

# Cisco Webex Room Panorama

## Getting Started Guide



After installing the Cisco Webex Room Panorama as described in the Installation Guide, you must continue with the procedures in this Getting Started guide. They are a mandatory part of the Room Panorama installation process.

This guide includes:

- Registration with Cisco UCM
- Running the setup assistant to calibrate the camera and check that the audio system is correctly installed
- Screen calibration

Cisco Webex Room Panorama is running CE software, the same software as the rest of the Cisco Webex Room series.

Minimum software version:

- CE9.13.0

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# Register Room Panorama with Cisco UCM

Webex Room Panorama requires as a minimum Cisco Unified Communications Manager (UCM) version 10.5 with a device enabler for Cisco Webex Room Panorama.

Supported Cisco UCM releases:

- Cisco UCM version 10.5.2, 11.5.1, 12.0.1, 12.5.1, and later

You need a device package that includes the following product types (released March 2020):

- Cisco Webex Room Panorama
- Cisco Webex Room 70 Panorama

You can download Cisco UCM and device packages from the software download page for the Cisco Unified Communications Manager. You need your Cisco login to get access.

- <https://software.cisco.com/download/home/268439621>

## Device Pool and Location

We recommend you to use the same *Device Pool* and *Location* as for other devices that are running CE software.

However, if you need better granularity with bandwidth management it is also possible to assign Room Panorama video systems to a separate *Device Pool* with separate *Region Bandwidth* settings.

## Bandwidth

The default bandwidth for Room Panorama is 16Mbps total bandwidth, with 128kbps reserved for audio.

When defining region relationship bandwidth settings you must make sure that the *Maximum Session Bit Rate for Video Calls* is set to 16000kbps or above, and that *Maximum Audio Bit Rate* is set to 128kbps or above.

For more details about Cisco UCM and bandwidth management, refer to the following documents:

- Preferred Architecture - <https://www.cisco.com/c/en/us/td/docs/solutions/CVD/Collaboration/enterprise/12x/120/collbcvd/bwmgmt.html>
- Solution Network Reference Design - [https://www.cisco.com/c/en/us/td/docs/voice\\_ip\\_comm/cucm/srnd/collab12/collab12/cac.html](https://www.cisco.com/c/en/us/td/docs/voice_ip_comm/cucm/srnd/collab12/collab12/cac.html)

## SIP message size

We recommend you to set the *SIP Max Incoming Message Size* parameter to 30000 bytes.

At the time when this document is written Cisco UCM defect # CSCvt01340 can cause calls between Panorama video systems to be reduced to a bandwidth which is too low for a genuine Panorama experience. Therefore we strongly recommended that you **keep the *Conference DefaultCall Rate* setting in the *Product Specific Configuration* section at the default value of 16000 kbps** when adding a Panorama video system to Cisco UCM.

When a new Cisco UCM version with a fix for defect # CSCvt01340 is deployed, you can consider to increase this value to 20000 kbps.

# Run the setup assistant (page 1 of 5)

## Register to a call service

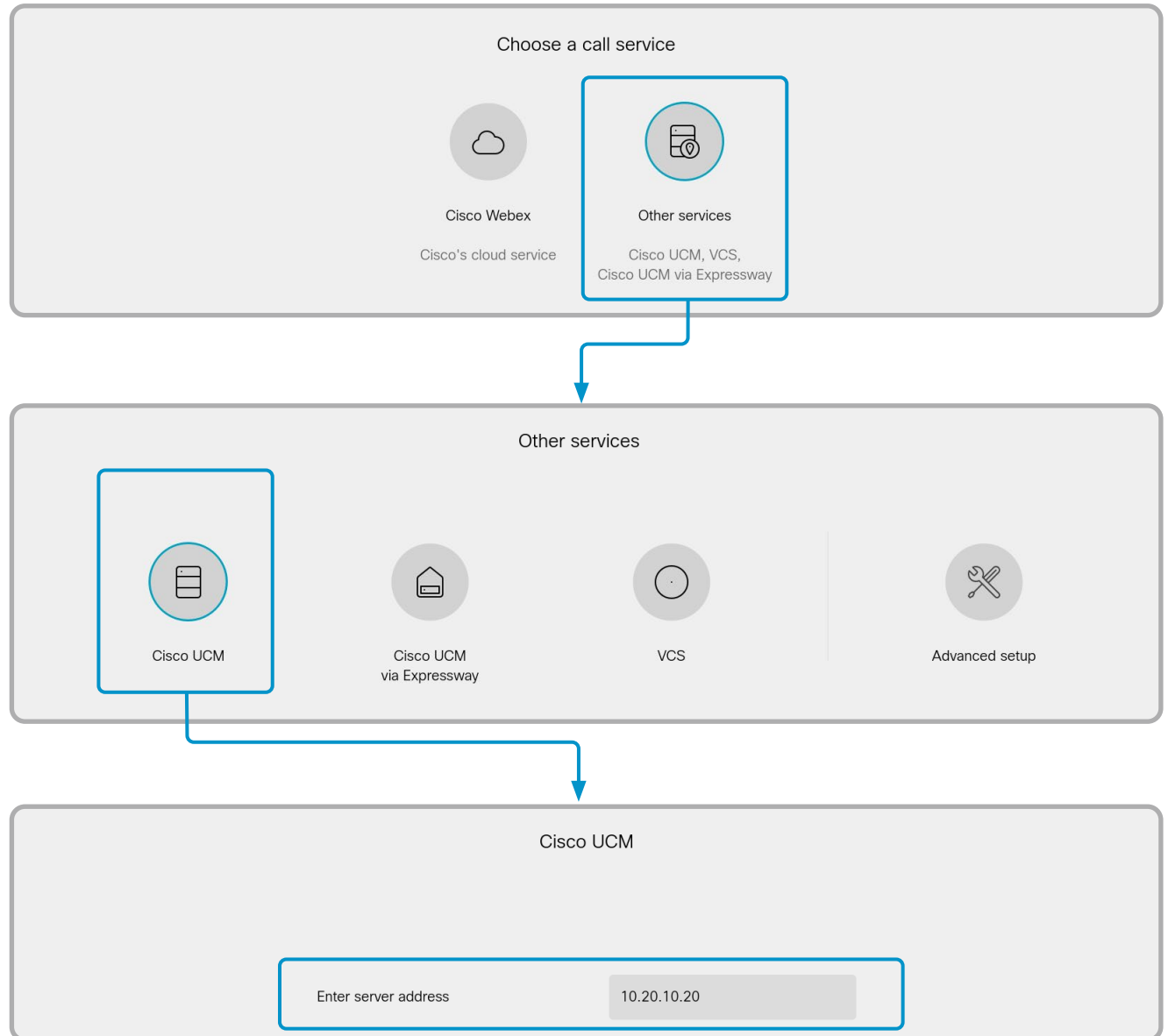
If your device is automatically provisioned, the IP and provisioning settings are automatically configured and the setup assistant skips this step.

### Choose a call service <sup>1</sup>

**Note:** You must select Cisco UCM to get the full Room Panorama experience.

### Enter the Cisco UCM server address

Enter IP address or DNS name in the [Enter server address](#) field, and select [OK](#) to confirm the change<sup>2</sup>.



<sup>1</sup> If you wish to revisit these settings after the initial setup, go to the device name on the home screen, and select [Settings > Device activation](#). Then, select [Change service](#).

<sup>2</sup> The DHCP server can be set up to provide the Host server address automatically (DHCP Option 150). Any input set up here overrides the setting provided by DHCP.

