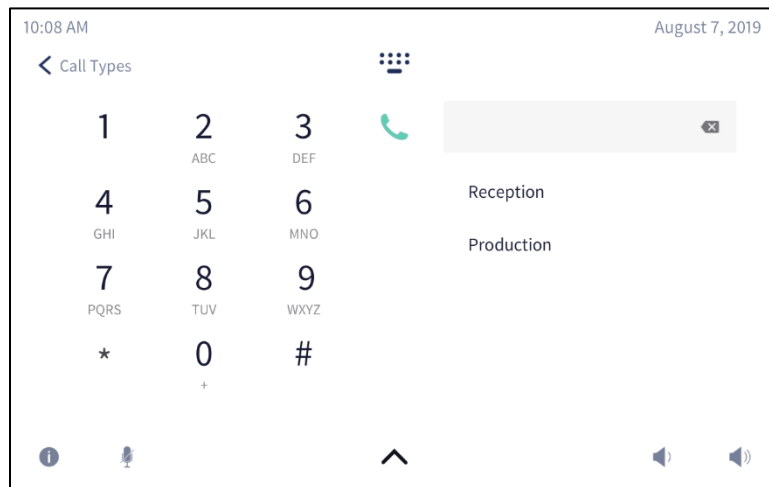
1. Tap Ⓢ. The **Find Contact to Call** screen is displayed.

Find Contact to Call Screen
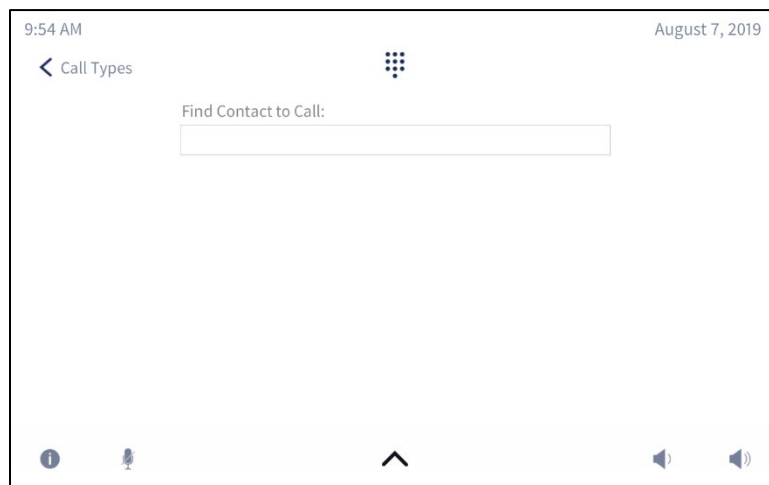
2. Tap ⠿. The keypad screen is displayed.

Keypad Screen

3. Tap a speed dial button to call. The device calls the number stored for the speed dial button.

Call a Phone Number

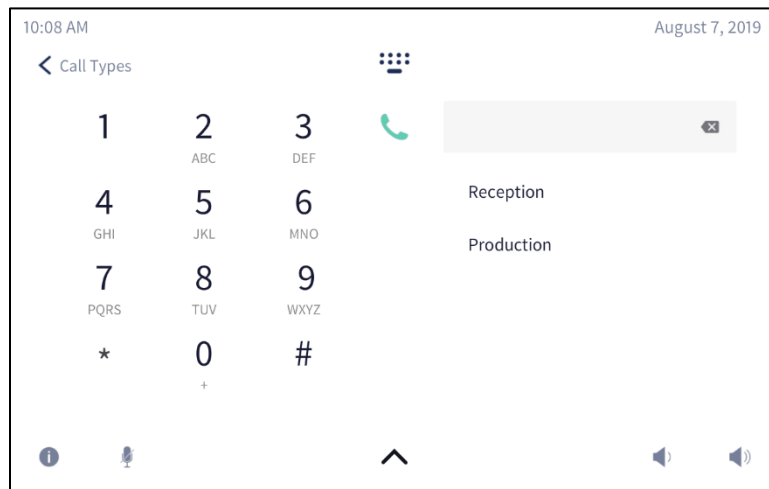Use the numeric keypad to dial a phone number.

