



CCS-WB-1  
Crestron AirBoard™  
Whiteboard Capture System

Supplemental Guide  
Crestron Electronics, Inc.

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# CCS-WB-1

## Crestron AirBoard

### Whiteboard Capture System

## Introduction

The Crestron AirBoard™ whiteboard capture system (CCS-WB-1) turns any dry-erase board into an electronic whiteboard. The CCS-WB-1 allows you to present and illustrate on a standard whiteboard and share your content in real time on the video displays of a remote audience. Whiteboard content is shared through the remote user's Web browser.

The CCS-WB-1 provides the following features:

- Remote viewing from a Web browser.
- Invite other remote viewers.
- Download a snapshot or timeline of displayed content.
- Create and download a slide deck of all changes made to the whiteboard.
- Email snapshots and timelines.

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**NOTE:** A Crestron control system programmed with the CCS-WB-1 module containing email contacts is required. Refer to the module's help file for details.

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This supplemental guide discusses the requirements, configuration instructions, and operating instructions for the CCS-WB-1. For information on installing the CCS-WB-1, refer to the CCS-WB-1 DO Guide (Doc. 8277) at [www.crestron.com/manuals](http://www.crestron.com/manuals).

## Requirements

### Hardware

The CCS-WB-1 can operate as a standalone device, or integrate with the following hardware for enterprise-level deployments:

- Crestron 3-Series® Control System
- Crestron® DGE-100 Digital Graphics Engine 100
- (Optional) CEN-SWPOE-16 or CEN-SWPOE-5 Power Over Ethernet (PoE) Switch

# Configuration

## Requirements

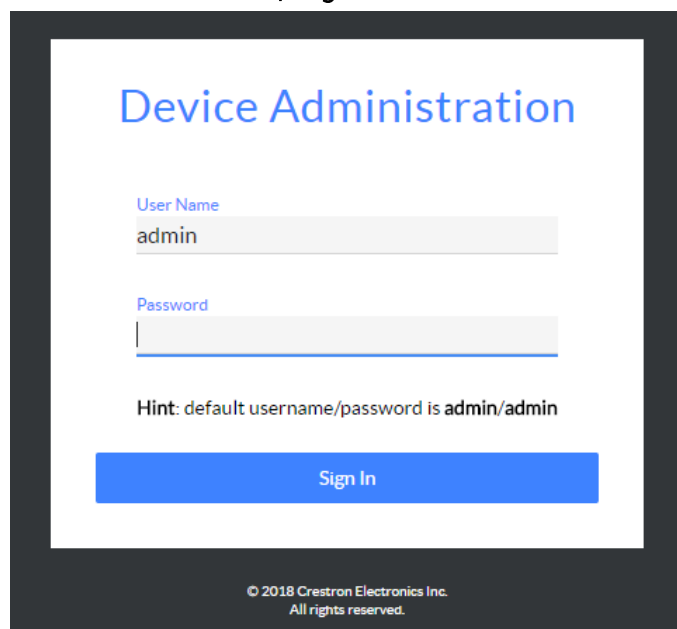
Configuration requires a computer with a Web browser and Crestron Toolbox™ software. Connect the CCS-WB-1 and computer to a commonly accessible network.

## Connect to the Device

The CCS-WB-1 IP address is required to configure the device. To connect to the device:

1. Use Crestron Toolbox Device Discovery Tool to find the CCS-WB-1 to be configured.
2. Double-click the CCS-WB-1 to be configured. A Web browser will open to the Device Administration login page.

### Device Administration, Login



Device Administration

User Name  
admin

Password  
|

Hint: default username/password is admin/admin

Sign In

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**NOTE:** Use the Crestron Toolbox Device Discovery Tool to determine the device's IP address. Then enter the IP address in a Web browser to navigate to the Device Administration login page.

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

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**NOTE:** A prompt appears for first time users to change their password. Follow the instructions for setting a new password. After entering the new password, the device's **OVERVIEW** screen will display.

---

## OVERVIEW Screen

The screenshot displays the Crestron Overview screen for a device. The interface includes a dark sidebar on the left with navigation options: OVERVIEW (selected), PAIRINGS, CAMERA, NETWORK, and DEVICE. The main content area is divided into four expandable sections: General, Pairing, Camera, and Network. Each section contains configuration details and status indicators, with 'Configure' buttons available for several items.