# Run the setup assistant (page 2 of 5)

## Set time zone

We recommend you check that the date and time settings are correct when you set up your video conferencing device. The device uses this information for example to time stamp messages transmitted to gatekeepers and other network elements.

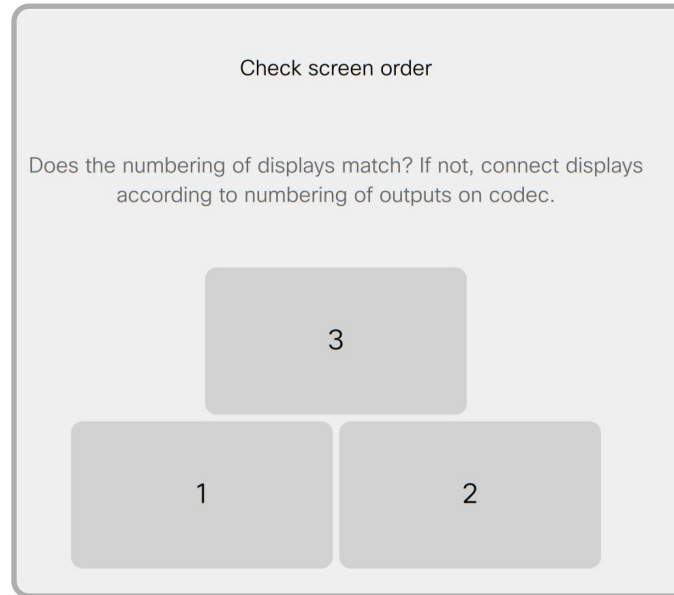
1. Select *Change time zone*.
2. Select region, time zone, and time format.  
Choose from 12h or 24h.

## Run the setup assistant (page 3 of 5)

### Check the screen order

The numbers 1, 2, 3 are shown on the three Room Panorama screens. Check that the numbers match what you see on the Touch controller.

If they don't, see how to fix this in ["Appendix 1: Fix a screen connection issue"](#).

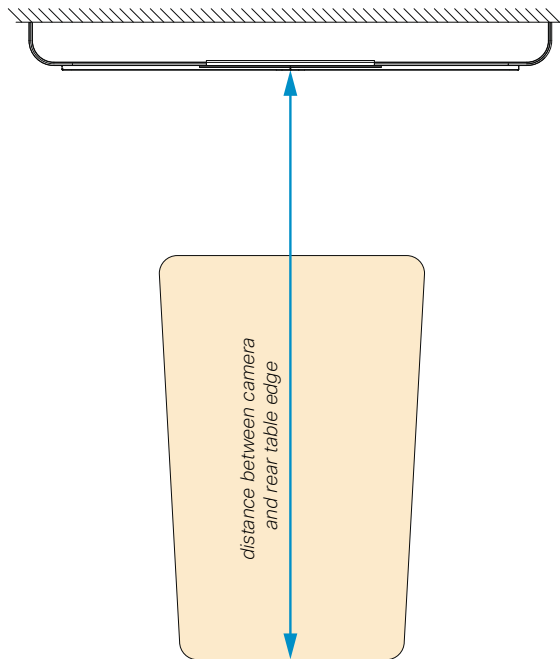


# Run the setup assistant (page 4 of 5)

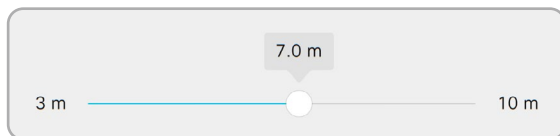
## Adjust the camera view

To get the best possible Panorama view, you have to carefully adjust the camera. The camera has two lenses, and you have to adjust the two of them to match each other and the room.

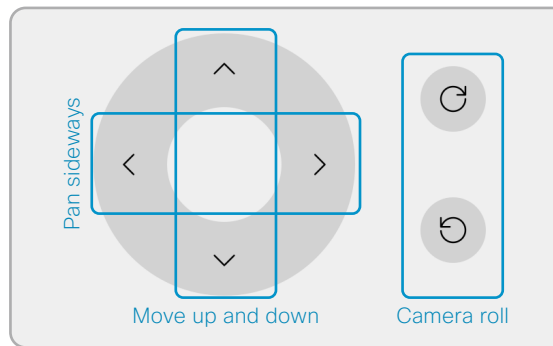
1. Measure the distance between the camera and the rear table edge.



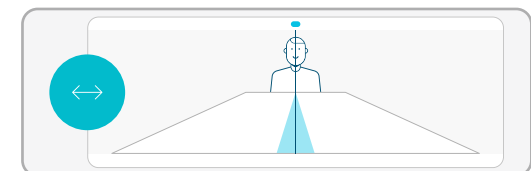
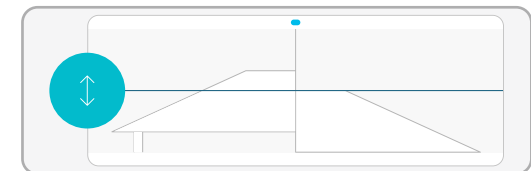
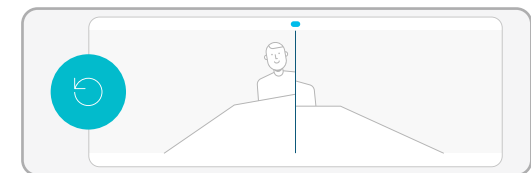
Use the slider to set the distance.



2. In the adjust camera view, you have controls for both the left and right camera lenses. The adjustments steps are small to allow high accuracy. Be prepared to tap a control many times for larger movements.



- Adjust the **camera roll** to make the scene appear vertical.
- **Move the camera framing up and down** to match the rear table edge height.
- **Pan the camera framing sideways** so objects at the rear table edge appear with natural width. Objects in the blue area will appear in both camera views.

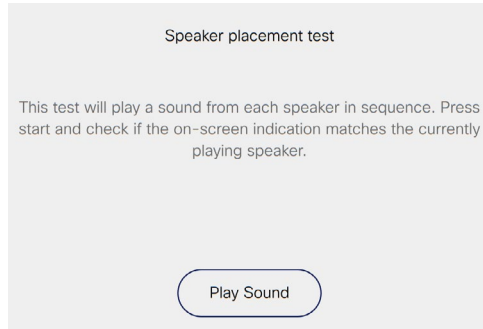


## Run the setup assistant (page 5 of 5)

### Speaker placement test

When you perform the speaker test, a sound plays from each speaker in sequence.

