Cisco Room Panorama

82-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

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 lb).

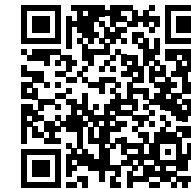The product is tall, so you may need a stepladder to complete the assembly.

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*.

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[*] 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 82-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.
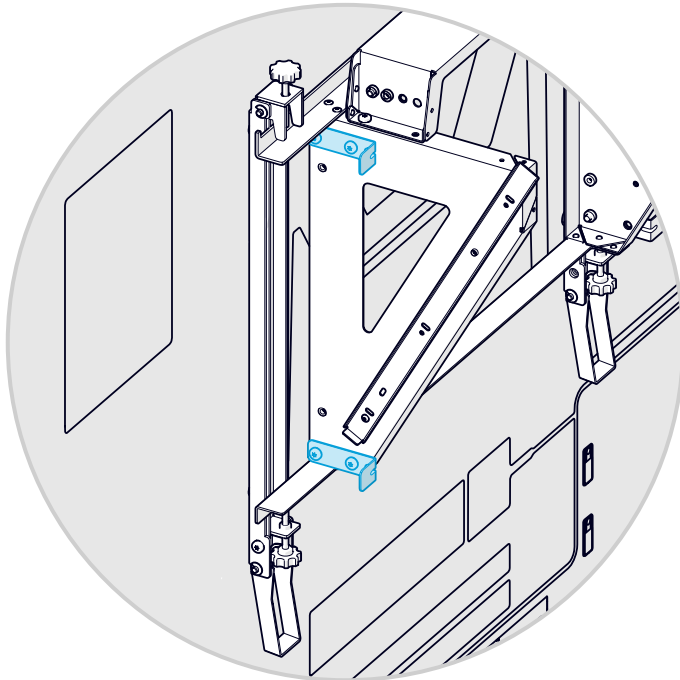
The screen mount safety brackets must be mounted securely, and NOT

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.
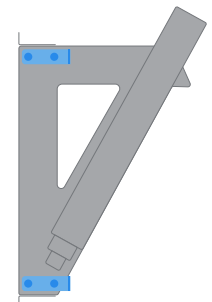
Safe Mode – horizontal position

Operational Mode – vertical position
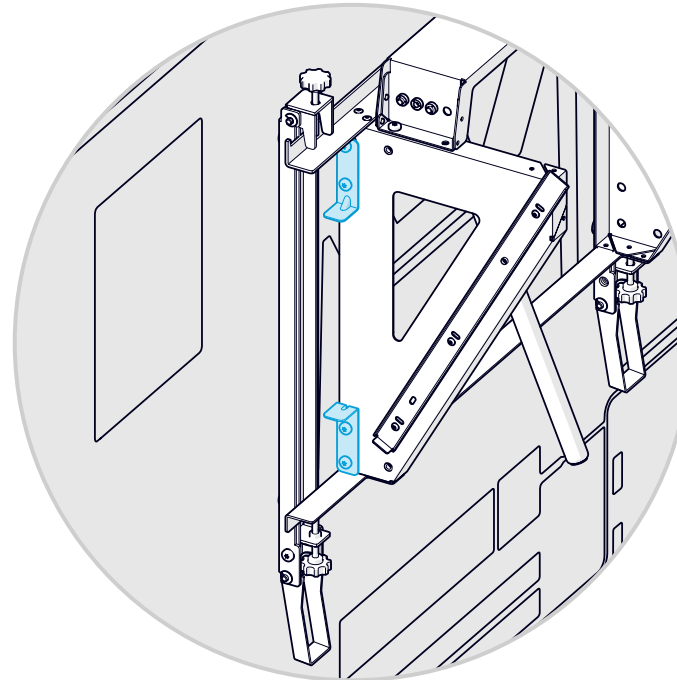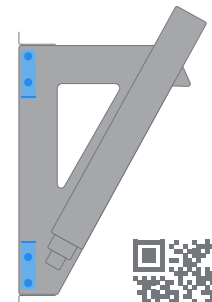

All four safety brackets must be in Safe Mode before mounting or removing a screen
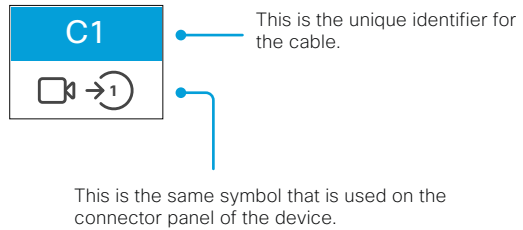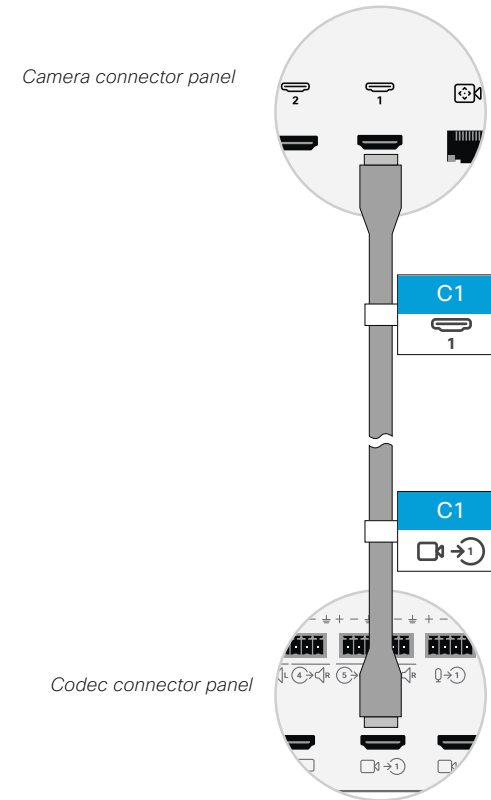
Safe Mode

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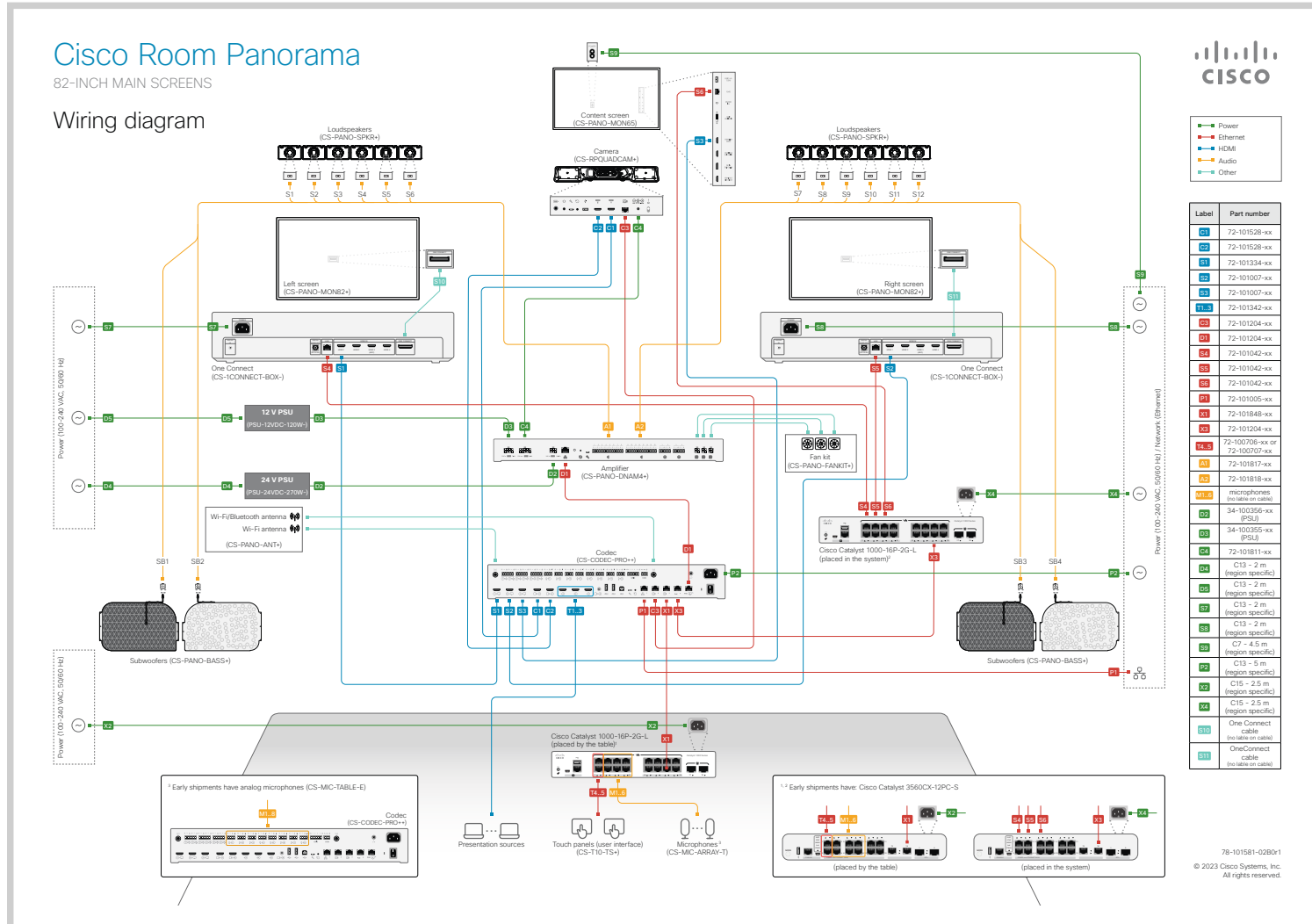
As an example, this pair of labels is used on one of the HDMI cables between the *codec* and the *camera*.

This is the unique identifier for the cable.

This is the same symbol that is used on the connector panel of the device.

Camera connector panel

Codec connector panel

Wiring diagram

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

Please get the latest version from https://www.cisco.com/go/panorama-installation

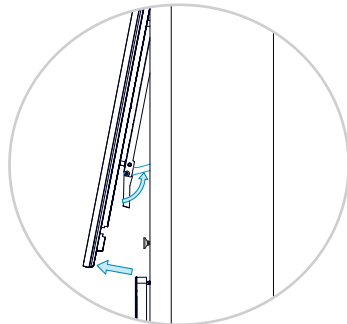Cisco Room Panorama
82-INCH MAIN SCREENS

Wiring diagram

Grilles

Speaker grille

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

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

1. Tilt out the content screen

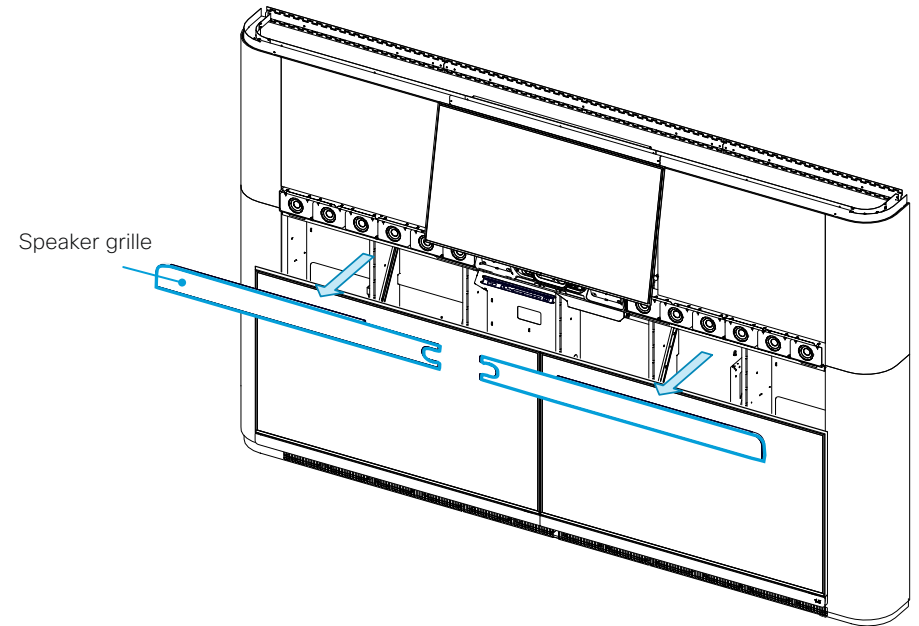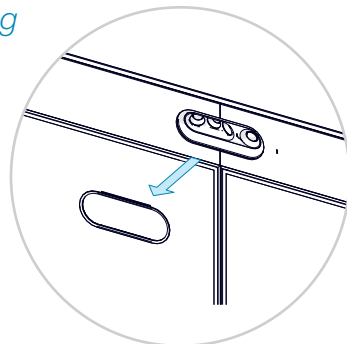Lift the lever behind the screen and fix the screen in a tilted position.

