

Cisco Room Panorama

85-INCH MAIN SCREENS

Spare Part Replacement Guide



Thank you for choosing Cisco!

Your Cisco product has been designed to give you many years of safe, reliable operation.

This part of the product documentation describes how to replace spare parts for the Cisco Room Panorama.

We recommend that you visit the Cisco website regularly for updated versions of this guide.

The user documentation can be found at <https://www.cisco.com/go/panorama-installation>.

How to use this guide

The top menu bar and the entries in the table of contents are all hyperlinks. You can click on them to go to the topic.

Cisco service and support

Cisco and our partners provide a broad portfolio of smart, personalized services and support. For more information about these services, go to: <https://www.cisco.com/go/telepresenceservices>.

Table of contents

Introduction.....	3
Before you start.....	4
Risk of personal injury	5
Cable marking	6
Wiring diagram	7
Grilles.....	8
Speaker grille.....	9
Deco grille	12
Screens.....	19
Content screen.....	20
Main screens	24
Gas springs for the main screen	36
One Connect box	42
One Connect cable	45
Speakers.....	48
Loudspeakers.....	49
Subwoofers	52
Camera	55
Camera.....	56
Fan and antenna	60
Fan module.....	61
Antenna kit.....	67
Codec and amplifier.....	72
Codec.....	73
Amplifier	75
Power supply units for the amplifier.....	77
Switch.....	79
Ethernet switch in the system	80
Ethernet switch in the table.....	83

Introduction

Before you start	4
Risk of personal injury.....	5
Cable marking.....	6
Wiring diagram	7

Before you start

Power



Power must be disconnected from all outlets before any work is done on the system.

Room Panorama consists of separately approved components. **This requires each component to be connected directly to a wall socket outlet that is installed by a qualified electrician.** You are not allowed to use a power strip (multi-socket extension cord).

Since each component has a power cord connected directly to a wall socket outlet, there is no total equipment rating (voltage, current, frequency) for the Room Panorama system. You should check the rating label on each component.

Maintenance by instructed personnel



Due to the size and mass of the Room Panorama system, it must be maintained or repaired according to our replacement instructions by qualified personnel.

We recommend 2 people working together to mount this product. Follow current regulations.

The Room Panorama is fastened to the wall with three horizontal rails. These rails must be fastened so that they can safely support the product. In total, the product weighs close to 600 kg (1320 lbs.).

The product is tall, so you may need a stepladder to complete the assembly.

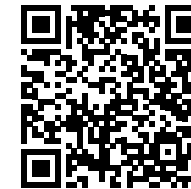
Related documentation

In addition to this *Spare Part Replacement Guide*, the following documents may be necessary.

- Wiring diagram
- Spare parts overview
- Installation guide

These documents* are available on the Cisco website:

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



Look for *Room Panorama* and select *Maintain and Operate Guides* or *Install and Upgrade Guides*.

* A new main screen model for Room Panorama was introduced in 2023. The new model is 85 inches; the original model was 82 inches. Room Panorama has the same functionality regardless of main screen model. However, since there are a few installation and cabling differences between them, there are two sets of installation instructions, spare part replacement instructions, and wiring diagrams online. This guide is for systems with 85-inch main screens.

Risk of personal injury

There is a potential hazard risk tied to the gas springs in the screen mount modules when installing and/or dismantling your Room Panorama product. There is no risk involved when following the *Install Guide* or *Spare Parts Guide*, but if caution is not taken regarding the screen mount safety brackets, there is a chance of personal injury.

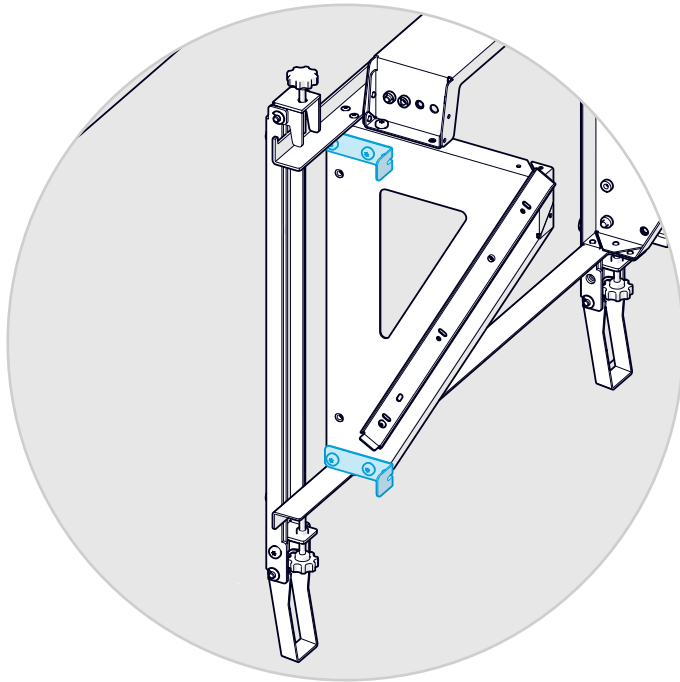
To be able to help lift the screen within the screen mount module, the gas springs store a lot of energy. If the screen mount safety brackets are moved/removed out of **Safe Mode** before the screen is mounted, the screen mount module can shoot out at high speed, potentially causing harm. The same goes if one tries to remove/dismantle the gas springs from the product.

The screen mount safety brackets must be mounted securely, and NOT tampered with until the new screen is in place and hanging on the bracket. Otherwise, you risk personal injury.

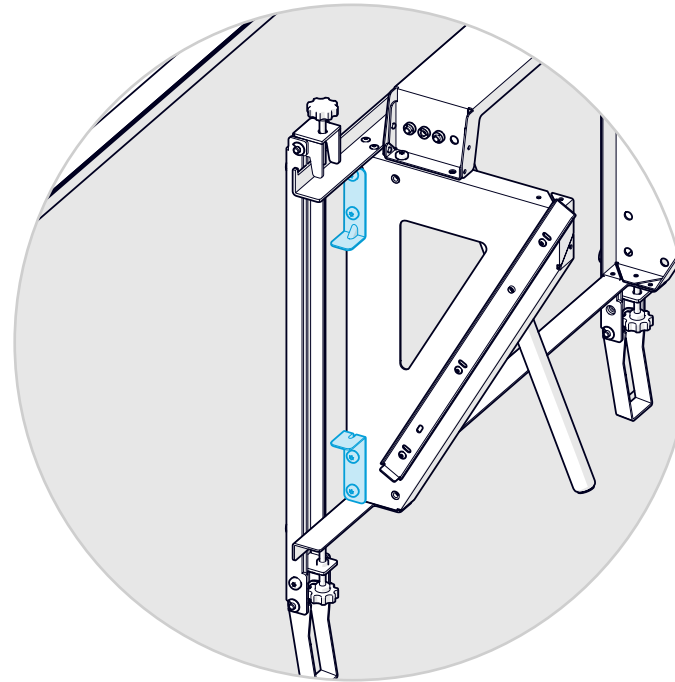
To avoid the risk of personal injury:

- Do not disassemble any of the pre-assembled parts of a display cavity at any time.
- Never move the screen mount safety brackets out of **Safe Mode** (the horizontal position) when the screen is not hanging on the screen mount module.
- If you must remove the screen from the screen mount module, always move the screen mount safety brackets back to the **Safe Mode** position before lifting off the screen.

Safe Mode - horizontal position

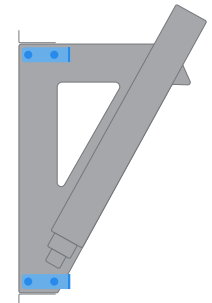


Operational Mode - vertical position

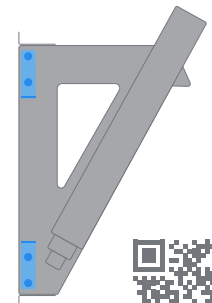


All four safety brackets must be in Safe Mode before mounting or removing a screen

Safe Mode

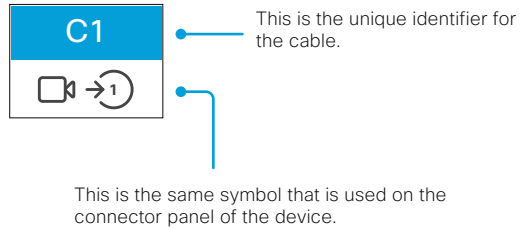


Operational Mode

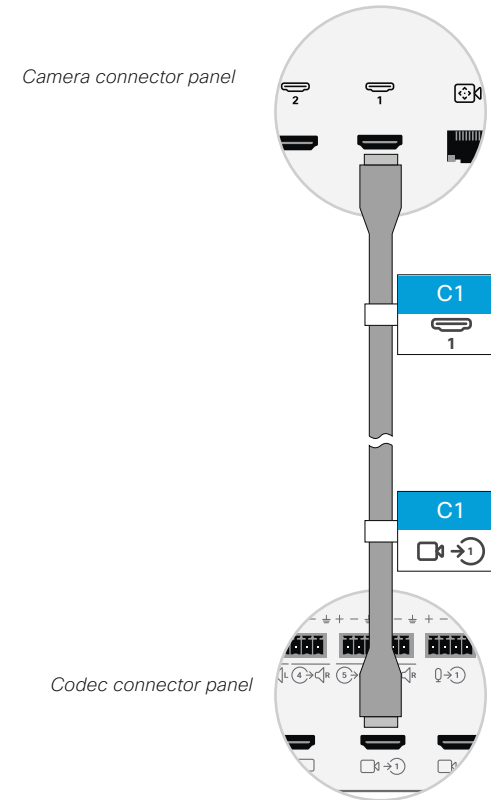


Cable marking

The cables are marked as shown in the wiring diagram. They have a colored tag for identification. In addition, they have a symbol that matches the symbol you find on the connector panel to which the cable shall be connected.



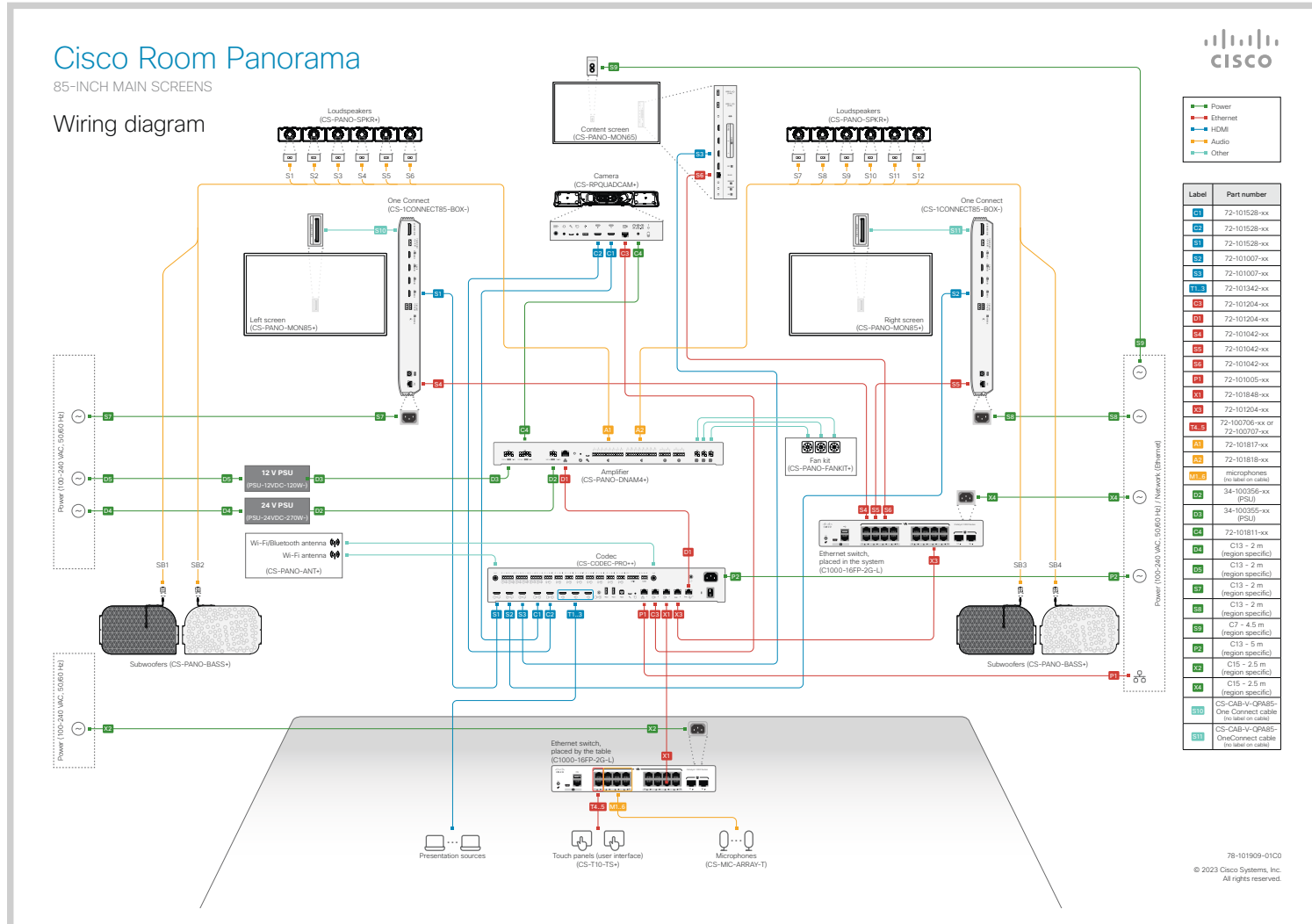
As an example, this pair of labels is used on one of the HDMI cables between the *codec* and the *camera*.



Wiring diagram

The wiring diagram is essential for helping you identify the cable connections.

Please download the latest version of the Cisco Room Panorama wiring diagram for 85-inch main screens from <https://www.cisco.com/go/panorama-installation>.



Grilles

Speaker grille.....	9
Deco grille.....	12

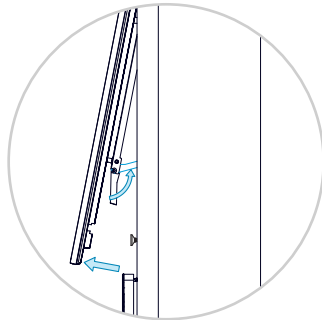
Speaker grille (page 1 of 3)

The speaker grille is above the main screen, covering the speakers. It contains two parts fastened by magnets.

PID: CS-PAN085-GRILL= (includes both speaker grille and deco grille)

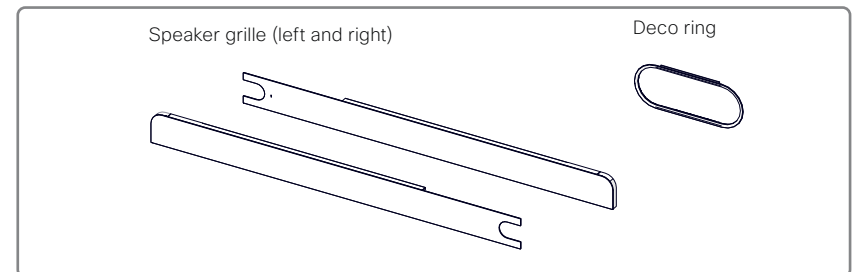
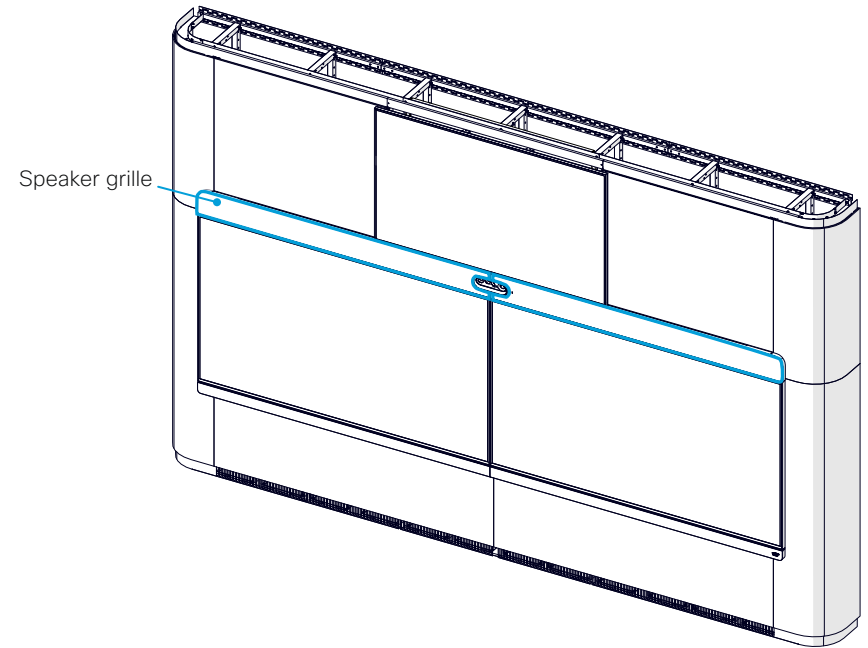
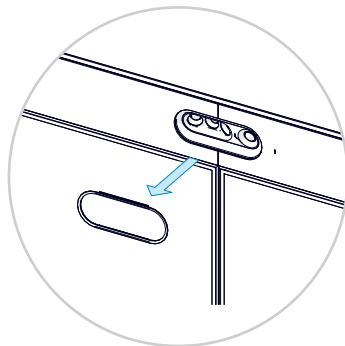
1. *Tilt out the content screen*

Lift the lever behind the screen and fix the screen in a tilted position.



Side view

2. *Remove the deco ring*

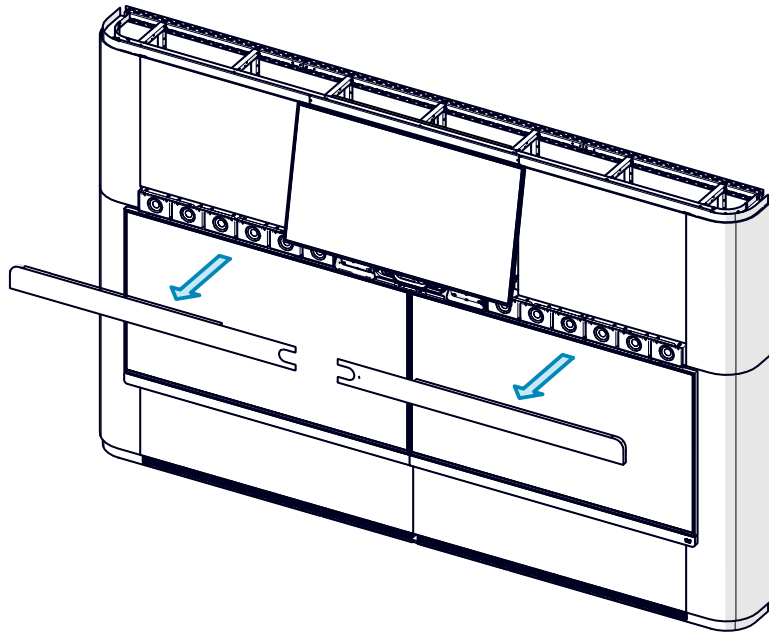


Speaker grille (page 2 of 3)

3. Remove the speaker grille

The speaker grille is split at center and each part is fastened by magnets.

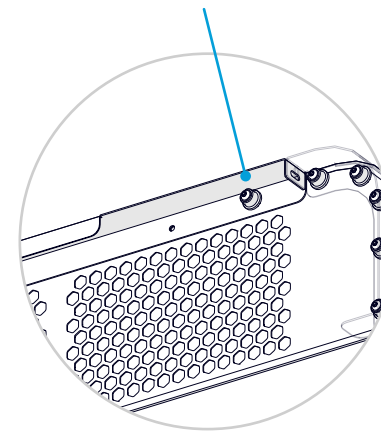
Remove one side at a time, using both hands placed at a wide grip. Curl your fingers under the grille and pull out and then up. The grille should come free.



4. Mount the new speaker grille

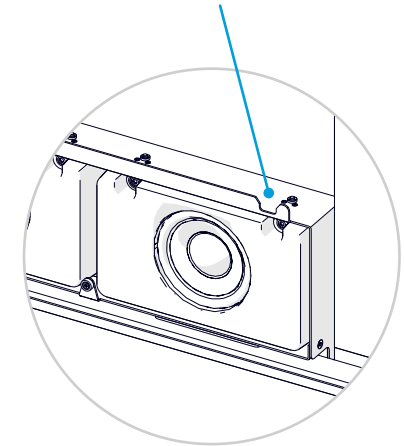
Place the new grille in front of the loudspeakers, one side at a time. Notice that the plastic washers on the grille fit into the slots above the loudspeakers.

Plastic washers on the inside of the grille



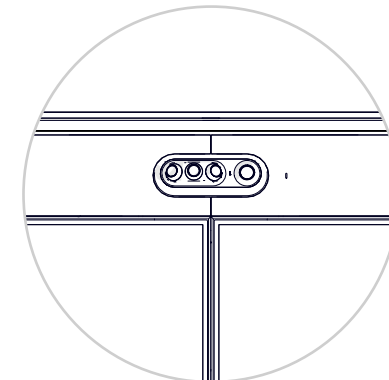
Grille, rear view.

Slots above the loudspeakers



Loudspeaker mounting structure, front view.

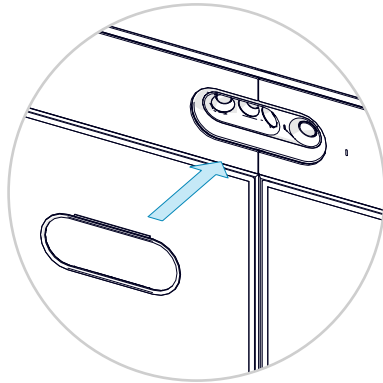
Align the split line of the grille with the gap between the screens. Make it as tight as possible.



Speaker grille (page 3 of 3)

5. *Place the deco ring*

Place the deco ring around the camera. The ring provides a neat transition between the grill and camera.



Deco ring

6. *Tilt back the content screen*

Pull the content screen slightly outward, so that you can release the levers on both sides. Then, gently let the screen move into vertical position.

Deco grille (page 1 of 7)

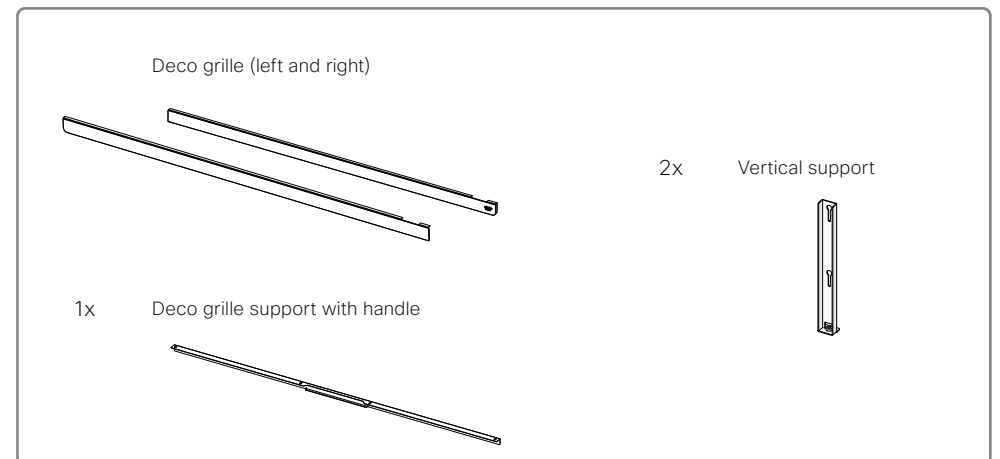
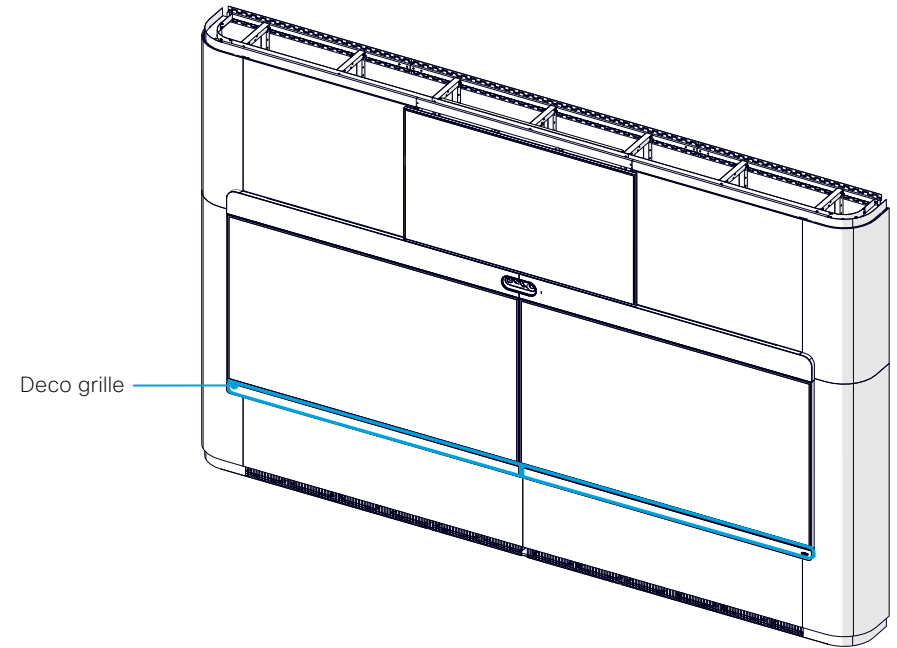
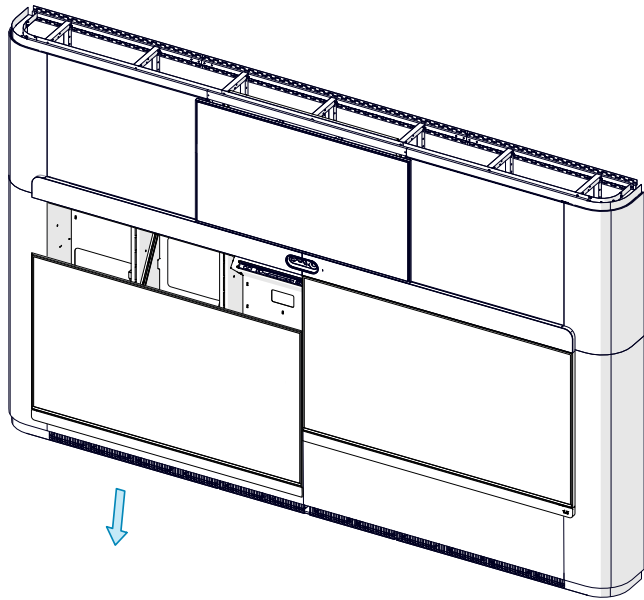
The deco grilles are below the main screens. There are two parts and each is attached to the screen with brackets.