1. Tap Ⓢ. The **Find Contact to Call** screen is displayed.

Find Contact to Call Screen

2. Tap ⁝⁝⁝. The keypad screen is displayed.
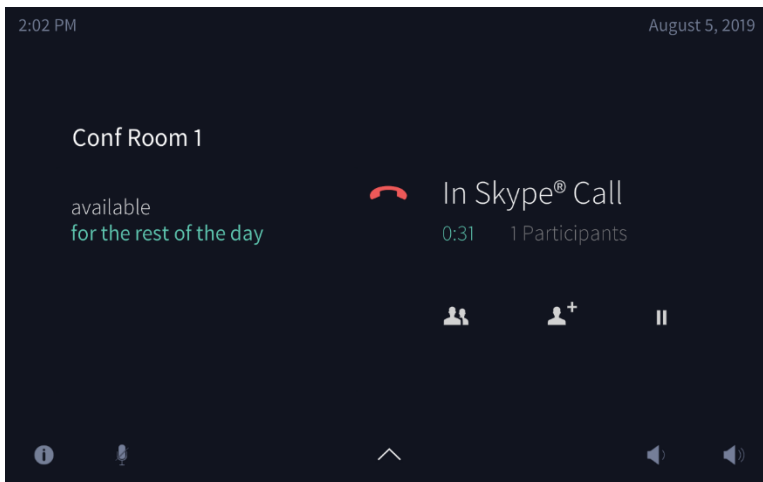
Keypad Screen

3. Tap the number to call with the numeric keypad, and then tap 📞.

Skype for Business In-Call Functions

During a Skype for Business call, the **In Skype Call** screen is displayed.
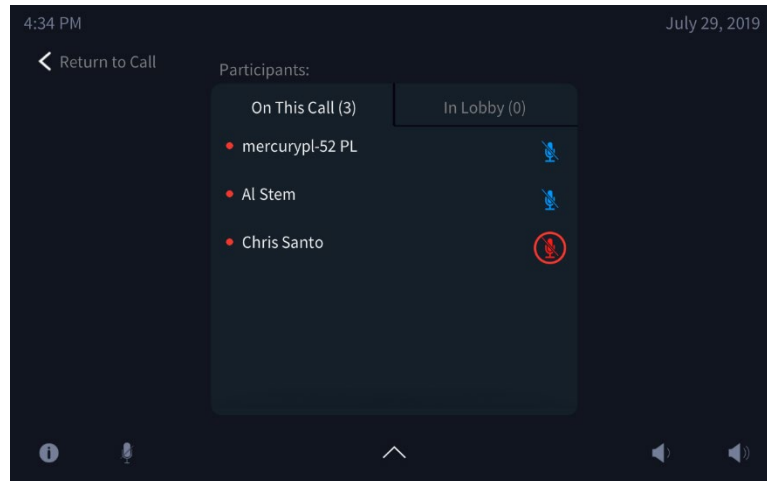
In Skype Call Screen

The following functions are available during a Skype for Business call.

- View participants

  Tap ![icon] to view members of the Skype for Business call. The **Participants** screen is displayed.

  Participants Screen


  - Tap **On This Call** to view current call participants.

  - Tap ![icon] next to a participant name to mute their microphone.

  - Tap **In Lobby** to view waiting invitees.

  - Tap **Return to Call** to exit the **Participants** screen.

- Place a Call on Hold

  Tap ![icon] to place the call on hold. Tap ![icon] to resume the call

- End the call

  Tap ![icon] to end the call.

- Tap ⋮⋮⋮ to use a keypad to send dual tone multi frequency (DTMF) tones (to enter extensions, check voicemail, etc.). The keypad screen is displayed.
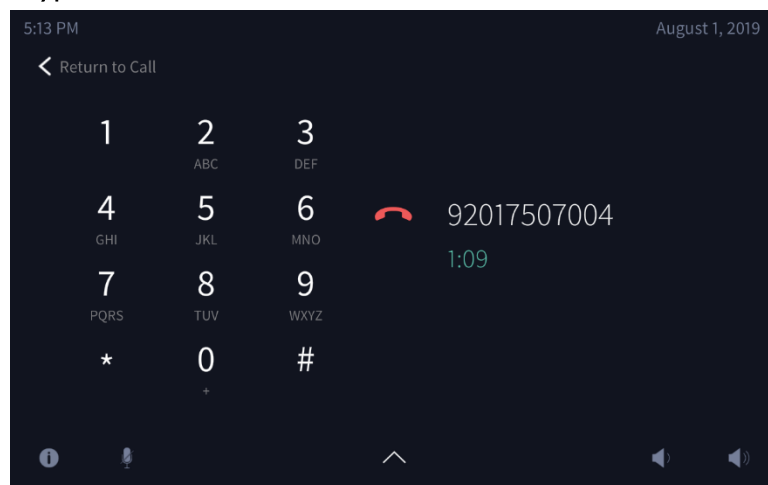
Keypad Screen

- – Tap numbers to send DTMF tones.