Speaker grille

Side view

2. Move the main screens downwards

Pull both main screens downwards by using the handles at the bottom of the deco grille.
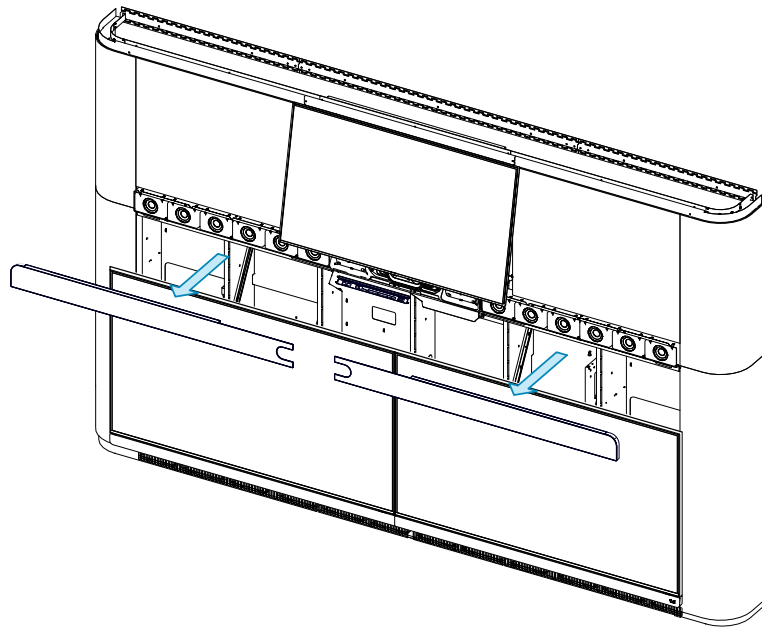
3. Remove the deco ring

Speaker grille (left and right)

Deco ring
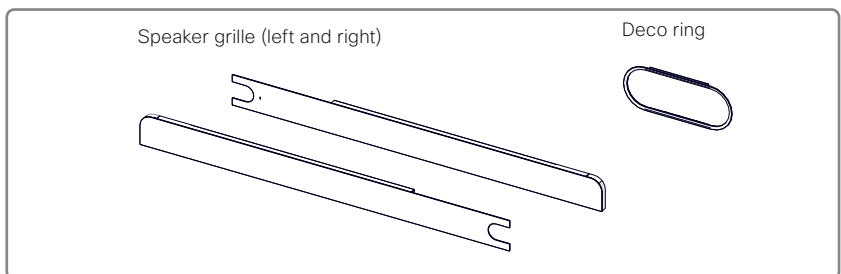
Speaker grille (page 2 of 3)

4.   *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.
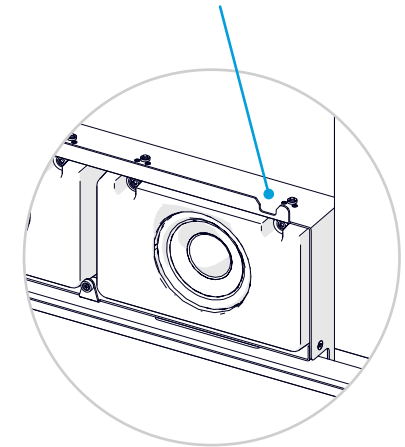
5.   *Mount the new speaker grille*

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.

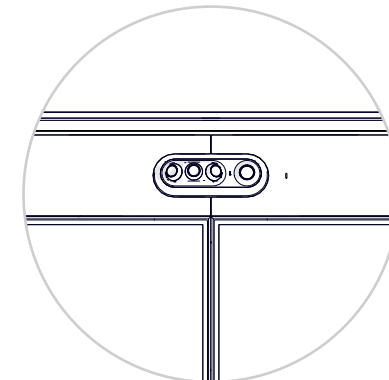Plastic washers on the inside of the grille
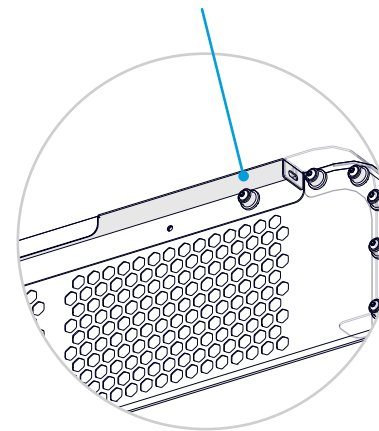
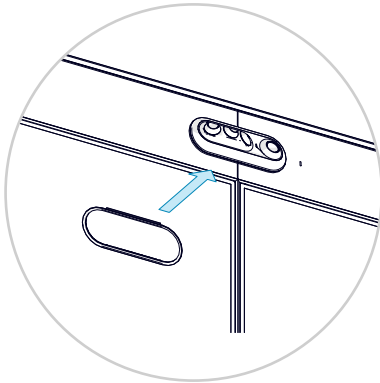Slots above the loudspeakers

Grille, rear view.

Loudspeaker mounting structure, front view.

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

6. Place the deco ring

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

Deco ring

7. Move the main screens up

Use the handles and push the screens up to their normal position.

8. 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.

D15459.05 | APRIL 2023   11

Deco grille

The deco grille is below the main screens. It is split at the center and each part is attached to a screen with four brackets.

PID: CS-PANO-GRILL= (includes both speaker grille and deco grille)
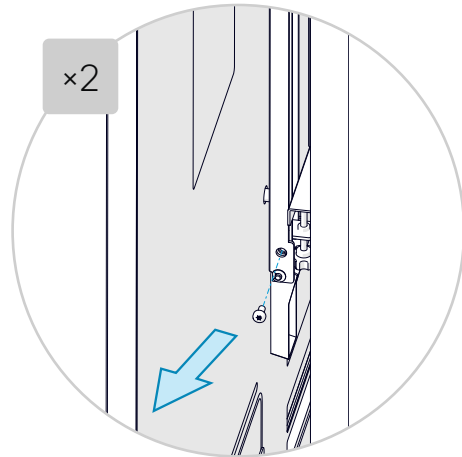
1. Move down the main screens

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

Deco grille

Deco grille (left and right)
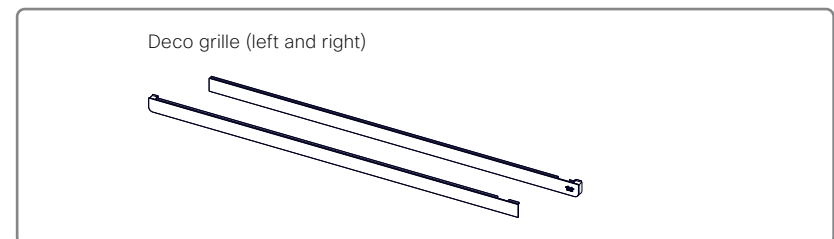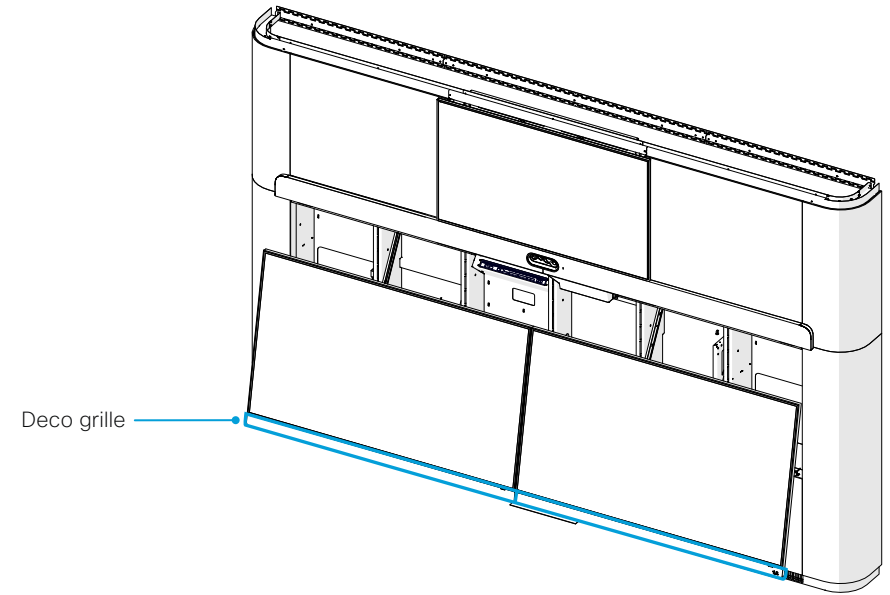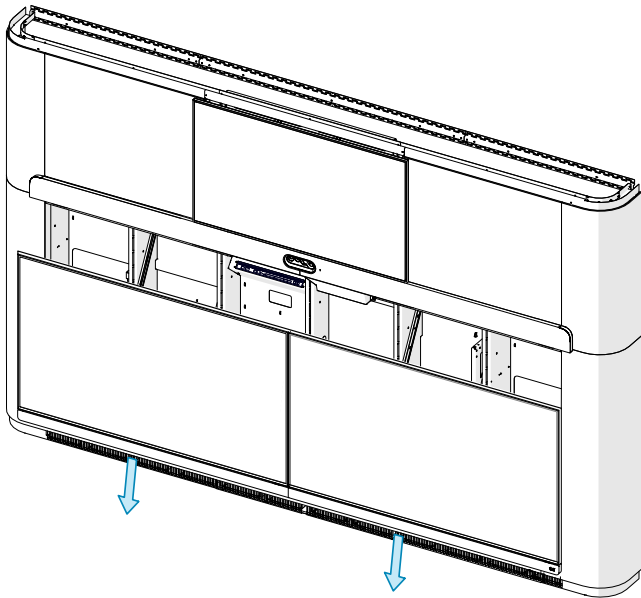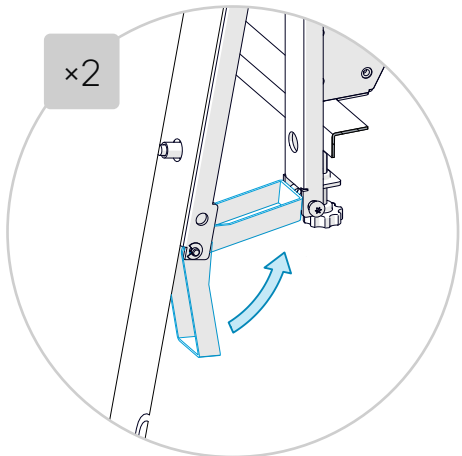
Deco grille (page 2 of 4)

2. Unscrew the angle lock screws behind the main screens

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

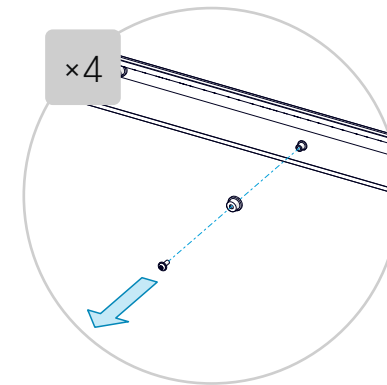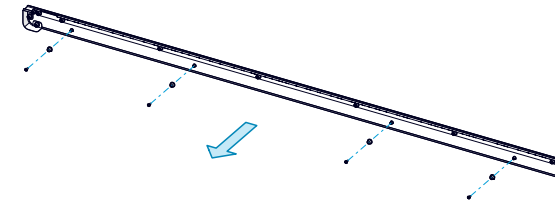×2