PID: CS-PAN085-GRILL= (includes both speaker grille and deco grille)

1. Move the main screen downwards

By using the handle at the bottom of the deco grille you are replacing, lower the main screen.

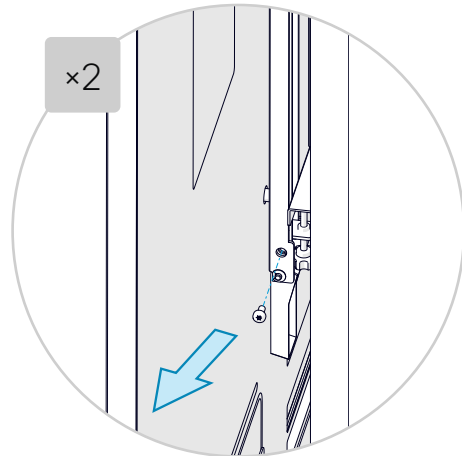
Do not lower both screens at the same time. This could result in scratches to the screen



Deco grille (page 2 of 7)

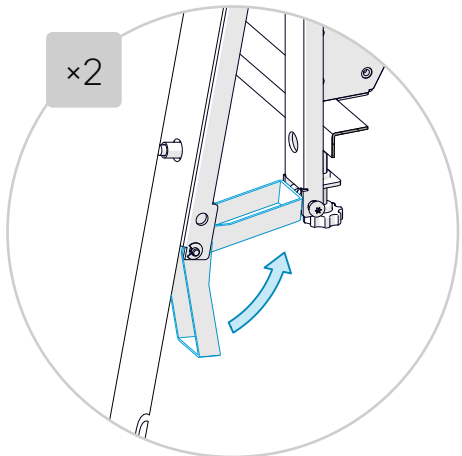
2. Unscrew the angle lock screws behind the screen

The lock screws are holding the screen in the vertical position. Loosen them so that you will be able to tilt out the screen.



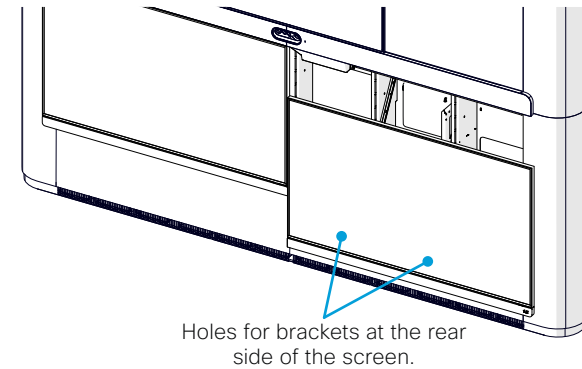
3. Tilt out the screen

Lift the levers on either side of the screen so that the screen stays in a tilted position.

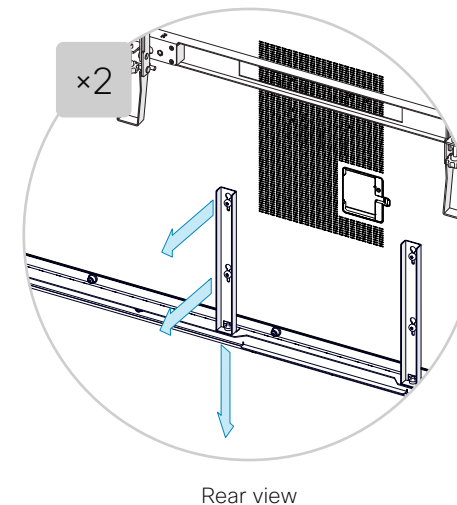


4. Remove the deco grille from the screen

Loosen the screws holding the deco grille, but do not remove them.



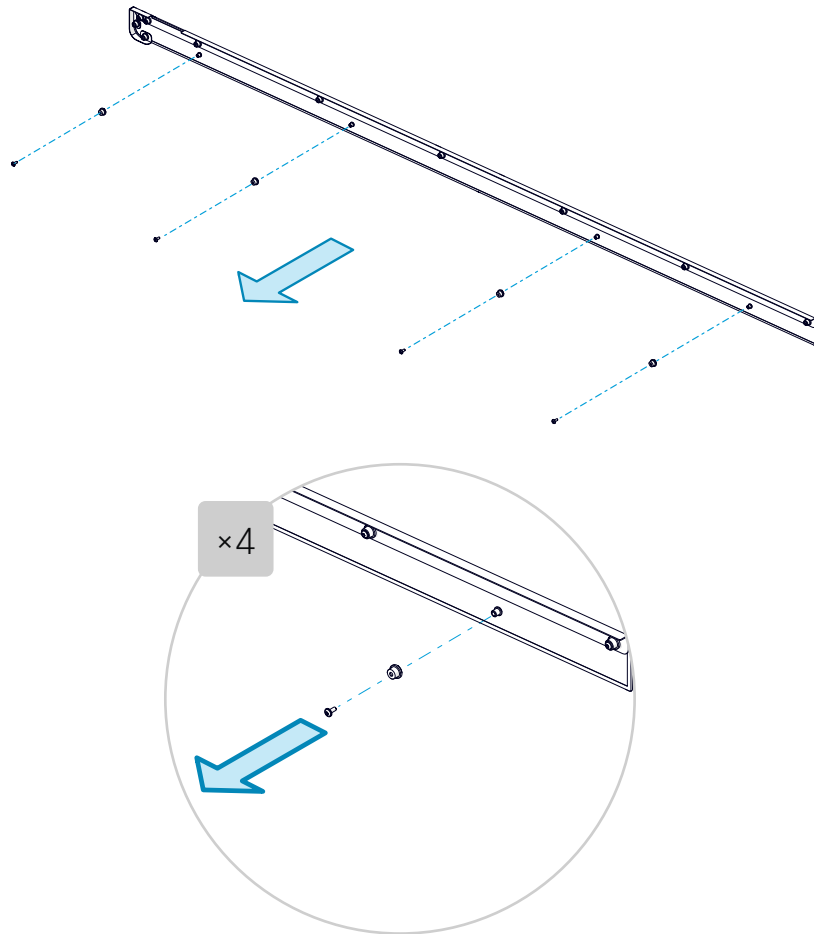
The deco grill will drop down and you can then lift it off the screen.



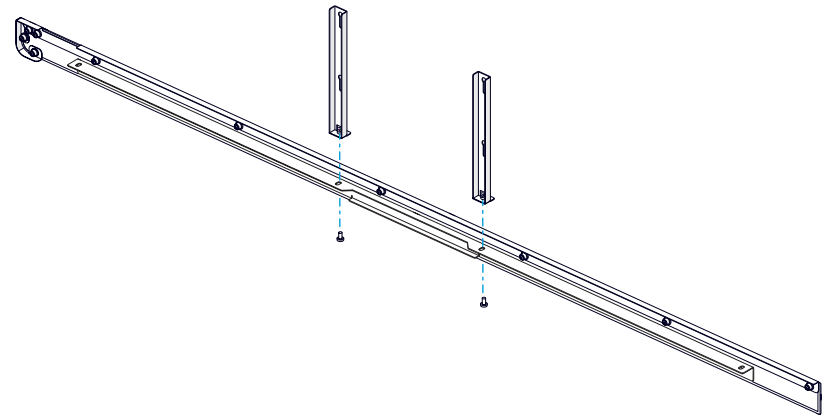
Deco grille (page 3 of 7)

5. *Disassemble the old deco grille*

- a. Remove the four screws and spacers from the deco grille, as shown in the illustration. You will re-use all of them when attaching the grille support to the new grille.



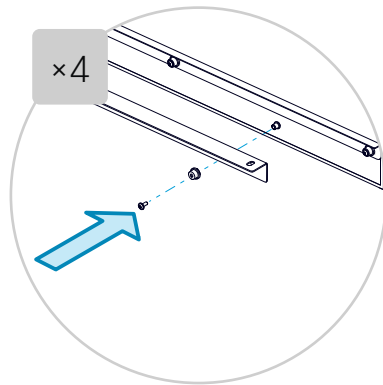
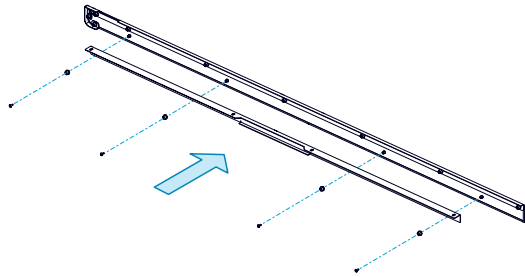
- b. Remove the vertical supports. Save the screws, as you will re-use them in the next step.



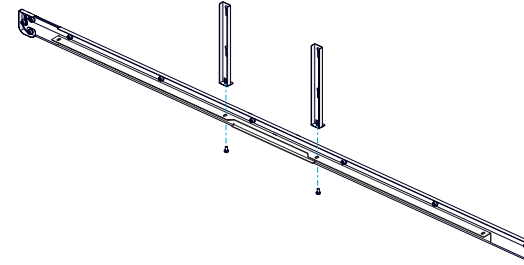
Deco grille (page 4 of 7)

6. Assemble the new deco grille

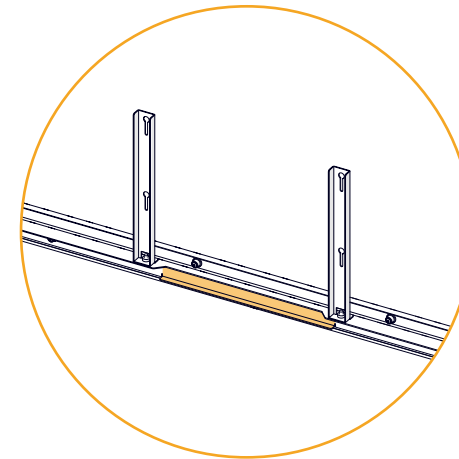
- a. Attach the grille support to the deco grille with the same screws as you just removed.
The left and right deco grilles are not identical, but the grille supports are interchangeable.



- b. Attach the vertical supports with screws.



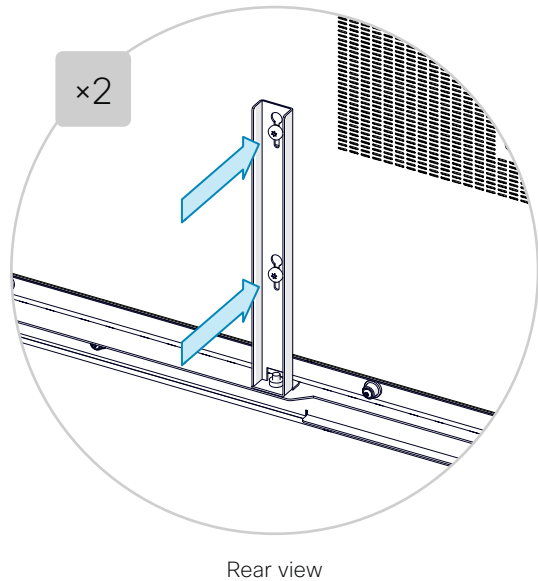
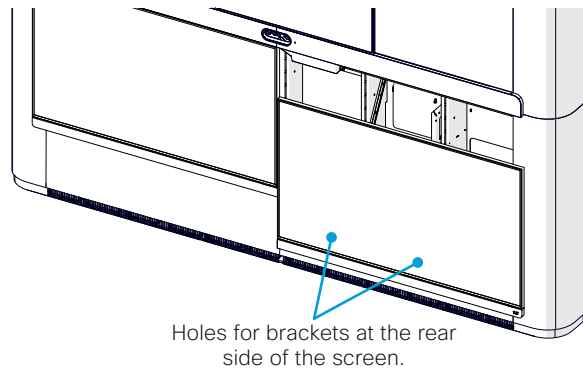
The deco grille has a handle at center, for pulling the screen up and down.



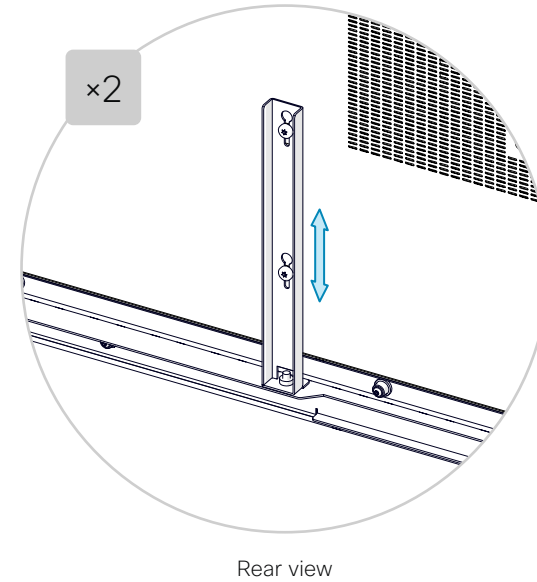
Deco grille (page 5 of 7)

7. *Mount the new deco grille to the screen*

- a. Attach the deco grille to the rear of the screen by hanging the vertical supports onto the screws.



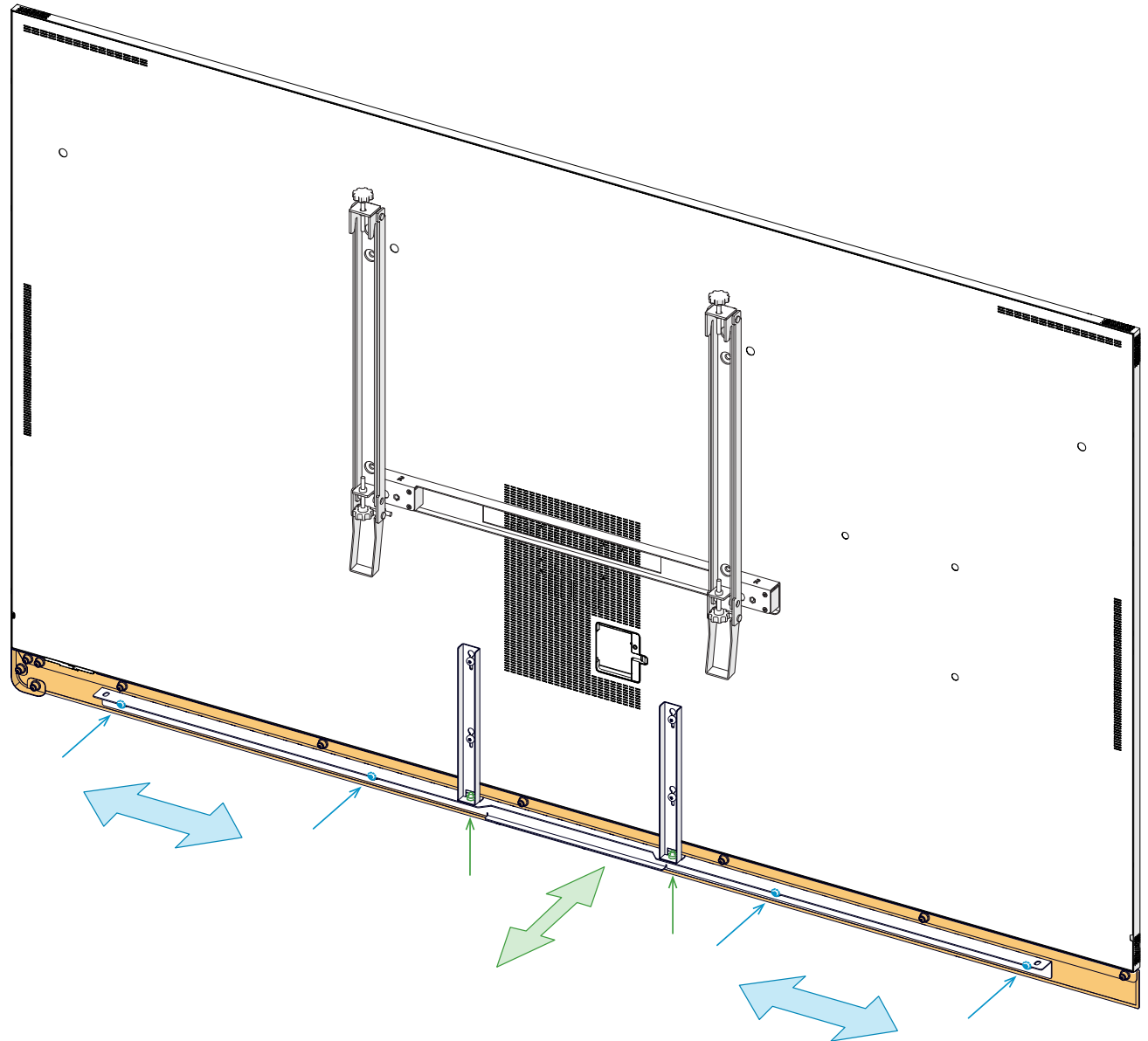
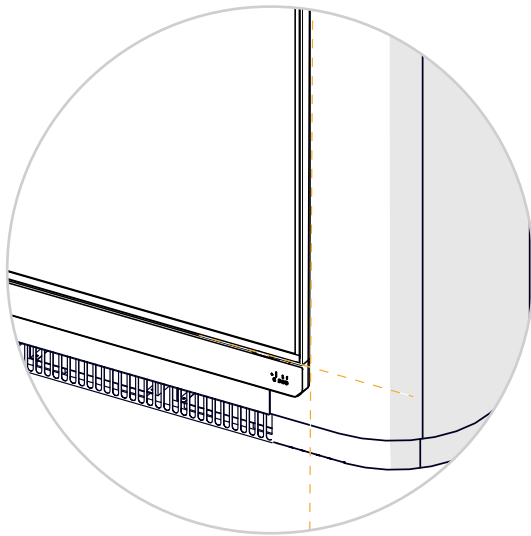
- b. Push the deco grille up and align it to the screen before tightening the screws.



8. *Align the deco grille to the screen*

In order to align the deco grille perfectly to the screen, you may have to adjust the screws.

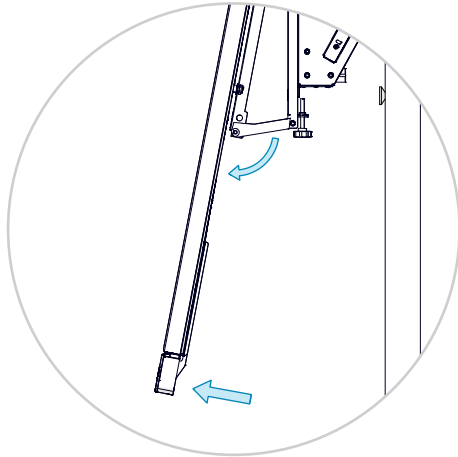
- To align the grille to the **front** of the screen, loosen the four screws that fasten the grille support to the grille (**blue**).
- To align the grille to the **side** of the screen, loosen the two screws that were used to fasten the vertical supports (**green**).



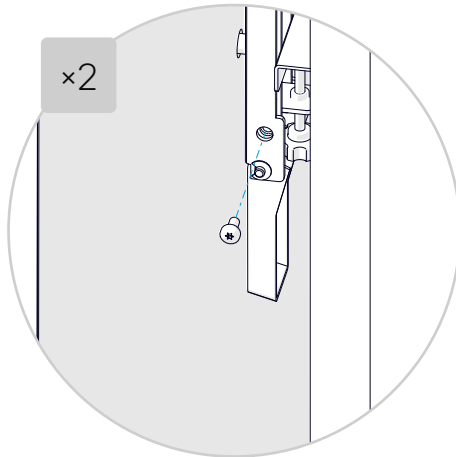
Deco grille (page 7 of 7)

9. *Lock the screen in the vertical position*

- a. Pull the screen slightly outward, so that you can release the levers on both sides. Then, gently let the screen move into the vertical position.



- b. Lock each lever in released position with one screw. This fixes the screen in a vertical position (no tilt).



10. *Move the main screen up*

Use the handle and push the screen up to the normal position. Align the tops of the screens and push them together to meet at the center split line.

11. *Repeat for the other deco grille, if necessary*

Screens

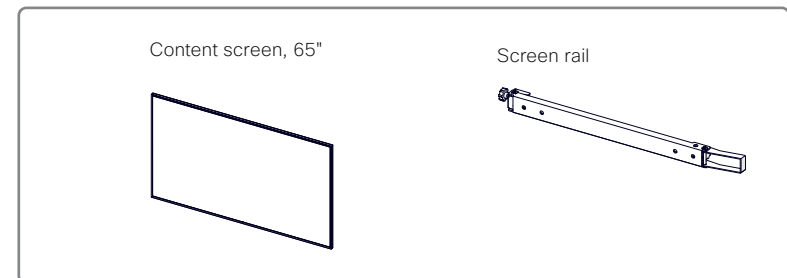
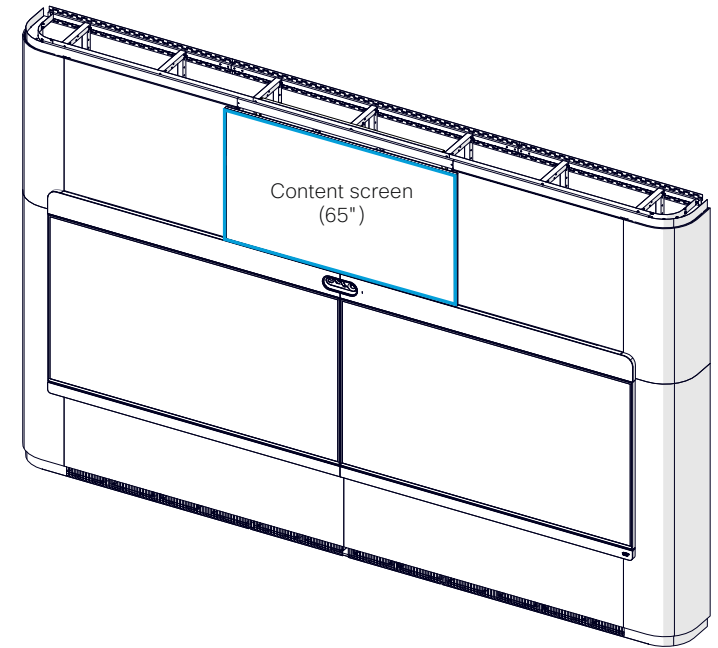
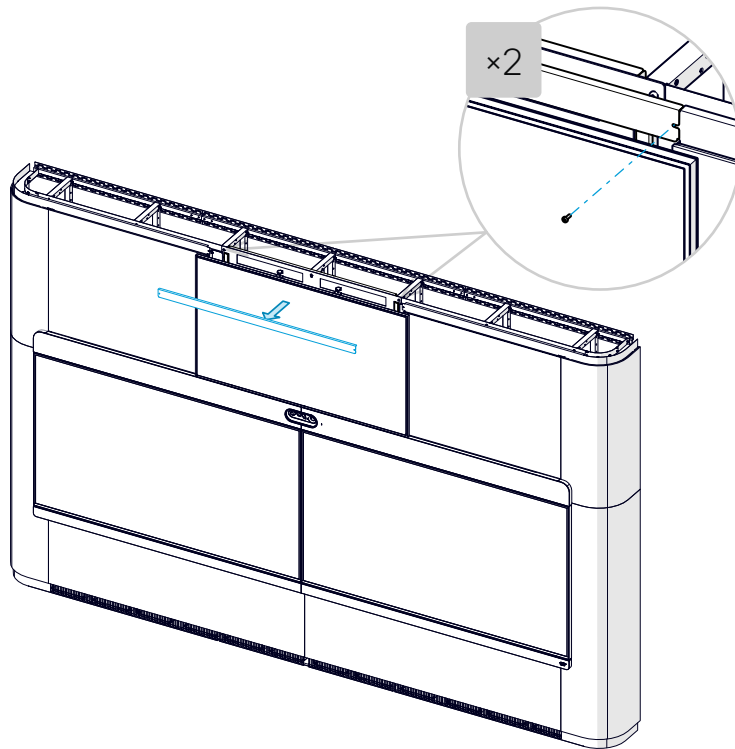
Content screen	20
Main screens	24
Gas springs for the main screen.....	36
One Connect box	42
One Connect cable.....	45

Content screen (page 1 of 4)

The content screen is the smaller screen, mounted at the top of the system.

- CS-PANO-MON65= (content screen, 65")
- CS-PANO-VESA= (screen rails)

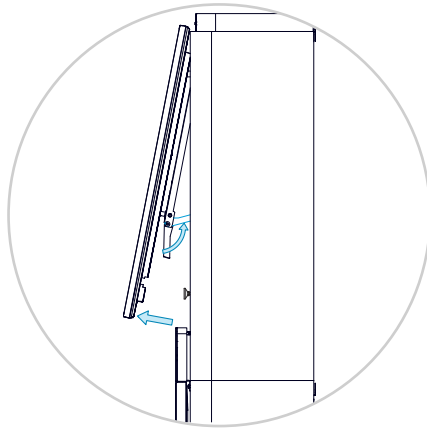
1. *Remove the center part of the upper trim*



Content screen (page 2 of 4)

2. *Tilt out the content screen*

Lift the lever behind the screen and fix the screen in a tilted position.



Side view

3. *Power off the screen and disconnect the cables*

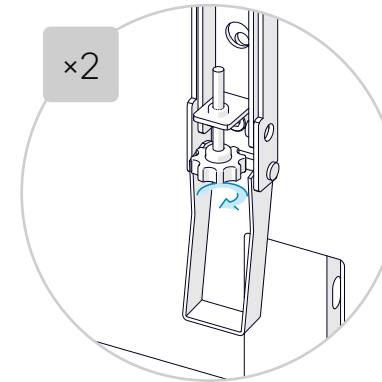
Disconnect all the cables:

- 1x HDMI (S3)
- 1x Ethernet (S6)
- 1x Power (S9)

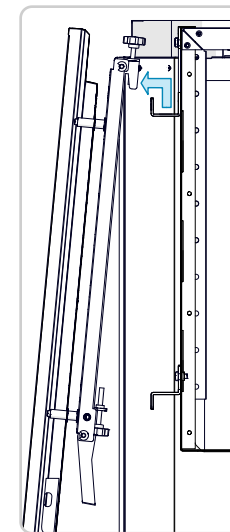
For cable routing information, refer to the [Wiring diagram](#).

4. *Unfasten the screen from the bracket*

Unscrew the thumb screws behind the screen to their lowest position, but don't remove them.