**CRESTRON** Leave Setup

**General**

Model	CCS-WB-1
Crestron ID	PCXTDL
Crestron AirBoard Name	UNASSIGNED
MAC Address	00:10:7F:A2:93:52
Firmware Version	1.0.13+14826
Serial Number	X131549

**Pairing**

Pairing with Control System **Not Paired** [Configure](#)

**Camera**

Camera Calibration **Configured** [Configure](#)

**Network**

Redirect HTTP to HTTPS No

Device Discovery Yes

Cloud Server Connection **Connected** [Configure](#)

Ethernet Adapter

MAC Address	00:10:7F:A2:93:52
Domain Name	CRESTRON.CRESTRON.COM
Host Name	CCS-WB-1-00107FA29352
DHCP Enabled	Yes
IP Address	172.30.16.62
Subnet Mask	255.255.255.0
Default Gateway	172.30.16.1
DNS Server 1	192.168.200.133
DNS Server 2	192.168.200.134

The **OVERVIEW** screen displays information about the device and provides links to configure the device:

- **OVERVIEW** contains information on general topics, control system pairing, using the camera, and network configuration.

Click = to expand a section on the **OVERVIEW** screen. Click - to minimize a section.

Click **Configure** to configure a setting.

The device status is shown on the bottom of the screen. Click + **Show More Details** to view more details. Click - **Show Less** to view fewer details.

- **PAIRINGS** displays the device pairing state.
- **CAMERA** calibrates the device to the whiteboard. A user can calibrate the device by clicking **Configure**.
- **NETWORK** configures the device for operation in a network environment.
- **DEVICE** provides options to upload firmware, reboot the device, and configure authentication management.

## Log Out from the Device

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

## Configure the Device

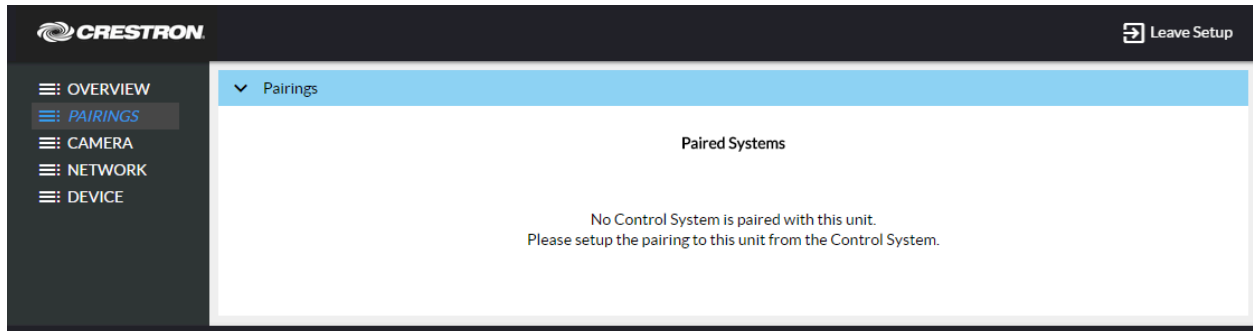
Configure the device as required for the installation.

### PAIRINGS

Use the CCS-WB-1 with a 3-Series Control System as part of a local Crestron AirBoard whiteboard solution. Click **PAIRINGS** to view information about the connected control system.

If the device has not been paired with a control system, the following screen is displayed.

#### PAIRINGS Screen, No Paired System



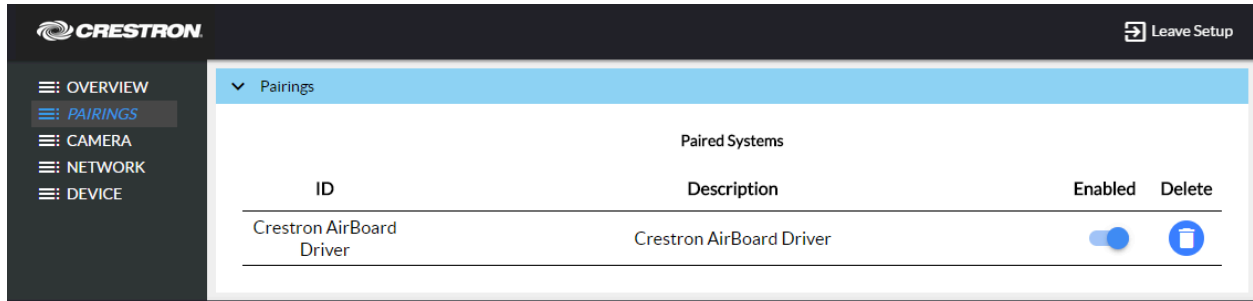
Pair the CCS-WB-1 with a control system from the CCS-WB-1's SIMPL programming module that is part of a SIMPL Windows program. For details on pairing and the SIMPL programming module, refer to the module's help file.