3. Tilt out the main screens

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

×2

4. Remove the old grille from the screen

Remove the four screws and spacers from the deco grille, as shown in the illustration, and remove the old grille.
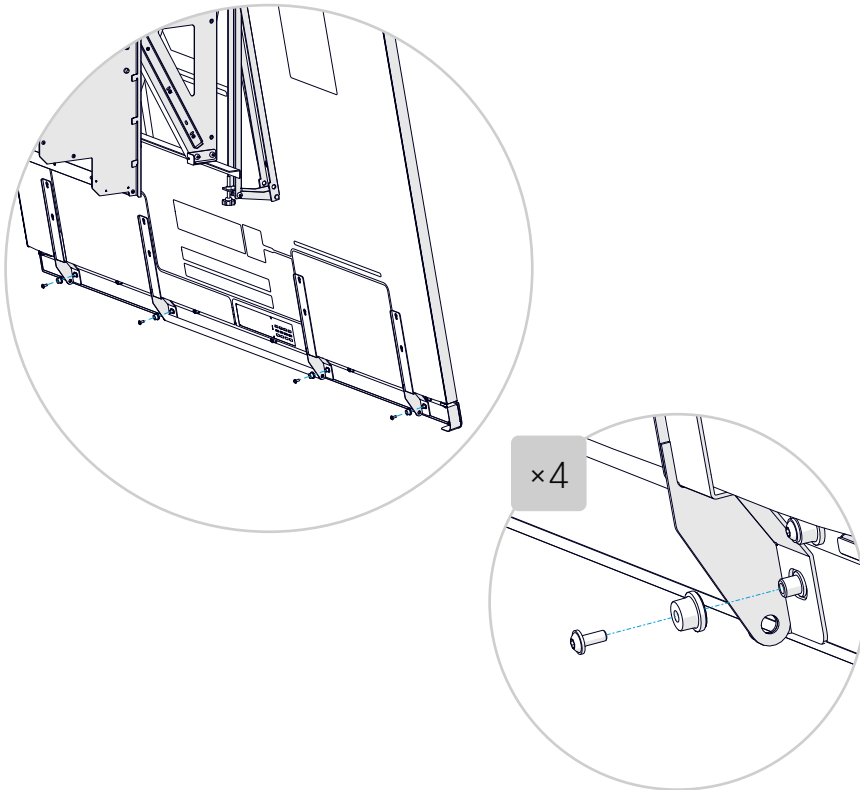
You will re-use the screws and spacers when mounting the new grille on the screen.

×4

5. Attach the new grille to the screen

a. From front, hang the new grille onto the holes of the brackets.

b. From behind, fasten the grille to the screen with the same screws and spacers that you just removed.

c. Push up and align the grille toward the center before tightening the screws.
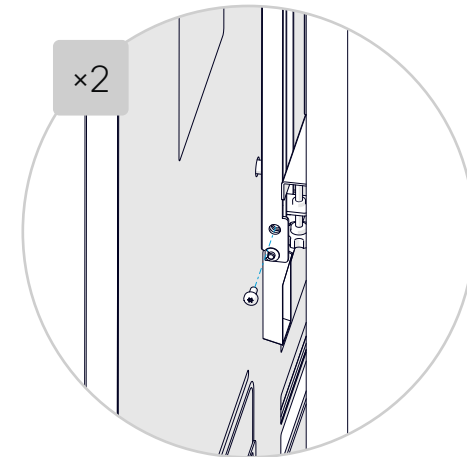
×4

6. 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.
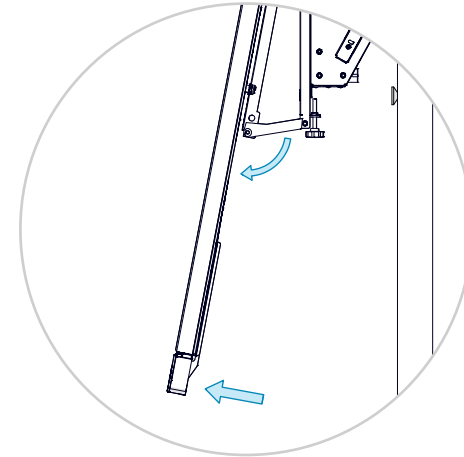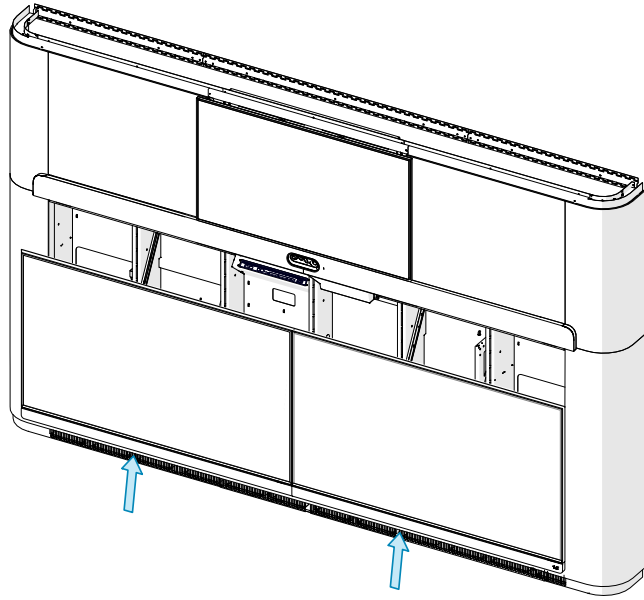
Lock each lever in released position with one screw. This fixes the screen in a vertical position (no tilt).

×2

Deco grille (page 4 of 4)

7.   *Move the screens up*

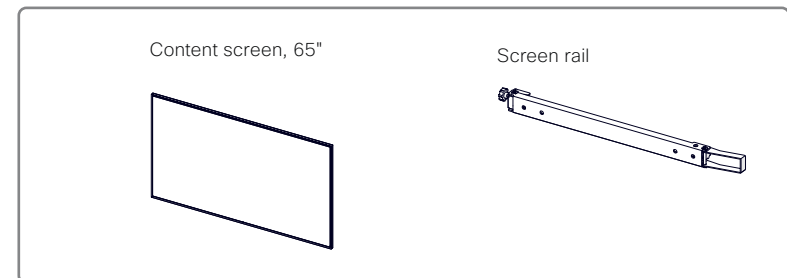Use the handles and push the screens up to their normal position.

Screens

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")
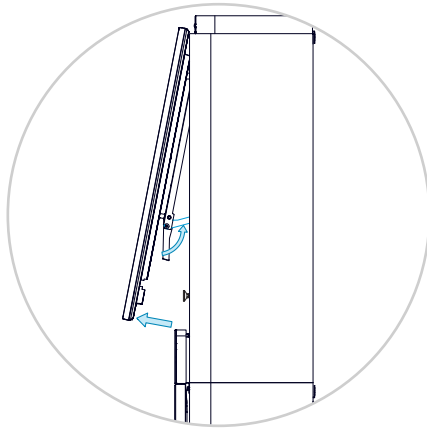- CS-PANO-VESA= (screen rails)

1. Remove the center part of the upper trim
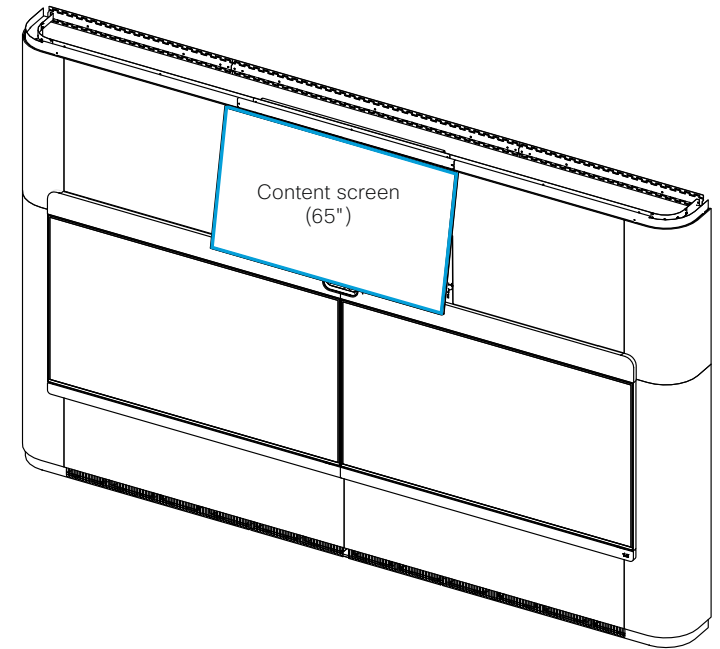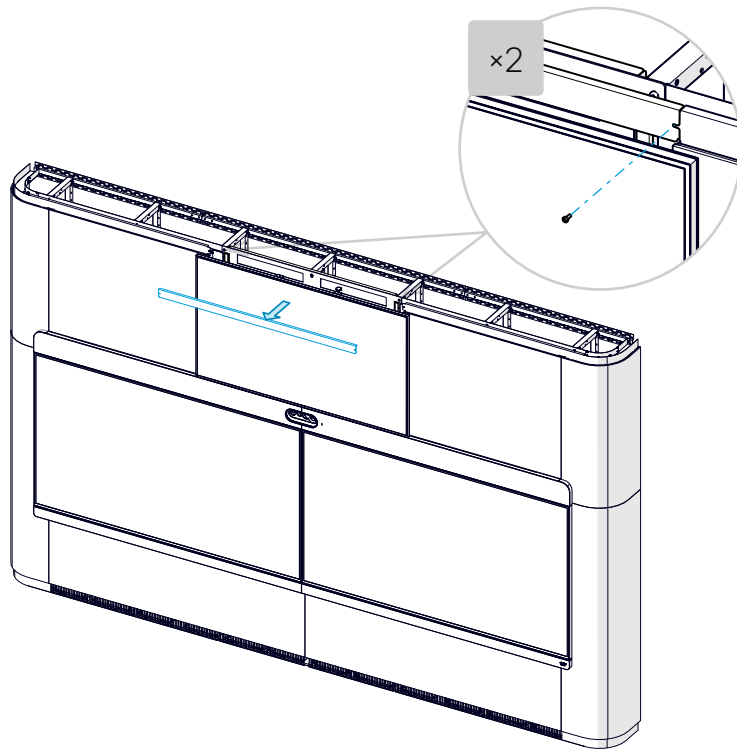
×2

Content screen (65")

Content screen, 65"   Screen rail

Content screen

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

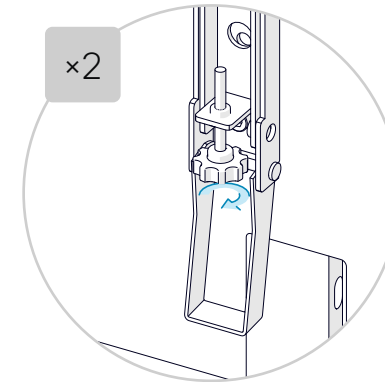Disconnect all the cables:
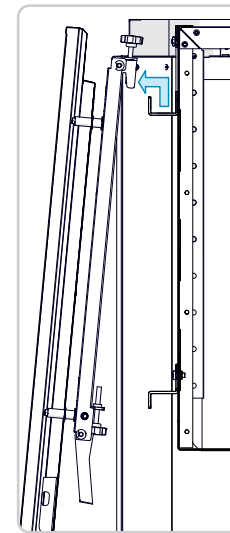
- 1x HDMI (S3)
- 1x Ethernet (S6)
- 1x Power (S9)

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.

×2

5. Lift the screen off the bracket

Side view

18

Content screen

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.