5. *Lift the screen off the bracket*



Side view

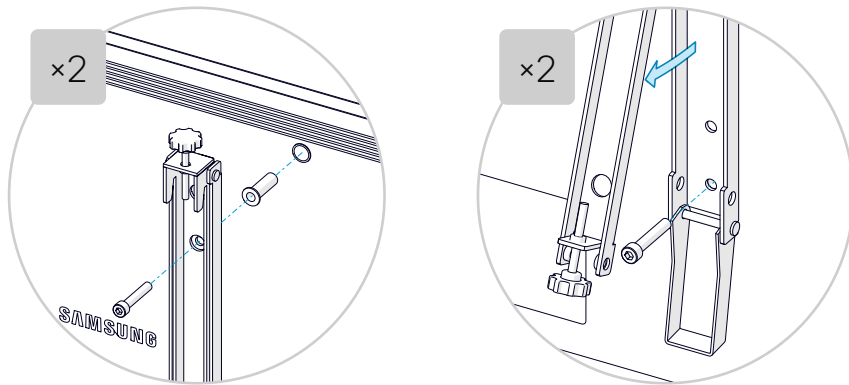
Content screen (page 3 of 4)

6. Remove the rails from the old screen and fasten them to the new screen

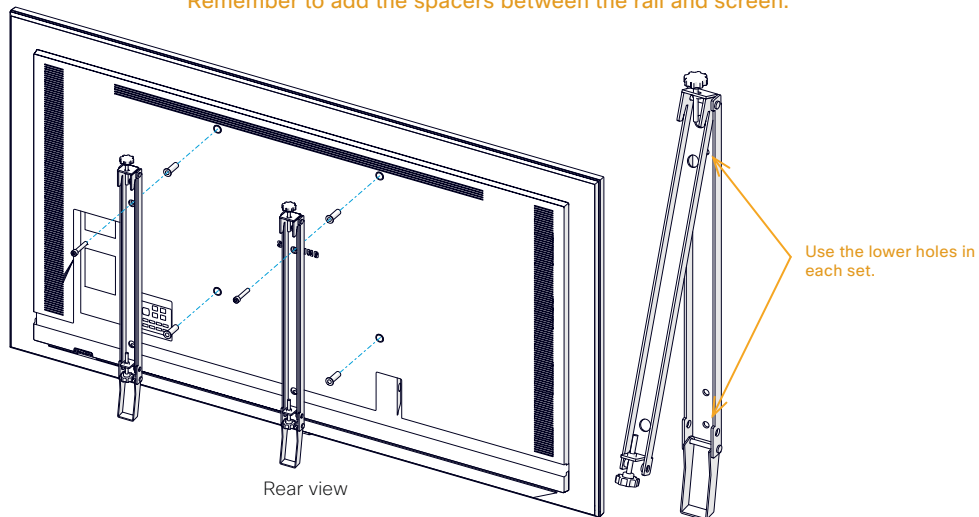
Unfasten the rails from the old screen.

Fasten each rail to the new screen with two screws.

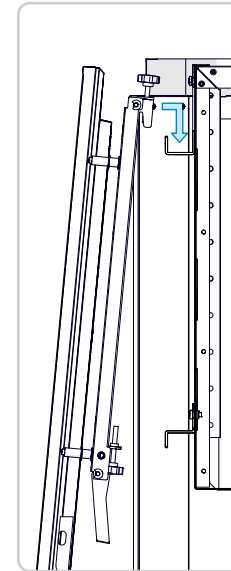
Lift the outer part of the rail to get access to the lower screw.



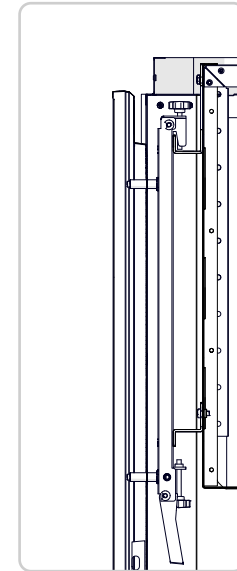
Remember to add the spacers between the rail and screen.



7. Lift the screen onto the bracket



Lift screen onto bracket
(side view)

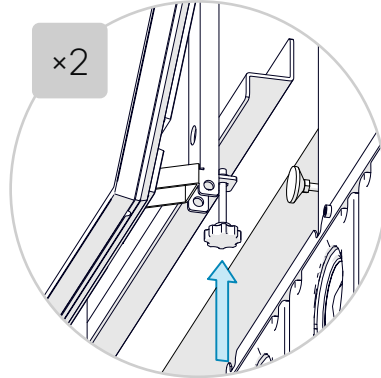


Screen in place
(side view)

Content screen (page 4 of 4)

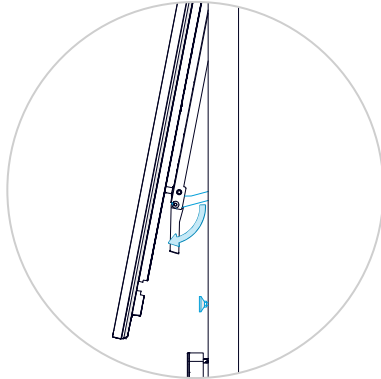
8. *Secure the screen to the lower bracket*

Tighten the thumb screws so that they secure the screen to the lower bracket.



9. *Un-tilt the screen*

Pull the content screen slightly outward, so that you can release the levers on both sides. Then, gently let the screen move into the vertical position.



Side view

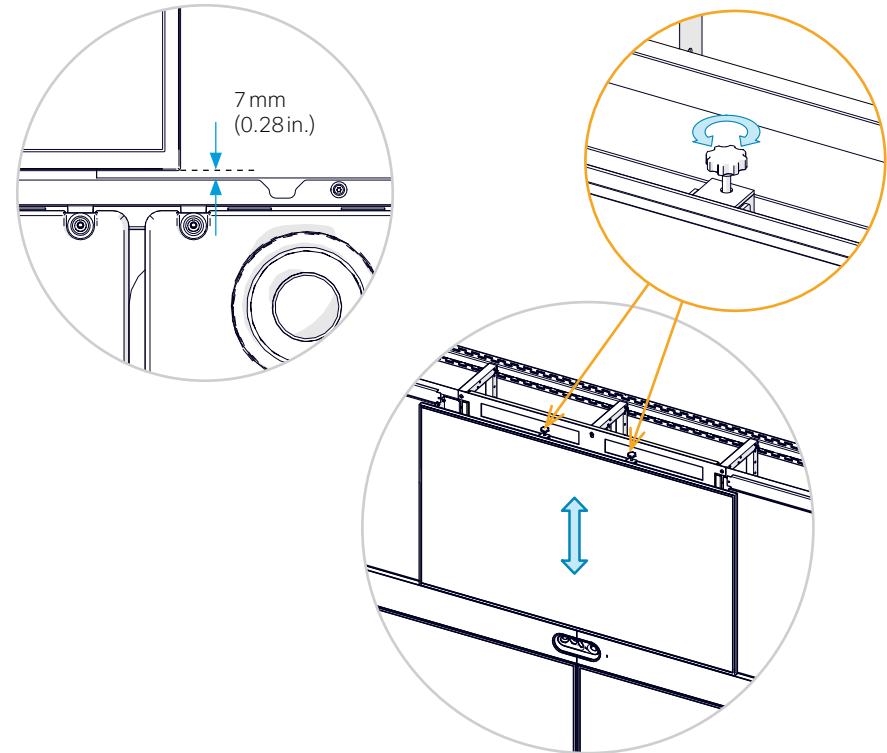
10. *Connect the cables*

Connect the cables to the content screen according to the [Wiring diagram](#):

- 1x HDMI (S3), 1x Ethernet (S6), 1x Power (S9)

11. *Adjust the screen height*

You may need to adjust the screen height. If so, use the two thumb screws at the top of the screen. The gap between the screen and the loudspeaker mounting structure should be 7 mm (0.28 in.).



12. *Mount the center part of the upper trim*

13. *Calibrate the screen*

Power on the screen and run calibration. Refer to the [Room Panorama Getting Started Guide](#) for details.

Main screens (page 1 of 12)

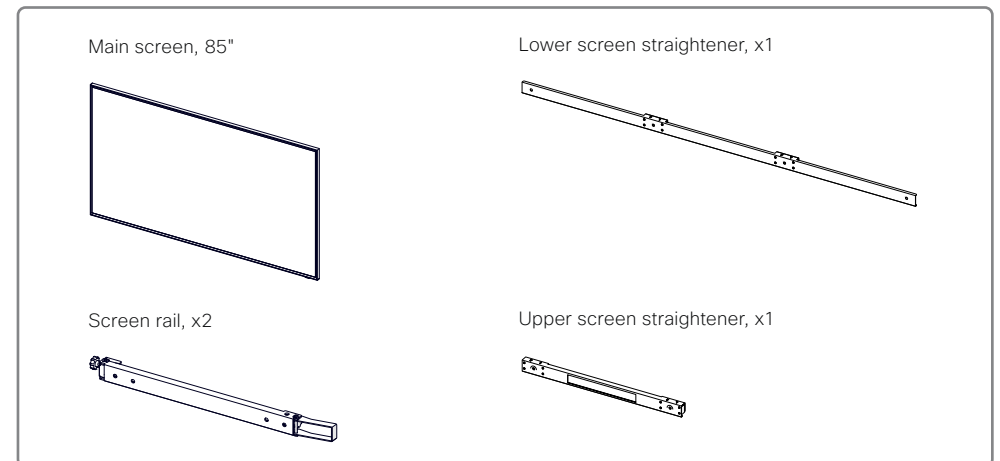
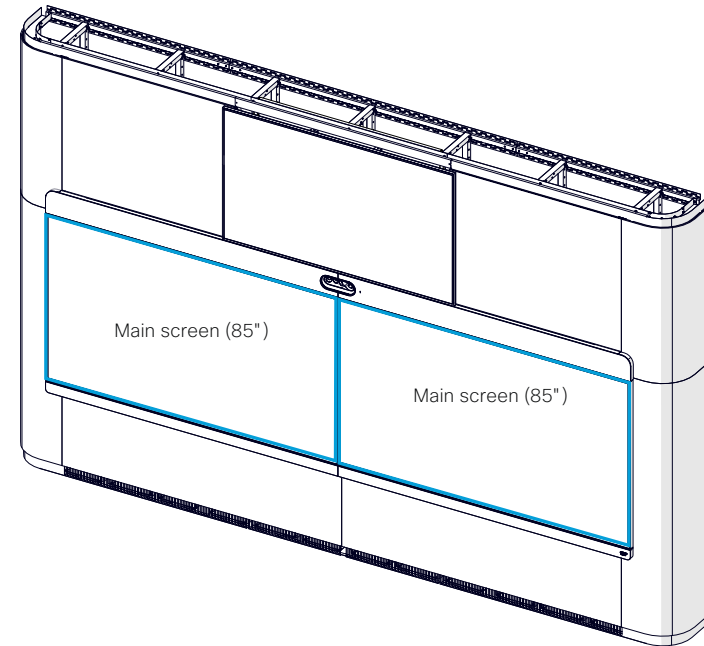
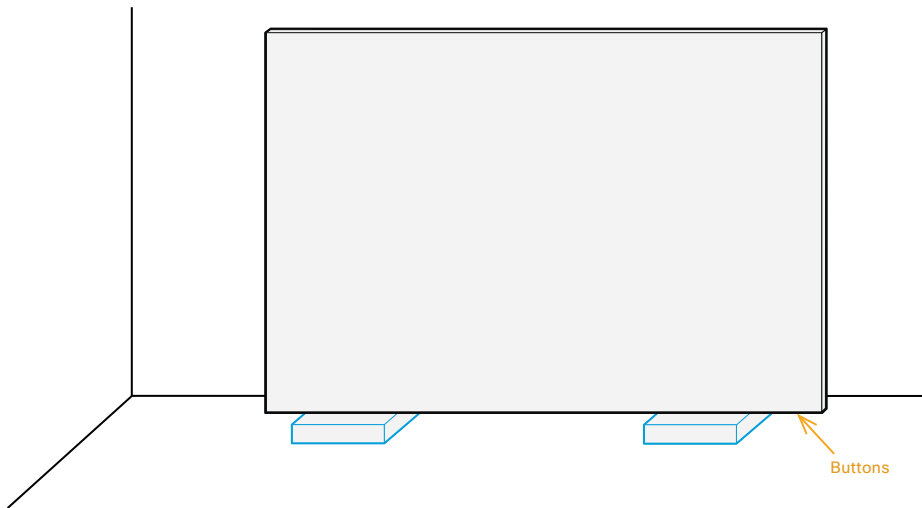
The main screens are the two 85" screens in the center.

- CS-PANO-MON85= (main screens, 85")
- CS-PANO-VESA= (screen rails for 65"/85")
- CS-MON82-REMOTE= (remote control for the 85" screens)

1. Prepare a stand for the screen when it is not mounted

Use cardboard to prepare a stand for the screen when it is not mounted.

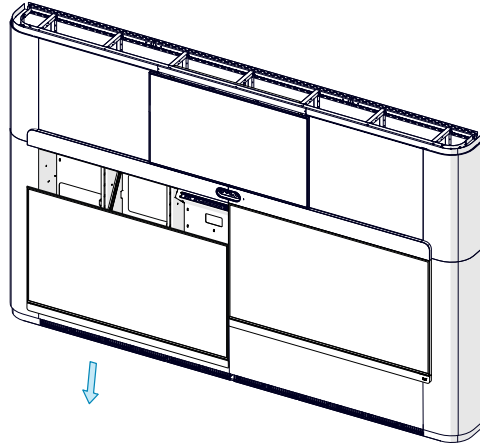
There are buttons on the bottom of the screen which can be damaged if you stand the screen on the floor without a support underneath.



Main screens (page 2 of 12)

2. Move the main screen downwards

Lower the main screen to be replaced by using the handle at the bottom of the deco grille.



Note! To avoid scratching the screens, do not lower both screens at the same time.

3. Remove power from the One Connect box

Disconnect the power to the One Connect box on the side of the main screen to be removed. Refer to the [Wiring diagram](#).

Left screen:

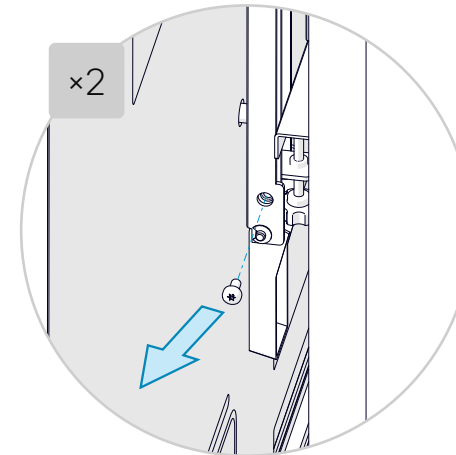
- One Connect box power cable (S7)

Right screen:

- One Connect box power cable (S8)

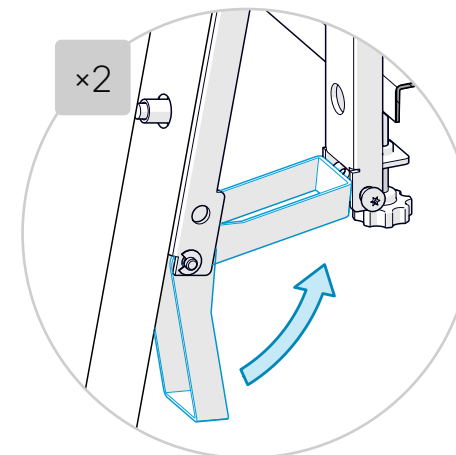
4. Unscrew the angle lock screws behind the screen

These screws are holding the screen in the flat position. Loosen them so that you will be able to tilt out the screen.



5. Tilt out the main screen

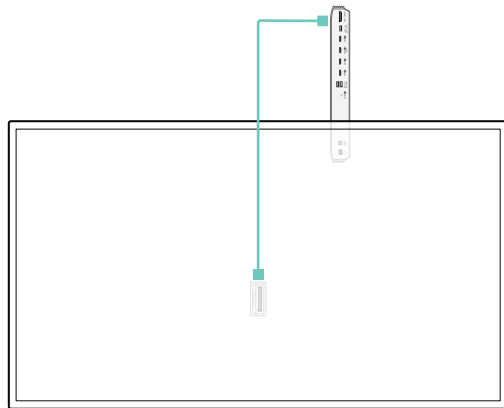
Lift the levers on either side of the screen to hold the screen in the tilted position.



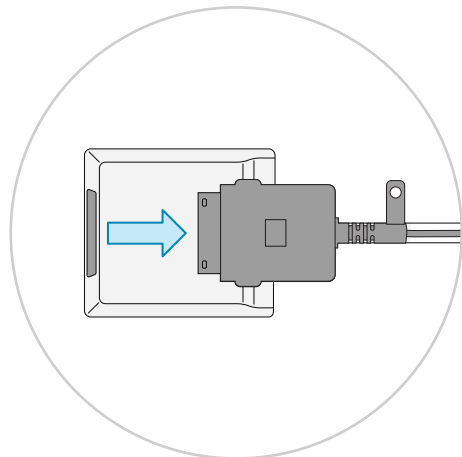
Main screens (page 3 of 12)

6. *Disconnect the One Connect cable from the main screen*

Take care while removing the One Connect cable. Try not to bend it too much, because it is fragile. Disconnect the One Connect cable from the One Connect box and the screen.

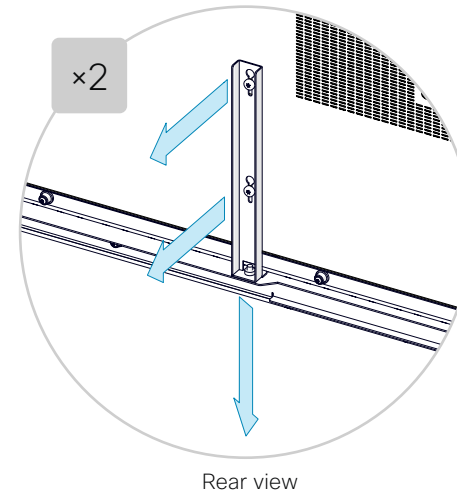


Remove the connector from the socket by squeezing the sides when pulling



7. *Remove the deco grille*

Loosen the screws holding the deco grille brackets. The deco grill will drop down and you can then lift it off the screen.



8. Move the screen mount safety brackets to the **Safe Mode** position

You must always have the screen mount safety brackets in the **Safe Mode** position when there is no screen hanging on them, or you risk personal injury.

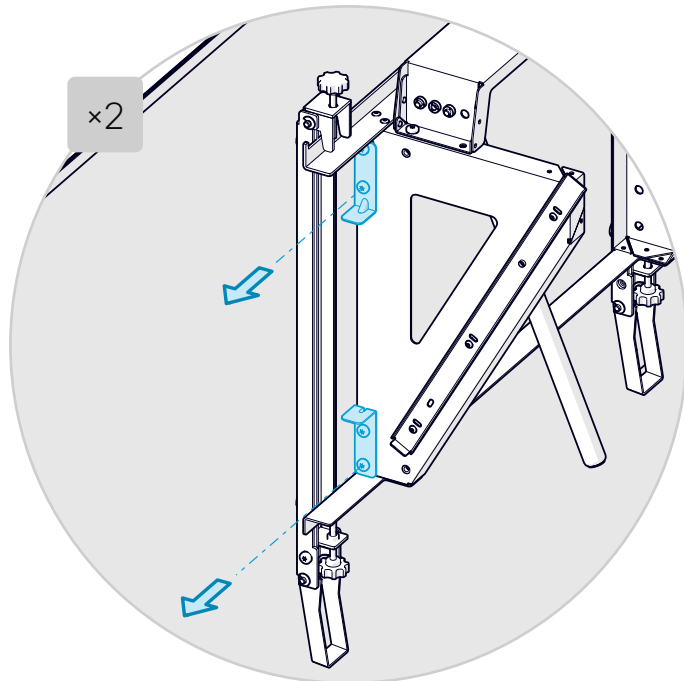
Each screen mount module has four screen mount safety brackets that are required when there is no screen hanging on the module. Move the screen mount safety brackets into the **Safe Mode** position (i.e., the horizontal position) to prepare for removing the screen.

Repeat the procedure on both sides of the screen mount module.

To avoid the Risk of Personal Injury:

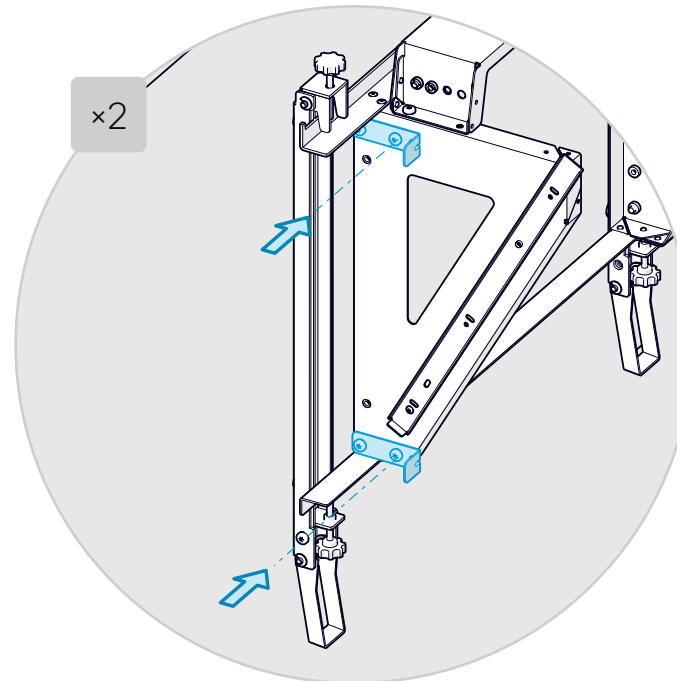
- Never move the screen mount safety brackets out of **Safe Mode** (the horizontal position) when the screen is not hanging on the screen mount module.
- If you must remove the screen from the screen mount module, always move the screen mount safety brackets back to the **Safe Mode** position before lifting off the screen.

Operational Mode - vertical position



- a. There are two screws on each side of the screen mount. Remove one screw from each bracket.

Safe Mode - horizontal position

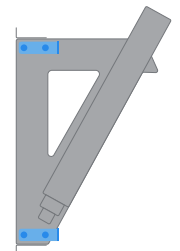


- b. Loosen the remaining screw on each bracket, and rotate the brackets into the horizontal position.
c. Add the two screws that you just removed, and tighten all screws with the bracket in the **Safe Mode** position.
d. Repeat on the other side of the screen mount.

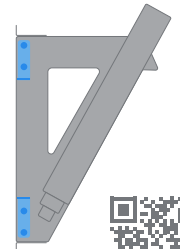


All four safety brackets must be in **Safe Mode** before mounting or removing a screen

Safe Mode



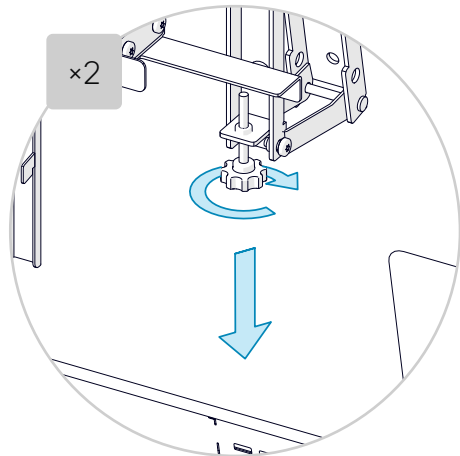
Operational Mode



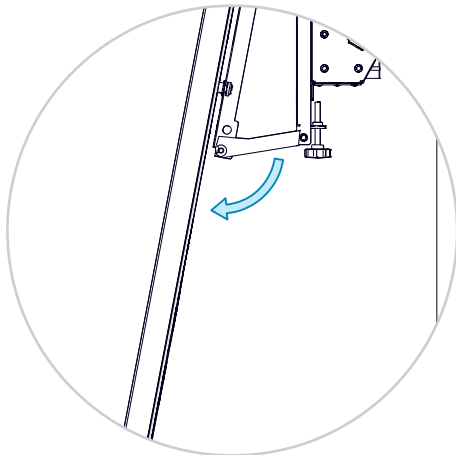
Main screens (page 5 of 12)

9. Unfasten the screen from the bracket

Unscrew the thumb screws on both sides of the screen to their lowest position, but don't remove them.



Pull the screen slightly outward, so that you can release the levers on both sides. Then, gently let the screen move into vertical position.

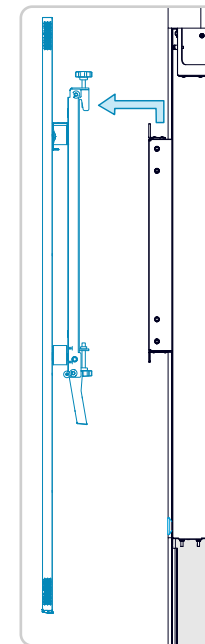


10. Lift and remove the old screen



To avoid the Risk of Personal Injury:

- Never move the screen mount safety brackets out of **Safe Mode** (i.e., the horizontal position) when the screen is not hanging on the screen mount module.
- If you must remove the screen from the screen mount module, always move the screen mount safety brackets back to the **Safe Mode** position before lifting off the screen.

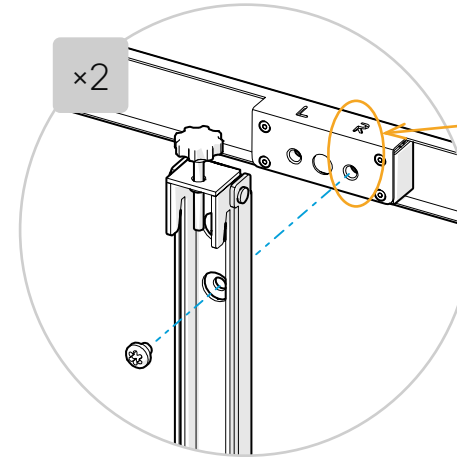
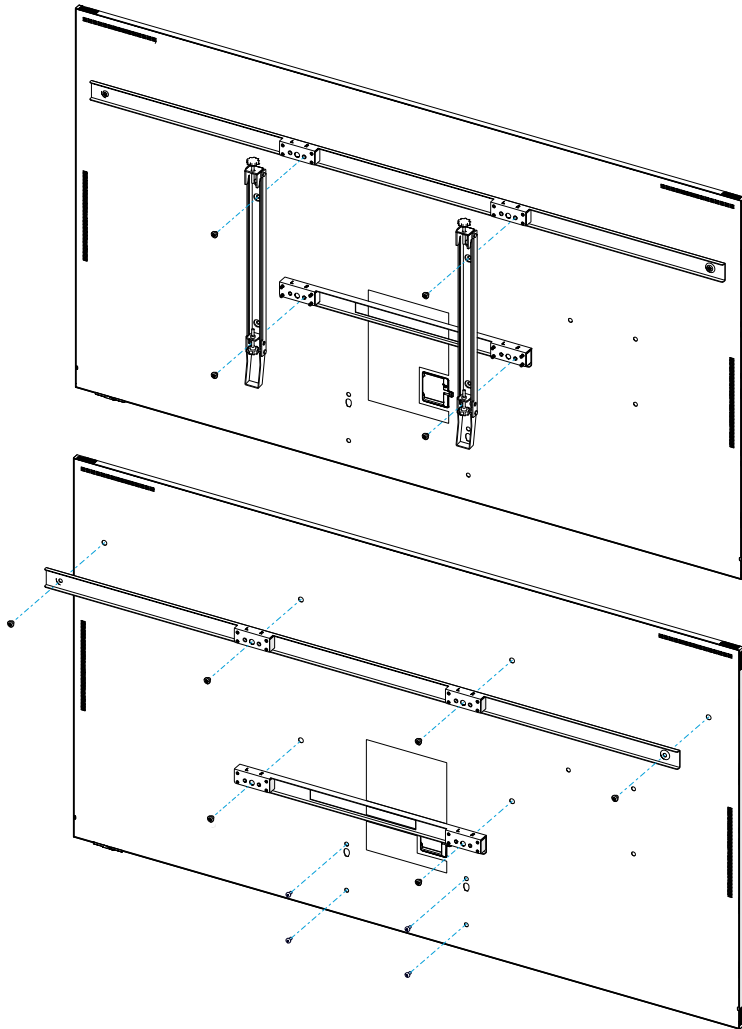


Lift screen off brackets
(side view)

Main screens (page 6 of 12)

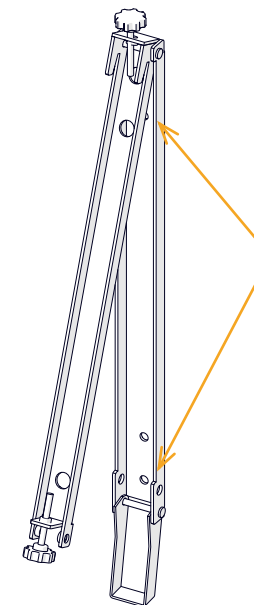
11. Transfer the rails, the straightening bars, and the deco grille screws from the old screen

Take care, because the spacers will fall off. Try to catch them, because you will need them for mounting the rails on the new screen.