- – Tap **Return to Call** to exit the keypad screen.

- Place a Call on Hold

  Tap ▮▮ to place the call on hold. Tap ▶ to resume the call

- Add a Participant

  a. Tap 👤⁺. The invitation screen is displayed.

  Invitation Screen
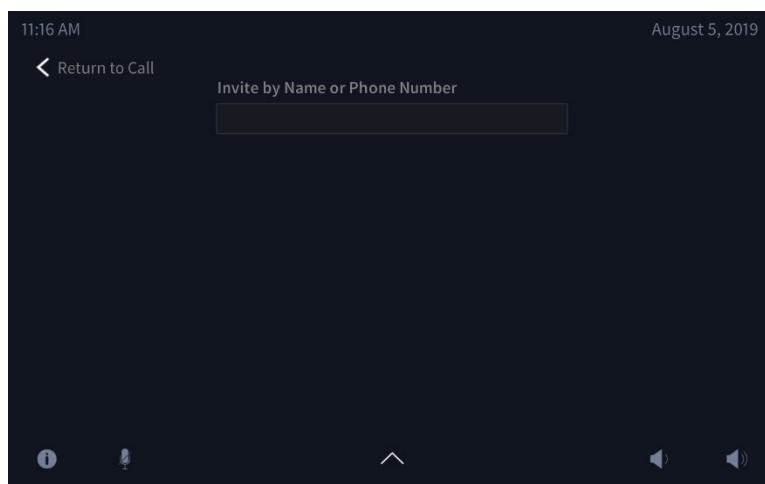
 b. Enter the name or telephone number of the participant to be added.

c. Tap the name or phone number that is displayed. The participant is dialed and added to the call when they answer.

Crestron AirBoard Whiteboard Capture

When configured, the CCS-UC-1 can start and manage a Crestron AirBoard session to share whiteboard content from a connected CCS-WB-1 Crestron AirBoard Whiteboard Capture System. The CCS-UC-1 provides controls for managing the session and distributing recordings.

Tap 🖼️ to display the Crestron AirBoard controls.

AirBoard Controls
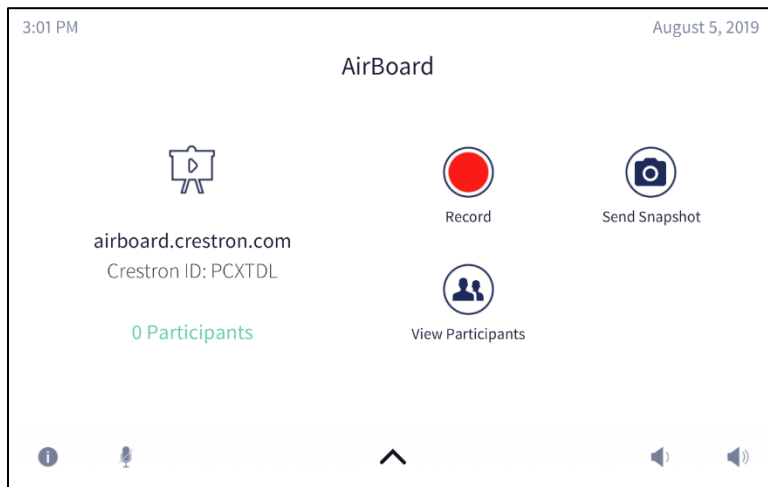
Record and Share a Crestron AirBoard Session

A Crestron AirBoard session can be recorded and distributed to those unable to attend a live broadcast.

1. Tap 🔴 to start recording the Crestron AirBoard session.

   NOTE: The recording session automatically begins when selecting the Crestron Airboard device as a presentation source as described in "Present Crestron AirBoard Content" on page 71.

2. Tap ⬛ to stop recording the Crestron AirBoard session. The CCS-UC-1 stops recording Crestron AirBoard content and presents options for sharing the recording of the Crestron AirBoard session.