×2

×2
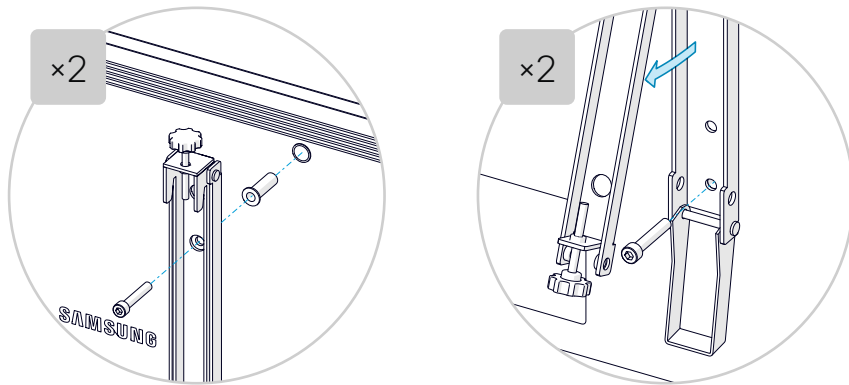
Remember to add the spacers between the rail and screen.

Use the lower holes in each set.

Rear view

7. Lift the screen onto the bracket

Lift screen onto bracket
(side view)

Screen in place
(side view)

Content screen

8. Secure the screen to the lower bracket

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

×2
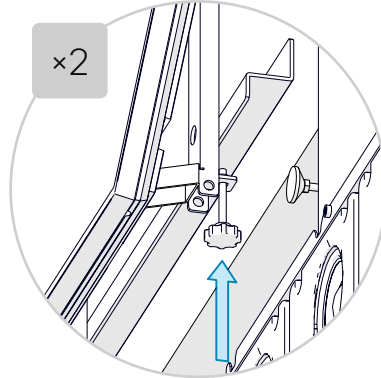
9. Untilt the screen

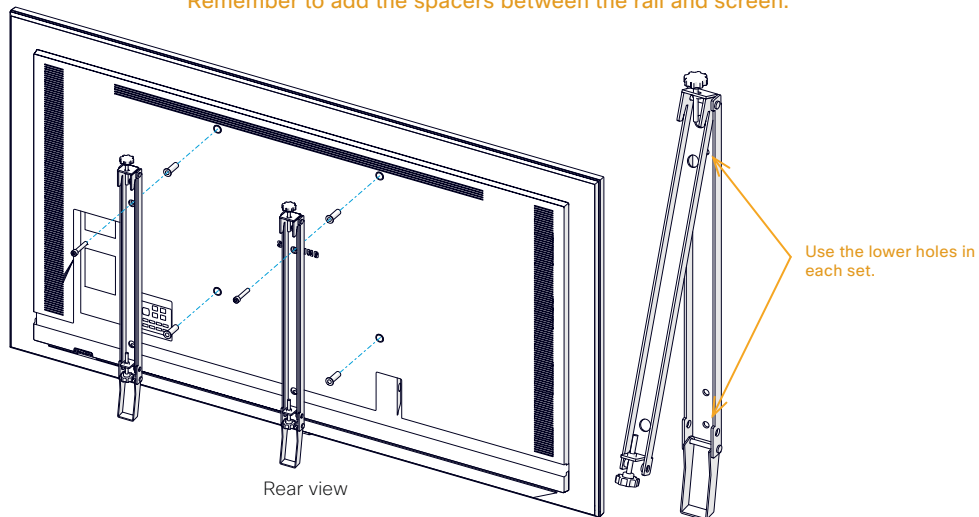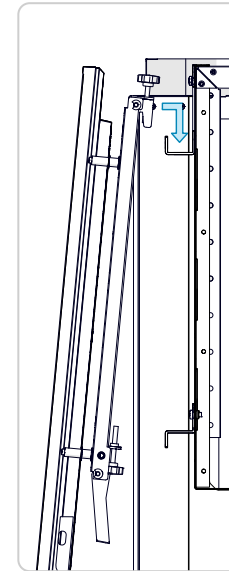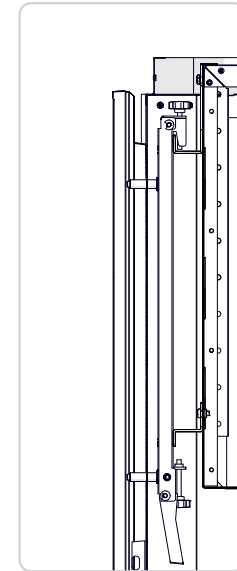Pull the content screen slightly outward, so that you can release the levers on both sides. Then, gently let the screen move into the vertical position.

Side view
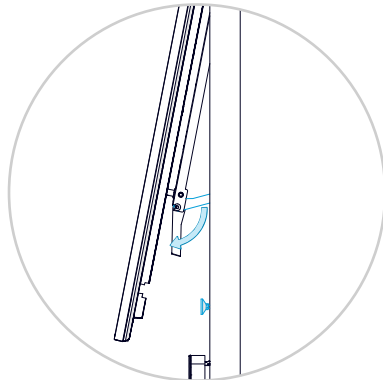
10. Connect the cables

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.).

7 mm
(0.28 in.)
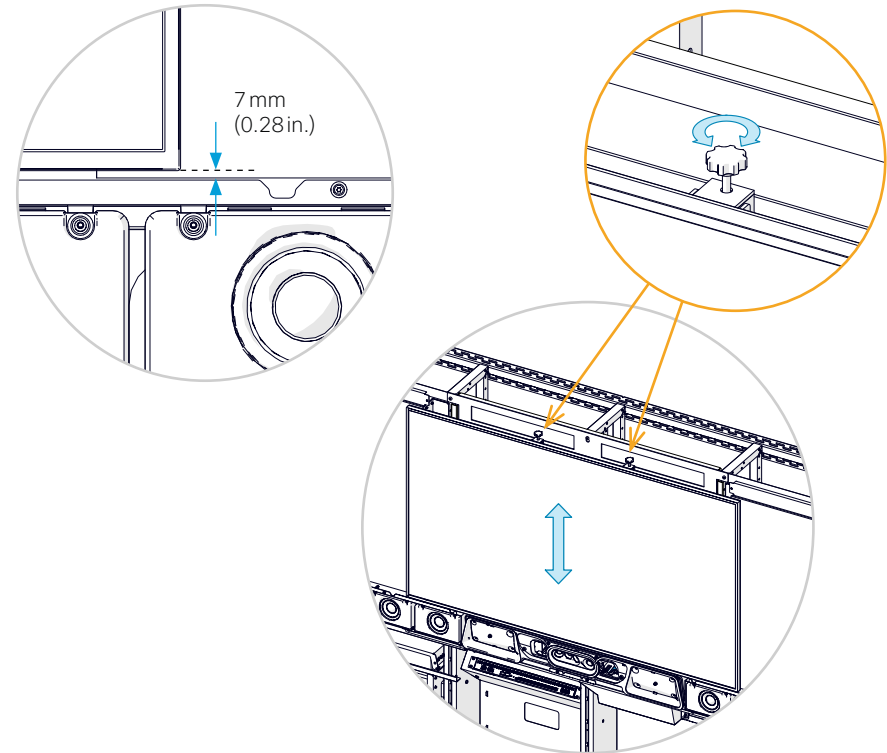
12. Mount the center part of the upper trim

13. Calibrate the screen

Power on the screen and run calibration. Refer to the *Room Panorama Getting Started Guide* for details.

Main screens

The main screens are the two 82" screens in the center.

- CS-PANO-MON82= (main screens, 82")
- CS-PANO-VESA= (screen rails for 65"/82")
- CS-MON82-REMOTE= (remote control for the 82" screens)

1.   *Prepare a stand for the screen*

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.

Buttons

Main screen (82")

Main screen (82")

Main screen, 82"   Screen rail
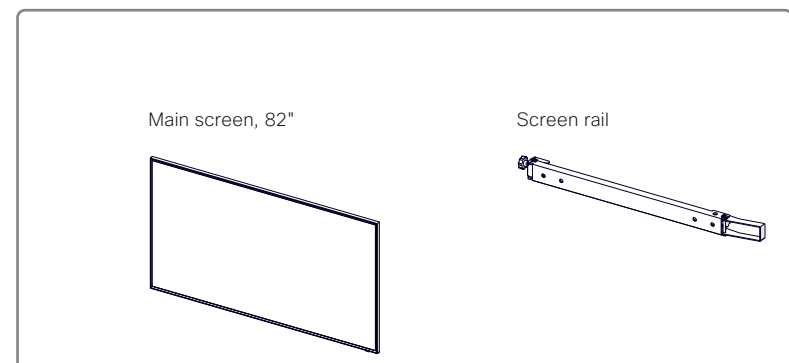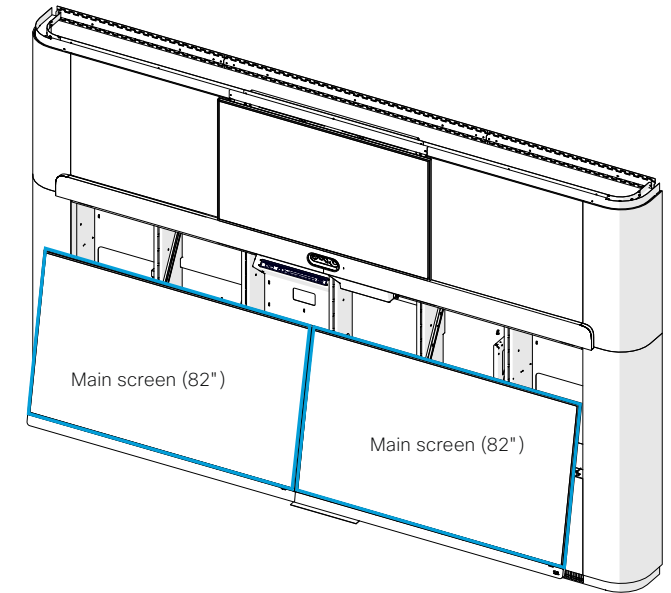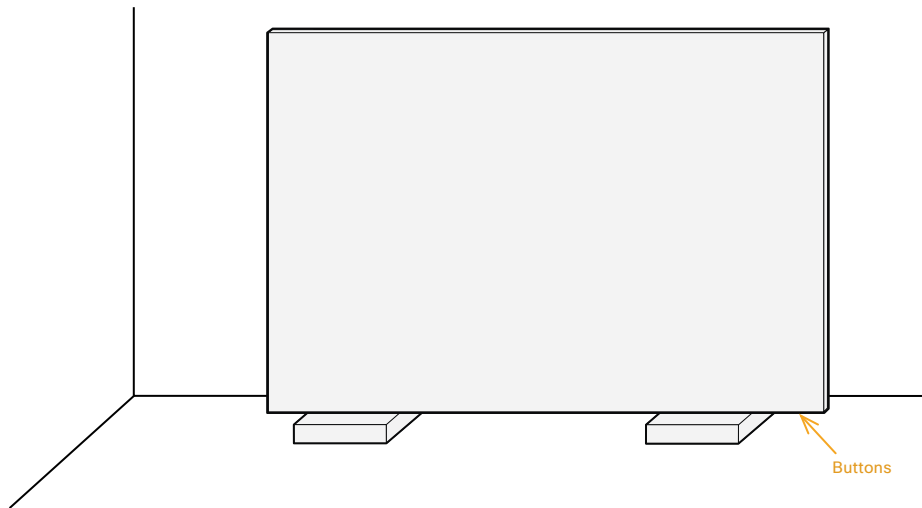
2. Move the main screens downwards

Pull down both main screens by using the handles at the bottom of the deco grille.
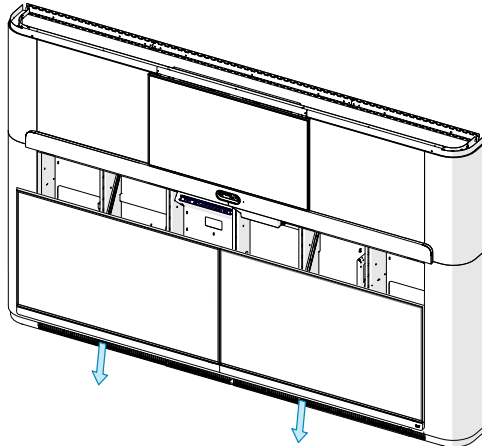
3. Remove power from the One Connect box

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.