1. Tap *Play Sound* to start the test.



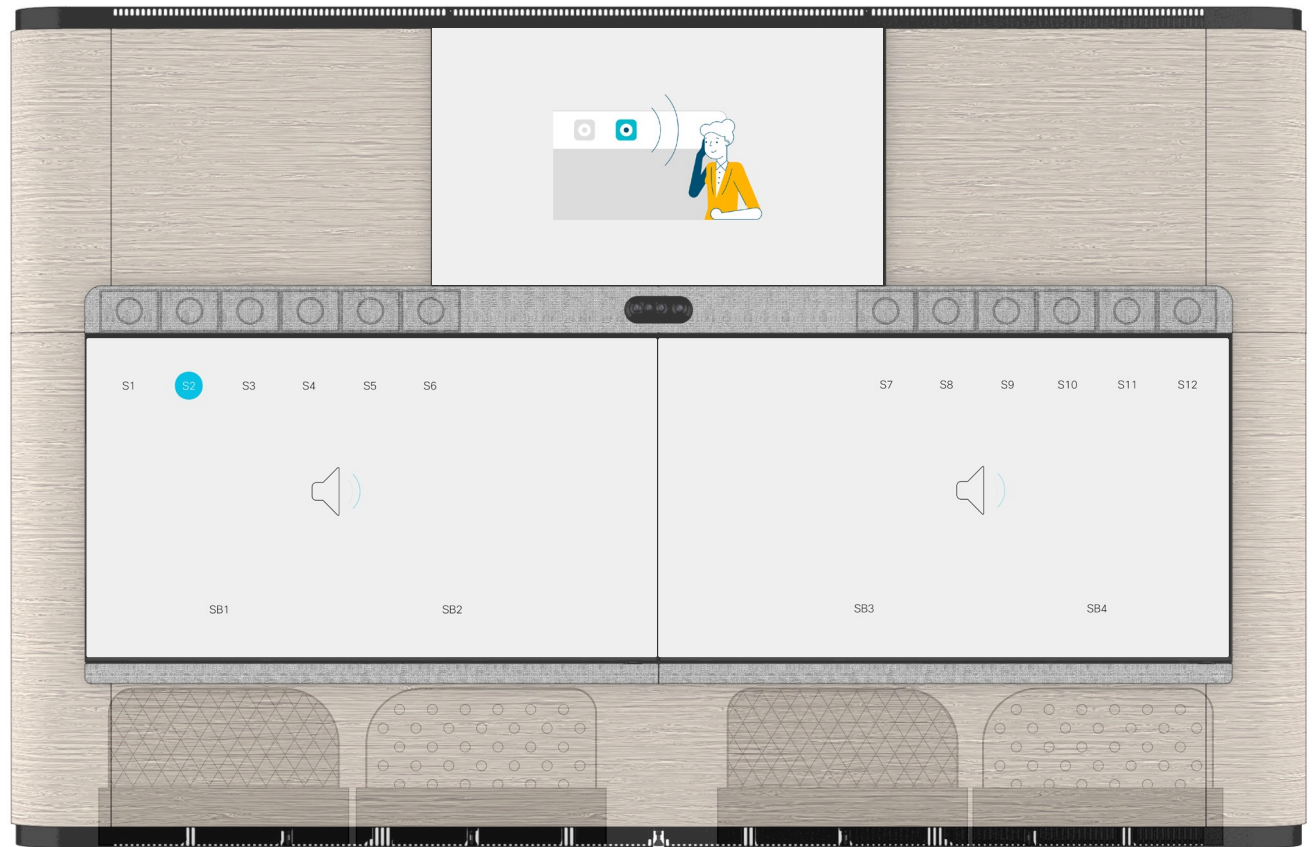
2. Tap *Next* to listen to the next speaker, or *Previous* to go back and listen to the previous speaker again.

The illustration to the right shows what is displayed on the 3 screens of the system. The number close to the speaker that is supposed to play is indicated with blue color.

The symbols S1 - S12 are for the full range speakers above the screens (hidden behind the speaker grille); the symbols SB1 - SB4 are for the subwoofers, which are behind the wooden panels under the screens.

If the full range speakers and subwoofers are connected correctly, you will hear that the sound is played from the speaker in the position that is marked with blue.

If this is not the case, see how to fix this in [“Appendix 2: Fix a speaker connection issue”](#).





# Calibrate the displays (page 1 of 6)

The two main displays and the content display of your Room Panorama system must be calibrated.

**You must repeat the procedure described here for all the three displays.**

The calibration is a required part of the installation procedure for new products, and also when you replace one or more screens in an existing installation.

**Display calibration is done when the system is up and running, after you have run the setup assistant.**

## Equipment needed

USB 2.0 extension cord (3 m)

Ethernet cable (5 m)

Calibrator: X-Rite i1 Display Pro

Windows PC/laptop with:

- HDMI output port
- Ethernet 10/100 port
- USB 2.0 port (regular USB-A port)
- One of these Windows versions:
  - Windows 7, 32 bit / 64 bit
  - Windows 8, 32 bit / 64 bit
  - Windows 10, 32 bit / 64 bit
- Samsung Color Expert Pro software installed on the PC/laptop (use the default settings).

## Download the Color Expert Pro software

The calibration software for the displays (*Color Expert Pro*) is on the Cisco Download Software web page. \*

Open the web page and select your product (*Webex Room Panorama*):

<https://software.cisco.com/download/home>

The format of the filename is:

“Color\_Expert\_Pro\_xxxx.zip”

where “xxxx” represents the version number.  
The current version is 1137.

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\* The display calibration software is not uploaded to the download page for every CE release. You may have to look under an older release than the one your video device is running.

# Calibrate the screens (page 2 of 6)

## Calibration set-up and preparation

The video system must be turned ON when running the calibration.

1. Connect the PC to one of the HDMI presentation cables that comes from the Panorama system.
2. Connect the PC to one of the Ethernet switches of the Panorama system (behind the right display or under the table).
3. Connect the X-Rite Display Pro to the PC through USB, using the extension cord.
4. Start the *Color Expert Pro* software.

The calibration PC always gets IP address: 169.254.1.30

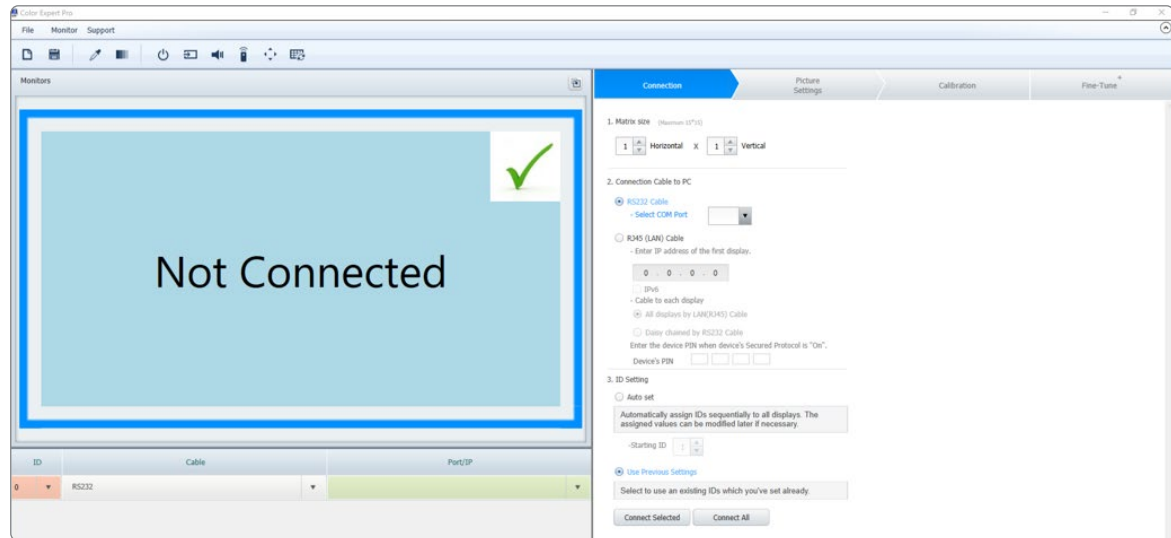
The three displays get unique IP addresses in the following range, depending on how they are connected: 169.254.1.35 - 169.254.1.39

5. Use one of the provided Samsung IR remote controls and find the IP address of the respective displays.

Press *Menu* and use the *arrow keys* on the remote control to navigate to *Network > Network Status*; then press *Enter*.