Crestron AirBoard Recording Options
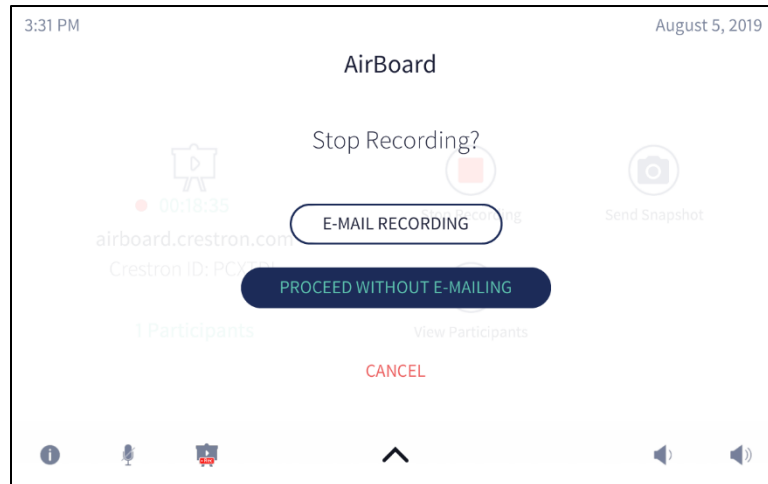
Email a Recording

Tap **E-MAIL RECORDING to** view options for emailing a snapshot or slide deck of the Crestron AirBoard session for review or archiving.

Email Options

1. Type an email address in the **E-mail recording to:** field. Multiple email addresses may be entered separated by commas or semicolons.

2. Tap **Send Snapshot** to send an image of the current Crestron AirBoard content or tap **Send Slide Deck** to send a recording of the recorded Crestron AirBoard session.
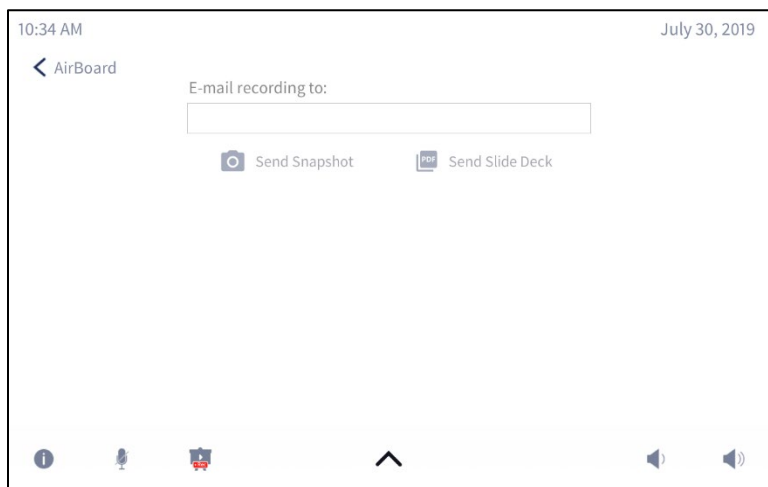
    > **NOTE:** The Crestron Airboard device's **Timeline** setting must be configured to create slide decks. For details, refer to the CCS-WB-1 Supplemental Guide (Doc. 8323) at www.crestron.com/manuals.

Proceed Without Emailing

Tap **PROCEED WITHOUT E-MAILING** to end the Crestron AirBoard session without keeping a recording of the session.

Cancel

Tap CANCEL to cancel the stop request and continue recording.

Send a Snapshot

Tap ⬛ to send a snapshot of the current Crestron AirBoard session.

Send Snapshot

1. Type an email address in the **E-mail recording to:** field. Multiple email addresses may be entered when separated by commas or semicolons.

2. Tap **Send Snapshot** to send an image of the current Crestron AirBoard content.

View Participants

Tap ![participants icon] to view a list of people viewing the Crestron AirBoard session or waiting to view the Crestron AirBoard session.

Participants In Session
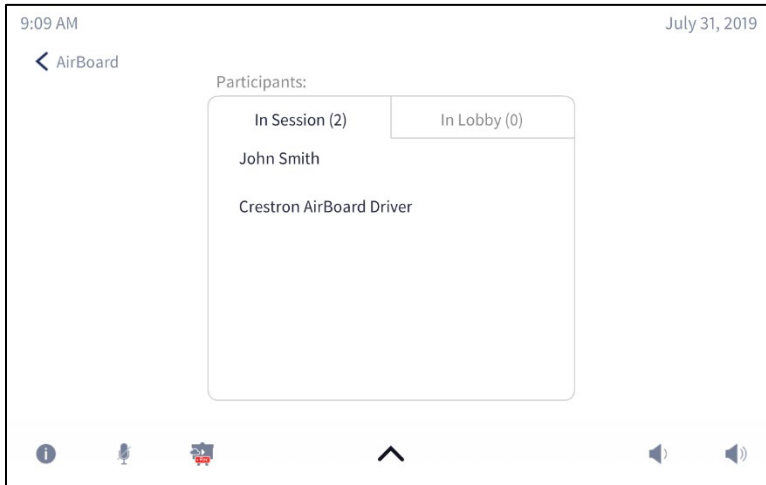
- **In Session:** Tap **In Session** to view a list of people viewing the Crestron AirBoard session.