**NOTE:** When pairing the device with a control system, physical access to the control pad is required. The pairing process requires the user to press the button on the device's control pad.

Once the device is paired with a control system, the screen below is displayed when viewing the **PAIRINGS** screen.

### PAIRINGS Screen, Paired System Listed



To disable the pairing between the control system and the device, move the Enabled switch to the left. To permanently delete the pairing information from the camera, click

## CAMERA

After installation, calibrate the CCS-WB-1 to its location. Click **CAMERA** to begin the calibration process and to display the Permission screen.

### Permission Screen



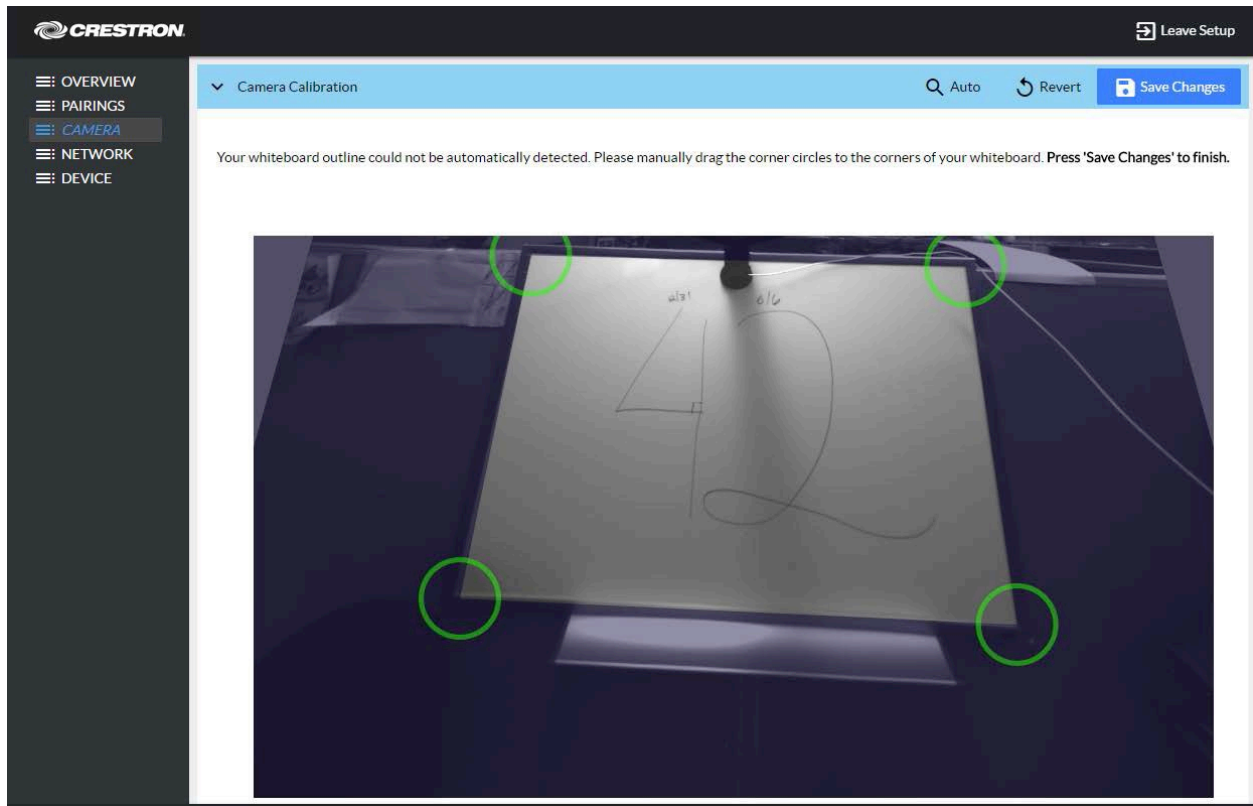
Crestron AirBoard Setup needs permission to configure your Crestron AirBoard.  
Press the button on your Crestron AirBoard control pad to confirm.

CANCEL

1. Press the button on the control pad to grant permission to the setup program.
  - Auto Detection  
If the whiteboard is automatically detected by the CCS-WB-1, the screen displays what it detected. To adjust the frame size, use a mouse to drag the green circles to the whiteboard corners, and then click **Save Changes**.

- Manual Calibration  
If the whiteboard is not automatically detected by the CCS-WB-1, the Camera Calibration screen is displayed.