×2
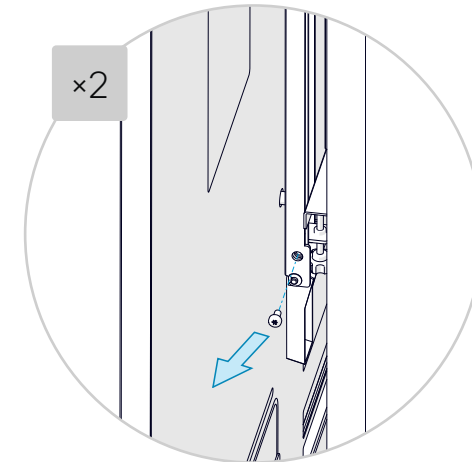
5. Tilt out the main screens

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

×2
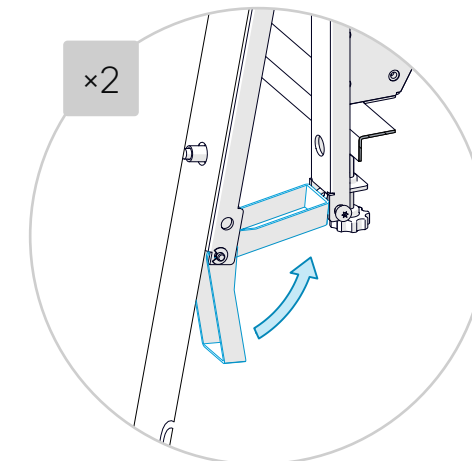
6. Disconnect the cable from the main screen

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

To remove the One Connect cable, you must first unscrew it from the screen. Squeeze the sides of the connector while pulling it out of the socket.
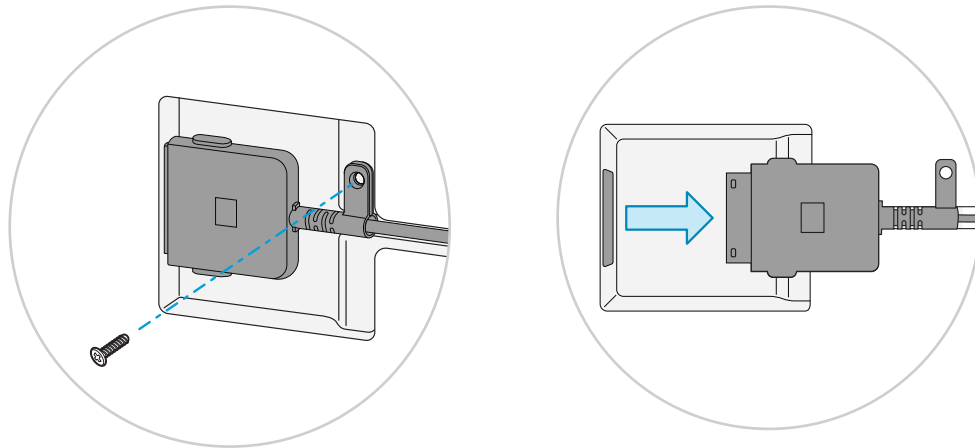
7. Remove the brackets holding the deco grille and handle

Loosen the screws holding the brackets. The brackets will drop down and you can then lift them off the screen, together with the grille and the handle.
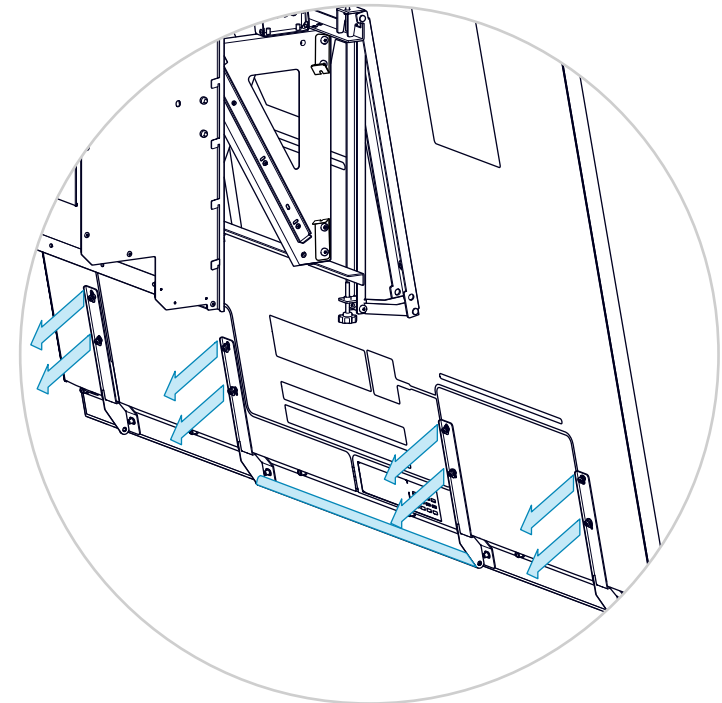
Rear view

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.
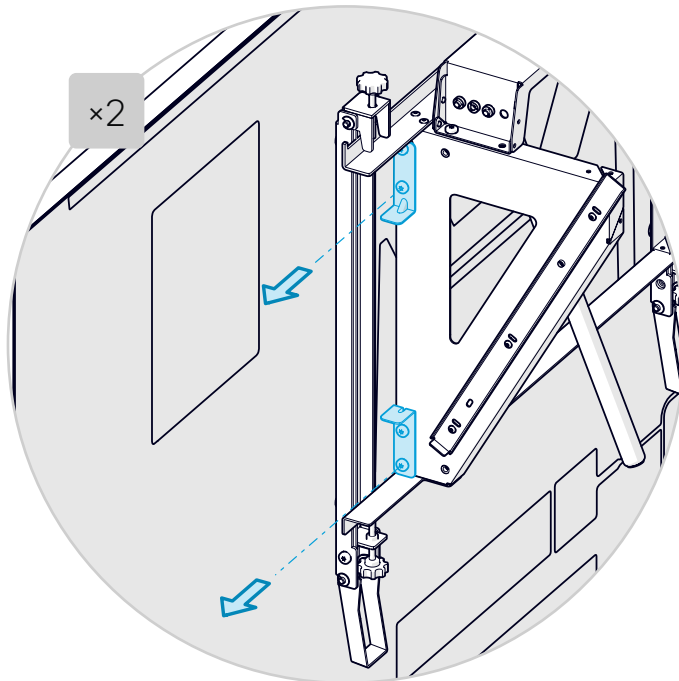
- If you must remove the screen from the screen mount module, always move the screen mount safety brackets back to the **Safe Mode** position before lifting off the screen.

Operational Mode – vertical position

×2

Safe Mode – horizontal position

×2

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

Safe Mode

Operational Mode

a. There are two screws on each side of the screen mount. Remove one screw from each bracket.
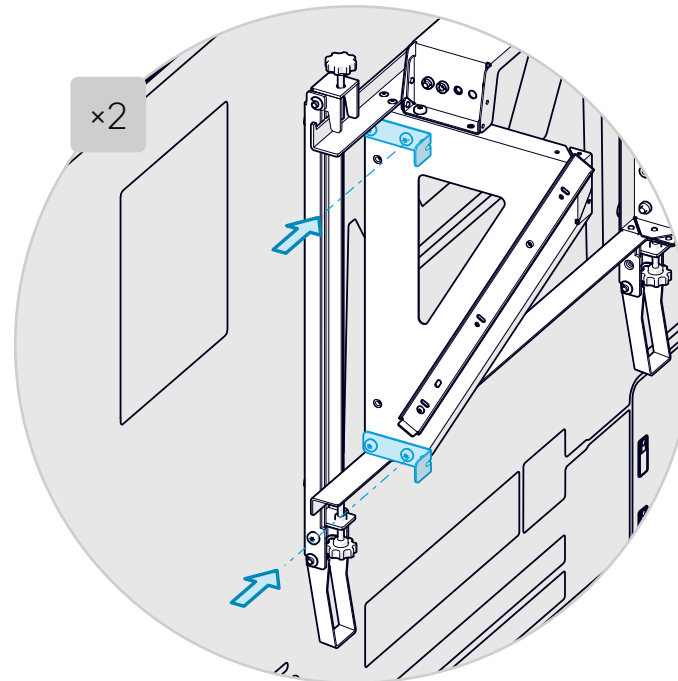
b. Loosen the remaining screw on each bracket, and rotate the brackets into the horizontal position.

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.
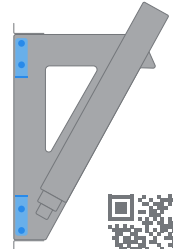
9.   Unfasten the screen from the bracket

Unscrew the thumb screws on both sides of the screen to their lowest position, but don't remove them.
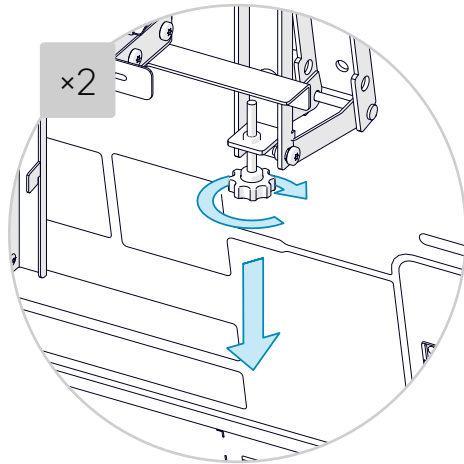
×2

Pull the screen slightly outward, so that you can release the levers on both sides.

Then, gently let the screen move into vertical position.
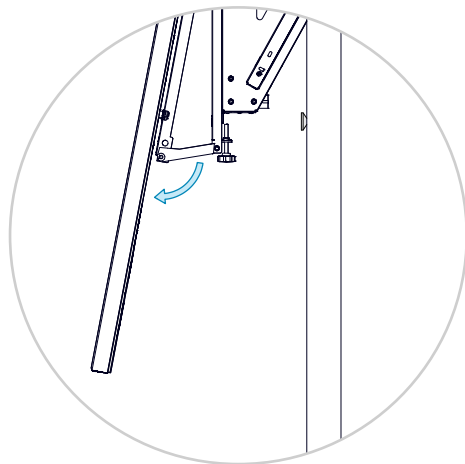
10.   Lift and remove the old screen

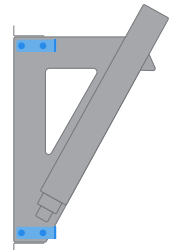To avoid the Risk of Personal Injury:

· 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.
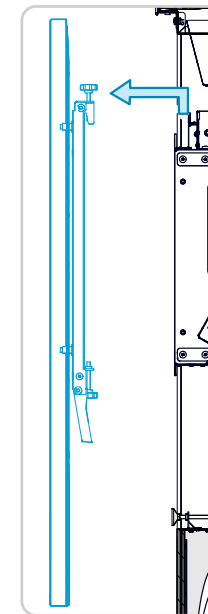
Lift screen off bracket
(side view)

11. Transfer the rails from the old screen to the new screen

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

×4

12. Hang the screen onto the screen mount module

Lift screen onto bracket
(side view)