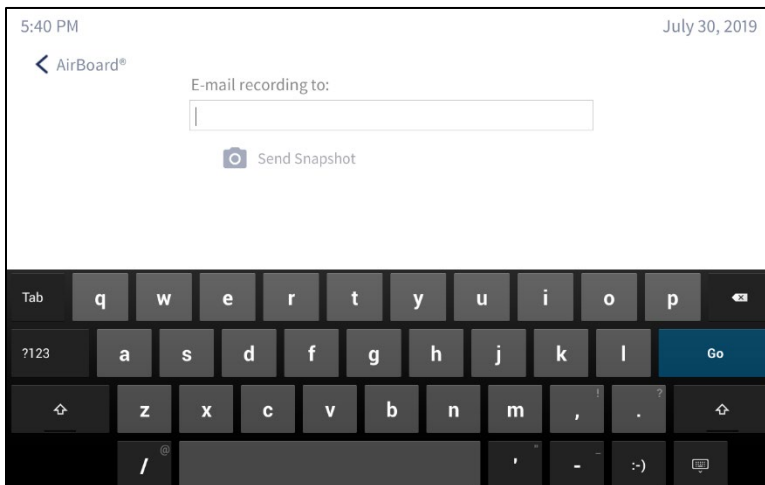- **In Lobby:** Tap **In Lobby** to view a list of people that are waiting in a virtual lobby to be admitted to the Crestron AirBoard session.

  NOTE: Participants are placed in the virtual lobby only if the Crestron AirBoard device's Code Mode is set to **Disable**. For details on setting the Code Mode, refer to page 57.

  Tap ![checkmark icon] to admit a user to the Crestron AirBoard session.

Participants in Lobby
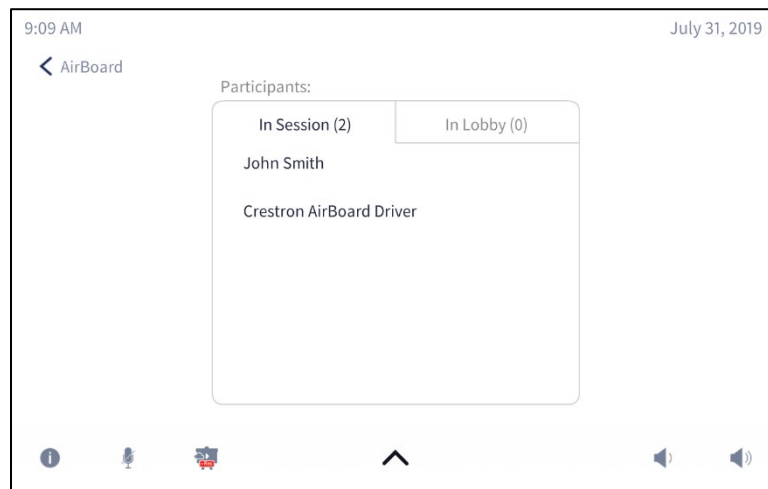
Invite Remote Participants

Guests can be invited to an active Crestron AirBoard session.

NOTE: The maximum number of remote participants is 10.

To invite remote participants to view a Crestron AirBoard session, convey the following information to potential viewers:

- **Website:** In this case, airboard.crestron.com.

- **Crestron ID:** The CCS-WB-1 ID number which is shown on the Crestron AirBoard controls screen.

- **Code (if enabled):** The alphanumeric code which is shown on the Crestron AirBoard controls screen.

    NOTE: If a code is not shown, participants are not required to enter a code into the "Enter Code" field when they sign in at airboard.crestron.com. After signing in, they will be placed in a virtual lobby pending approval of the Crestron Mercury device user. For details on managing participants, refer to "In Lobby" on page 96.

Admit Remote Participants

If a participant requests a remote connection while a presentation is not currently being recorded, and the Code Mode is set to **Disabled**, the following prompt is displayed on the CCS-UC-1.