### Camera Calibration Screen

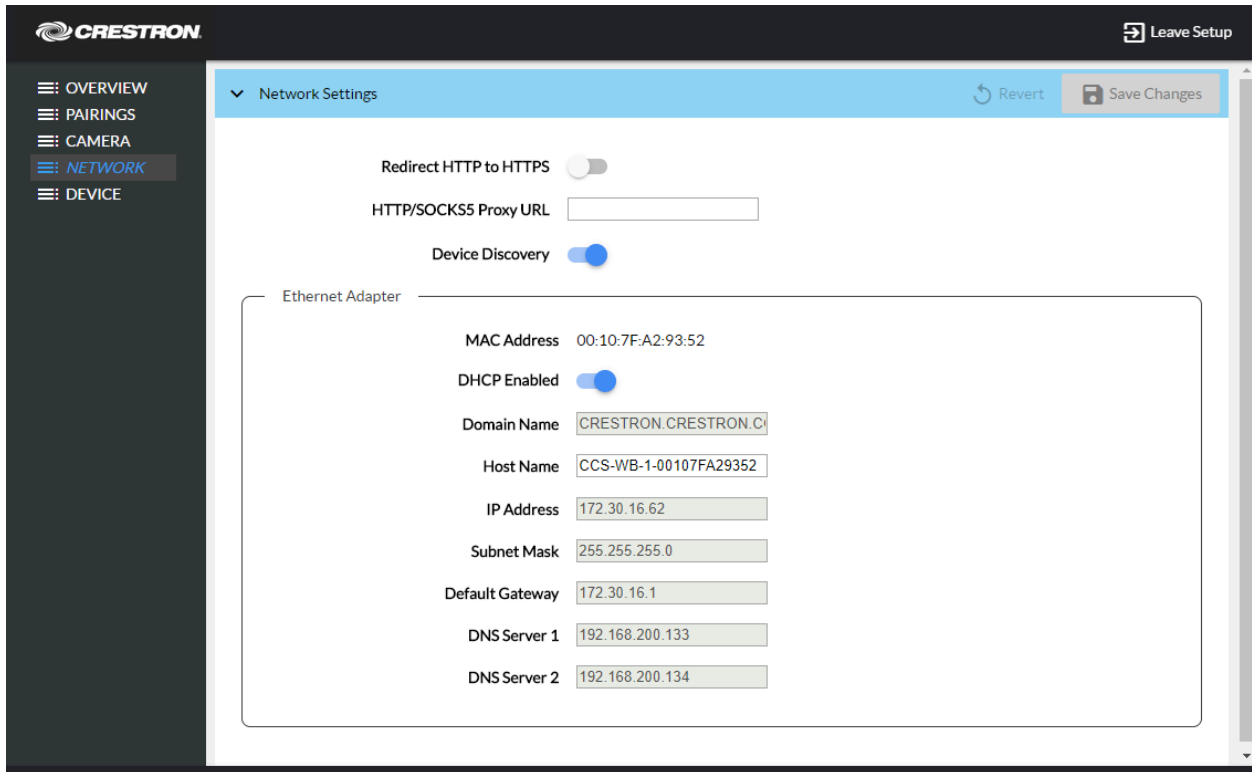


- Use a mouse to drag the green circles to the whiteboard corners.
- Click **Save Changes** to save calibration information. Otherwise, click **Revert** to return to the previously saved settings.

## NETWORK

Click **NETWORK** to view and change the device's network settings.

### NETWORK Screen



- To have the device route browsers to an HTTPS URL instead of HTTP, move the **Redirect HTTP to HTTPS** switch to the right.

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**NOTE:** When browsing to the HTTPS URL, you must accept the device's certificate when browsing to the configuration pages.

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- To have the device use an HTTP/SOCKS5 Proxy for communicating with Crestron's cloud service, enter the proxy server URL in the **HTTP/SOCKS5 Proxy URL** field.
- Use the **Ethernet Adapter** section to view network information or obtain and/or enter network information.
  - To obtain network settings from a DHCP server, use the mouse to move the **DHCP Enabled** switch to the right. Enter a new host name in the **Host Name** field with a name that can be easily recognized.

---

**NOTE:** If the DHCP server cannot provide an address, the device assigns the default address 169.254.102.1)

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- To manually enter Ethernet parameters, use the mouse to move the **DHCP Enabled** switch to the left and enter the domain name, host name, IP address, subnet mask, default gateway, and DNS servers.