Wait a few seconds until the status window displays the IP address.

**Note:** The status screen error “*Wired network connection failed.*” is normal as the display is connected to the internal Panorama network, and not Internet.



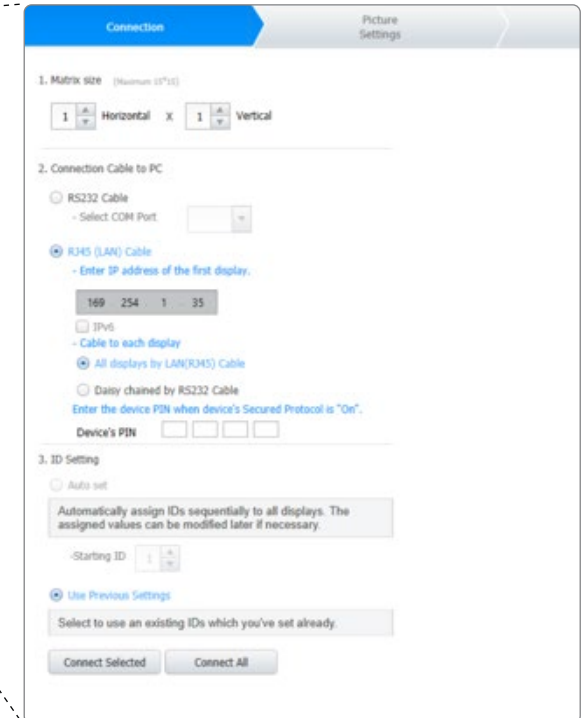
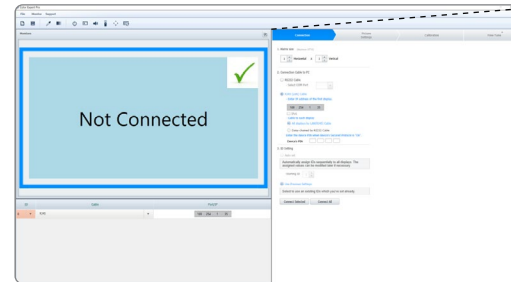
# Calibrate the screens (page 3 of 6)

## Calibration software configuration

**Important:** You must repeat the complete configuration and calibration process for all the three displays.

In the *Connection* tab, set the following:

1. *Matrix size*: Keep the default values (1 Horizontal x 1 Vertical)
2. *Connection Cable to PC*:
  - Select **RJ45 (LAN) Cable**
  - **Enter the IP address** of the display you are going to calibrate. Use the IP address that you found in the previous section.
  - Select **All displays by LAN(RJ45) Cable**
3. *ID Setting*
  - Select **Use Previous Settings**
4. Click *Connect Selected*
  - The Connection window will appear for a few seconds.
  - Click **Save** when the Connection complete window appears.



# Calibrate the screens (page 4 of 6)

In the *Picture Settings* tab, set the following:

1. *Gamma*
  - Select **Gamma Curve Value**
  - Keep the default values (10 steps and 2.2)
2. *Uniformity*
  - Select **Not use (Monitor Native Uniformity)**
3. *White Balance*
  - Select **Use**

For *Luminance*:

- Select **Specific Value**
- Use the arrow keys or type **300** cd/m<sup>2</sup>

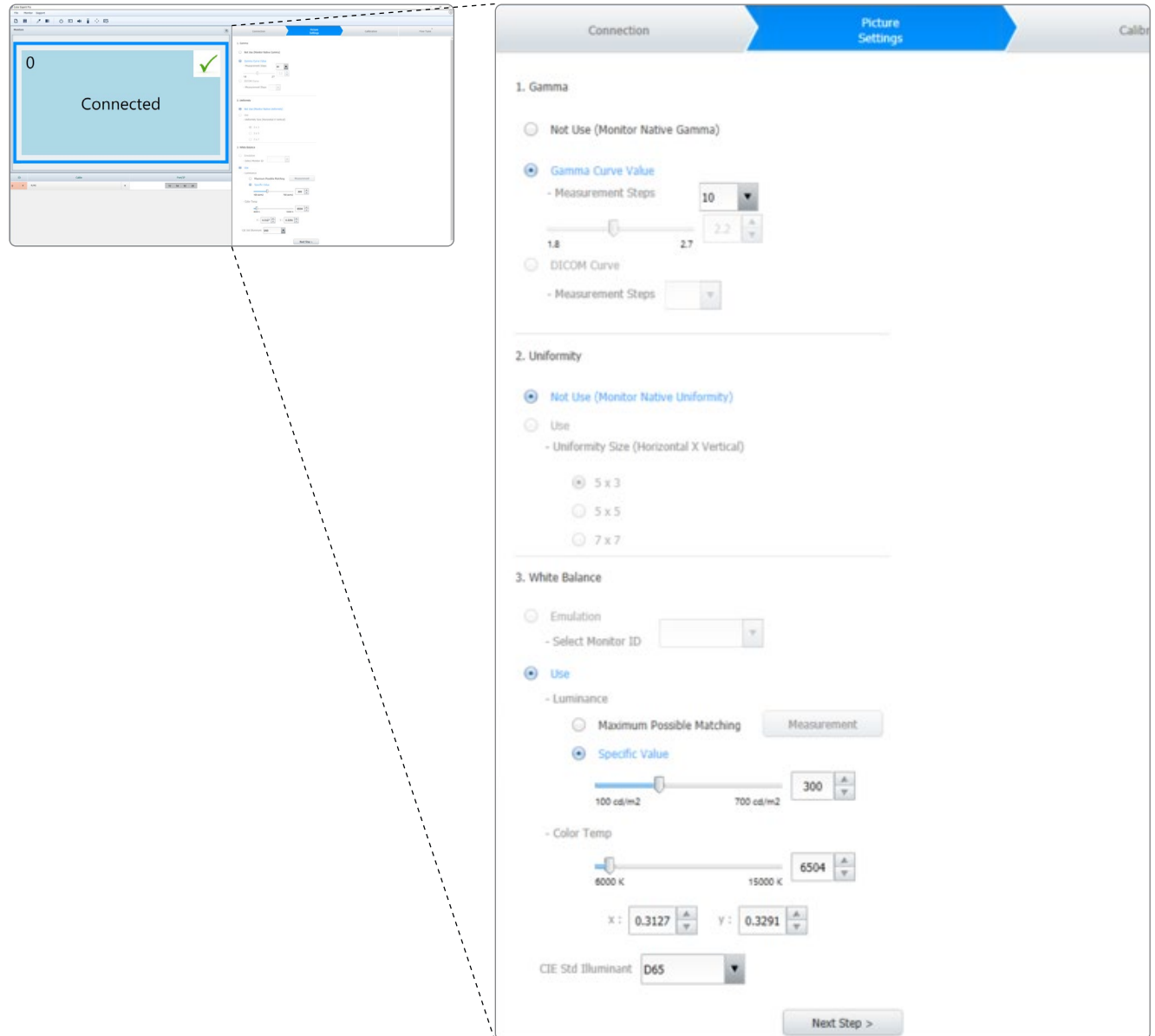
For *Color Temp*:

- Keep the number of Kelvin (K) and x: and y: values as is

For *CIE Std Illuminant*

- Select **D65** from the dropdown menu

4. Click [Next Step >](#)



## Calibrate the screens (page 5 of 6)

In the *Calibration* tab, set the following:

1. *Apply Picture Settings*
  - Keep the default setting (**All Source**)
2. *Calibration Sensor*
  - Keep the default setting (**Auto Detect**)
3. *HDMI Black Level*
  - Make sure **Use Previous Settings** is NOT checked
4. Click *Calibrate Selected* to start the calibration of one display.