Incoming Remote Connection Request Screen
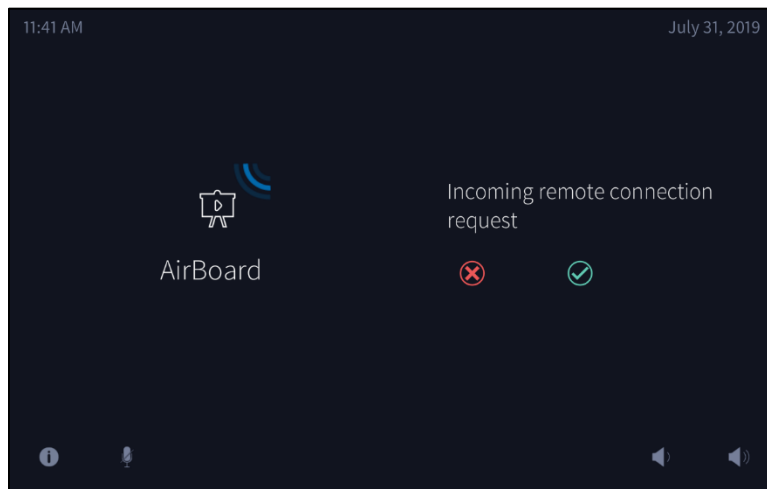
- Tap to ⊗ deny the request.

- Tap ⊘ to approve the request. The participant will be admitted into a new Crestron AirBoard recording session.

Meeting Conclusion Warning

When a scheduled meeting is almost over, the following prompt will appear.

Meeting Conclusion Warning
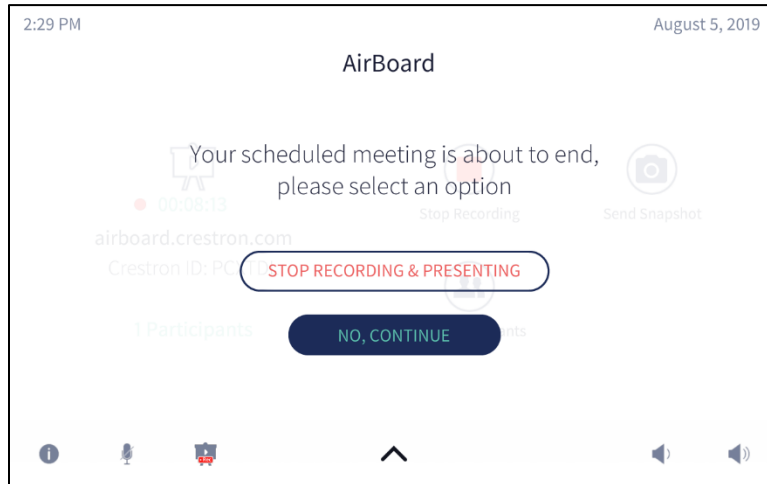
To end the recording and presenting session, select **STOP RECORDING & PRESENTING**. Refer to "Email a Recording" on page 94 for information on sending recordings to participants once the recording has been stopped. To continue recording and presenting until the end of the meeting, select **NO, CONTINUE**.

Once the scheduled meeting has ended, recording will stop and choices for emailing the recording or continuing without email are displayed.

Meeting Conclusion Warning
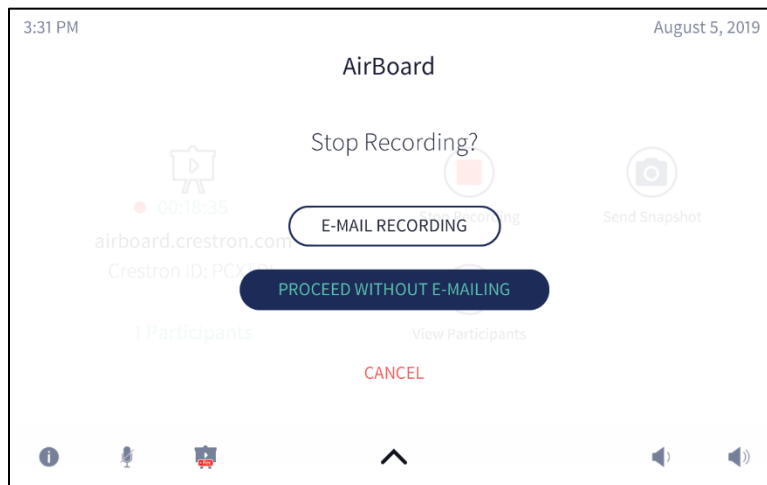
Tap E-MAIL RECORDING to email a recording of the session or tap PROCEED WITHOUT E-MAILING to continue without emailing a recording session.