When all changes are complete, click **Save Changes**. Otherwise, click **Revert** to return to the previously saved settings.

## DEVICE

Click **DEVICE** to set the device's name, update firmware, restore factory settings, reboot the device, set an access code, use the timeline feature, and manage users.

### DEVICE Screen

The screenshot displays the Crestron Device Management interface. On the left is a navigation menu with options: OVERVIEW, PAIRINGS, CAMERA, NETWORK, and DEVICE (highlighted). The main content area is titled 'Device Management' and contains several sections:

- Name:** A text field labeled 'Crestron AirBoard Name' with the value 'UNASSIGNED' and a 'Set' button.
- Firmware:** Shows 'Firmware Version: 1.1.0+14945'. The 'Firmware Upgrade' section includes a 'Choose File' button (with 'No file chosen' text), an 'Upload and Apply' button, and an 'Enable Auto-Update' toggle switch (turned on). A 'Set' button is at the bottom right.
- Maintenance:** Contains two buttons: 'Factory Restore' and 'Reboot'.
- Code:** Features 'Code Mode' radio buttons for 'Disabled' (selected), 'Random', and 'Use the following code'. Below is a 'Code' text field and a 'Set' button.
- Timeline:** Includes an 'Enable Timeline' toggle switch (turned on), a 'Length (minutes)' input field with the value '1', and a slider. A 'Set' button is at the bottom right.
- Operation Mode:** Has 'Operation Mode' radio buttons for 'Cloud' (selected) and 'Local Mode (Self-Hosted)'. A 'Set' button is at the bottom right.

Below the Device Management section is the 'Authentication Management' section:

- 'Enable Authentication' toggle switch (turned on) with a 'Set' button.
- Two tabs: 'CURRENT USER' (active) and 'OTHER USERS'.
- Under 'CURRENT USER', the 'Name' is 'admin'.
- A 'Change Current User Password' button is located at the bottom.

At the bottom of the screen, a status message reads: 'Crestron AirBoard Whiteboard Capture System is configured and ready to use.'

## Name

Assign a friendly name to the device. The name will be displayed at the top of a remote viewer's display when sharing content.

## Firmware

### Upload New Firmware

To upload device firmware, follow this procedure:

1. Click **Choose File** and navigate to the firmware file location.
2. Select the file to use and click **Open**.
3. Click **Upload and Apply** to load the firmware.

### Auto-Update

The device can automatically check for firmware updates and update the device as needed. To allow auto updating, move the **Enable Auto-Update** switch to the right. To disable auto updating, move the **Enable Auto-Update** switch to the left.

---

**NOTE:** The device must have internet access to enable Auto Update.

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## Maintenance

### Factory Restore

To restore the device to the default factory settings, click **Factory Restore**.

### Reboot

To reboot the device, click **Reboot**.

## Code

Use a code to limit access to remote viewers.

### Code Mode

The code feature can be disabled, randomly generated, or fixed to a specific value. 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 **Code** field and click **Set**.

---

**NOTE:** If a code is being used it must be shared with remote viewers. Share the code through a Crestron control system and touch screen, or simply sent to remote viewers.

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To restore the device to the default factory settings, click **Factory Restore**.

## Timeline

Remote viewers can display a timeline to allow them to “scroll back” and view whiteboard content. To enable the timeline feature:

1. Move the **Enable Timeline** switch to the right.
2. Enter the timeline length (in minutes) in the **Length (minutes)** field.
3. Click **Set** to save the setting.



## Operation Mode

Operation mode determines how users connect to the AirBoard.

1. If the device is set to Cloud, use [airboard.crestron.com](https://airboard.crestron.com) to connect.
2. If the device is set to Local Mode (Self-hosted), use the IP Address of the device to connect.

## Authentication Management

The Authentication Management section controls access to the device’s setup pages.

- To use authentication for accessing the device’s setup pages, move the **Enable Authentication** switch to the right and click **Set**. This is the default setting.
- To allow anyone on the network to access the device’s setup pages, move the Enable Authentication switch to the left and click **Set**.
- To change the current user’s password, click **Change Current User Password** and follow the onscreen instructions.
- To add, edit or delete users, click **OTHER USERS** and select one of the following options.
  - **Create a User.** Click **Create User** and follow the onscreen instructions.
  - **Edit a User.** Click  located next to a user name, and follow the onscreen instructions for changing the user password.
  - **Delete a User.** Click  located next to a user name and follow the onscreen instructions for deleting a user.

# Operation

Content from a CCS-WB-1 can be shared and viewed locally or remotely.