Use the holes marked with an "R" for the right screen.

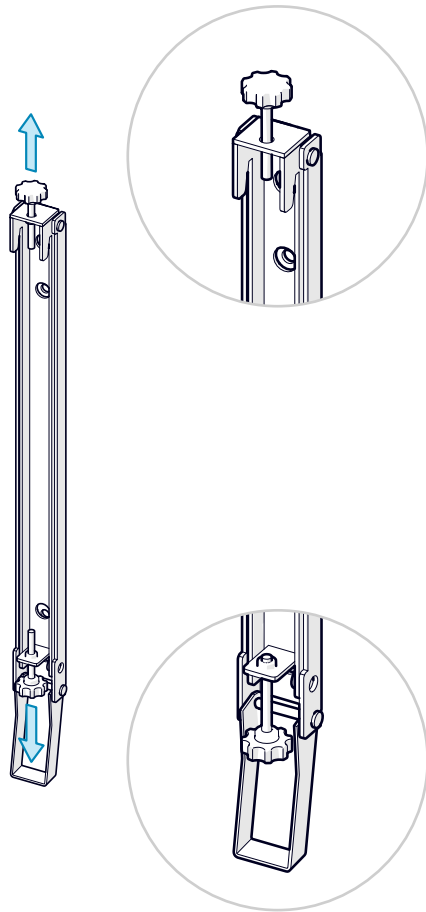
You will use the holes marked with an "L" when mounting the left screen.



Use the lower holes in each set.

12. Loosen the rail thumb screws

Partially unscrew the thumb screws as shown in the close-ups. It's important that they don't interfere with placing the screen onto the screen mount module in the next step.

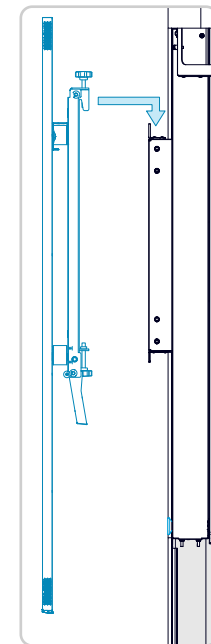


13. Hang the screen onto the screen mount module

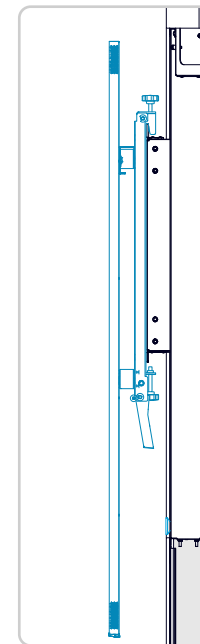


To avoid the Risk of Personal Injury:

- Never move the screen mount safety brackets out of **Safe Mode** (i.e., the horizontal position) when the screen is not hanging on the screen mount module.
- If you must remove the screen from the screen mount module, always move the screen mount safety brackets back to the **Safe Mode** position before lifting off the screen.



Lift screen onto bracket
(side view)



Screen in place
(side view)

14. Move the screen mount safety brackets to the Operational Mode position

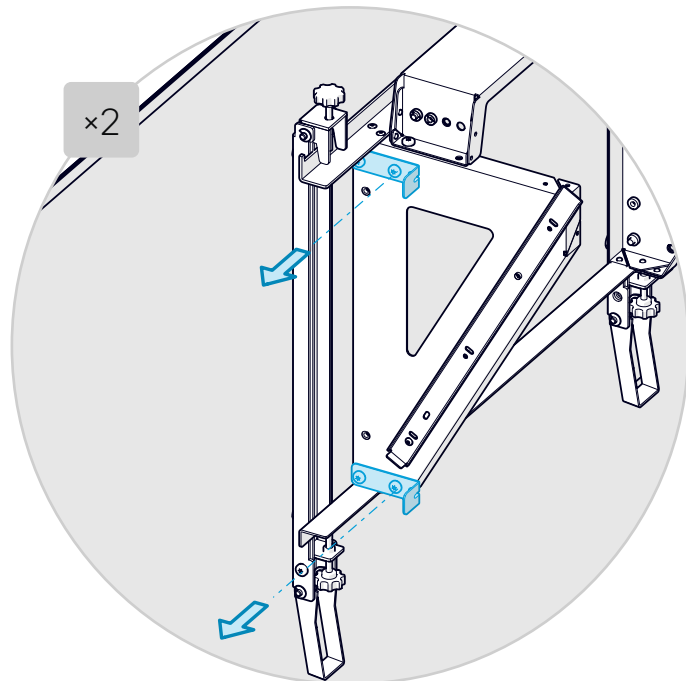
Once the screen is in firmly in place, move the screen mount safety brackets out of **Safe Mode** position, and into the *Operational Mode* position. Otherwise, you will not be able to push the screen fully toward the wall.

Each screen mount contains four screen mount safety brackets. Repeat the procedure on both sides of the screen mount module.

To avoid the Risk of Personal Injury:

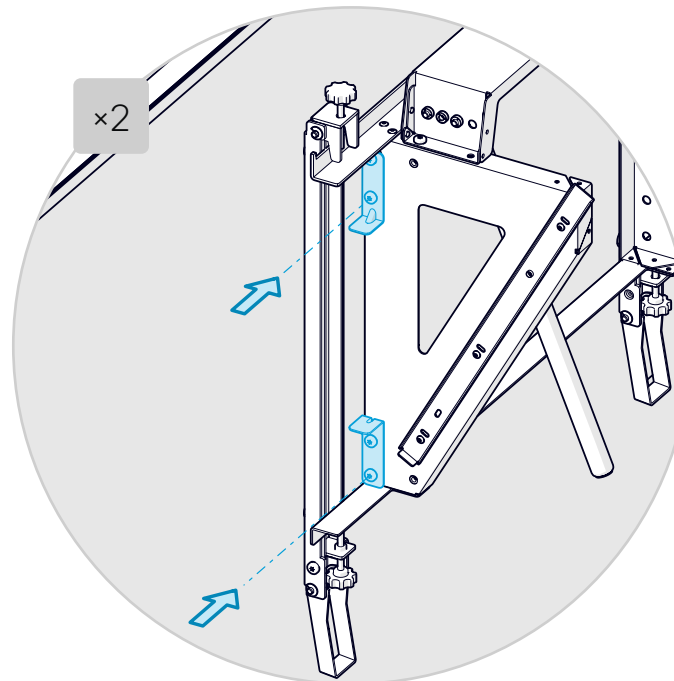
- Never move the screen mount safety brackets out of **Safe Mode** (the horizontal position) when the screen is not hanging on the screen mount module.
- If you must remove the screen from the screen mount module, always move the screen mount safety brackets back to the **Safe Mode** position before lifting off the screen.

Safe Mode - horizontal position



- a. Gently pull the screen downward.
- b. There are two screws on each side of the screen mount. Remove one screw from each bracket.

Operational Mode - vertical position



- c. Loosen the remaining screw on each bracket, and rotate the brackets into the vertical position.
- d. Add the two screws that you just removed, and tighten all screws with the bracket in the *Operational Mode* position.
- e. Repeat on the other side of the screen mount module.

Warning icons: exclamation mark, downward arrow with exclamation mark, and information icon.

All four safety brackets must be in Safe Mode before mounting or removing a screen

Safe Mode

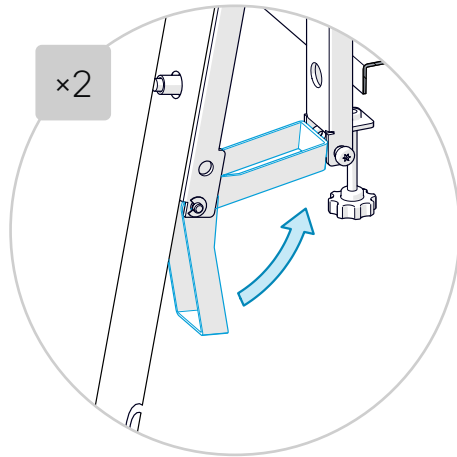
Operational Mode

Main screens (page 9 of 12)

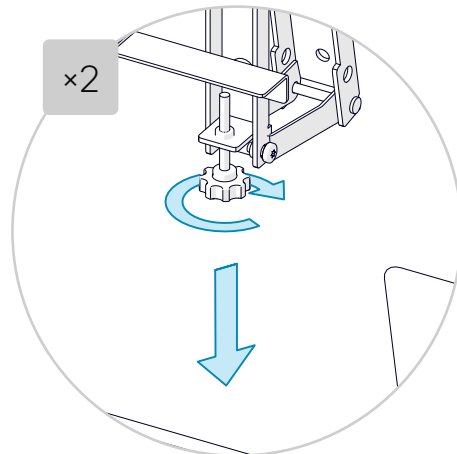
15. Secure the screen

Carefully tilt the screen by lifting out the lower edge.

Use the levers on the screen rails to fix the screen in a tilted position.



Tighten the thumb screws so that it secures the screen to the bracket.



16. Connect the One Connect cable to the main screen

Take care not to bend the One Connect cable too much; it's fragile.

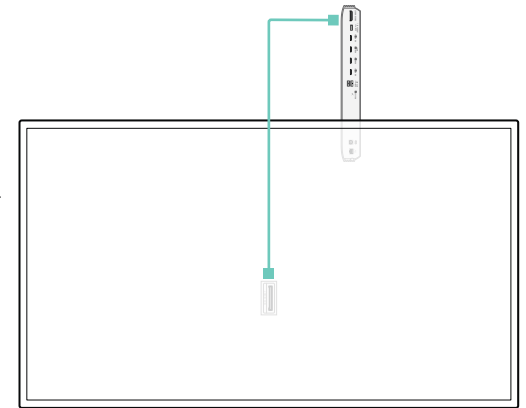
Left screen:

- 1x One Connect cable (S10)

Right screen:

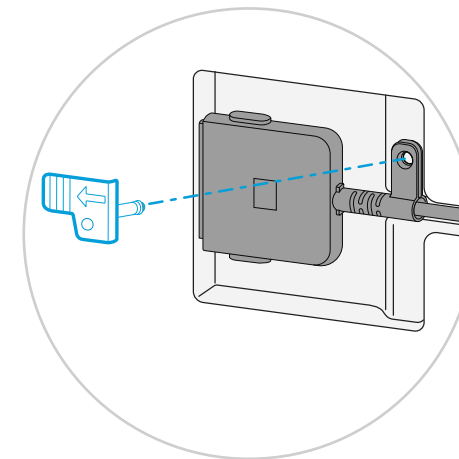
- 1x One Connect cable (S11)

Connect the One Connect cable to the screen.



Squeeze the buttons on the sides of the connector and connect it to the socket on the screen.

Place the peg in the hole to secure the connector.

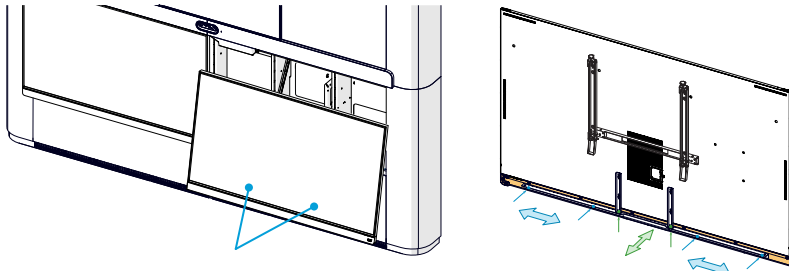


Main screens (page 10 of 12)

17. *Remove the transparent film from the edges of screen*

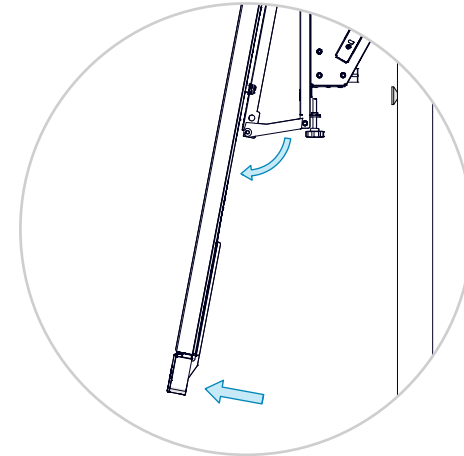
18. *Mount and align the deco grille to the screen*

Follow the steps for mounting and aligning the grille in the [Deco grille](#) section.

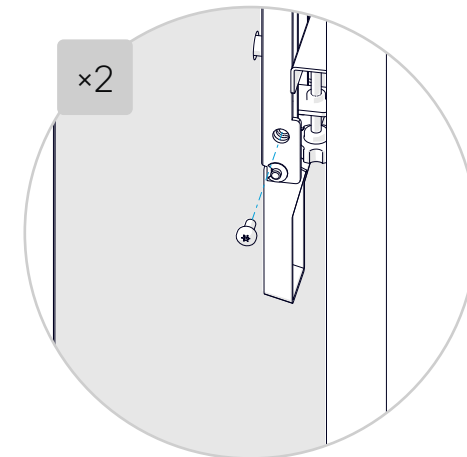


19. *Lock the screen in the vertical position*

- Pull the screen slightly outward, so that you can release the levers on both sides. Then, gently let the screen move into the vertical position.



- Lock each lever in released position with one screw. This fixes the screen in a vertical position (no tilt).



Main screens (page 11 of 12)

20. Connect power to the One Connect box

Connect the power to the One Connect box on the side of the main screen that was replaced. Refer to the [Wiring diagram](#).

Left screen:

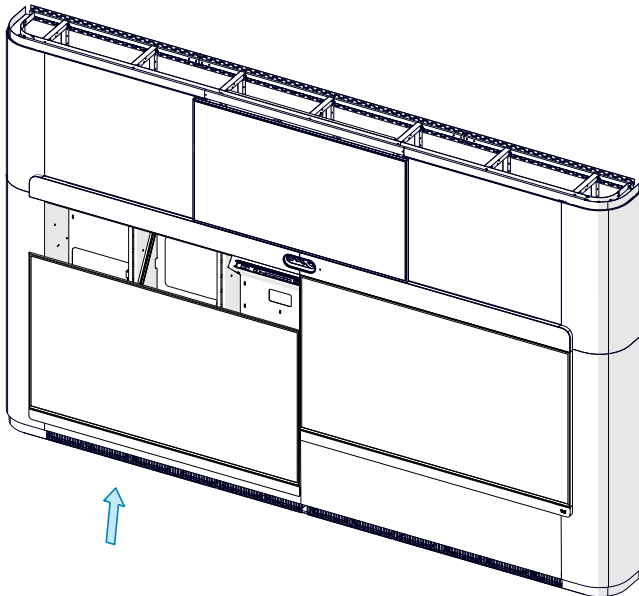
- One Connect box power cable (S7)

Right screen:

- One Connect box power cable (S8)

21. Move the screen up

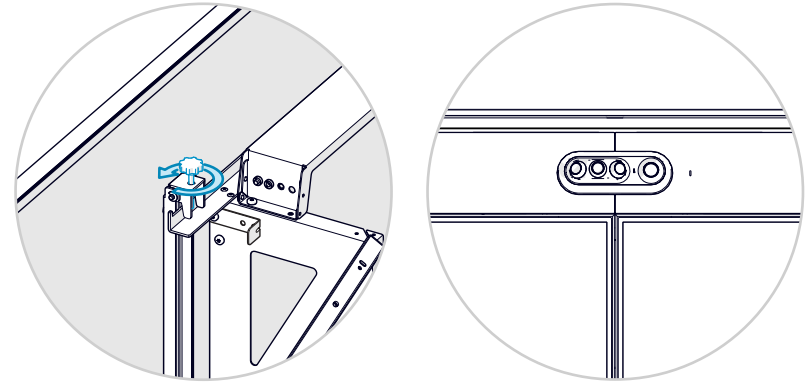
Use the handle and push the screen up to the normal position.



22. Remove the plastic film from the front of the screen

23. Align the main screens and the speaker grille

- If necessary, turn the thumb screws on the vertical rails to align the screen. Turn clockwise to move the screen outwards; counter-clockwise to move inwards.
- To align the screen to the center line of the speaker grille, you can move the screen to the left or right by pushing the screen bracket.

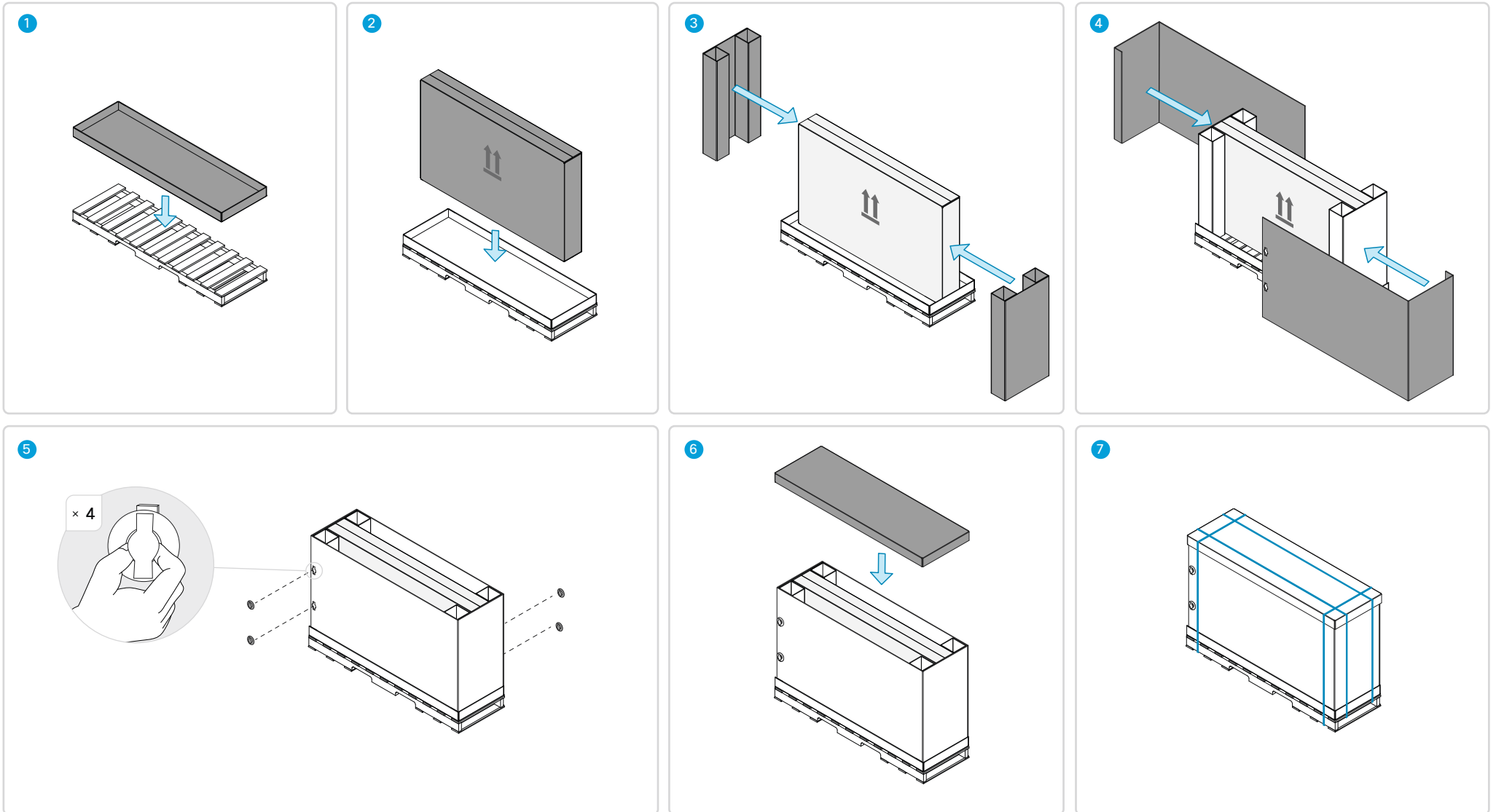


24. Calibrate the new screen

The screen should power on automatically. If this does not happen, power on the screen using the remote control or button under screen.

Refer to the *Room Panorama Getting Started Guide* for calibration details.

25. Pack the old screen for shipping



Gas springs for the main screen (page 1 of 6)

The main screen is mounted with a pair of gas springs that allow you to raise and lower the screen.

- CS-GAS-SPRING= (Room Panorama Display Cavity Gas Springs for 85" - 1 Pair)

Prerequisites:

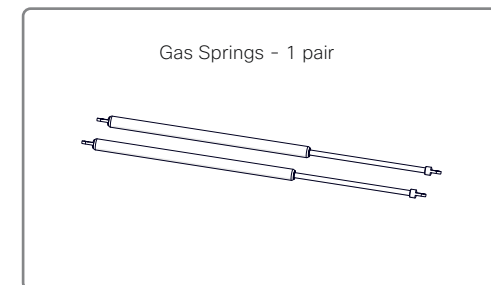
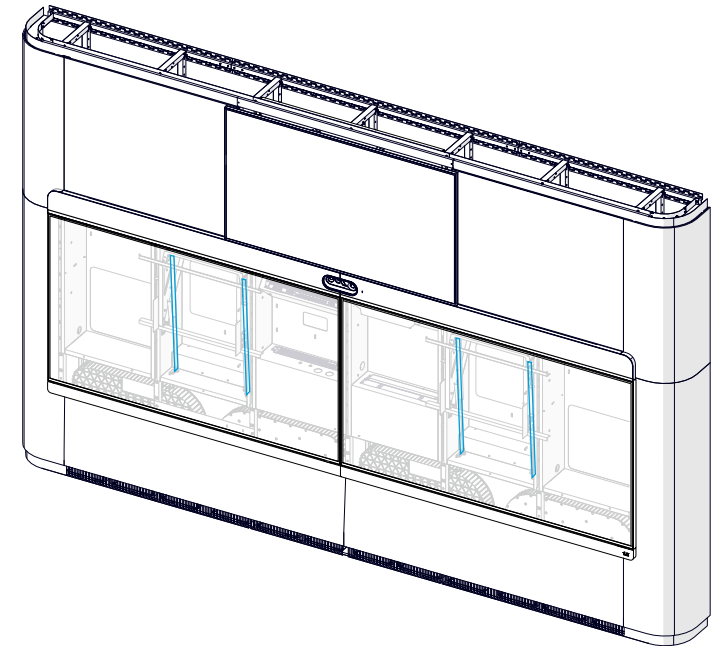
- Block or wooden bar approx. 2"×4"×27"
- Hex 4 mm allen key
- 2 strong people (pull down force approx. 60kg)

1. *Prepare to lift the main screen off*

Do the following steps, as described in the [Main screens](#) section.

- Prepare a stand for the screen
- Move the main screen downwards
- Remove power from the One Connect box
- Unscrew the angle lock screws behind the screen
- Tilt out the main screen
- Disconnect the One Connect cable from the main screen
- Remove the deco grille
- Unfasten the screen from the bracket

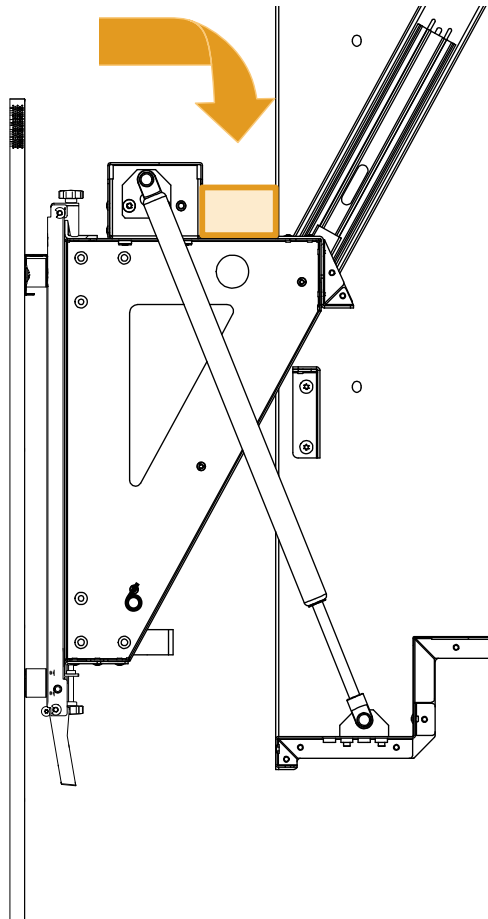
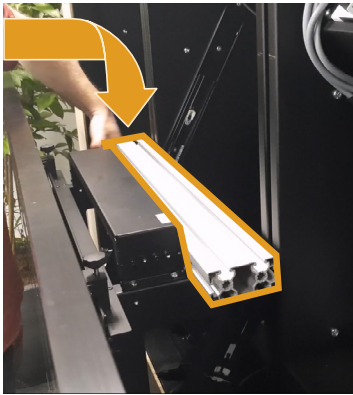
Do not set the brackets into SAFE mode. You have to be able to raise the mount all the way to the fully retracted position, and the safety brackets prevent this.



Gas springs for the main screen (page 2 of 6)

2. Place a block between the bracket and the rack

The block should be approximately 2"×4"×27". This is to prevent the mount from springing back up when you remove the screen.