0  
Connected

Picture Settings	Target
Gamma	10
Uniformity	Not Use
Luminance	300
Color Temp.	6504K

Check picture settings before starting calibration. These settings define the parameters for the calibration process and determine the color characteristics for calibration on each displays. You can edit these on the "Picture Settings" tab.

- Apply Picture Settings

Current Source

All Source

- Calibration Sensor

Auto Detect

Select Sensor Type More

- HDMI Black Level

Use Previous Settings

Calibrate Selected Calibrate All

# Calibrate the screens (page 6 of 6)

## The calibration process

All three displays will now turn black with a crosshair in the middle.

1. Place the calibrator, X-Rite i1 Display Pro, facing the center of the crosshair on the display that you want to calibrate.  
Make sure the lens faces the display and that the white diffusor is NOT in front of the lens.
2. Click [Next](#).
3. Wait for part 1 (of the 2 parts) of the auto-calibration process to complete. It takes 2-5 minutes.
  - The image will change, showing different values of red, green, blue and white.
  - When this step is finished, the screen will first flicker, and then return to the black screen with the crosshair.
4. Click [Next](#).
5. Wait for part 2 (of the 2 parts) of the auto-calibration process to complete. It takes 2-5 minutes.

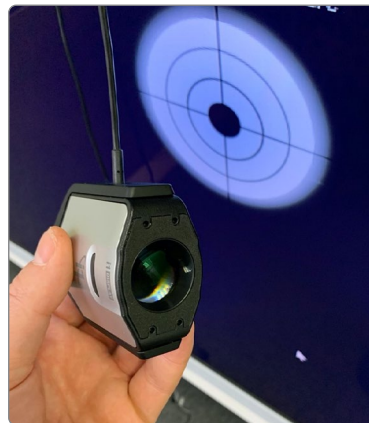
When finished the *Calibration Result* window appears with the calibration report.

6. Double check that the *Target* values were:
  - Color Temp: **6504K**
  - Luminance (Max): **300**
7. Click [Close](#) to end the calibration process for this display. *Fine Tuning* is not necessary.

**Note:** If anything went wrong during the calibration, go back and repeat all steps from the start.

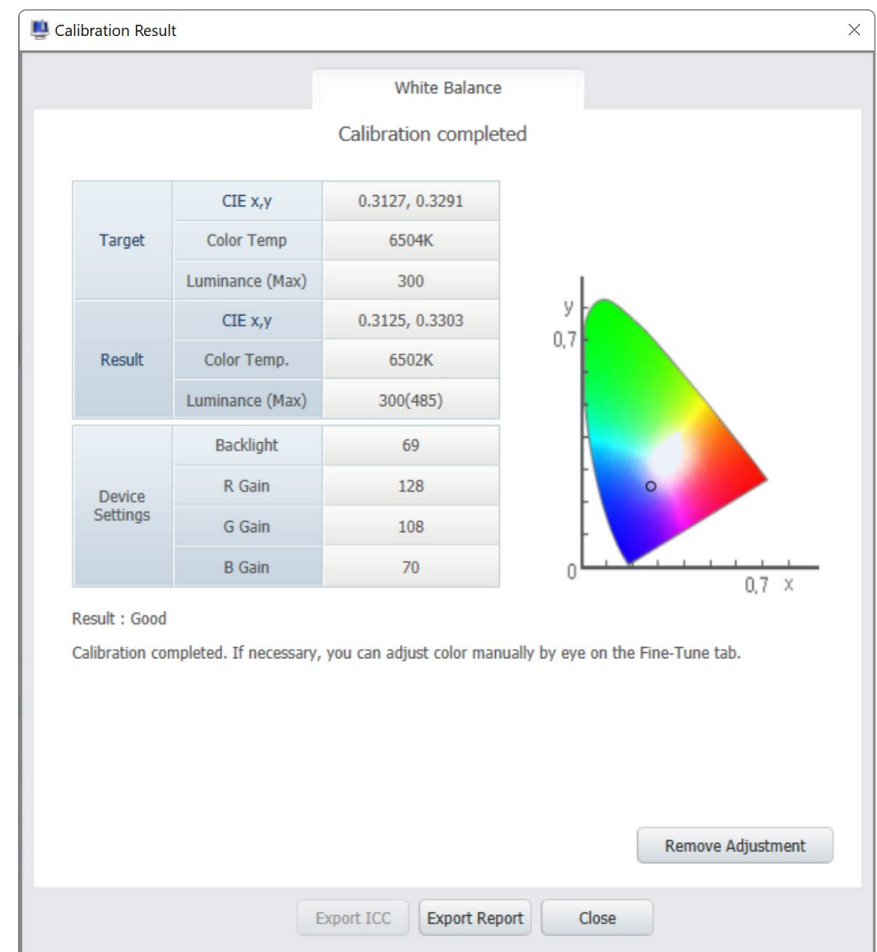
**Important:** After finishing calibration of the first display, click the [Connection](#) tab, and start over for the next display. The settings from the previous calibration is not saved.

Continue until you have performed the full calibration procedure (page 10 to page 13) for all the three displays.



When all three screens are calibrated, disconnect and remove the Ethernet cable and calibrator.