## Start a Whiteboard Session

### With a Control System

Use the CCS-WB-1 locally to provide basic whiteboard capture capabilities for display using a Crestron control system, a DGE-100 or DM-DGE-200 graphic engine, a TSW touch screen or a XPanel control program. Use the touch screen or XPanel program to start sharing and perform other functions.

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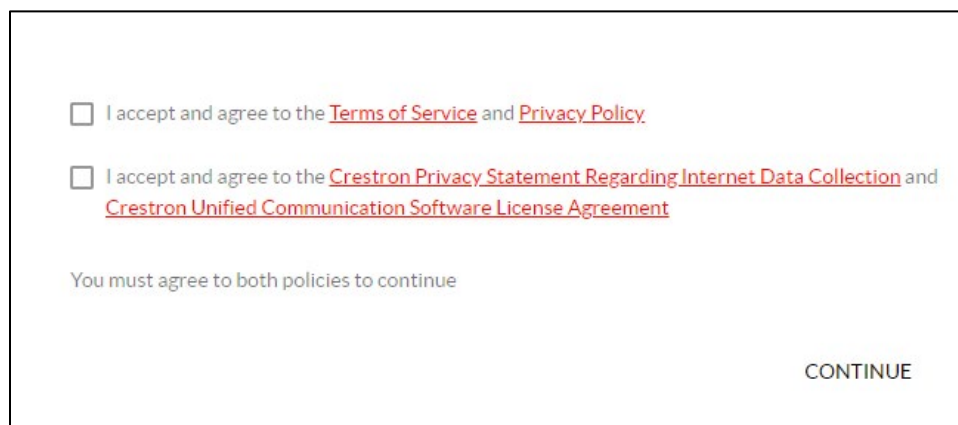
**NOTE:** Available functions are dependent on the functionality created in the control system program.

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### With a Web Browser

1. To display terms of usage, visit the following address from your Web browser:
  - a. If operation mode of the device is set to **Cloud** use [airboard.crestron.com](http://airboard.crestron.com)
  - b. If operation mode is set to **Local Mode (Self-hosted)**, use the IP Address of the device

#### Terms of Usage



I accept and agree to the [Terms of Service](#) and [Privacy Policy](#).

I accept and agree to the [Crestron Privacy Statement Regarding Internet Data Collection](#) and [Crestron Unified Communication Software License Agreement](#)

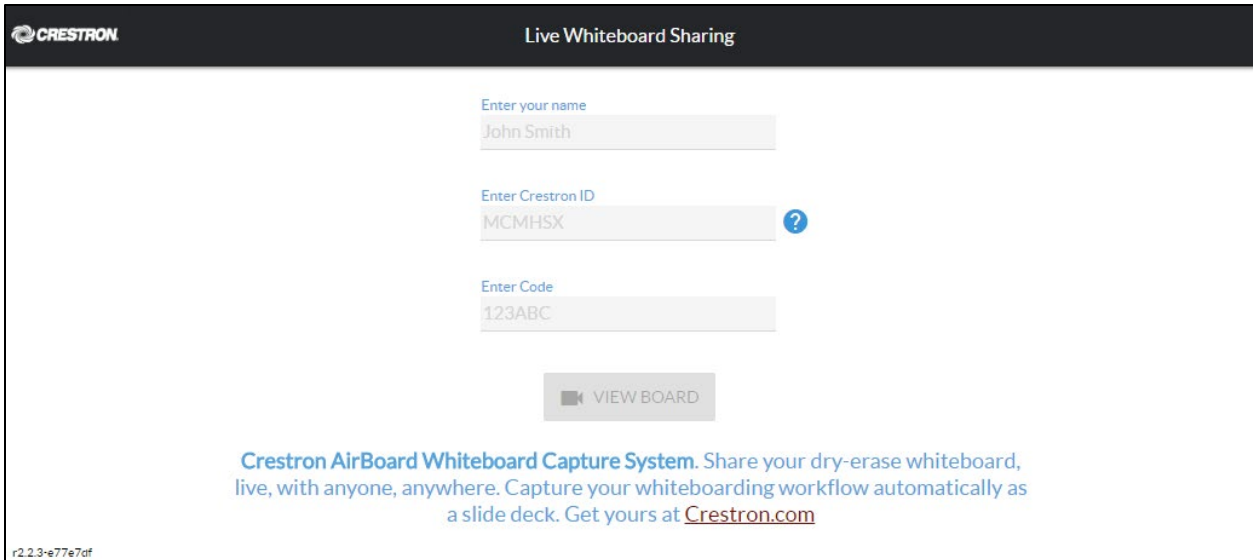
You must agree to both policies to continue