13. *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

×2

Operational Mode – vertical position

×2

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

Safe Mode
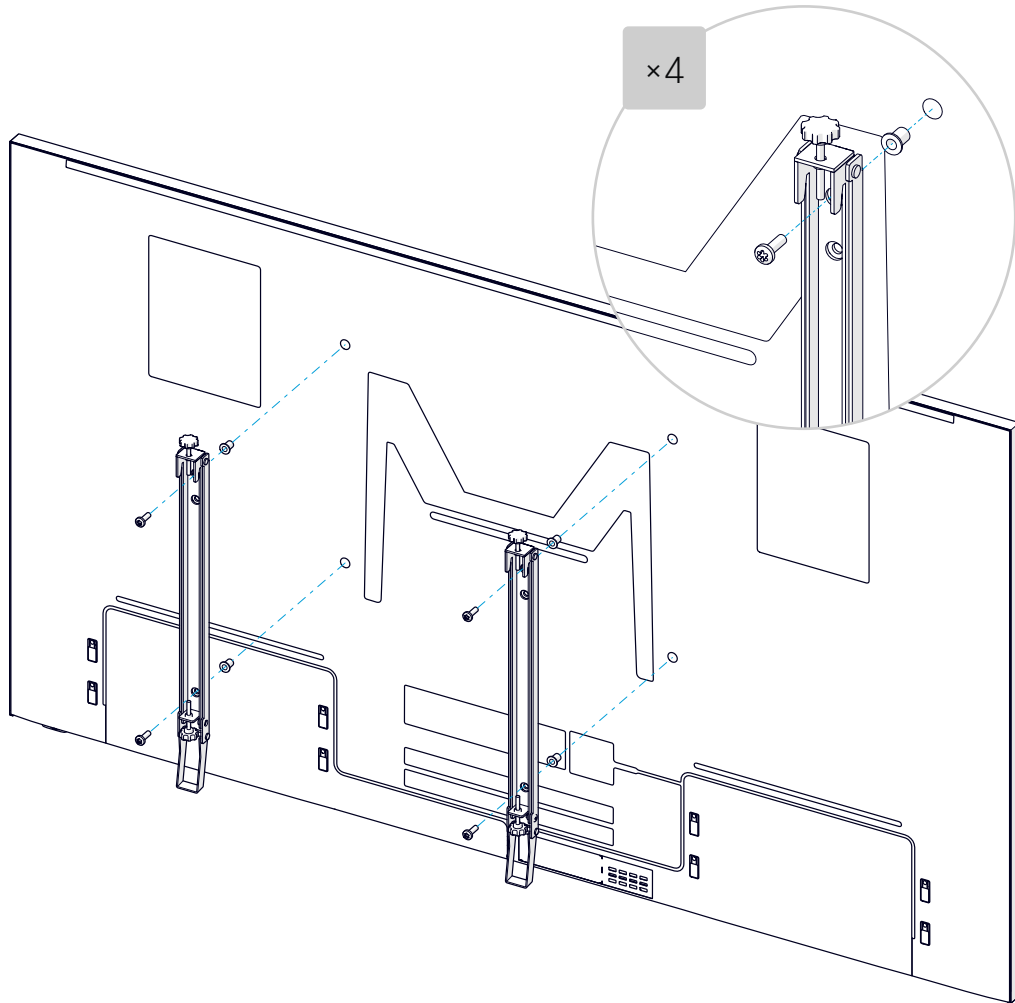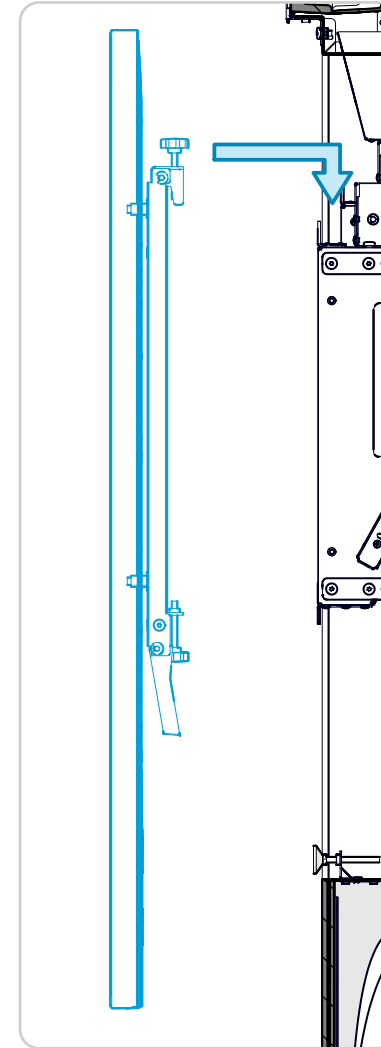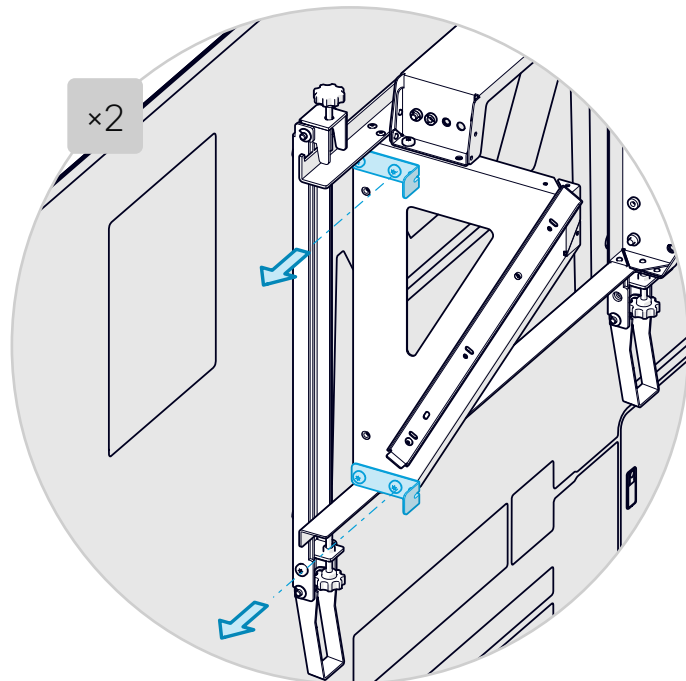

Operational Mode

a. Gently pull the screen downward.

b. There are two screws on each side of the screen mount. Remove one screw from each bracket.
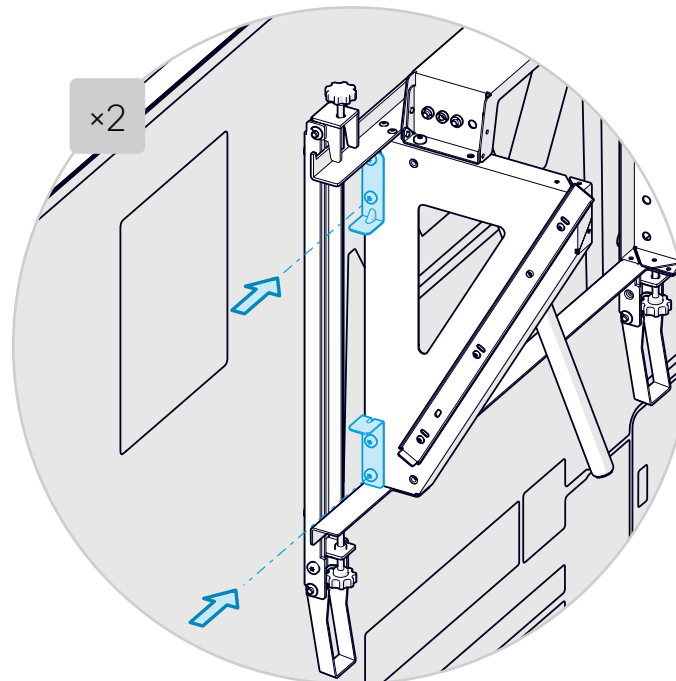
c. Loosen the remaining screw on each bracket, and rotate the brackets into the vertical position.

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.

14. 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.

×2
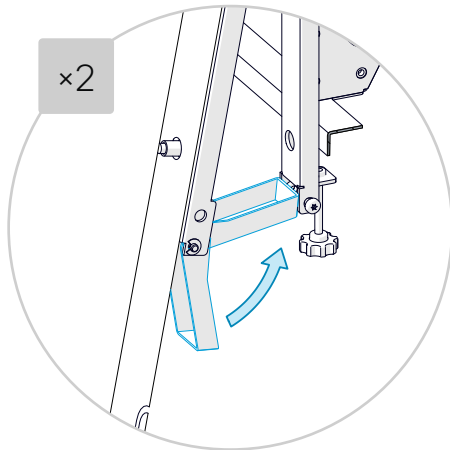
Tighten the thumb screws so that it secures the screen to the bracket.

×2
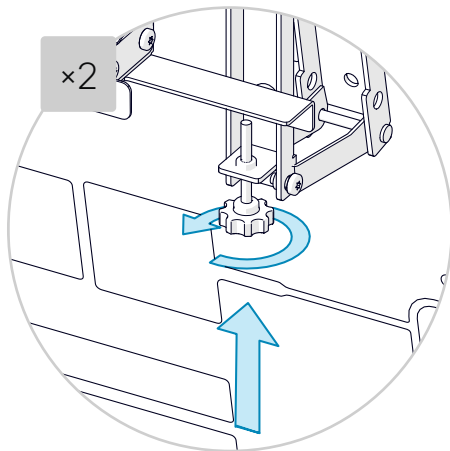
15. Connect the One Connect cable to the main screen

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)

Fasten the cable connector to the screen with a screw.
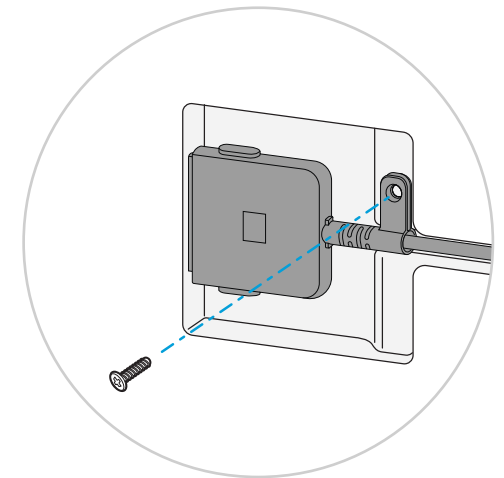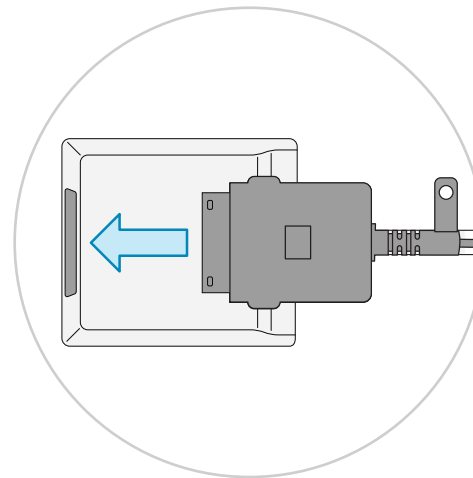
16. Mount the bracket containing the deco grille and handle to the new screen

Attach the four brackets to the new screen.

Push the deco grille as far up as possible under the screen and then tighten the screws.

Rear view
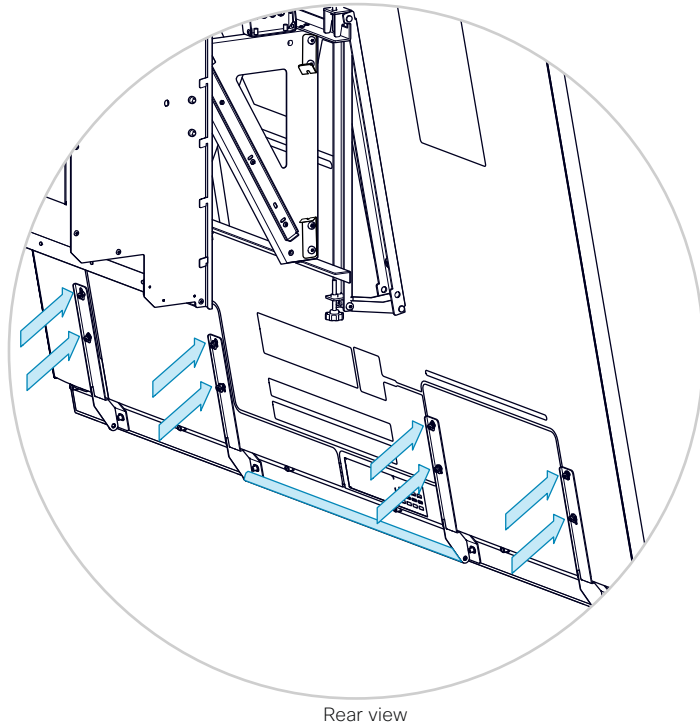
17. Lock the screen in the vertical position

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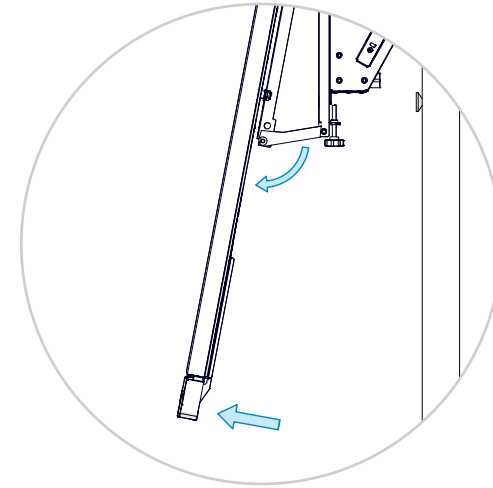
Lock each lever in the released position with one screw. This fixes the screen in a vertical position (no tilt).