Run a Web Conference

When configured, the CCS-UC-1 can run a web conference using a connected computer that is running web conferencing software. The CCS-UC-1 provides the speakerphone, video display, and camera capabilities (when equipped).

NOTE: The CCS-UC-1 does not provide an Internet connection to the computer to run a web conference. The computer must have its own Internet connection.

To run a web conference, follow this procedure:

1. Tap [icon]. The **Collaborate** screen is displayed.

    Collaborate Screen
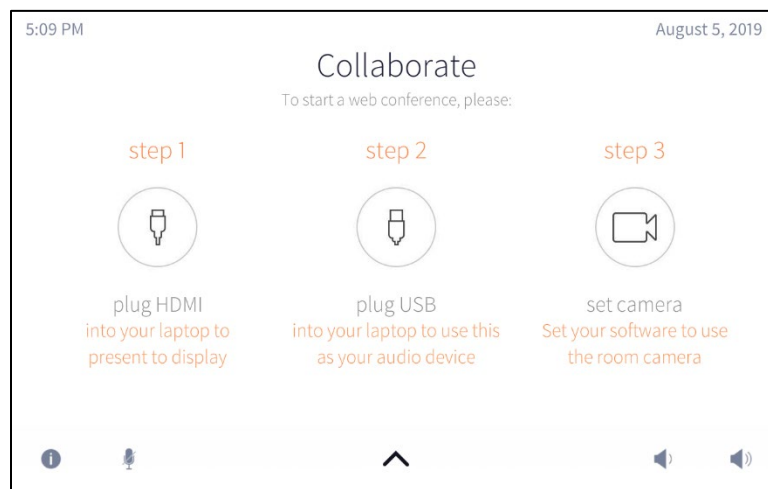
2. Connect the HDMI cable from the CCS-UC-1 to the computer that is running the web conference.

3. Connect the USB cable from the CCS-UC-1 to the computer that is running the web conference software. The **USB Connected** screen is displayed.

    USB Connected Screen

4. On the computer, set the web conference software to use the room camera attached to the CCS-UC-1.

5. Start the web conference.

6. When the conference is over, end the conference.

7. Disconnect the USB and HDMI cables from the computer.

Invite the CCS-UC-1 to a Meeting (Schedule the Room)

The CCS-UC-1 can be reserved using either the Skype for Business program or Microsoft® Outlook® software.

Reserve from Skype for Business Program

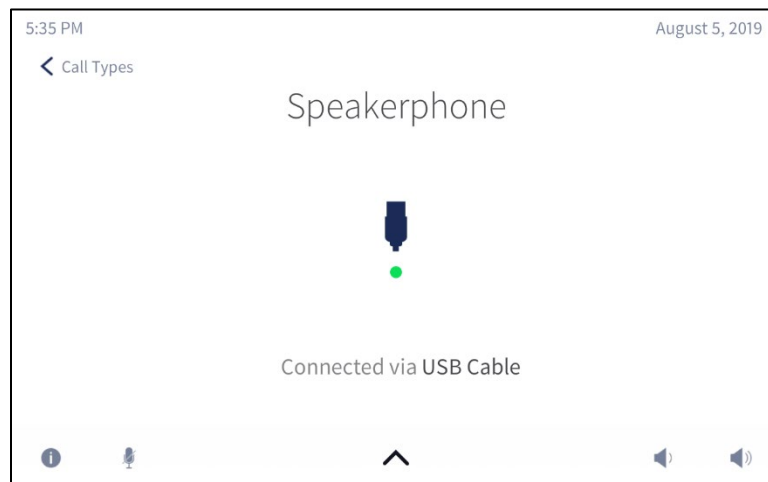To add the room from the Skype for Business program, perform the following procedure:

1. Join the meeting from a computer or mobile device.

2. Click **Invite More People**.

3. Search for the room name (the room name is on the CCS-UC-1's display) and click **OK**.

4. Answer the call from the CCS-UC-1.

Reserve from Microsoft Outlook

To add the room from Microsoft Outlook, perform the following procedure:

1. Open the calendar item in Outlook on the computer or mobile device.

2. Add the CCS-UC-1 in the **To:** field, and send the update. If the meeting is accepted, it will appear on the room calendar shortly.

3. Join the meeting from the CCS-UC-1.

Troubleshooting

The following table provides troubleshooting information. If further assistance is required, contact a Crestron customer service representative.