**The calibration process for Webex Room Panorama is now complete.**

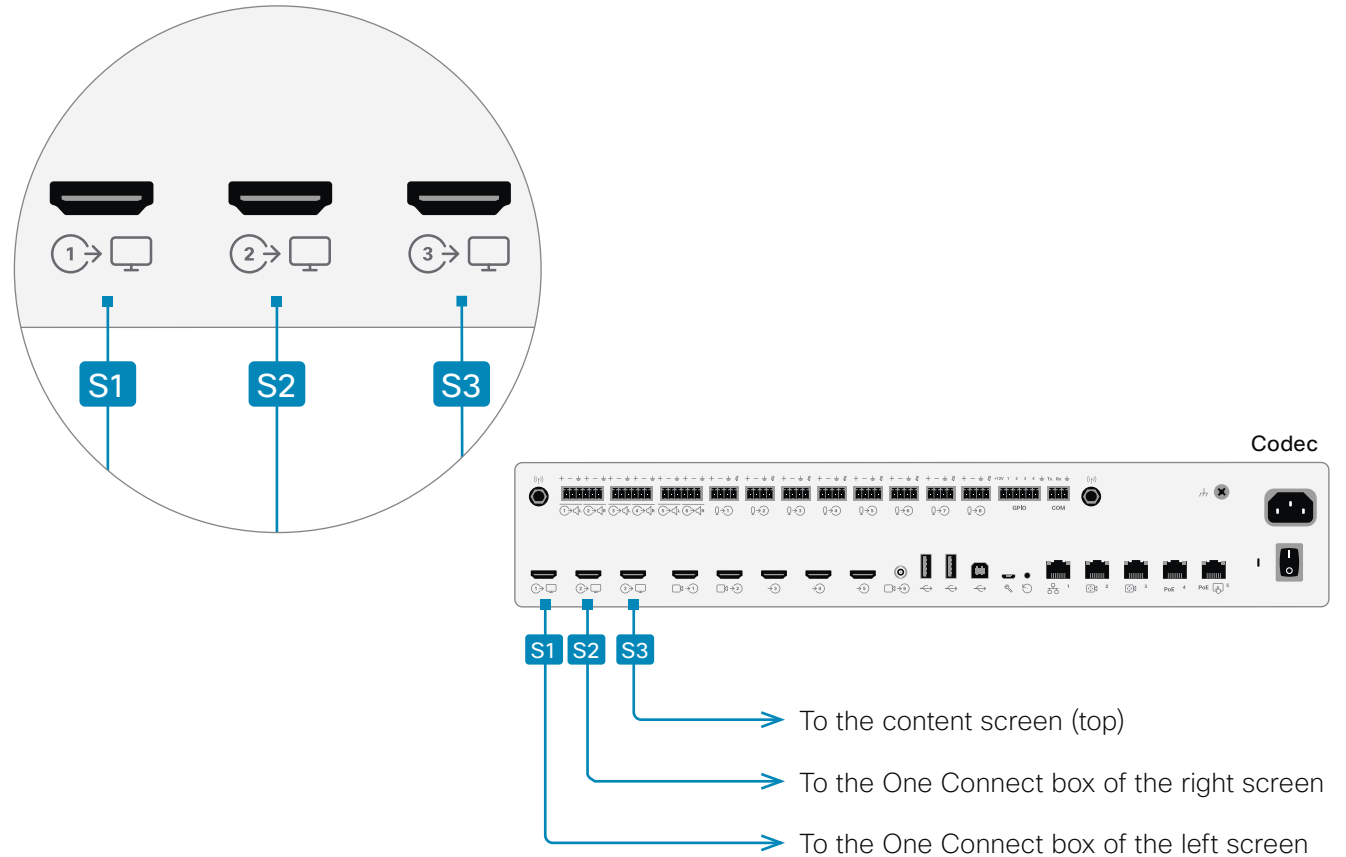


# Appendix 1: Fix a screen connection issue (page 1 of 2)

## The screen numbers are mixed up

Check that the HDMI cables between the codec and the screens / One Connect boxes are connected properly.

1. Use the handle and pull the left screen carefully down, so that you get access to the codec.
2. Check that the screens are connected to the connectors as shown in the illustration.



**Note:** A Wiring Diagram was shipped with the product. It is also available online.

<https://www.cisco.com/go/panorama-installation>

# Appendix 1: Fix a screen connection issue (page 2 of 2)

## A screen doesn't show a number

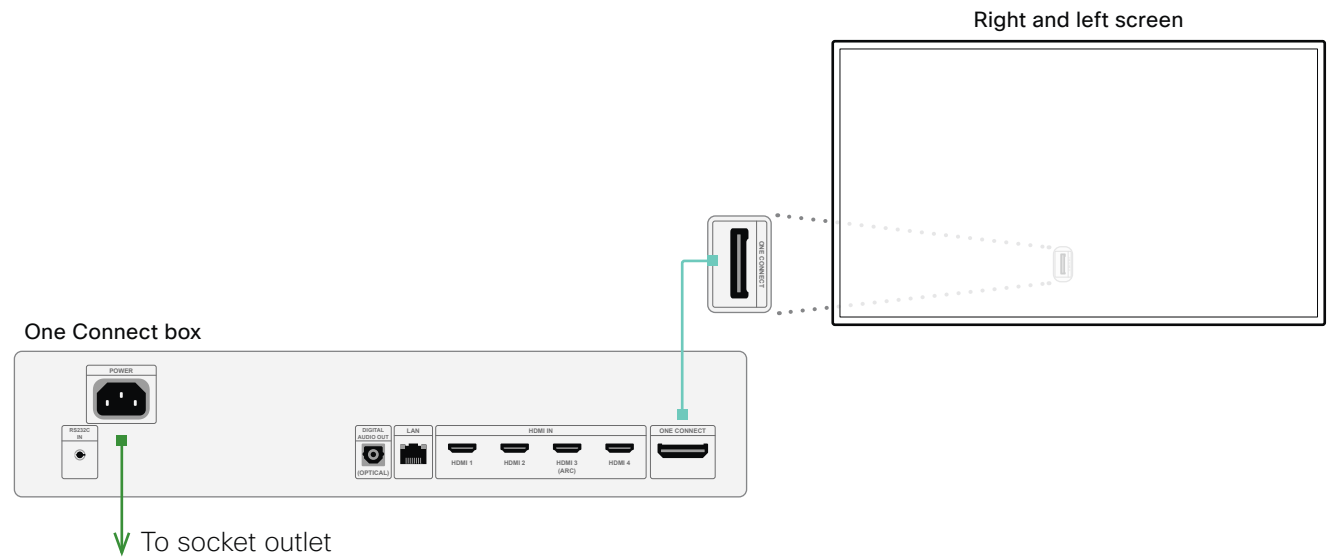
1. Check that the HDMI cable is connected to the codec, as described in the *Numbers are mixed up* section.
2. Pull the screen that is not showing a number carefully down to get access to its connectors.
3. Main screens (left and right):
  - Check that the cable is connected between the One Connect box and the screen itself.

**Caution:** This cable must be handled with care, as described in the Installation Guide.

- Check that the One Connect box is connected to power.

Content screen (top):

- Check that the screen is connected to power.



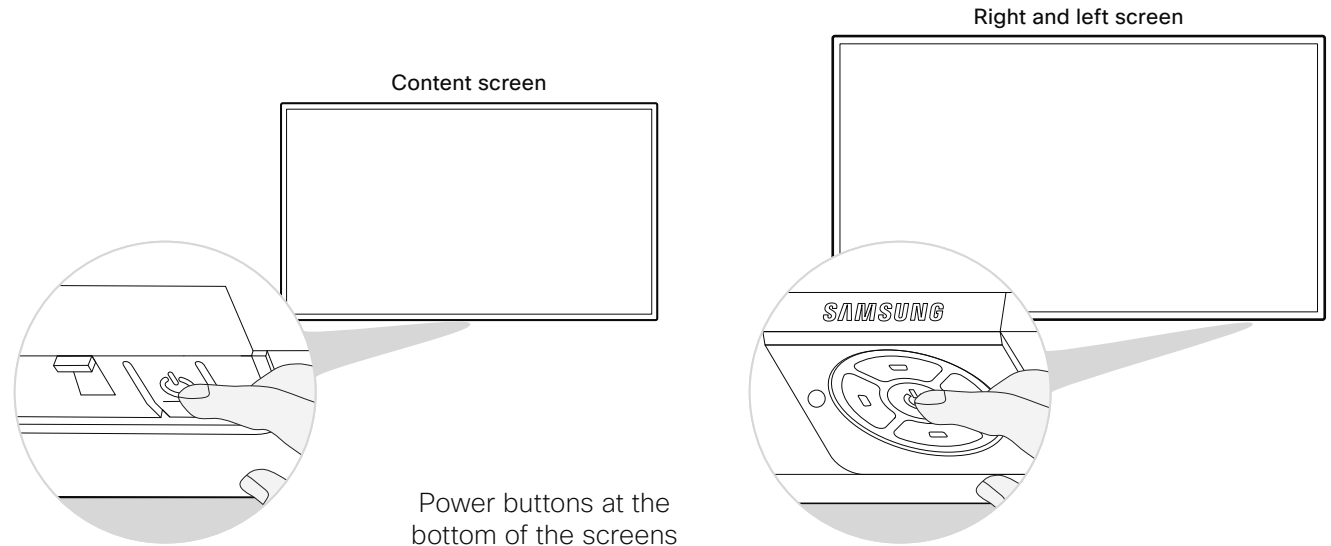
## Auto power-on

The screens are configured to turn on automatically when you connect the power cord. Also, the screens wake up from standby automatically.