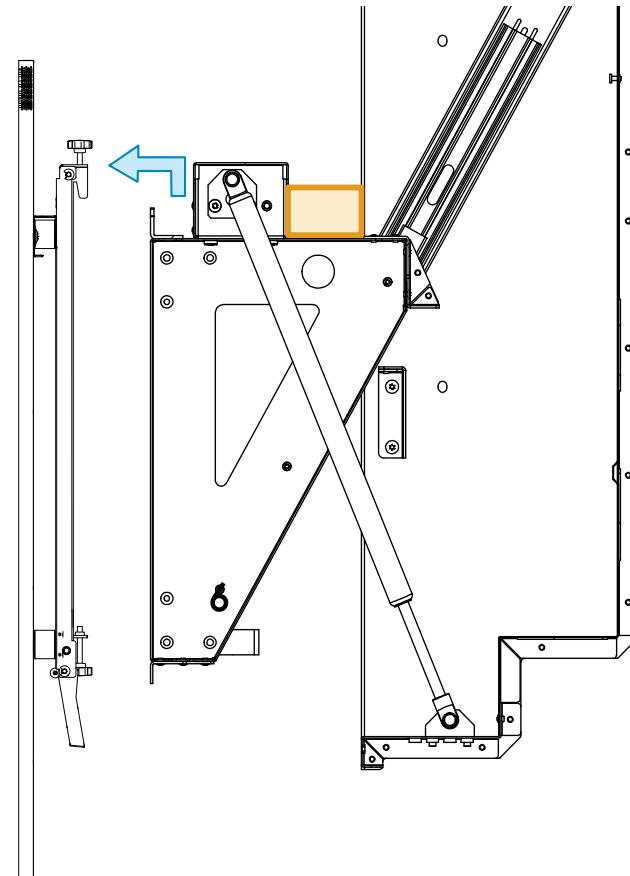


3. Lift and remove the screen



To prevent injury, place the block before removing the screen.

The block is necessary because you are not able to use the Safe mode for this operation. Safe mode prevents you from raising the mount to the fully retracted position and fully removing the tension from the gas springs.



Lift screen off brackets
(side view)

Gas springs for the main screen (page 3 of 6)

4. *Raise the display mount*

Be careful. You will need two strong persons to keep the bracket from snapping back violently.

This requires one very strong person to hold the mount down while the other person removes the bar. Carefully, raise the mount raise into the fully retracted position.

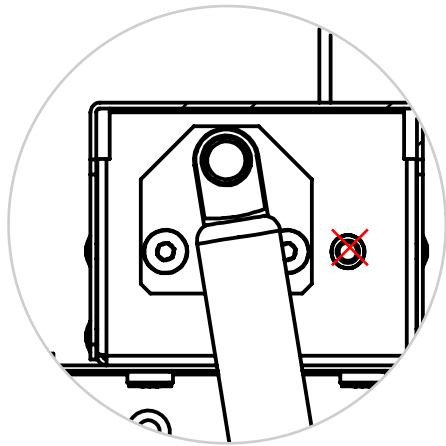


Unless you strongly hold the bracket, it will snap up.

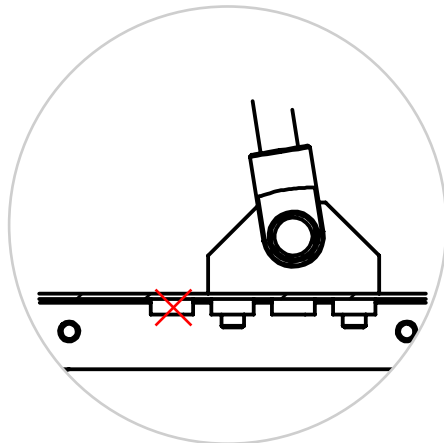
Gas springs for the main screen (page 4 of 6)

5. Replace the gas springs

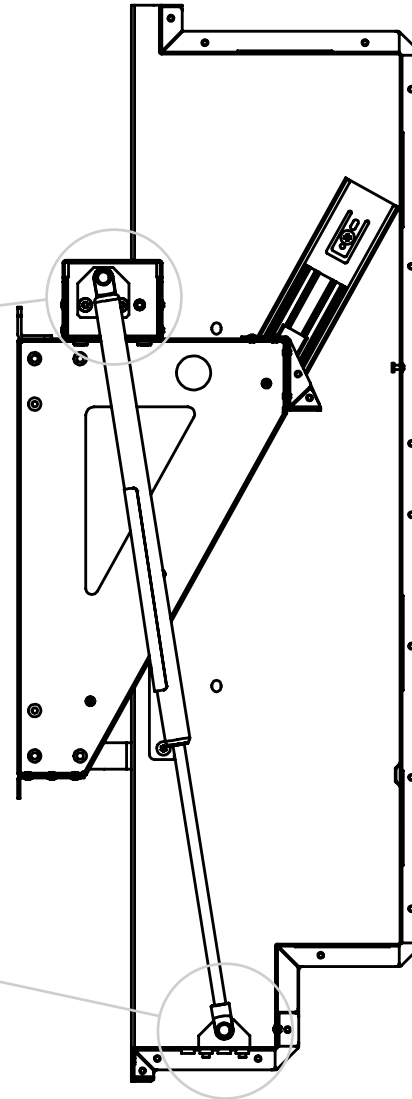
For the **upper** bracket, use the outer holes. For the **lower** bracket, use the *inner* holes.



Upper bracket (side view)
Use the outer holes



Lower bracket (side view)
Use the inner holes



Gas springs for the main screen (page 5 of 6)

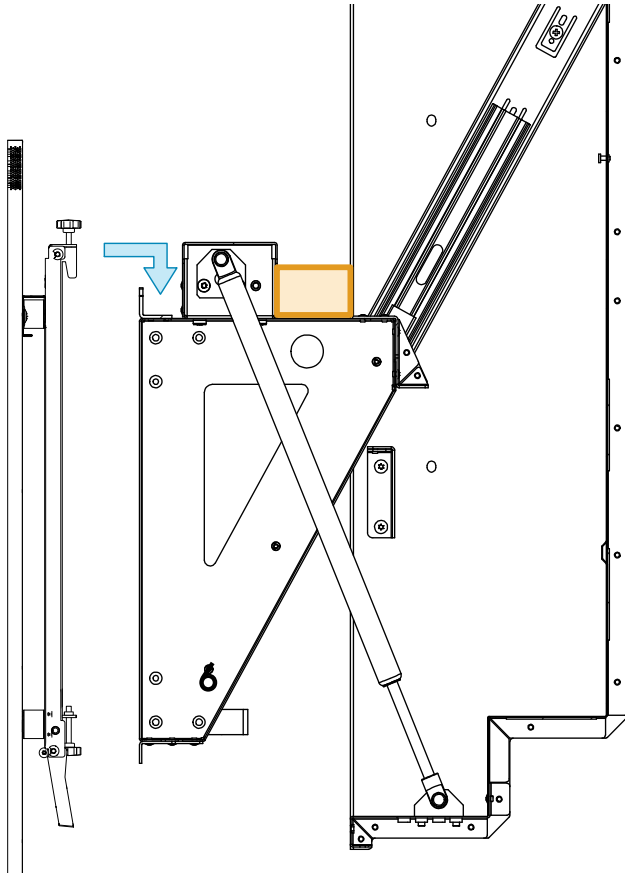
6. Lower the display mount and place the block

Pull the mount down and hold it while another person places the block between the mount and the rack.



Gas springs for the main screen (page 6 of 6)

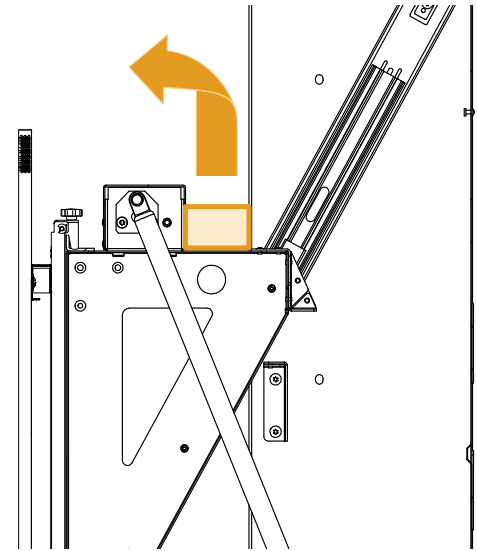
7. Place the screen on the mount



Lift screen on to brackets
(side view)

8. Remove the block

You can safely remove the block now, because the screen's weight will hold the display mount down.



9. Secure and reconnect the screen

Do the following steps, as described in the [Main screens](#) section.

- Secure the screen
- Connect the One Connect cable to the main screen
- Remove the transparent film from the edges of screen
- Mount the deco grille to the screen
- Lock the screen in the vertical position
- Connect power to the One Connect box
- Move the screen up

One Connect box (page 1 of 3)

The One Connect box provides processing for the screens.

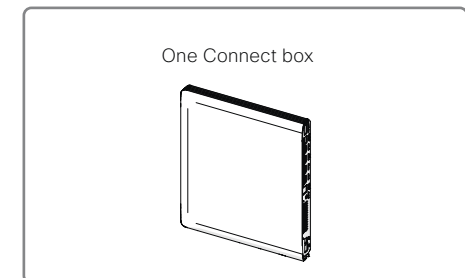
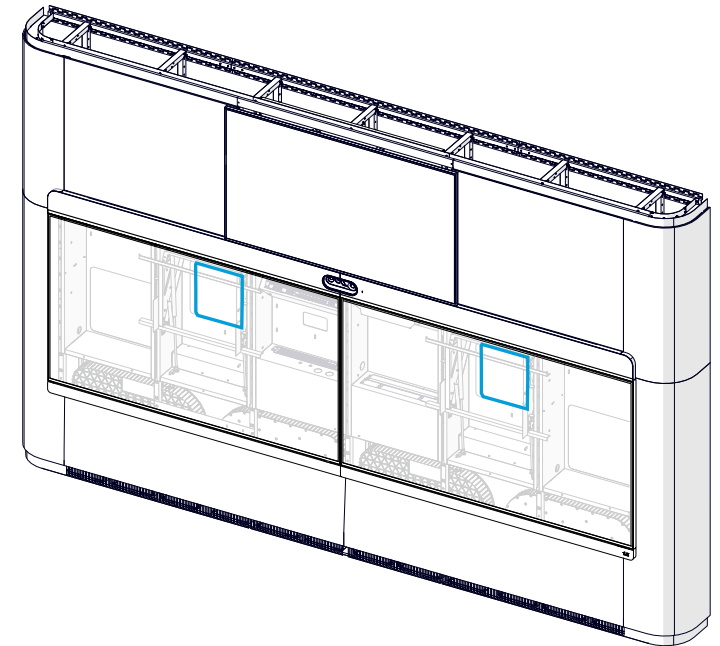
- CS-1CONNECT85-BOX= (One Connect box, one for each main screen)

1. *Remove power from main screen and One Connect box*

Disconnect the power to the One Connect box from the wall socket. Refer to the [Wiring diagram](#).

Left One Connect box power cable (S7)

Right One Connect box power cable (S8)



One Connect box (page 2 of 3)

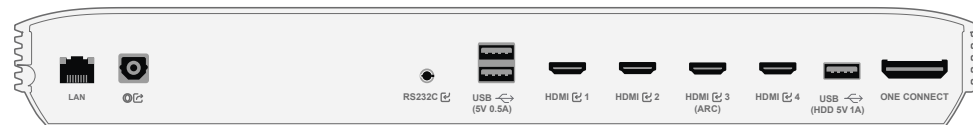
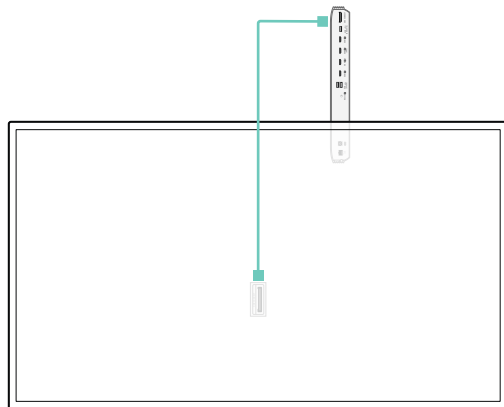
2. *Move the main screen downwards*

On the side of the One Connect box you are replacing, pull the main screen down. Use the handle at the bottom of the deco grille.

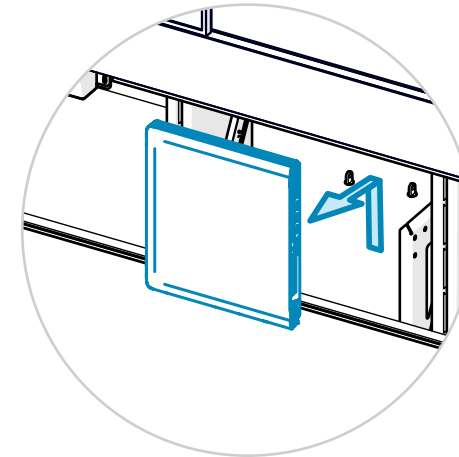
Note! Do not take down both screens at the same time to avoid scratching the screen.

3. *Disconnect cables from the One Connect box*

Disconnect the One Connect cable from the One Connect box and the screen.



4. *Remove the old One Connect box*



5. *Mount the new One Connect box*

Hang the One Connect box for the right screen on the two pre-mounted screws in the display cavity. The connector panel is facing to the right.

6. *Connect the cables*

Connect the cables to the new One Connect box according to the [Wiring diagram](#).

One Connect box (page 3 of 3)

7. *Move the main screen up*

Use the handle and push the screen up to the normal position. Align the tops of the screens and push them together to meet at the center split line.

8. *Connect power to the main screen and One Connect box*

Connect the power to the One Connect box to the wall socket. Refer to the [Wiring diagram](#).

Left One Connect box power cable (S7)

Right One Connect box power cable (S8)

9. *Power on the main screen*

The screen should power on automatically. If this does not happen, power on the screen using the remote control or button under screen.

One Connect cable (page 1 of 3)

The One Connect cable provides power, video, and control signals from the One Connect box to the screen.

- CS-CAB-V-QPR85= (One Connect cable, one for each main screen)

1. *Remove power from the main screen*

Disconnect the power to the main screen that is connected to the One Connect box.

2. *Remove power from the One Connect box*

Disconnect the power to the One Connect box from the wall socket. Refer to the [Wiring diagram](#).

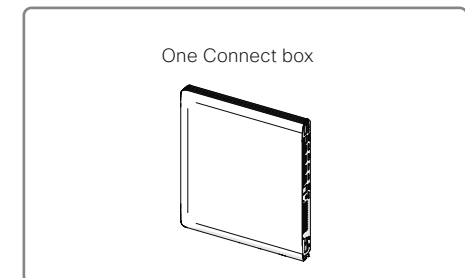
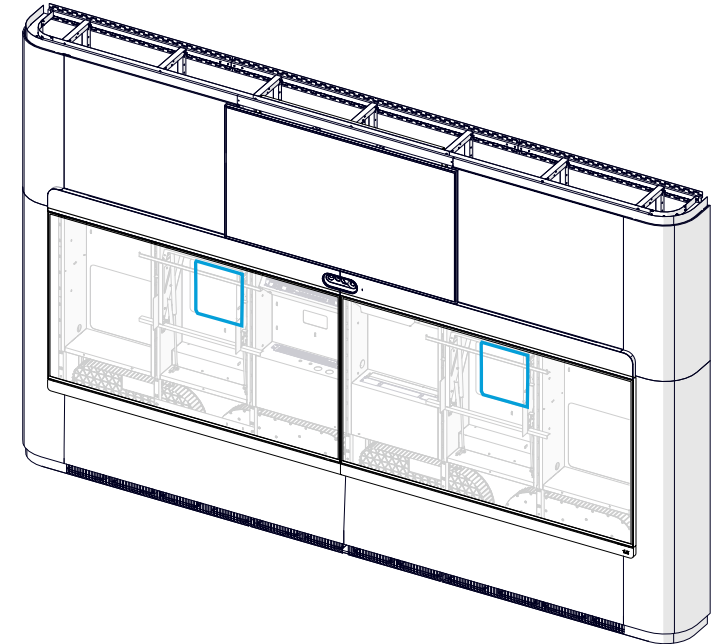
Left One Connect box power cable (S7)

Right One Connect box power cable (S8)

3. *Move the main screen downwards*

On the side of the One Connect box you are replacing, pull the main screen down. Use the handle at the bottom of the deco grille.

Note! Do not take down both screens at the same time to avoid scratching the screen.

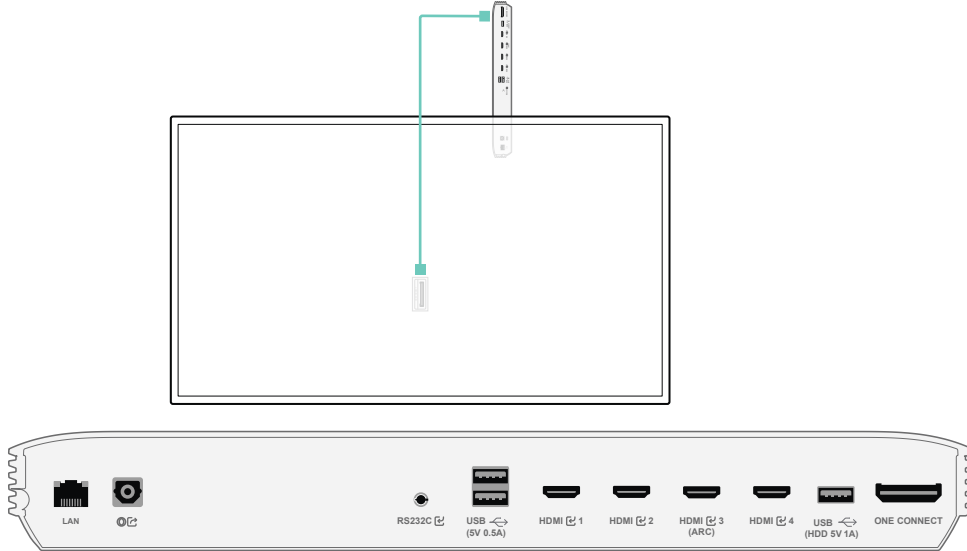


One Connect cable (page 2 of 3)

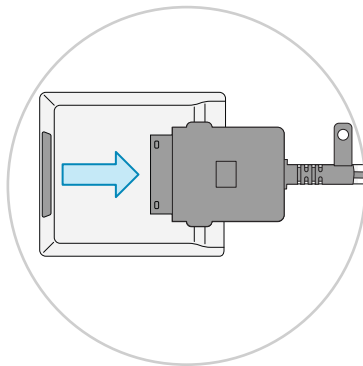
4. Disconnect the One Connect cable

Disconnect the One Connect cable from the One Connect box and the screen.

Take care not to bend the One Connect cable too much; it's fragile.



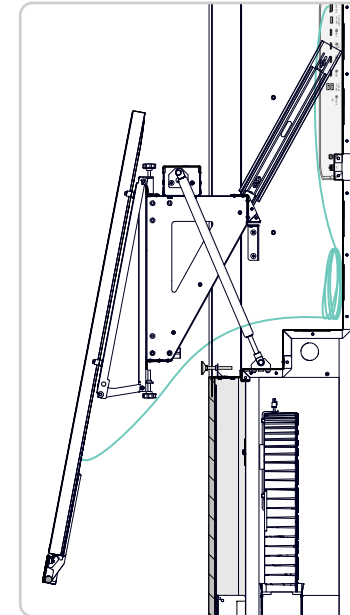
Squeeze the buttons on the sides of the connector and pull it out of the socket on the screen.



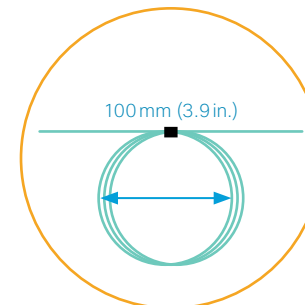
5. Connect the new One Connect cable

Take care not to bend the One Connect cable too much; it's fragile.

Carefully wind the cable and hang it on the back wall.



One Connect cable, side view



Always take care not to pinch or bend the One Connect cable too much; it's fragile.

One Connect cable (page 3 of 3)

6. *Move the main screen up*

Use the handle and push the screen up to the normal position. Align the tops of the screens and push them together to meet at the center split line.

7. *Connect power to the screen and One Connect box*

Connect the power to the One Connect box to the wall socket. Refer to the [Wiring diagram](#).

Left One Connect box power cable (S7)

Right One Connect box power cable (S8)

8. *Connect power to the main screen*

9. *Power on the main screen*

The screen should power on automatically. If this does not happen, power on the screen using the remote control or button under screen.

Speakers

Loudspeakers	49
Subwoofers	52

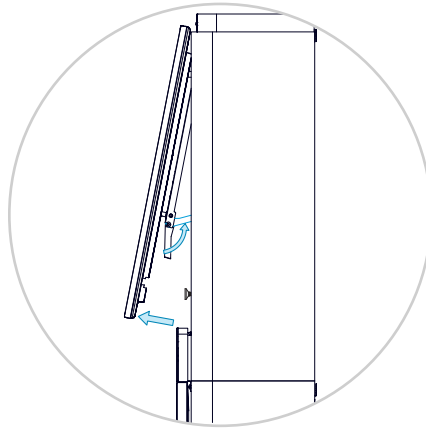
Loudspeakers (page 1 of 3)

The system has twelve loudspeakers; six on each side of the camera. These are referenced by the identifiers as shown in the illustration.

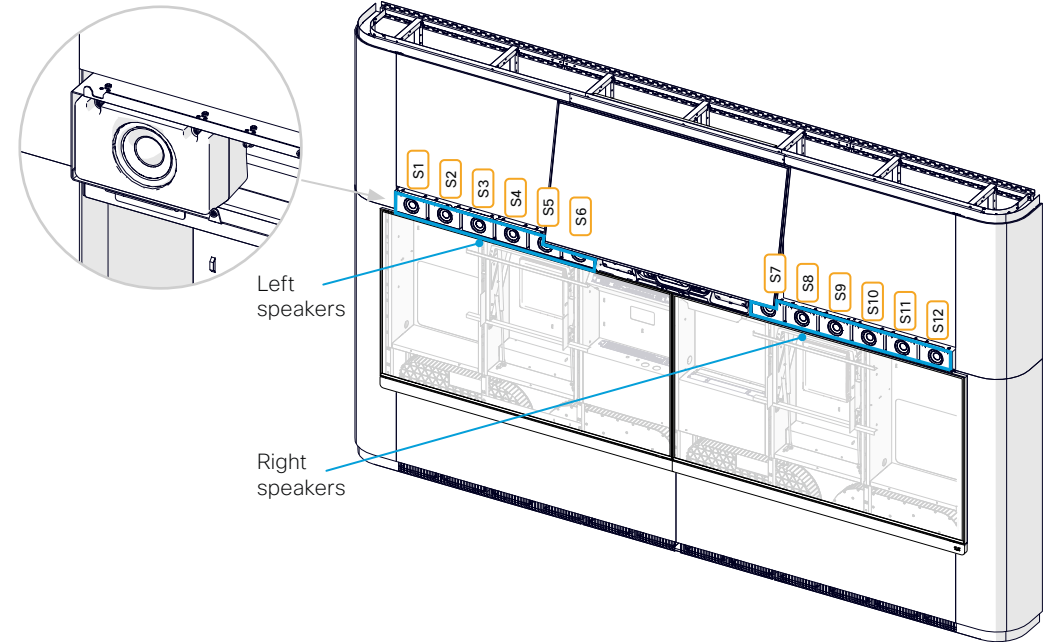
PID: CS-PANO-SPKR= (speaker)

1. Tilt out the content screen

Lift the lever behind the screen and fix the screen in a tilted position.

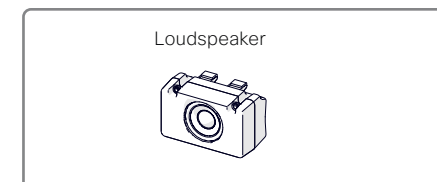


Side view



2. Remove the deco ring and speaker grille

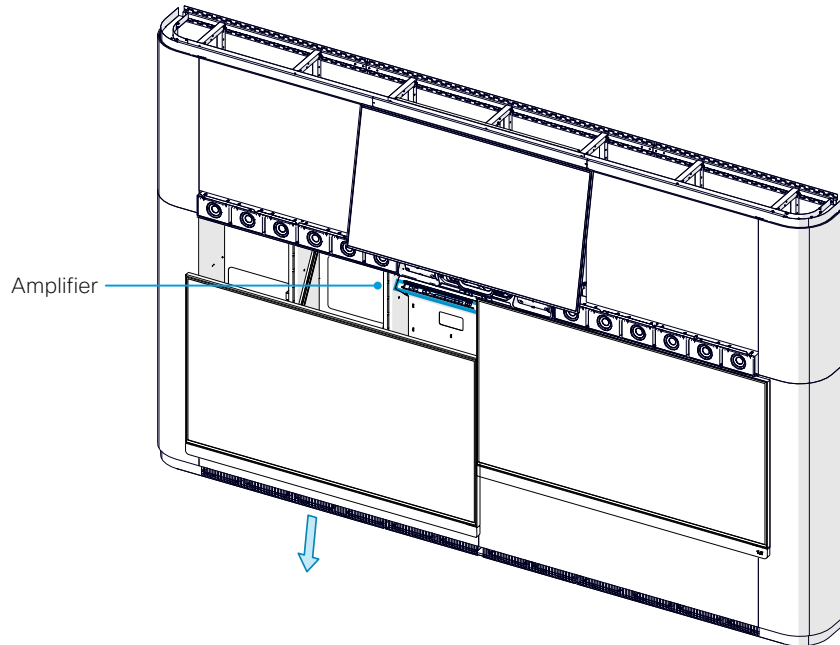
The speaker grille is split at center; each part is fastened by magnets. See the [Speaker grille](#) section for illustrations.



Loudspeakers (page 2 of 3)

3. Move the LEFT main screen downwards

Pull the left main screen downwards by using the handle at the bottom of the deco grille.

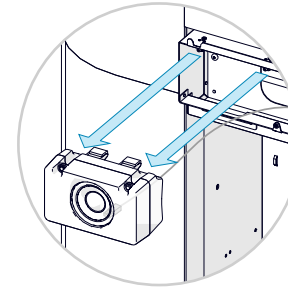


4. Disconnect power from the amplifier

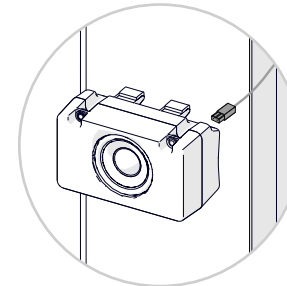
Pull out the power cable from the amplifier connections panel. Refer to the [Wiring diagram](#) for an image of the amplifier connector panel.

5. Pull the speaker out from the mounting structure

Check that the rubber gaskets stay firmly on the pegs.