×2
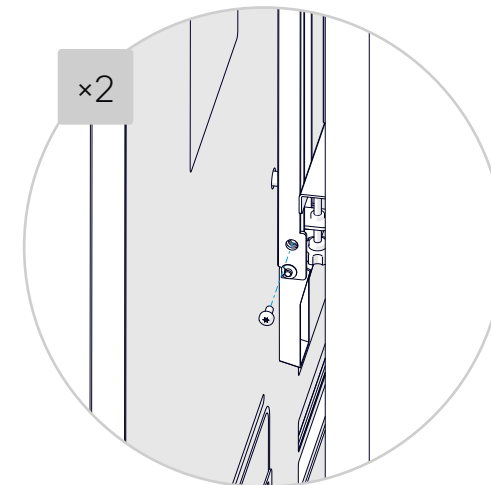
18. Connect power to the One Connect box

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)

19. Move the screens up

Use the handles and push the screens up to their normal position. Also push them together to meet at the center split line.
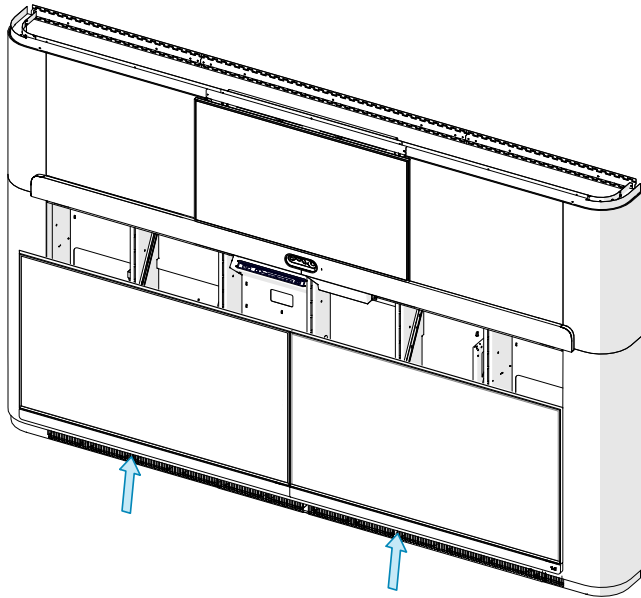
20. Power on the main screen

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

21. Calibrate the new screen

Use the remote or the power button to power on the screen.

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

Main screens

22. Pack old screen
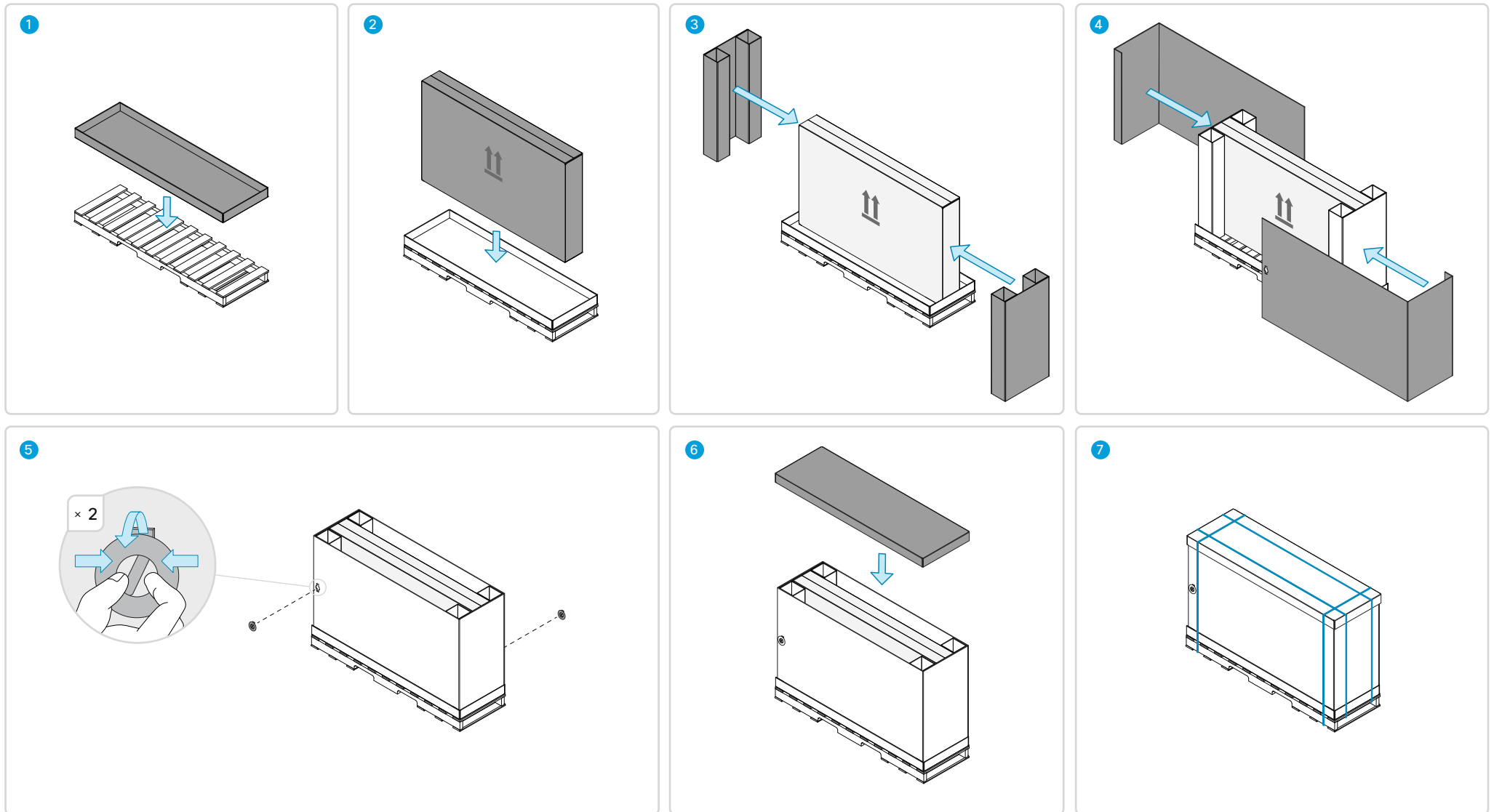
Gas springs for the main screen

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 82" – 1 Pair)

Prerequisites:

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

1.   *Prepare to lift the main screen off*

Do the following steps, as described in the Main screens section.

    a. Prepare a stand for the screen

    b. Move the main screen downwards

    c. Remove power from the One Connect box

    d. Unscrew the angle lock screws behind the screen

    e. Tilt out the main screen

    f. Disconnect the One Connect cable from the main screen

    g. Remove the deco grille

    h. 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 - 1 pair

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.
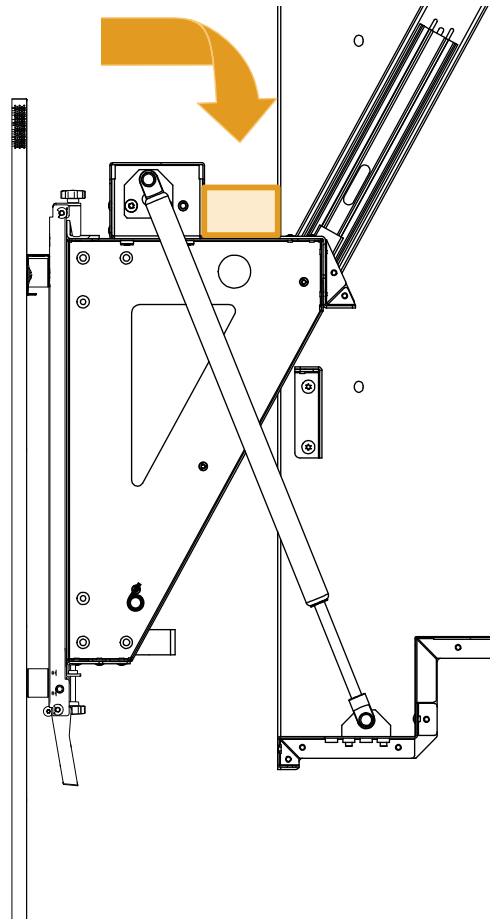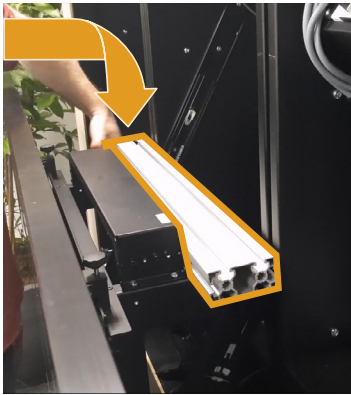
3.   Lift and remove the screen

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.
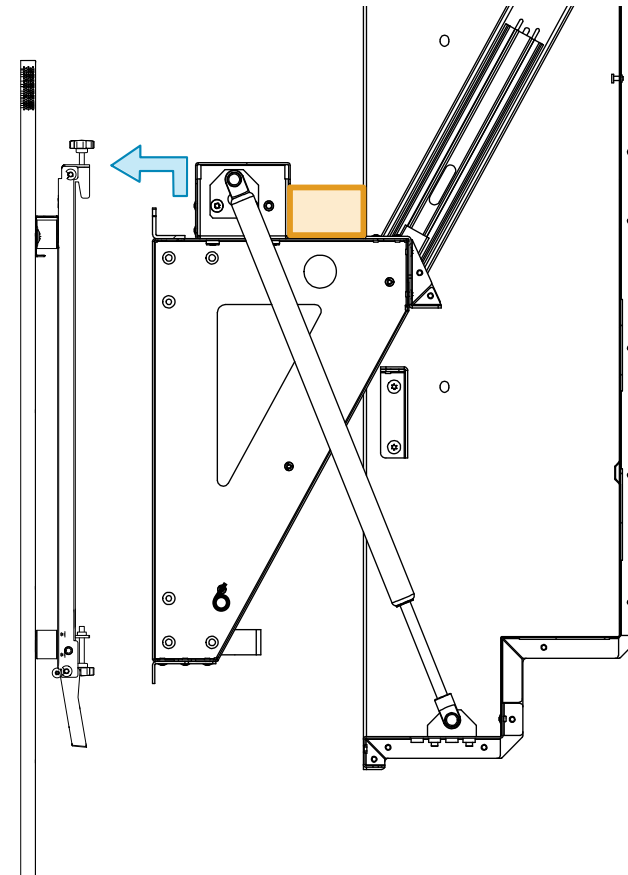
Lift screen off brackets
(side view)

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.