If the screens don't wake up, you can try to unplug the power cord, and connect it again. Or you can tap the power button of the screen.

**Note:** A Wiring Diagram was shipped with the product. It is also available online.

<https://www.cisco.com/go/panorama-installation>



Power buttons at the bottom of the screens



## Appendix 2: Fix a speaker connection issue (page 1 of 3)

The Room Panorama has the following speakers:

- 12 main speakers, 6 to the left of the camera and 6 to the right. They are behind the speaker grille.
- 4 subwoofers below the main screens, 2 to the left and 2 to the right. They are behind the cosmetic panels.

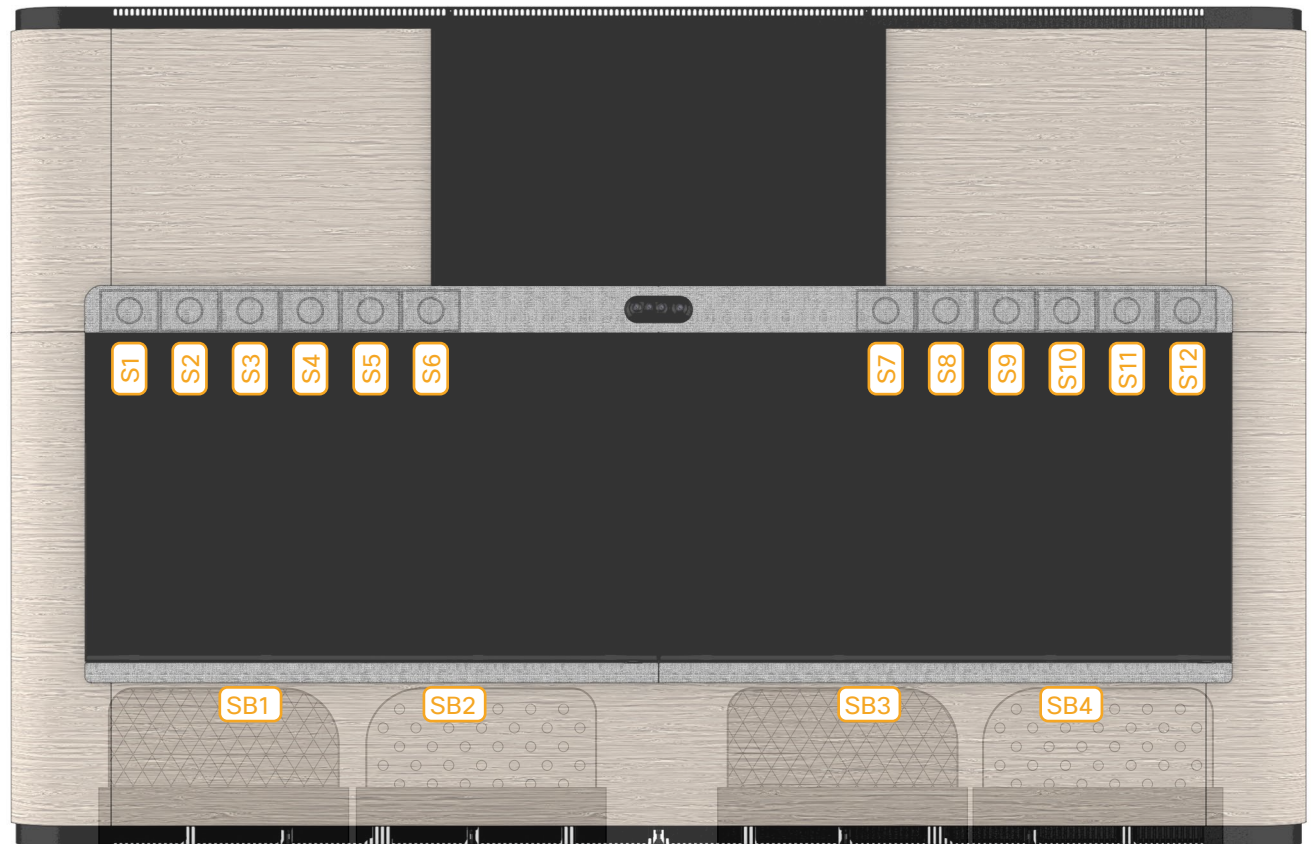
### Speaker cables

The speaker cables connect the speakers (both main speakers and subwoofers) to the amplifier.

The speaker cables come as two bundles, one for the left side, and one for the right side.

The end that connects to the amplifier are marked with **Left Speakers ch1-8** ( **A1** ) and **Right Speakers ch9-16** ( **A2** ).

The end that connects to a speaker is marked as shown in the illustration: **Sn** on the cables to the main speakers, and **SBn** on the cables to the subwoofers.



## Appendix 2: Fix a speaker connection issue (page 2 of 3)

### Issues with the main speaker connections

Carefully remove the speaker grille to get access to the main speakers. The grille snaps to magnets.

#### *The order of speakers are wrong*

This means that wrong cables are connected to some of the speakers.

1. Pull speakers that are in a wrong position gently off their pegs, and disconnect the cable.
2. Check the number that is printed on the cable (close to the connector), and connect it to the correct speaker (see illustration).
3. Push the speaker back onto its pegs.

#### *The left and right speakers are switched*

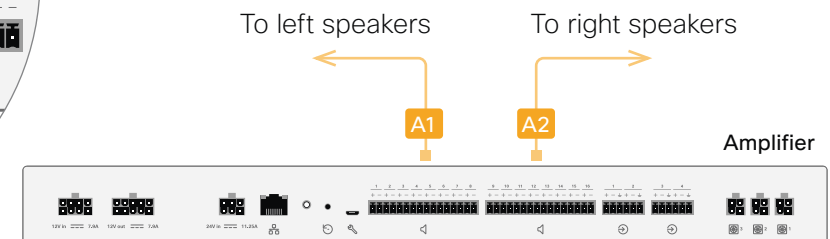
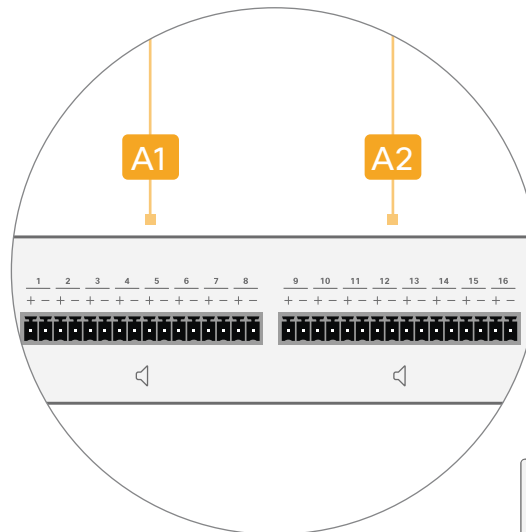
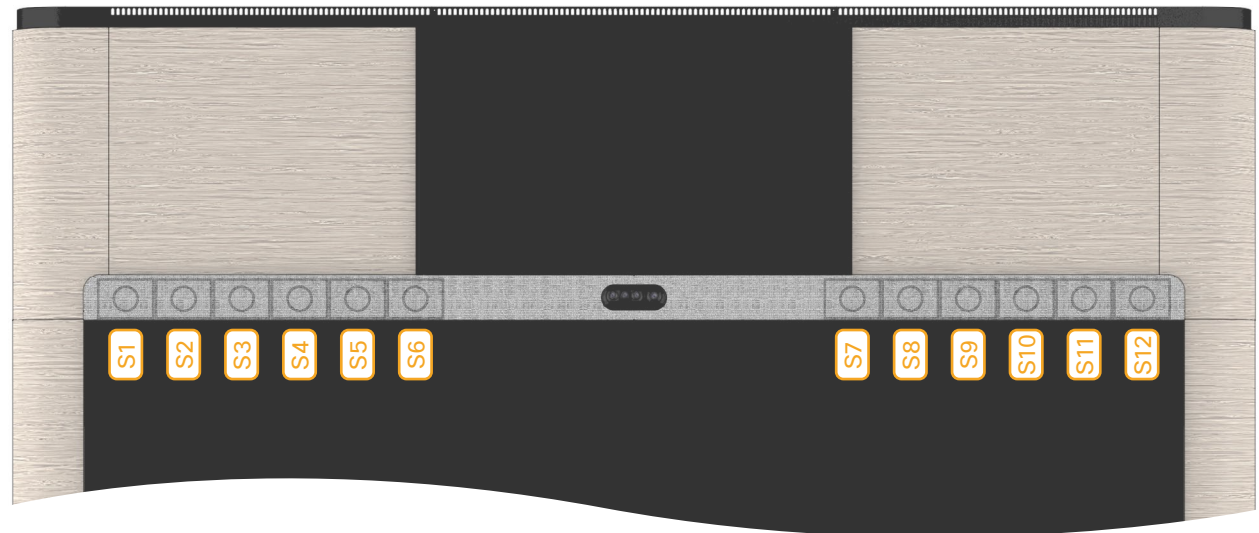
This means that the left and right cable bundles are connected to the wrong amplifier outputs.