6. Disconnect the cable



Loudspeakers (page 3 of 3)

7. *Connect the correct cable to the new loudspeaker*

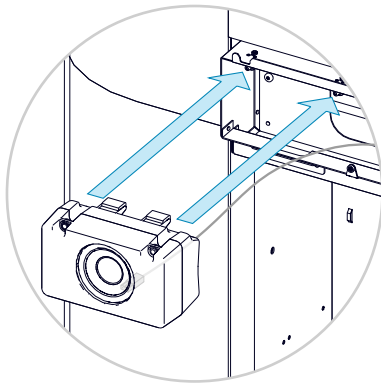
The cables are marked with numbers S1 to S12 - counting from the left, as shown on the previous page. Refer to the [Wiring diagram](#) for illustrations.

When mounting several speakers, we recommend you to start from the center.

8. *Place the loudspeaker onto the pegs*

Check that the rubber gaskets stay firmly on the pegs.

Make sure that no cables, including the cables from the One Connect box, are touching the loudspeakers.



9. *Power on the amplifier*

Refer to the [Wiring diagram](#) for an image of the amplifier connector panel.

10. *Move the main screen up*

Use the handle and push the screen up to the normal position. Align the tops of the screens and push them together to meet at the center split line.

11. *Reattach the speaker grille and deco ring*

See [Speaker grille](#) for illustrations.

12. *Tilt back the content screen*

Pull the content screen slightly outward, so that you can release the levers on both sides. Then, gently let the screen move into vertical position.

Subwoofers (page 1 of 3)

To replace a subwoofer, you will need to disassemble the whole system on the side of the subwoofer that you are replacing. **It is a very time-consuming task.** Refer to the *Room Panorama Installation Guide* for guidance.

PID: CS-PANO-BASS= (subwoofer)

1. *Unplug all the power cables from the sockets*

The power sockets are in the lower cavities on the far left and far right of the system. Refer to the [Wiring diagram](#) for details.

2. *Remove the content screen*

Refer to the [Content screen](#) section.

3. *Remove one main screen*

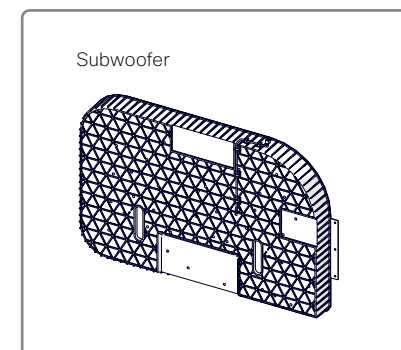
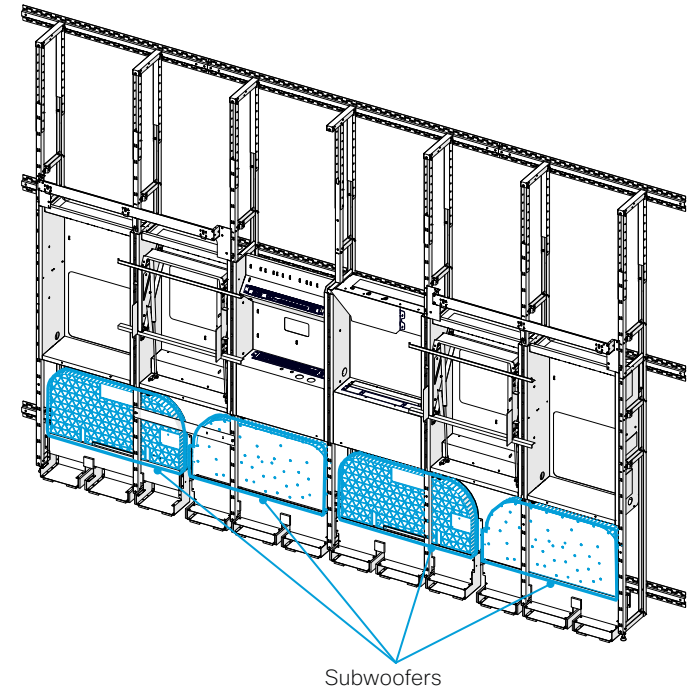
Remove the screen on the side of the subwoofer that you are replacing. This is a big process. Refer to the [Main screens](#) section.

4. *Remove the camera*

Refer to the [Camera](#) section.

5. *Remove loudspeakers*

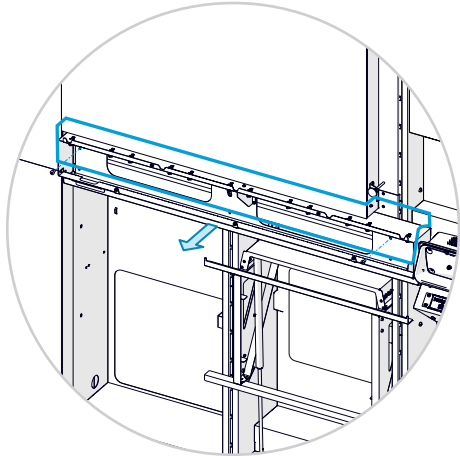
Remove all loudspeakers on the side of the subwoofer that you are replacing. Refer to the [Loudspeakers](#) section.



Subwoofers (page 2 of 3)

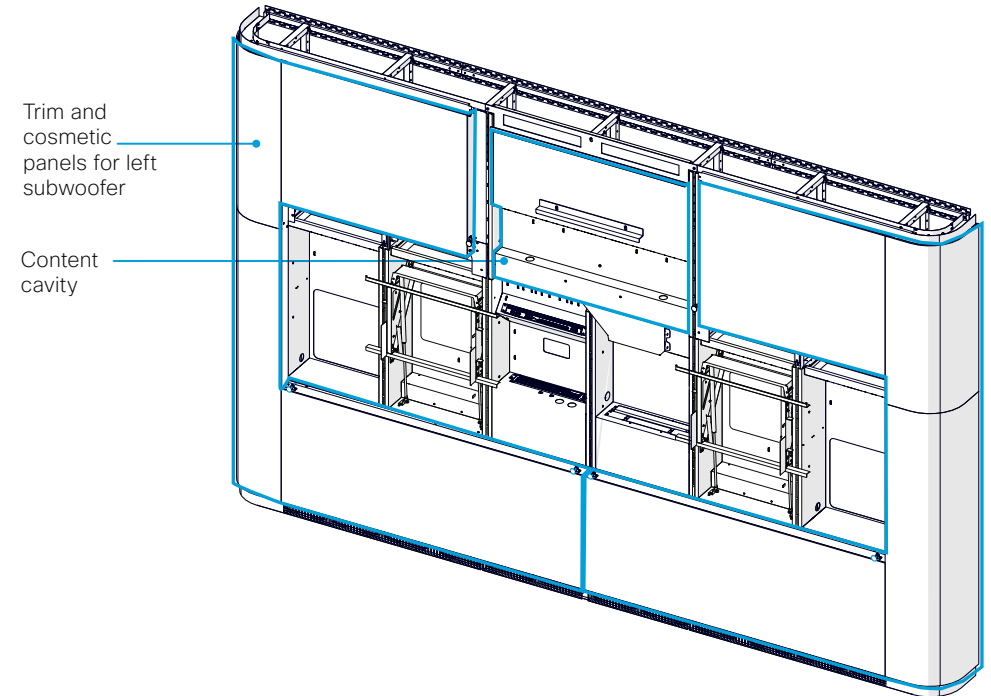
6. *Remove the loudspeaker mounting structure*

Remove the loudspeaker mounting structure on the side of the subwoofer you are replacing.



7. *Remove trims and cosmetic panels*

Remove all the trims and cosmetic panels on the side of the subwoofer you are replacing. See the illustration to the right for reference.



Subwoofers (page 3 of 3)

8. *Remove the content cavity*

This is the cavity where the content screen is placed. See the illustration to the right for reference.

To avoid the risk of personal injury, do not disassemble any of the pre-assembled parts of a display cavity.

9. *Lift and mount the cavities 2 slots up*

On the side of the subwoofer, there are cavities above the subwoofer. Because you must lift it up vertically to be able to remove it, these block your way to remove the subwoofer. So, you will need to lift that cavity (or more than one cavity) upwards to give you space to get the subwoofer out.

To avoid the risk of personal injury, do not disassemble any of the pre-assembled parts of a display cavity.

10. *Remove the subwoofer*

11. *Install the new subwoofer and replace all of the parts by following the above steps in reverse*

Refer to the *Room Panorama Installation Guide* for guidance.

Camera

Camera	56
--------------	----

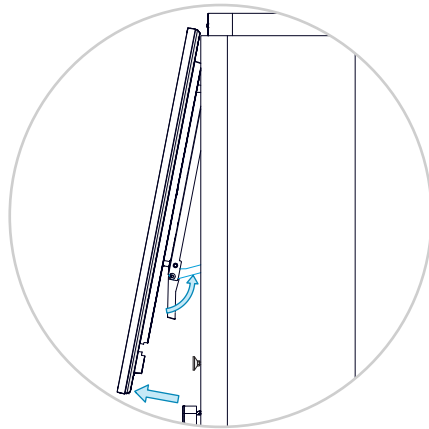
Camera (page 1 of 4)

This section describes how to remove and replace the camera.

PID: CS-RPQUADCAM= (camera)

1. Tilt out the content screen

Lift the lever behind the screen and fix the screen in a tilted position.



Side view

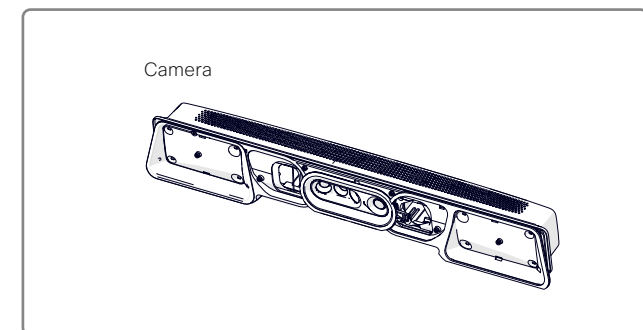
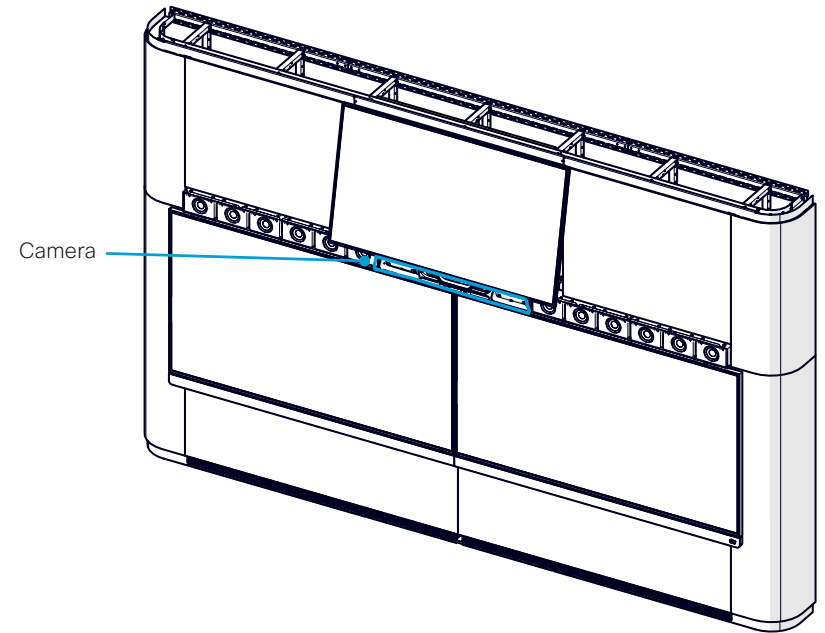
2. Remove the deco ring and speaker grille

See [Speaker grille](#) for illustrations.

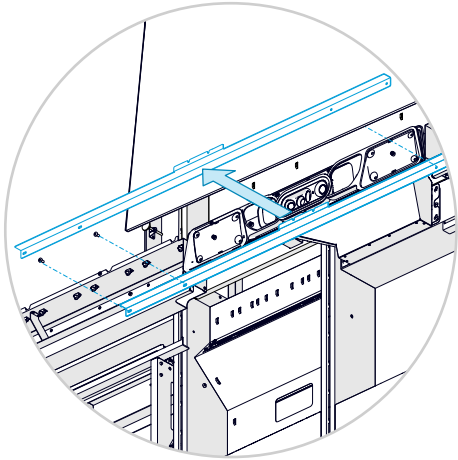
3. Move the main screens downwards

In this task, you will need to have both main screens down at the same time. This is not recommended because of the potential for scratching the screens. Be careful and push the screens back up as soon as you can.

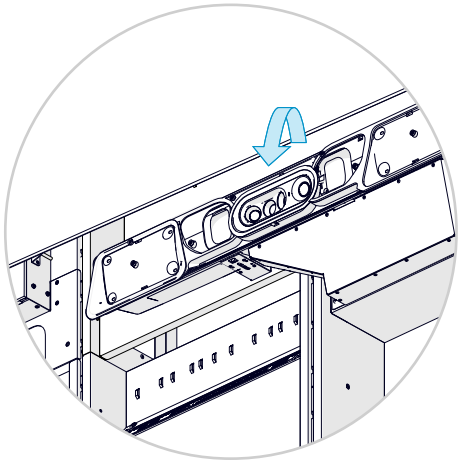
Pull the main screens downwards by using the handles at the bottom of the deco grille.



4. Remove the screen support profile

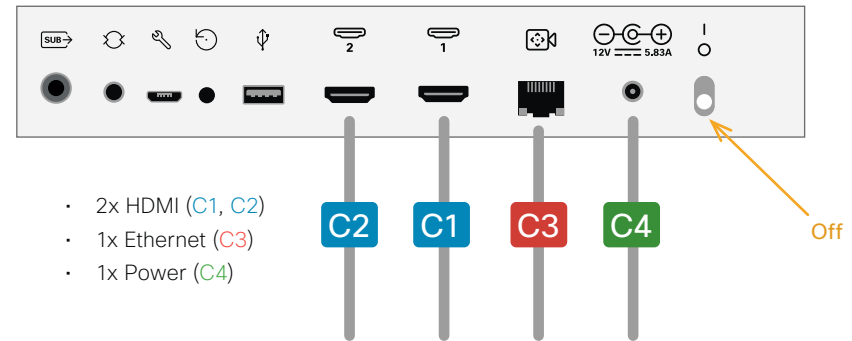


5. Tilt down the camera



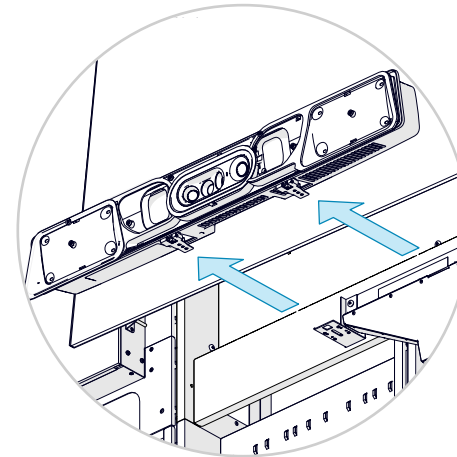
6. Power off camera and disconnect the cables

Switch off the power and disconnect the cables. Refer to the [Wiring diagram](#).



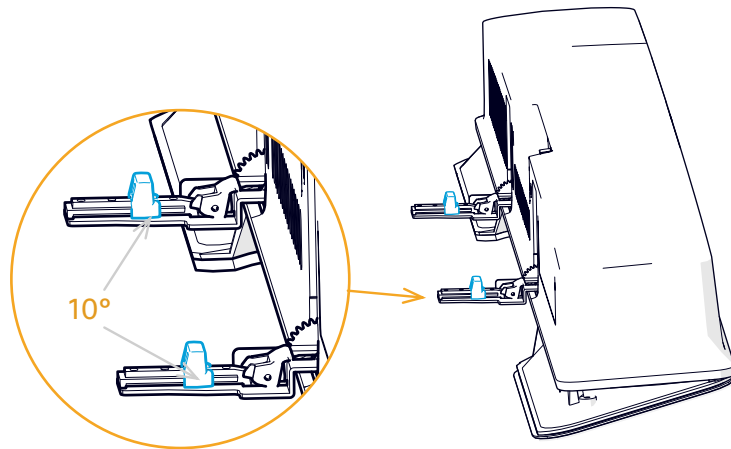
7. Pull out the camera

Press both buttons and then pull the camera gently toward you to remove it.



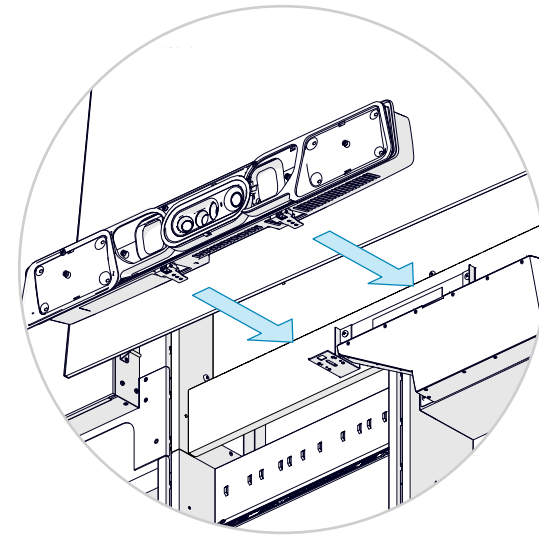
8. *Set the tilt angle on the new camera to 10°*

Flip down the brackets and **move the sliders to 10°**. This is the required tilt angle for this product. Flip the brackets back when done.



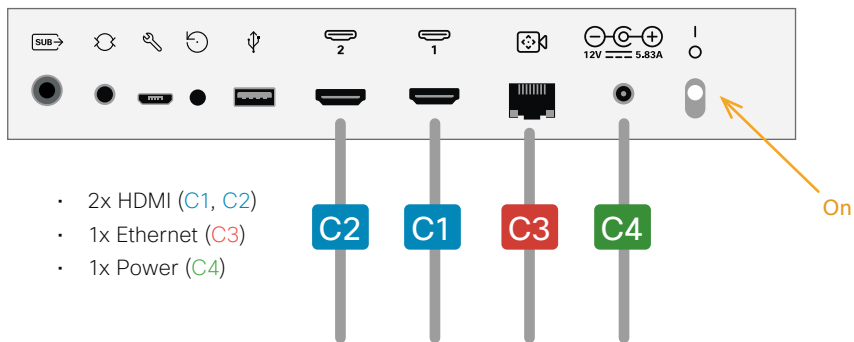
9. *Snap the new camera onto the bracket*

Click the camera onto the bracket. You should hear a click sound from both entry points. Make sure the camera is fully in place by pulling it gently.

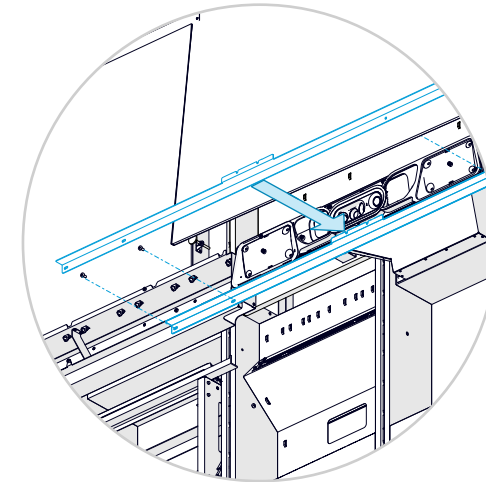


10. Connect the cables and switch on the power

- Connect the cables to the camera according to the [Wiring diagram](#): You may tilt the camera for easier access to the connector panel.
- Fasten the cables to the rack cavity with Velcro to prevent the cables from touching the camera and cause rattling noise.
- Set the power switch in *On* position.



11. Mount the screen support profile



12. Move the main screens up

Use the handles and push the screens up to the normal position. Align the tops of the screens and push them together to meet at the center split line.

13. Mount the speaker grille and deco ring

The speaker grille is split at center; each part is fastened by magnets. See the [Speaker grille](#) section for illustrations.

14. Tilt the content screen back

Pull the content screen slightly outward, so that you can release the levers on both sides. Then, gently let the screen move into vertical position.

Fan and antenna

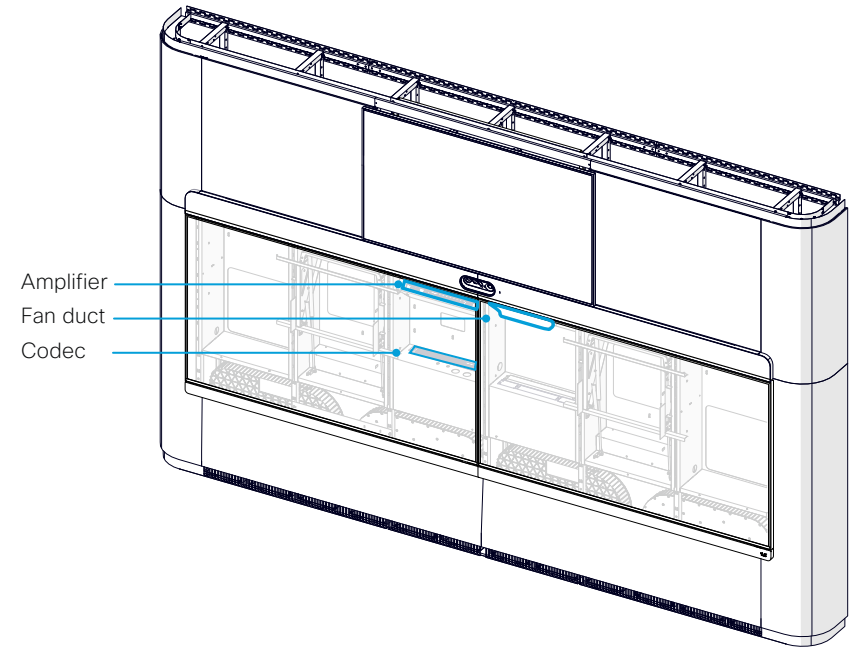
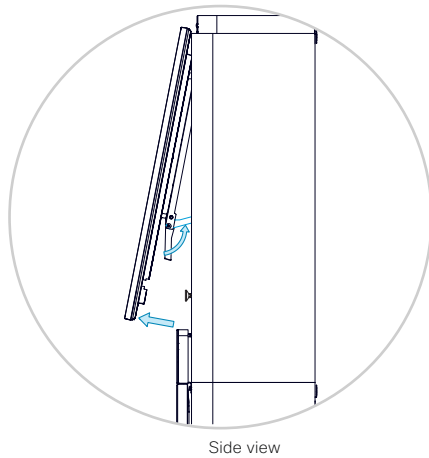
Fan module.....	61
Antenna kit.....	67

Fan module (page 1 of 6)

PID: CS-PANO-FANKIT= (fan kit, without the mounting plate)

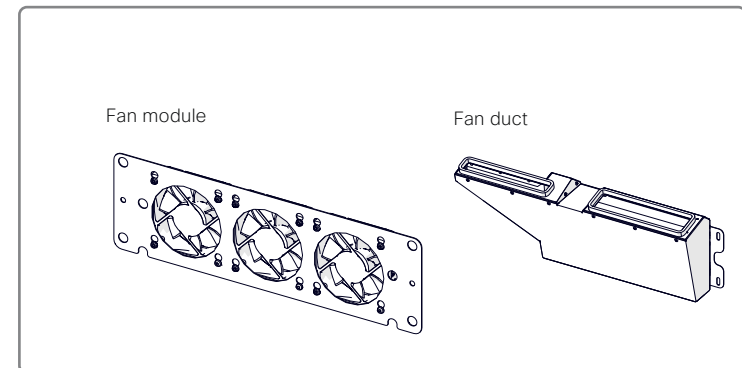
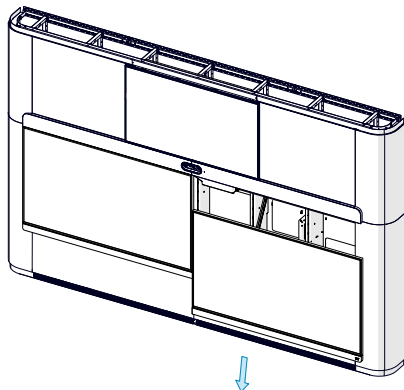
1. Tilt out the content screen

Lift the lever behind the screen and fix the screen in a tilted position.



2. Move the RIGHT main screen downwards

Pull the right main screen downwards by using the handle at the bottom of the deco grille.



Fan module (page 2 of 6)

3. Remove the deco ring and speaker grille

The speaker grille is split at center; each part is fastened by magnets. See the [Speaker grille](#) section for illustrations.

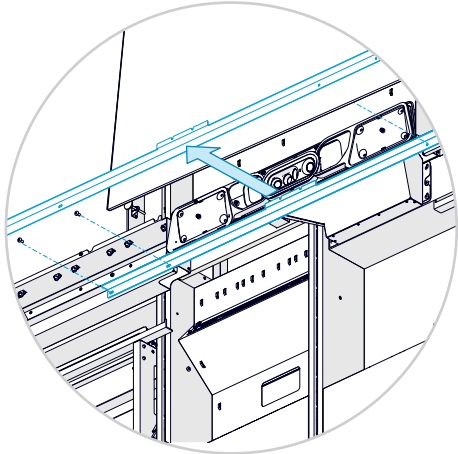
4. Switch the power switch on the codec to OFF

See the codec connections panel. Refer to the [Wiring diagram](#).

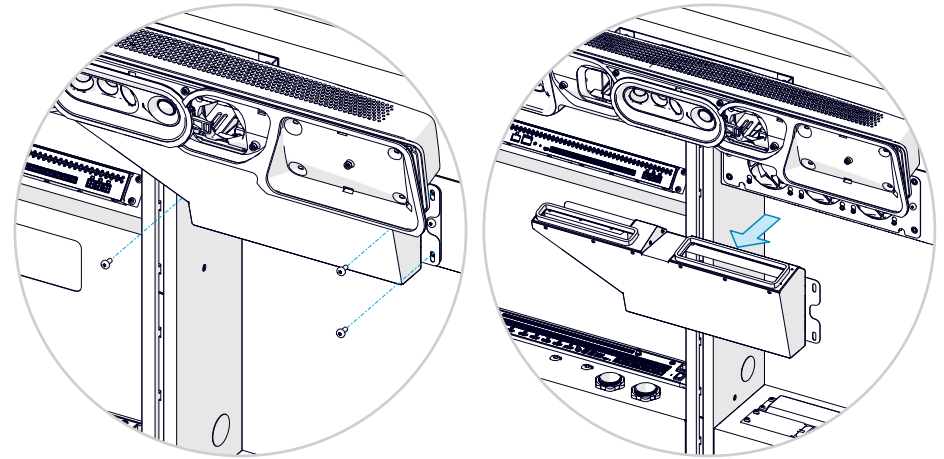
5. Disconnect power from the amplifier

Pull out the power cable from the amplifier connections panel. Refer to the [Wiring diagram](#).