CCS-UC-1 Troubleshooting

TROUBLE	CAUSE	CORRECTIVE ACTION
The microphone mute LED on top of the CCS-UC-1 is lit blue.	The CCS-UC-1 is not receiving sufficient power for standard PoE+ (IEEE 820.3at) operation (for example, only receiving power from a standard PoE source).	Connect a PoE+ source or connect the PW-2420RU power pack (sold separately and included with the CCS-UC-1 W/PS KIT or CCS-UC-1-AV W/PS KIT).
The CCS-UC-1 displays the screen below, with the message "PoE power detected, device requires PoE+ power. Please connect a PoE+ power supply and reboot."	The CCS-UC-1 is not receiving sufficient power for standard PoE+ (IEEE 820.3at) operation (for example, only receiving power from a standard PoE source).	Connect a PoE+ source or connect the PW-2420RU power pack (sold separately and included with the CCS-UC-1 W/PS KIT or CCS-UC-1-AV W/PS KIT).
The CCS-UC-1 is not receiving PoE+ power from a Cisco® PoE+ switch.	The Cisco switch's Link Layer Discovery Protocol (LLDP) is disabled.	Configure the Cisco switch to enable LLDP. For example, to enable LLDP on some Cisco switches, use the following console commands: Switch# configure terminal Switch(config)# lldp run Switch(config)# end

Appendix: Configure Exchange for Use with CCS-UC-1

Skype for Business can provide single touch join functionality on its client devices. The image below shows a reserved Skype for Business meeting where the CCS-UC-1 is able to read the join information from the body of the scheduling service. Tapping **JOIN SKYPE® MEETING** causes the CCS-UC-1 to join the Skype for Business call.

For information on supported versions of Skype for Business and Exchange, refer to Answer ID 5829 in the Online Help on the Crestron website (www.crestron.com/onlinehelp).

Home Screen - Reserved Room
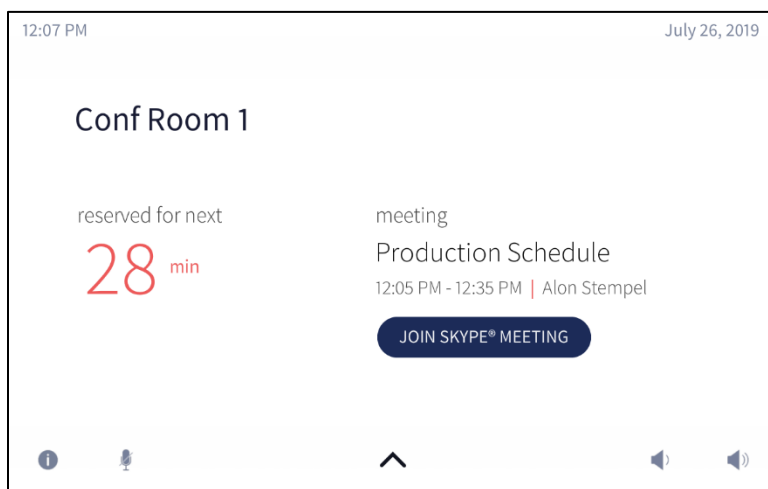
There are several reasons the **JOIN SKYPE® MEETING** button may not display:

- The calendar body is not available to the CCS-UC-1

- The CCS-UC-1 is not logged in to Skype for Business

- The meeting was not scheduled as a Skype for Business meeting

- The join information in the body of the scheduled meeting was not available to the CCS-UC-1

Enable Resource Account Body for One Touch Join

By default, resource accounts do not include a body for their invitations. To have resource accounts that are used with the CCS-UC-1 include a body in their invitations, perform the following procedure.

NOTES:

- Change data within the chevrons before executing commands.

- Both on-premises and Office 365 deployments are affected.

1. Access PowerShell on the domain and enter the following command for the account.

```
Set-CalendarProcessing <account name> –DeleteComments $false –
DeleteSubject $false
```

2. Run the following script:

```
////Provisioning O365 Lync/Skype Account////

//Open Powershell - Make connection to O365

//Change Data in carrots before executing commands.

Set-ExecutionPolicy Unrestricted

$org="<cloudaccount>.onmicrosoft.com"

$cred=Get-Credential <useraccount>@$org

$sess=New-PSSession -ConfigurationName microsoft.exchange -
Credential $cred -AllowRedirection -Authentication basic -
ConnectionUri https://ps.outlook.com/powershell

Import-PSSession $sess

//Send Whatever commands you want.
```

Refer to https://technet.microsoft.com/en-us/library/dn975125.aspx for more information.

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