CONTINUE

2. Click the checkboxes to accept, and then click **CONTINUE** to display the Live Whiteboard Sharing page.

### Live Whiteboard Sharing



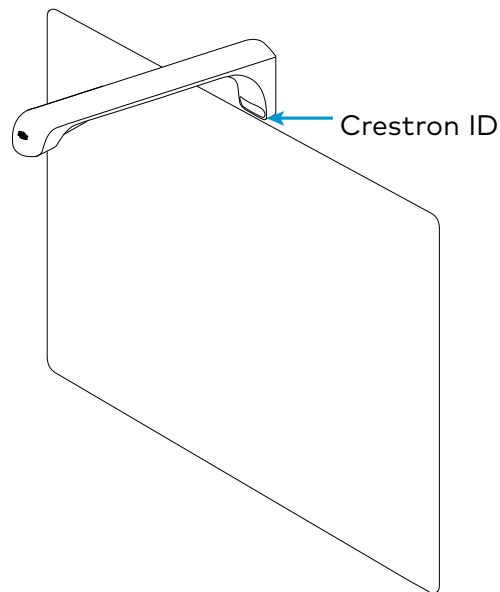


3. Enter your name, the Crestron ID, and the access code in the **Enter your name**, **Enter Crestron ID**, and **Enter Code** (if a code is set) fields respectively.

---

**NOTE:** The Crestron ID can be found on the front of the device as shown below. The Crestron ID is not required if the operation mode is set to **Local Mode (Self-hosted)**.

#### Crestron ID Location



4. Click **VIEW BOARD** to display the whiteboard content..

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**NOTE:** If a device does not require a code, a prompt is displayed to press the control pad button. Press the button to begin the session.

---

## Remote Viewers

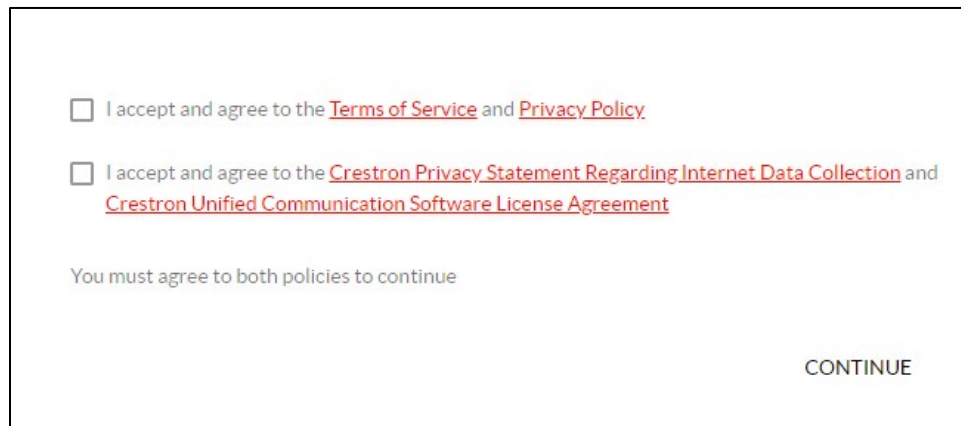
If someone tries to view the content remotely during a presentation session, a prompt is displayed to all connected users asking if the new visitor can join. Any connected user can grant or deny access to the new audience member.

## Remote Viewing

Remote users can view, share, and download whiteboard content using Web browser software.

1. To display terms of usage, visit the following address from your Web browser:
  - a. If operation mode of the device is set to **Cloud**, use [airboard.crestron.com](http://airboard.crestron.com)
  - b. If operation mode is set to **Local Mode (Self-hosted)**, use the IP Address of the device

### Terms of Usage



I accept and agree to the [Terms of Service](#) and [Privacy Policy](#).

I accept and agree to the [Crestron Privacy Statement Regarding Internet Data Collection](#) and [Crestron Unified Communication Software License Agreement](#)

You must agree to both policies to continue

CONTINUE

2. Click the checkboxes to accept, and then click **CONTINUE** to display the Whiteboard Sharing page.

## Live Whiteboard Sharing

**CRESTRON** Live Whiteboard Sharing

Enter your name  
John Smith

Enter Crestron ID  
MCMHSX ?