6. Remove the screen support profile



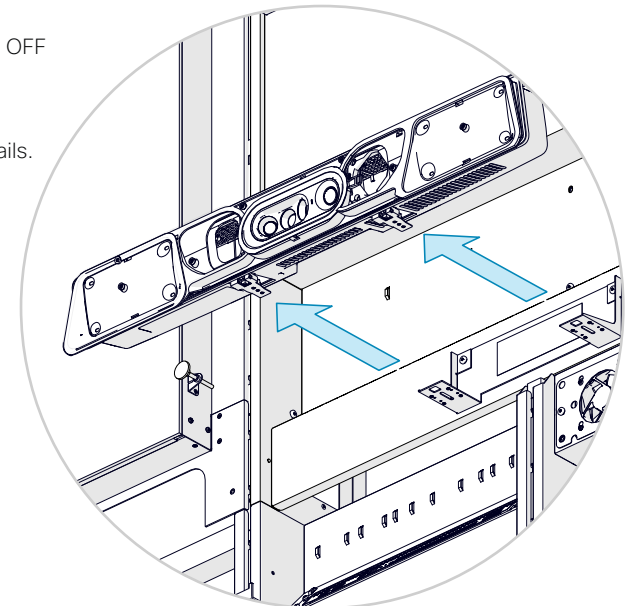
7. Unscrew and remove the fan duct



8. Remove the camera

- Tilt down the camera.
- Set camera power switch to OFF
- Remove the cables
- Pull out the camera

Refer to the [Camera](#) section for details.



Fan module (page 3 of 6)

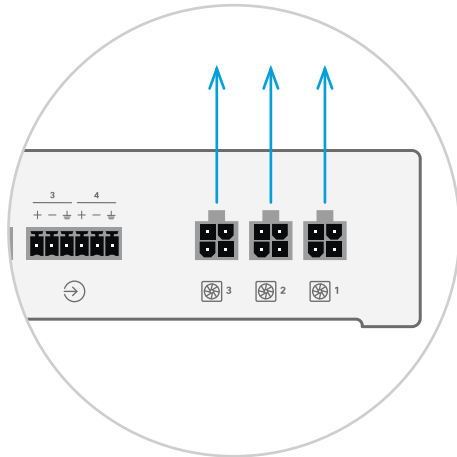
9. Disconnect cables from the amplifier

Refer to the [Wiring diagram](#).



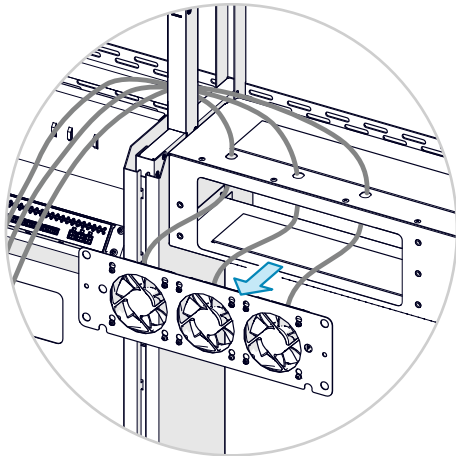
The cables will follow with the fan kit when you remove it.

To be able to pull the new cables back through the system, you should attach nylon draw tape to the cable ends near the amplifier before removing the old unit.



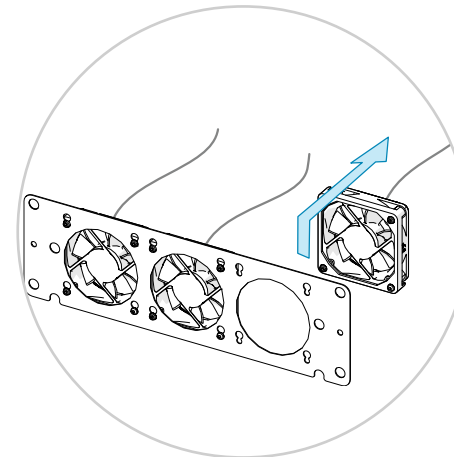
10. Unscrew and remove the fan module

The cables and nylon draw tape will follow with it. Take care not to remove the nylon draw tape from the system.



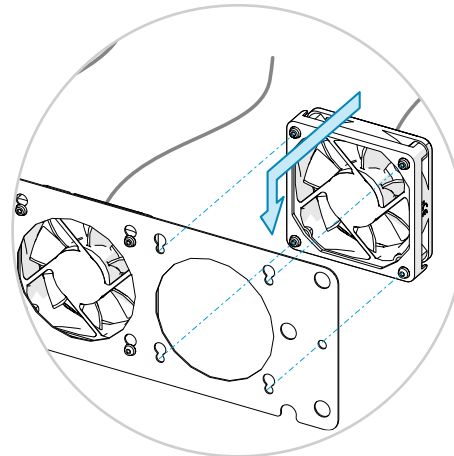
11. Remove the fans from the plate

Remove all the fans from the fan plate.



12. Mount the new fans on the plate

Mount each new fan onto the fan plate.



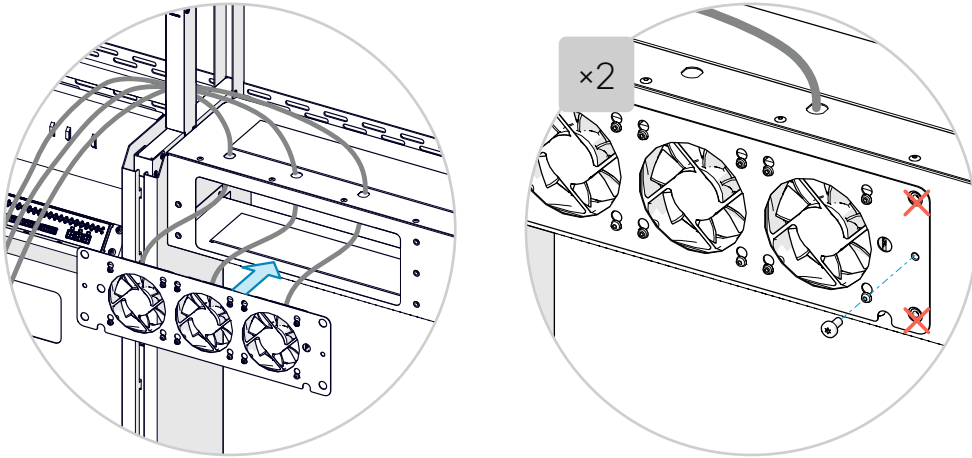
Fan module (page 4 of 6)

13. Mount the fan module

Tie the nylon draw tape to the new fan cables.

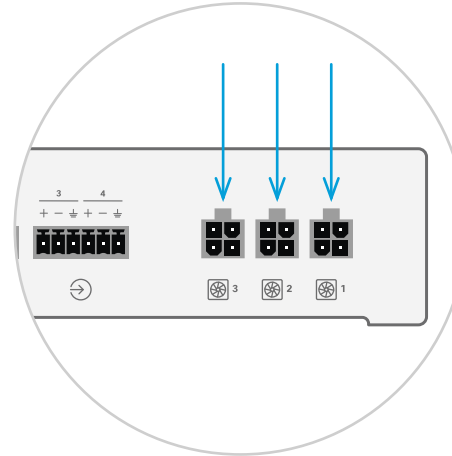
Hold the fan module with the cables upward. Thread the cables through the small holes in the cooling cavity, and insert the fan module in the slot.

Fasten the screw on either side.



14. Connect the cables to the amplifier

Remove the nylon tape from the cables and connect the cables to the amplifier. Refer to the [Wiring diagram](#).



15. Mount the camera

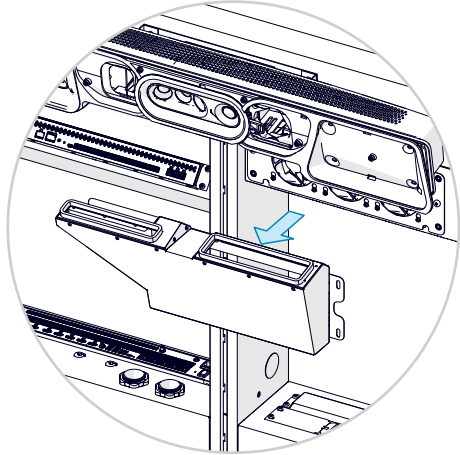
- Snap the new camera onto the bracket
- Connect the cables
- Set camera power switch to ON

Refer to the [Camera](#) section for details.

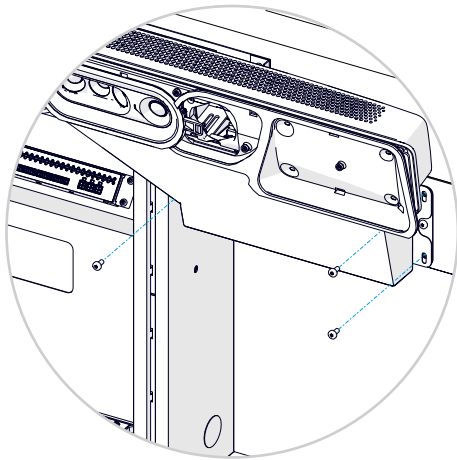
Fan module (page 5 of 6)

16. Mount the fan duct

The fan duct is placed in front of the fans, just below the camera.

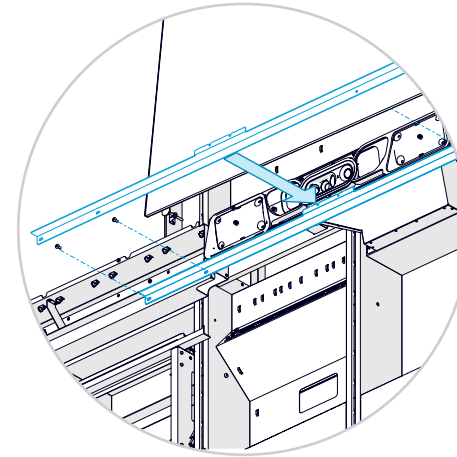


It's fastened with three screws. Push the duct gently upward toward the camera when tightening the screws.



You want the duct as close to the camera as possible, but don't push so hard that the camera is moved out of position.

17. Mount the screen support profile



18. Connect power to the amplifier

Plug in the power cable to the amplifier connections panel. Refer to the [Wiring diagram](#).

19. Switch the power switch on the codec to ON

See the codec connections panel. Refer to the [Wiring diagram](#).

Fan module (page 6 of 6)

20. Mount the speaker grille and deco ring

The speaker grille is split at center; each part is fastened by magnets. See the [Speaker grille](#) section for illustrations.

21. Move the main screen up

Use the handle and push the screen up to the normal position. Align the tops of the screens and push them together to meet at the center split line.

22. Tilt the content screen back

Pull the content screen slightly outward, so that you can release the levers on both sides. Then, gently let the screen move into vertical position.

Antenna kit (page 1 of 5)

PID: CS-PANO-ANT= (antenna kit)




The antenna support is fastened below the left display cavity. The antennas themselves face right and inward.

1. Switch off the power switch on the codec

Refer to the [Wiring diagram](#) for an illustration of the codec connector panel.

2. Remove the LEFT main screen

Follow all the steps to remove the LEFT main screen as described in the [Main screens](#) section.




All four safety brackets must be in Safe Mode before mounting or removing a screen

Safe Mode



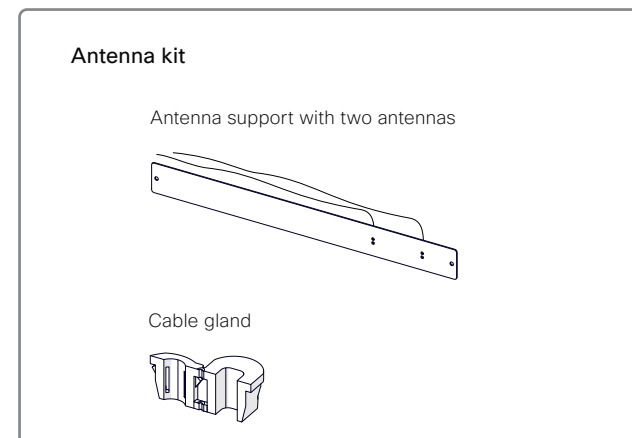
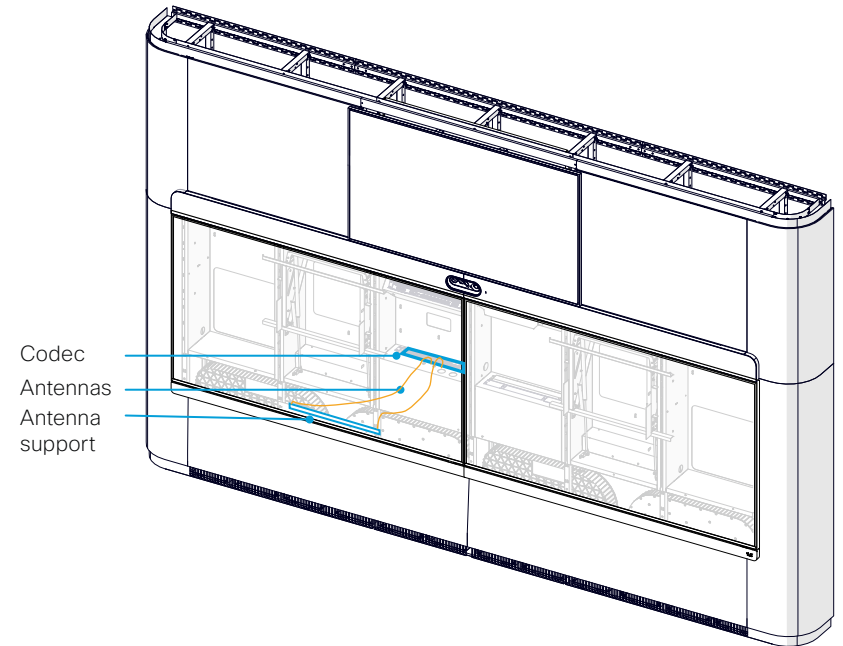
Operational Mode





To avoid the Risk of Personal Injury:

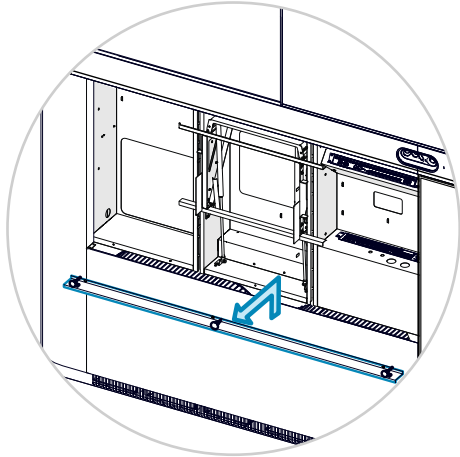
- Never move the screen mount safety brackets out of **Safe Mode** (the horizontal position) when the screen is not hanging on the screen mount module.
- If you must remove the screen from the screen mount module, always move the screen mount safety brackets back to the **Safe Mode** position before lifting off the screen.



Antenna kit (page 2 of 5)

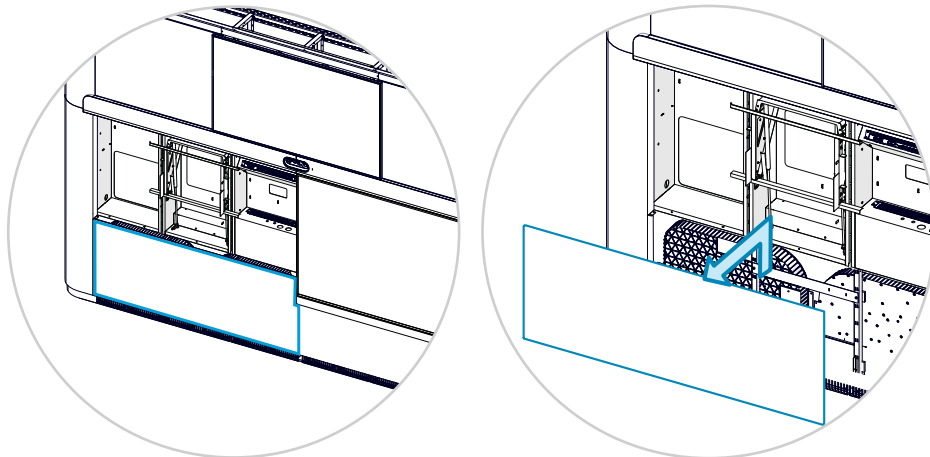
3. Remove the trim on the left side

The trim is above the lower front panel. There are five screws.



4. Remove the lower front panel on the left side

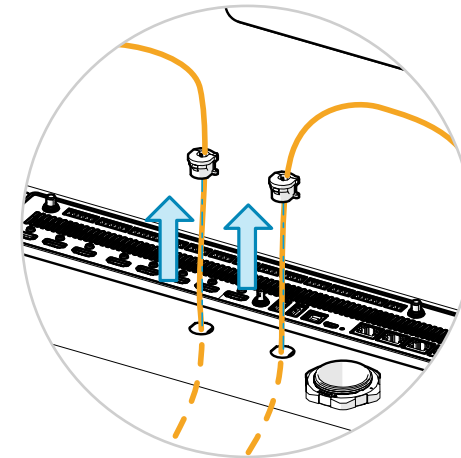
The lower front panel, also known as the lower cosmetic panel, is the wooden panel that covers the subwoofers. Lift it all the way up and out of its slot before pulling it forward.



5. Disconnect the antenna from the codec

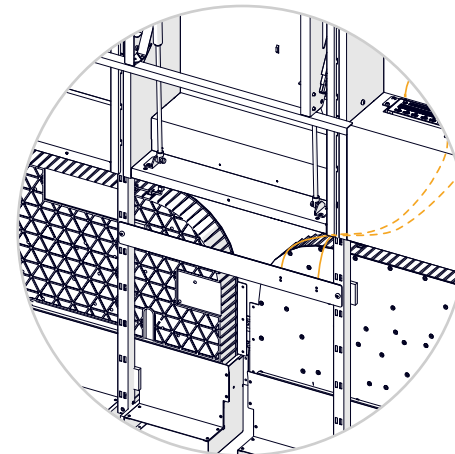
Take off the cable glands. These can be hard to remove. You will need to use pliers.

You will also need *new* cable glands for installing the new antenna, because these can only be used once.



6. Remove the antenna support from the rack

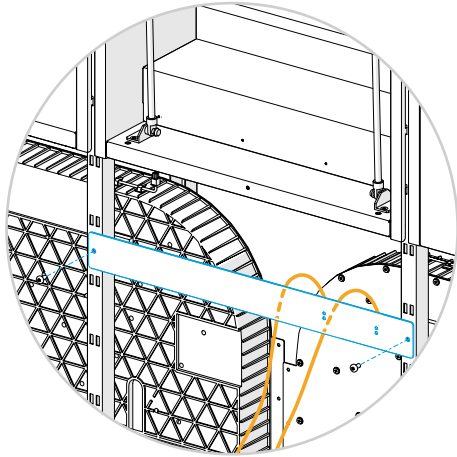
Unscrew the two screws and remove the antenna support.



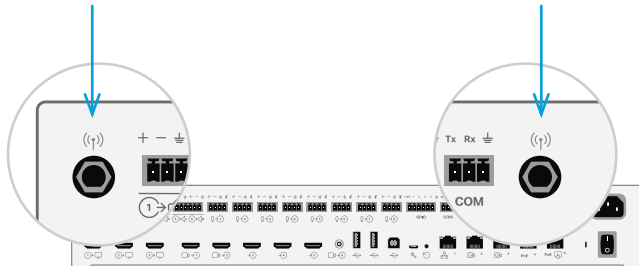
Antenna kit (page 3 of 5)

7. Install the new antennas

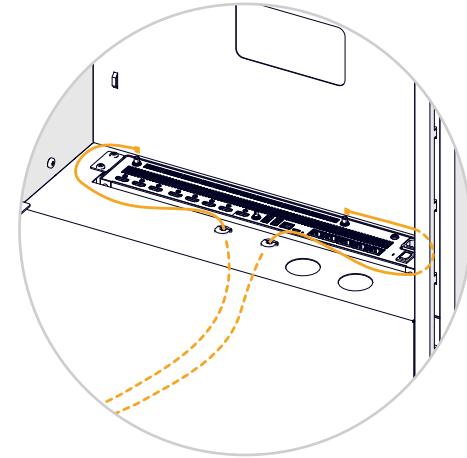
- a. Fasten the antenna support below the left display cavity. The antennas themselves face right and inward. Fasten the support to the risers with two screws.



- b. Thread the two antennas up through the small holes in the rack cavity, and connect them to the codec. Both antennas are identical, it does not matter which cable goes where, but both needs to be connected.



- c. Guide the antennas around the codec as shown above. Then, attach the cable glands for strain relief.

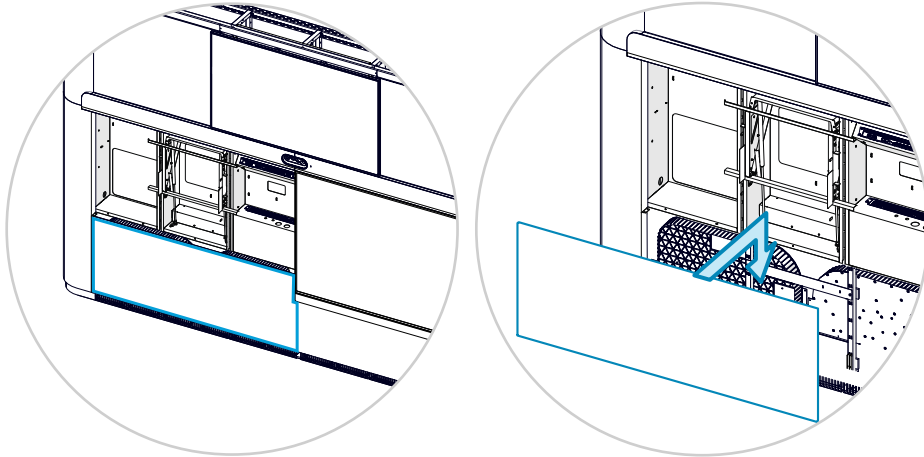


- d. Fasten the antennas to the risers with Velcro to prevent them from touching the subwoofers and cause rattling noise.

Antenna kit (page 4 of 5)

8. Mount the lower front panel

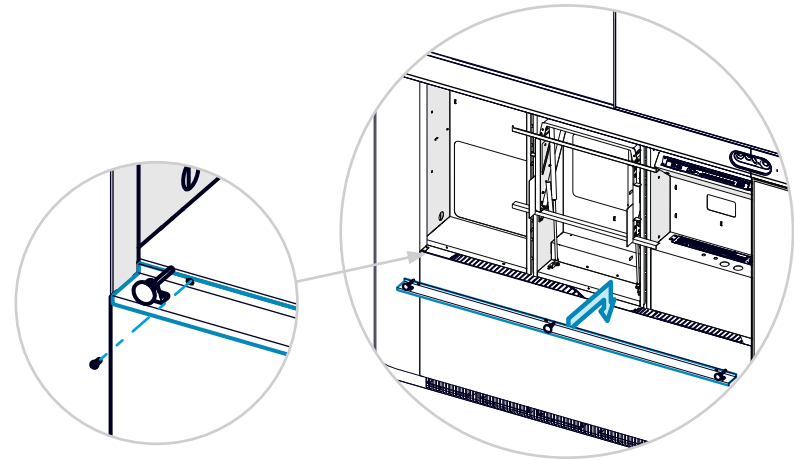
Slide the lower front panel onto the profiles, both at the bottom and at the outer side.



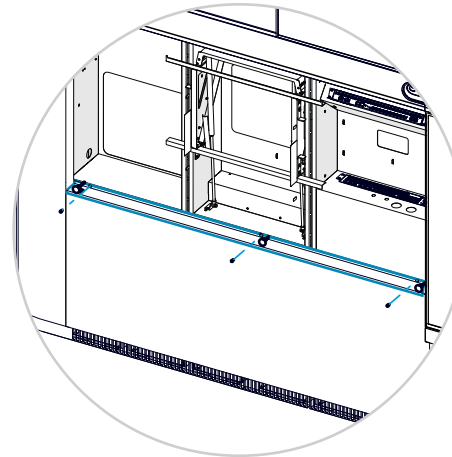
Make sure to fit the groove of the panel fully onto both profiles.

9. Mount the trim

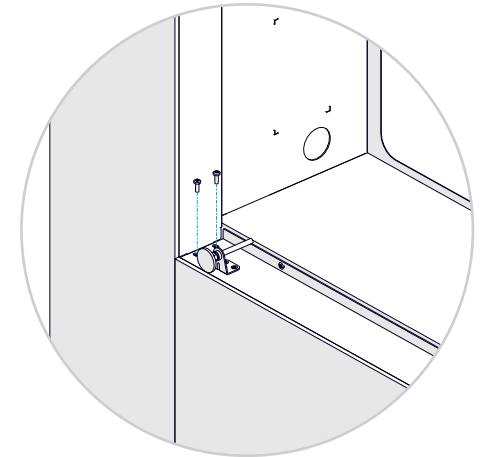
Fit the trim fully into the groove of the front panel, before you fasten the screws.



This side toward the corner



Three screws from the front.



In the corner, two screws from the top.
Push the corner panel toward center when fastening these screws.

Antenna kit (page 5 of 5)

10. Turn the power switch on the codec to ON

Refer to the [Wiring diagram](#) for an illustration of the codec connector panel.

11. Mount the LEFT main screen

See the [Main screens](#) section for instructions.

12. Move the main screen up

Use the handle and push the screen up to the normal position. Align the tops of the screens and push them together to meet at the center split line.