1. Use the handle and pull the left screen carefully down, so that you get access to the amplifier. The amplifier is just below the camera.
2. Check that the cable marked with **Left Speakers ch1-8 (A1)** are to the left, and the cable marked with **Right Speakers ch9-16 (A2)** are to the right. You need some force to get the connector fully into the socket.

#### *A speaker doesn't play*

This means that the cable is not connected properly to the speaker or amplifier, or the cable is broken.

- Check the connection to the speaker and amplifier, as described in the two sections above.



## Appendix 2: Fix a speaker connection issue (page 3 of 3)

### Issues with the subwoofer connections

#### *There is no sound from a subwoofer.*

Check that the cable is properly connected to the amplifier:

1. Use the handle and pull the left screen carefully down, so that you get access to the amplifier. The amplifier is just below the camera.
2. Check that the cable marked with **Left Speakers ch1-8 (A1)** and **Right Speakers ch9-16 (A2)** are entered fully into the socket. You need to apply some force.

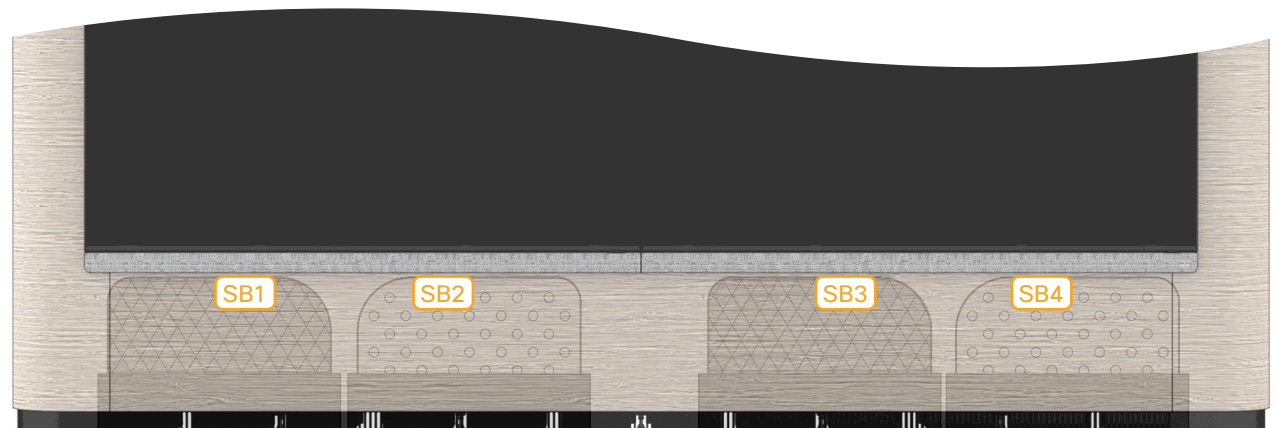
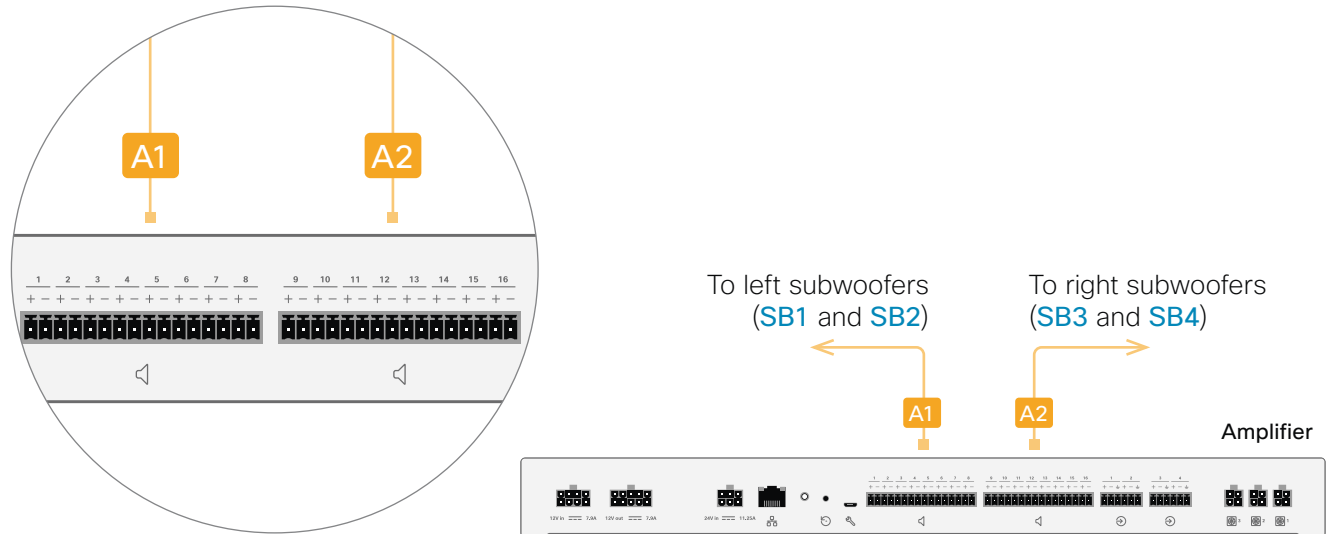
If this doesn't fix the problem, check that the cable is connected to the subwoofer:

1. Remove the trim that is on top of the cosmetic panel in front of the subwoofer. It's fastened with five screws.
2. Carefully loosen or fully remove the cosmetic panel the cosmetic panel so that you have access to the subwoofer connector.
3. If the cable is not yet connected, it should be hanging down behind the system.

Check the number that is printed on the cable (close to the connector), and connect it to the correct subwoofer (see illustration).

#### *The subwoofer order is wrong*

This means that wrong cables are connected to some of the subwoofers. You have to remove the wooden panels and re-connect the cables as described in the previous section.



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