Enter Code  
123ABC

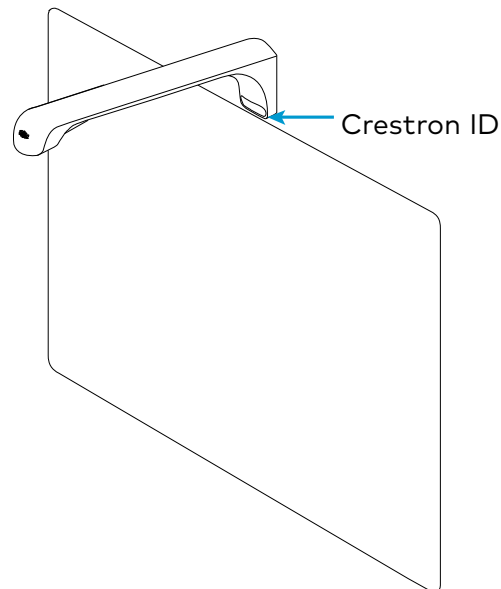
VIEW BOARD

Crestron AirBoard Whiteboard Capture System. Share your dry-erase whiteboard, live, with anyone, anywhere. Capture your whiteboarding workflow automatically as a slide deck. Get yours at [Crestron.com](https://www.crestron.com)

3. Enter your name, the Crestron ID, and the access code in the **Enter your name**, **Enter Crestron ID**, and **Enter Code** fields respectively.

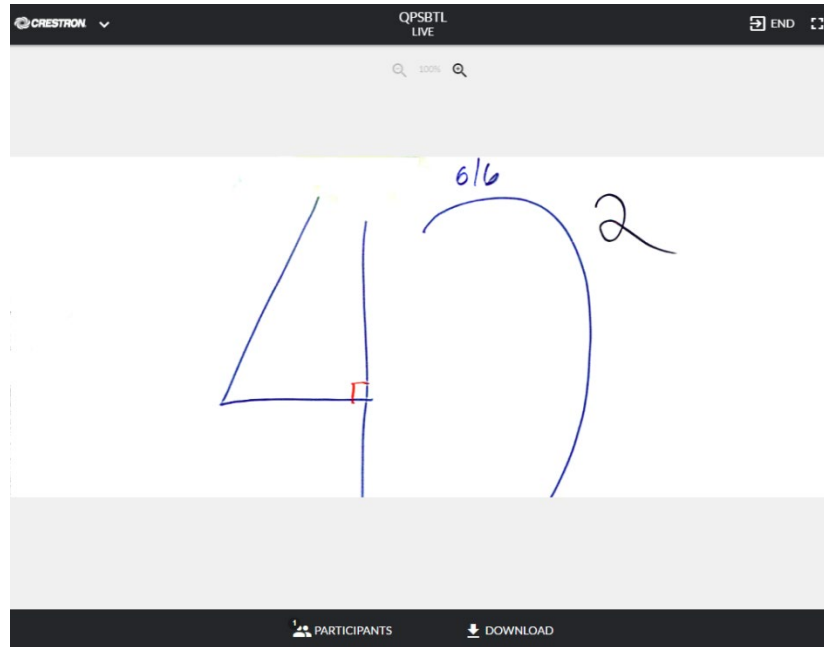
**NOTE:** The Crestron ID can be found on the front of the device as shown below. The Crestron ID is not required if the operation mode is set to **Local Mode (Self-hosted)**.

#### Crestron ID Location



4. Click **VIEW BOARD** to display the whiteboard content.

### Crestron ID Location



## Additional Functions

While viewing content, several functions are available.

### Add Viewers

As moderator, you can invite other viewers by email or send them a link to the session.

- To invite viewers by email, click **PARTICIPANTS**, and then click **Invite by Email**.

---

**NOTE:** This feature requires a Crestron control system programmed with the CCS-WB-1 module and populated with email addresses. Refer to the CCS-WB-1 module's help file for details.

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- To share a link to the session, click **PARTICIPANTS**, and then click **Share Session Link**. A hyperlink for the session is displayed and can be copied to the computer clipboard for distribution.

### Download Content

When viewing content, a snapshot of the current view and a slide deck of all changes to the whiteboard can be downloaded.

- To download a snapshot of the current whiteboard view, click **DOWNLOAD**, and then click **Snapshot**.
- To download a slide of all of the changes to the whiteboard, click **DOWNLOAD**, and then click **Slide Deck (PDF)**.



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**Crestron Electronics, Inc.**  
15 Volvo Drive, Rockleigh, NJ 07647  
Tel: 888.CRESTRON  
Fax: 201.767.7576  
[www.crestron.com](http://www.crestron.com)



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