Codec and amplifier

Codec	73
Amplifier	75
Power supply units for the amplifier	77

Codec (page 1 of 2)

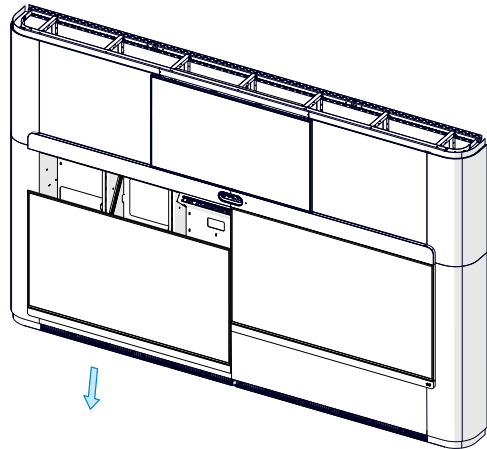
Cisco Codec Pro

PIDs:

- Codec Pro without rack ears: CS-CODEC-PRO=, CS-CODEC-PRO-NR= (non-radio), CS-CODEC-PRO-NR-K7= (non-encrypted)
- Rack ears for codec: CS-CPRO-RACKEARS=

1. Move the LEFT main screen downwards

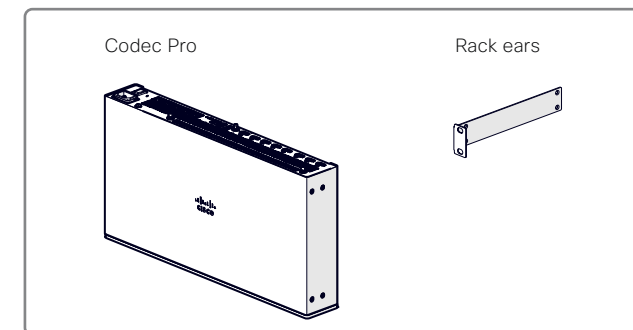
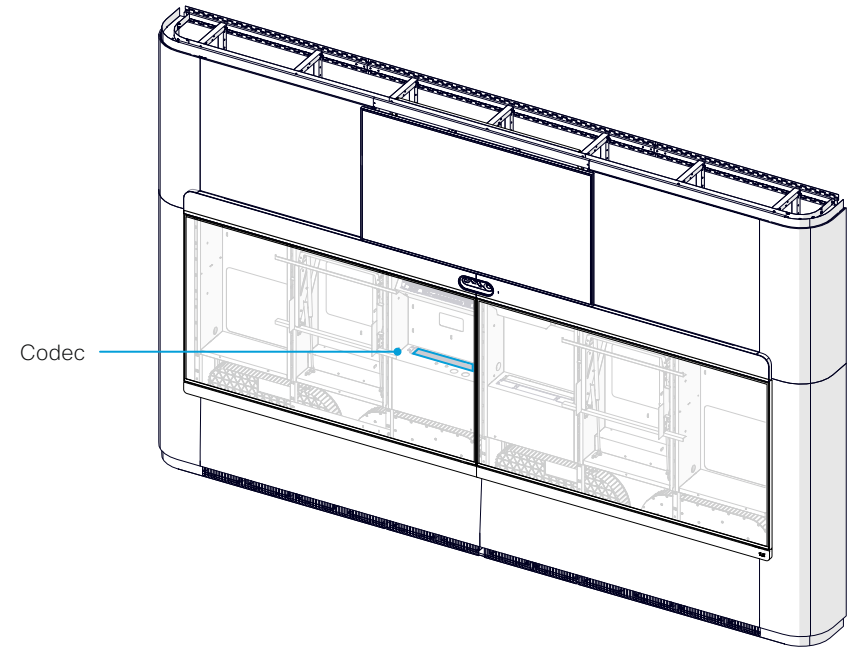
Pull the main screen downwards by using the handle at the bottom of the deco grille.



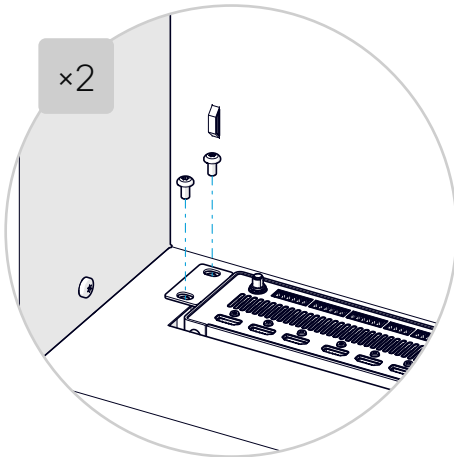
2. Switch the power switch on the codec to the OFF position

3. Disconnect cables from the codec

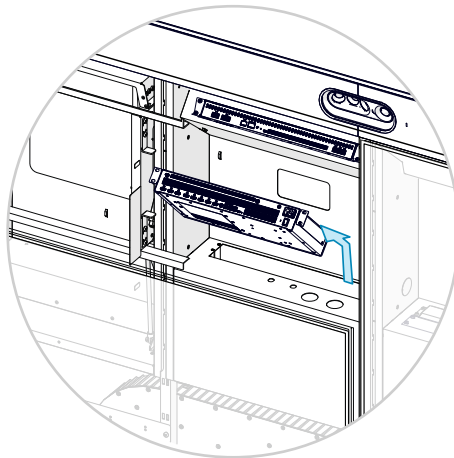
Refer to the [Wiring diagram](#) for an illustration of the codec connector panel.



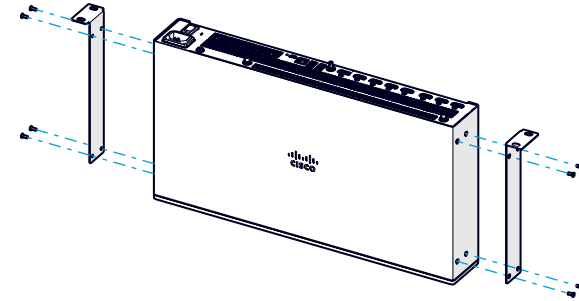
4. *Unscrew the screws holding the codec*



5. *Remove the codec from the rack*



6. *Remove rack ears from the codec*



7. *Place the rack ears onto the new codec*

Remove the eight pre-mounted screws, put the rack ears in place, and fasten them using the same screws and screw holes.

Remove the rubber feet from the codec.

8. *Place the codec in the rack*

Slide the codec into its slot. Fasten it with four screws.

9. *Connect the cables*

Connect the cables to the codec according to the [Wiring diagram](#).

10. *Switch the power switch on the codec to the ON position*

11. *Move the main screen up*

Use the handle and push the screen up to the normal position. Align the tops of the screens and push them together to meet at the center split line.

Amplifier (page 1 of 2)

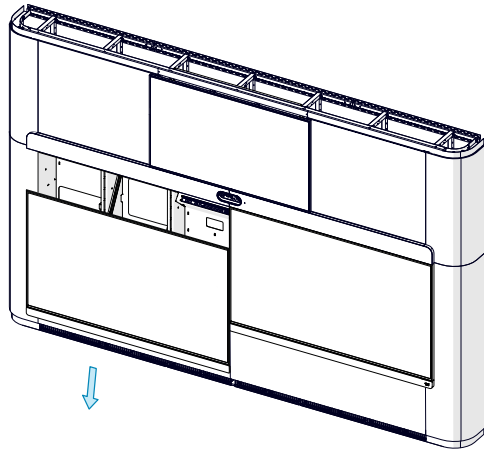
The Cisco Natural Audio Module IV is a 16 channel audio power amplifier with Ethernet and analog inputs.

PIDs:

- CS-PANO-DNAM4= (amplifier with rack ears)

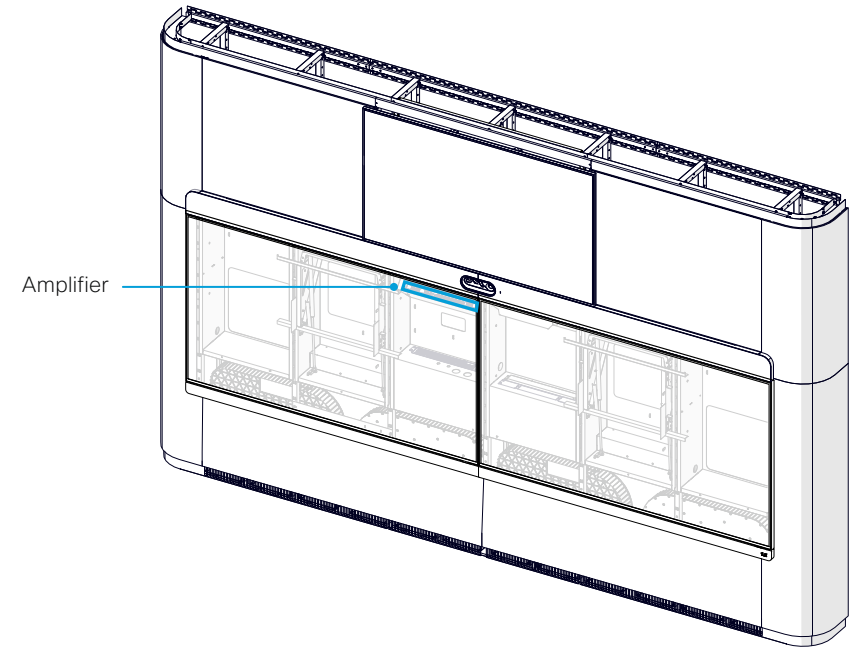
1. Move the LEFT main screen downwards

Pull the main screen downwards by using the handle at the bottom of the deco grille.

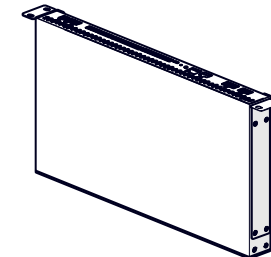


2. Disconnect the cables from the amplifier

Refer to the [Wiring diagram](#) for an image of the amplifier connector panel.

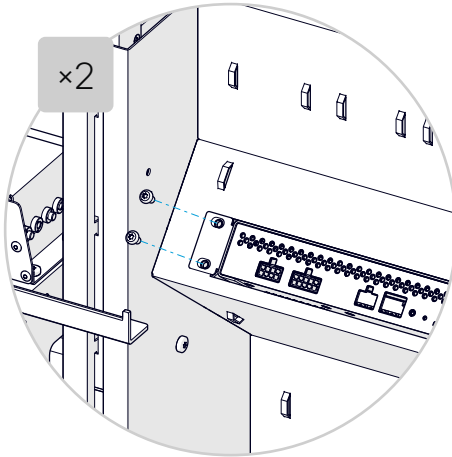


Amplifier with rack ears

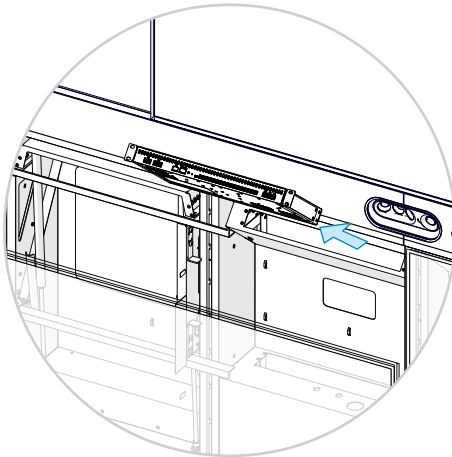


Amplifier (page 2 of 2)

3. *Unscrew the screws holding the amplifier*



4. *Remove the amplifier*



5. *Mount the new amplifier*

Slide the amplifier into its slot. Fasten it with four screws.

6. *Connect the cables to the amplifier*

Connect the cables to the amplifier according to the [Wiring diagram](#).

7. *Move the main screen up*

Use the handle and push the screen up to the normal position. Align the tops of the screens and push them together to meet at the center split line.

Power supply units for the amplifier (page 1 of 2)

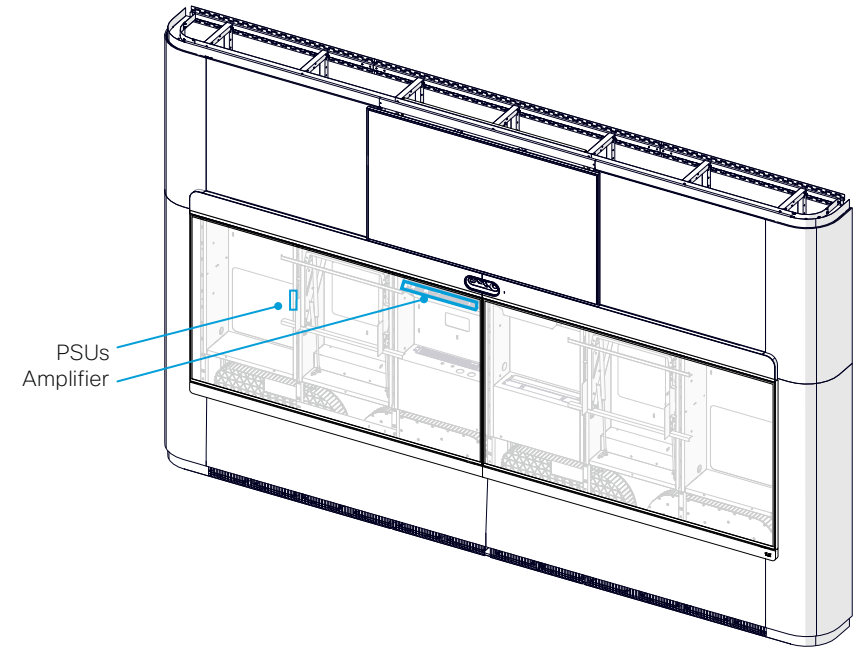
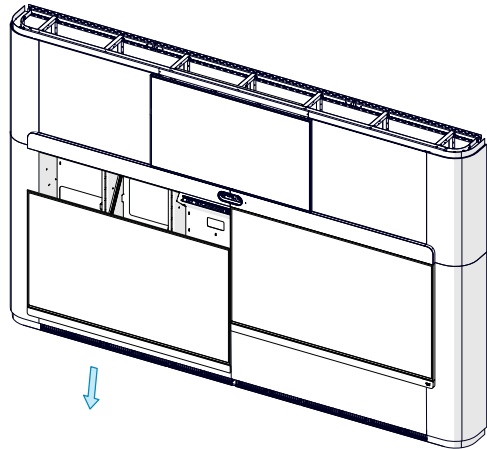
There are two Power Supply Units (PSUs) for the amplifier, one 12V, one 24V. Both PSUs are held in a single PSU bracket located in the left power cavity.

PIDs:

- PSU-12VDC-120W=
- PSU-24VDC-270W=

1. *Move the LEFT main screen downwards*

Pull the main screen downwards by using the handle at the bottom of the deco grille.




2. *Switch power switch on the 24V PSU to OFF*

This is the largest PSU in the left power cavity.

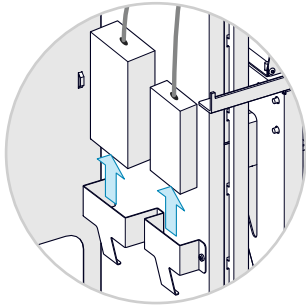
Power supply units for the amplifier (page 2 of 2)

3. *Disconnect the power cable from the PSU*

Refer to the [Wiring diagram](#).

 If you need to remove the cable from the rack, you should attach nylon draw tape to the cable end before removing it. This will be necessary for pulling a new cable back through the system.

4. *Remove the PSU from the bracket*



5. *Install the new PSU into the bracket*

6. *Connect the power cable to the PSU*

Connect the power cable to the PSU according to the [Wiring diagram](#).

7. *Switch the power switch on the 24V PSU to ON*

8. *Move the main screen up*

Use the handle and push the screen up to the normal position. Align the tops of the screens and push them together to meet at the center split line.

Switch

Ethernet switch in the system.....	80
Ethernet switch in the table	83

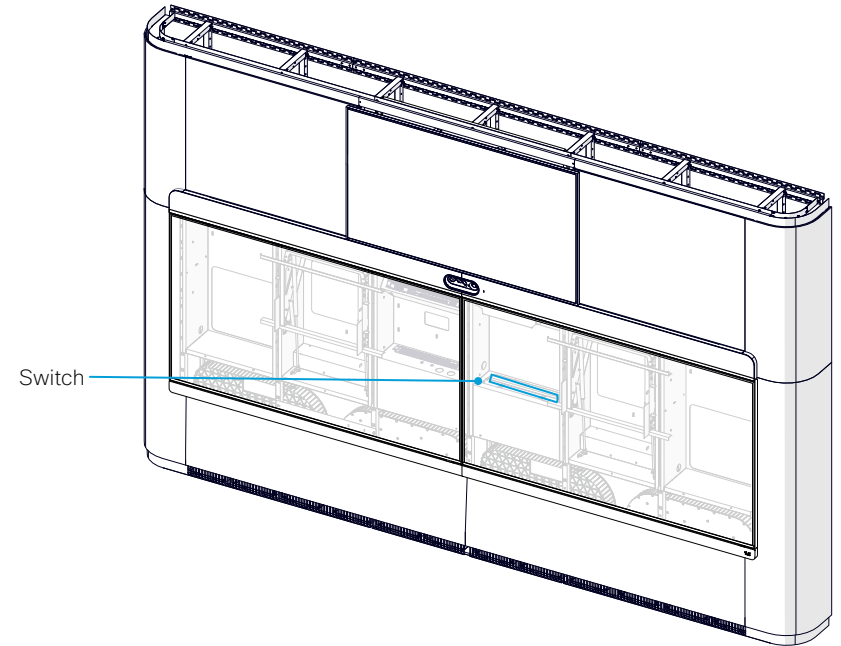
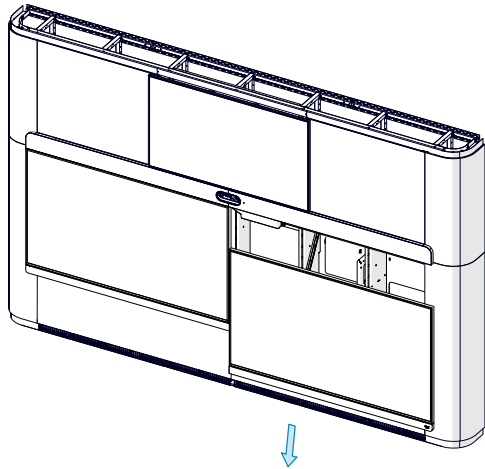
Ethernet switch in the system (page 1 of 3)

PIDs:

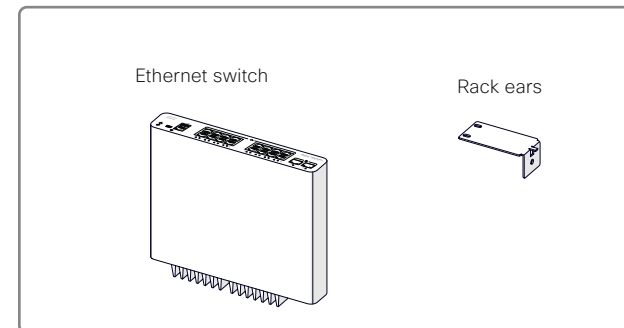
- C1000-16FP-2G-L (Ethernet switch)
- CS-SWCH-RACKEAR= (rack ears for Ethernet switch)

1. Move the RIGHT main screen downwards

Pull the main screen downwards by using the handle at the bottom of the deco grille.

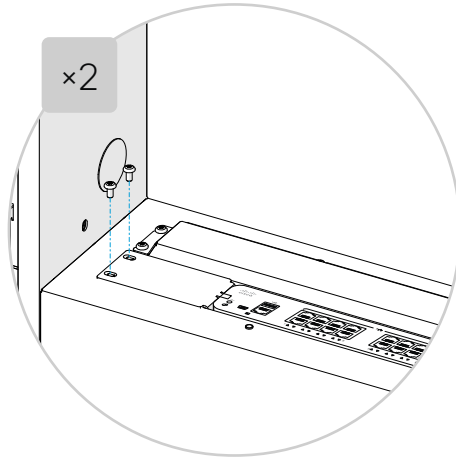


2. Disconnect all Ethernet cables from the switch



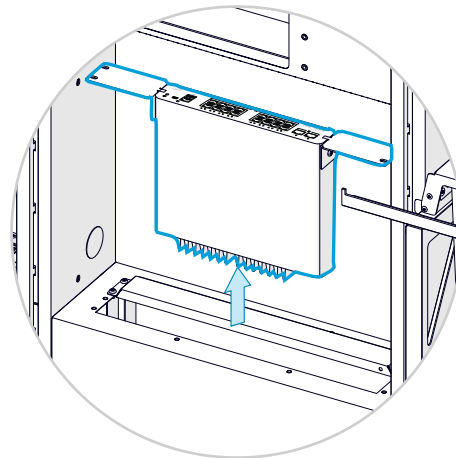
Ethernet switch in the system (page 2 of 3)

3. Remove the screws holding the Ethernet switch

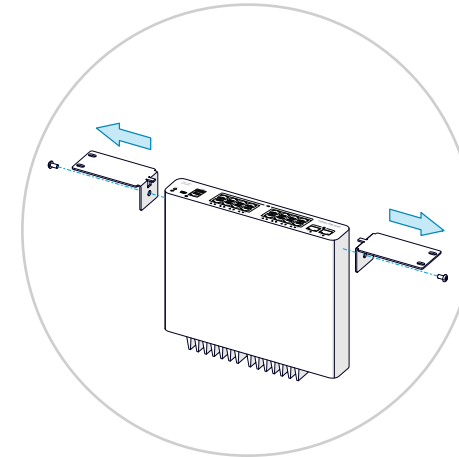


4. Remove the switch and disconnect the power

Lift the switch up carefully, and disconnect the power cable. Be careful that the switch is not lifted too quickly to avoid that the power cable drops inside the wall.



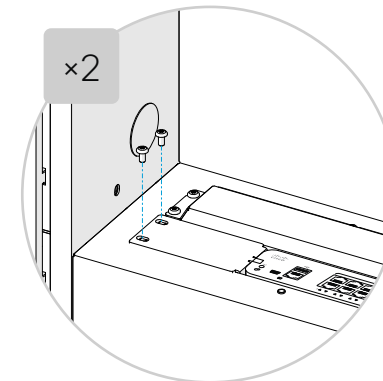
5. Remove rack ears from the switch



6. Place the rack ears onto the new switch

7. Connect power and place the new switch into the system

8. Fasten the screws for the switch



Ethernet switch in the system (page 3 of 3)

9. Connect Ethernet cables to the switch

Connect the Ethernet cables to the switch according to the [Wiring diagram](#).

10. Move the main screen up

Use the handle and push the screen up to the normal position. Align the tops of the screens and push them together to meet at the center split line.

Ethernet switch in the table

PIDs:

- C1000-16FP-2G-L (Ethernet switch)
- CMP-MGNT-TRAY= (mounting tray for Ethernet switch)

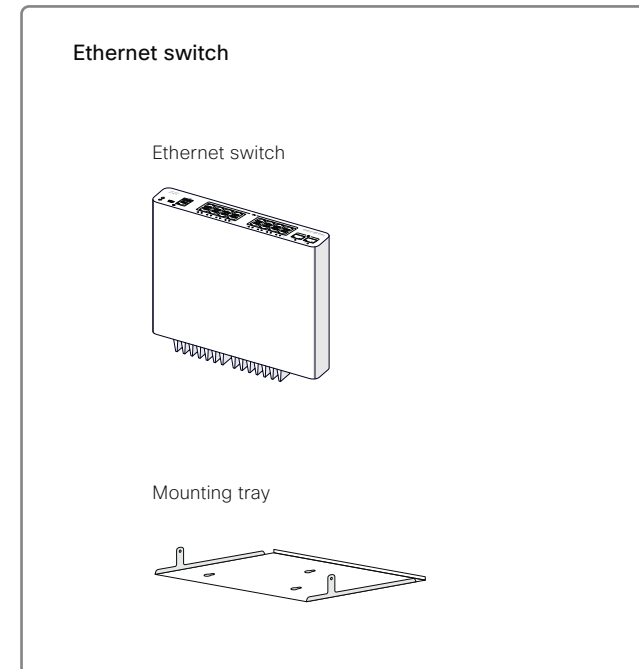
1. *Disconnect cables from the switch*

Refer to the [Wiring diagram](#).

2. *Unscrew and remove the switch from the mounting tray*

3. *Place the new switch into the tray and screw it into place*

4. *Connect the cables to the switch*



Cisco contacts

On our web site you will find an overview of the worldwide Cisco contacts.

Go to: <https://www.cisco.com/go/offices>

Corporate Headquarters
Cisco Systems, Inc.
170 West Tasman Dr.
San Jose, CA 95134 USA

Intellectual property rights

THE SPECIFICATIONS AND INFORMATION REGARDING THE PRODUCTS IN THIS MANUAL ARE SUBJECT TO CHANGE WITHOUT NOTICE. ALL STATEMENTS, INFORMATION, AND RECOMMENDATIONS IN THIS MANUAL ARE BELIEVED TO BE ACCURATE BUT ARE PRESENTED WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED. USERS MUST TAKE FULL RESPONSIBILITY FOR THEIR APPLICATION OF ANY PRODUCTS.

THE SOFTWARE LICENSE AND LIMITED WARRANTY FOR THE ACCOMPANYING PRODUCT ARE SET FORTH IN THE INFORMATION PACKET THAT SHIPPED WITH THE PRODUCT AND ARE INCORPORATED HEREIN BY THIS REFERENCE. IF YOU ARE UNABLE TO LOCATE THE SOFTWARE LICENSE OR LIMITED WARRANTY, CONTACT YOUR CISCO REPRESENTATIVE FOR A COPY.

The Cisco implementation of TCP header compression is an adaptation of a program developed by the University of California, Berkeley (UCB) as part of UCB's public domain version of the UNIX operating system. All rights reserved. Copyright © 1981, Regents of the University of California.

NOTWITHSTANDING ANY OTHER WARRANTY HEREIN, ALL DOCUMENT FILES AND SOFTWARE OF THESE SUPPLIERS ARE PROVIDED "AS IS" WITH ALL FAULTS. CISCO AND THE ABOVE-NAMED SUPPLIERS DISCLAIM ALL WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING, WITHOUT LIMITATION, THOSE OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT OR ARISING FROM A COURSE OF DEALING, USAGE, OR TRADE PRACTICE.

IN NO EVENT SHALL CISCO OR ITS SUPPLIERS BE LIABLE FOR ANY INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES, INCLUDING, WITHOUT LIMITATION, LOST PROFITS OR LOSS OR DAMAGE TO DATA ARISING OUT OF THE USE OR INABILITY TO USE THIS MANUAL, EVEN IF CISCO OR ITS SUPPLIERS HAVE BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

Any Internet Protocol (IP) addresses and phone numbers used in this document are not intended to be actual addresses and phone numbers. Any examples, command display output, network topology diagrams, and other figures included in the document are shown for illustrative purposes only. Any use of actual IP addresses or phone numbers in illustrative content is unintentional and coincidental.

All printed copies and duplicate soft copies are considered un-controlled copies and the original on-line version should be referred to for latest version.

Cisco has more than 200 offices worldwide. Addresses, phone numbers, and fax numbers are listed on the Cisco website at www.cisco.com/go/offices.

Cisco and the Cisco logo are trademarks or registered trademarks of Cisco and/or its affiliates in the U.S. and other countries. To view a list of Cisco trademarks, go to this URL: www.cisco.com/go/trademarks. Third-party trademarks mentioned are the property of their respective owners. The use of the word partner does not imply a partnership relationship between Cisco and any other company. (1110R)

Cisco product security overview

This product contains cryptographic features and is subject to United States and local country laws governing import, export, transfer, and use. Delivery of Cisco cryptographic products does not imply third-party authority to import, export, distribute, or use encryption. Importers, exporters, distributors, and users are responsible for compliance with U.S. and local country laws. By using this product you agree to comply with applicable laws and regulations. If you are unable to comply with U.S. and local laws, return this product immediately.

Further information regarding U.S. export regulations may be found at <http://www.bis.doc.gov/policiesandregulations/ear/index.htm>.