5. Replace the gas springs

For the **upper** bracket, use the outer holes. For the **lower** bracket, use the *inner* holes.
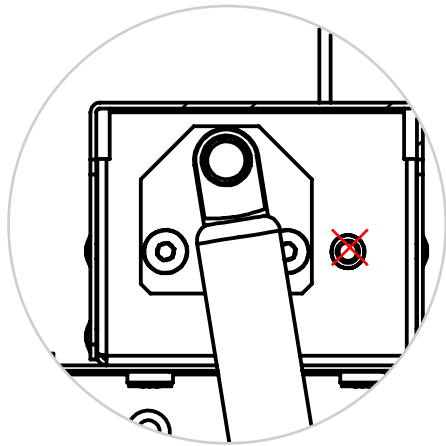
Upper bracket (side view)
Use the outer holes
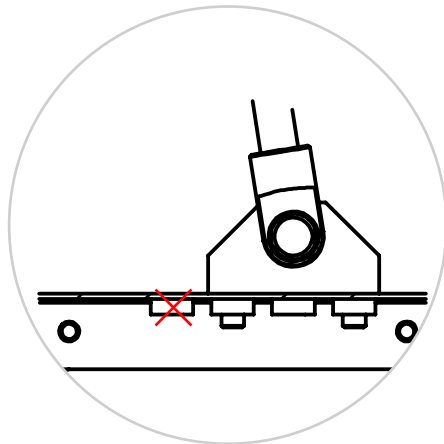
Lower bracket (side view)
Use the inner holes
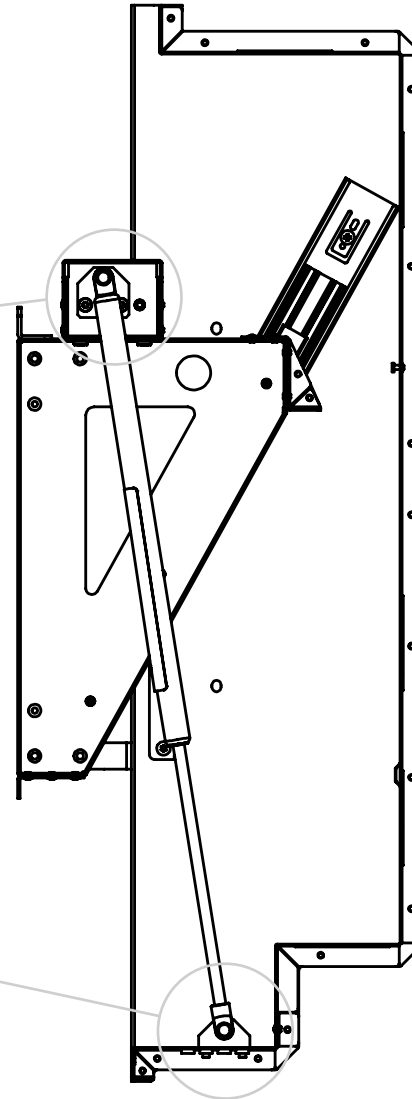
6. Lower the display mount and place the block

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

7.   Place the screen on the mount
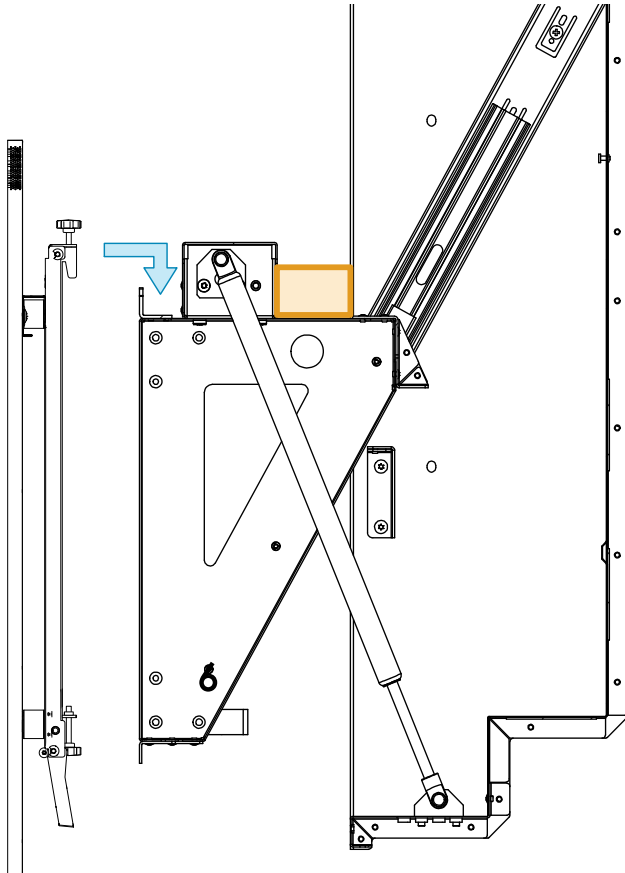
Lift screen on to brackets
(side view)

8.   Remove the block

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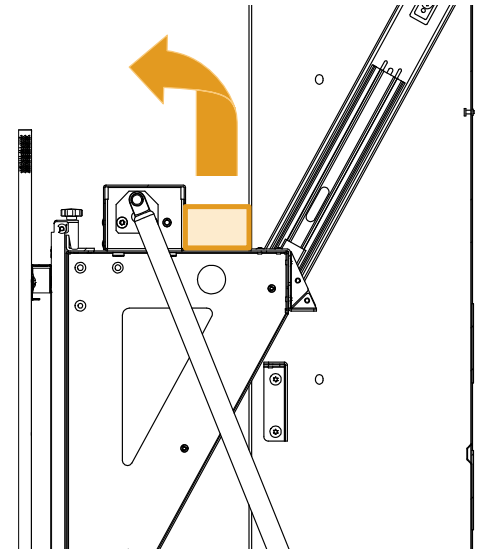
9.   Secure and reconnect the screen

Do the following steps, as described in the Main screens section.

    a. Secure the screen

    b. Connect the One Connect cable to the main screen

    c. Remove the transparent film from the edges of screen

    d. Mount the deco grille to the screen

    e. Lock the screen in the vertical position

    f. Connect power to the One Connect box

    g. Move the screen up

One Connect box (page 1 of 3)

The One Connect box provides processing for the screens.

- CS-1CONNECT-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)

S4
S5

S8
S9
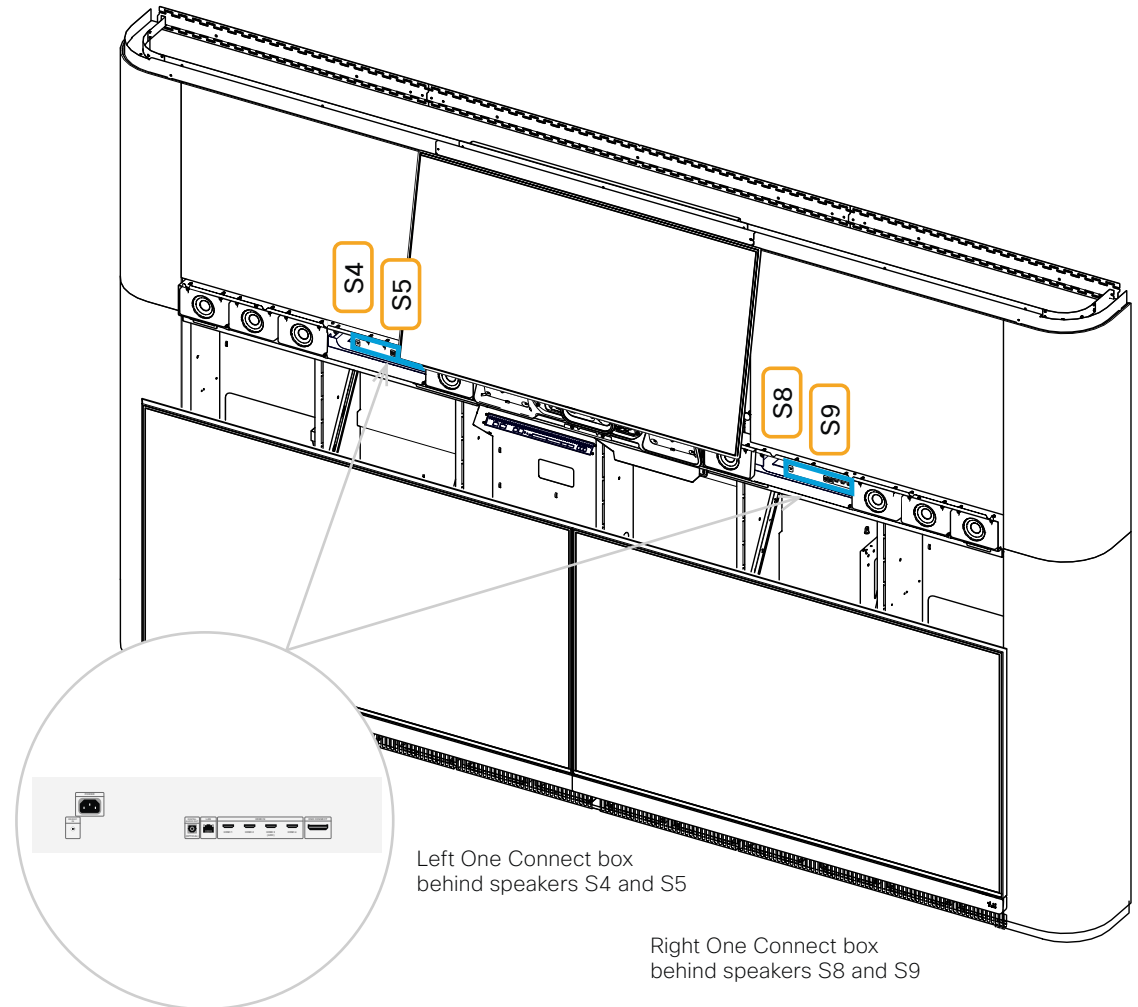
Left One Connect box
behind speakers S4 and S5

Right One Connect box
behind speakers S8 and S9

One Connect box

2. Tilt out the content screen

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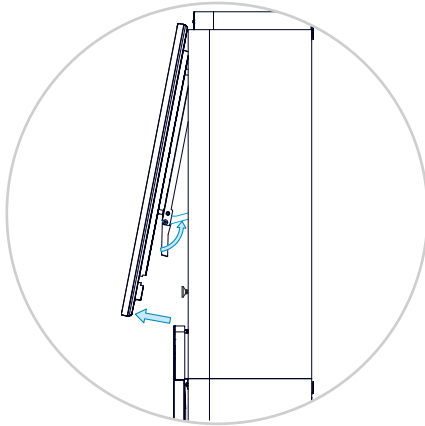
Side view

3. Move the main screens downwards

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

4. Remove the deco ring and speaker grille

See the Speaker grille section for illustrations.

5. Remove two speakers

Remove the second and third speakers, counting from the camera and outwards, on the side with the One Connect box you are removing.

Left One Connect box: 2 speakers (S4, S5)

Right One Connect box: 2 speakers (S8, S9)

6. Disconnect cables from the One Connect box

Pull the One Connect box to the left for a better view of the connectors and disconnect the cables.
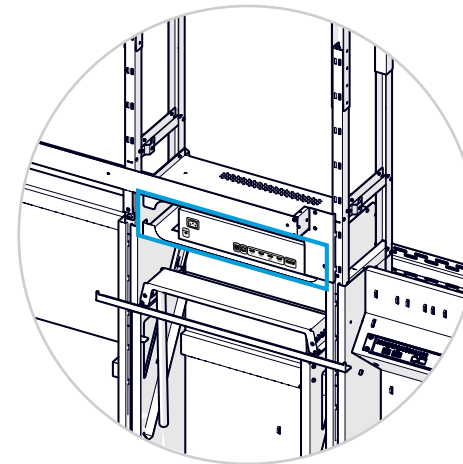
One Connect Box, front view

One Connect box

7.   Remove the old One Connect box

8.   Mount the new One Connect box

Place the One Connect box on top of the display cavity with the connectors facing outward.

9.   Connect the cables to the new One Connect box

Connect the cables according to the Wiring diagram.

10.   Place the speakers back into the rack

Left One Connect box:

- 2x speakers (S4, S5)

Right One Connect box:

- 2x speakers (S8, S9)

11.   Reattach the speaker grille and deco ring

Refer to the Speaker grille section for details.

12.   Move the main screens up

Use the handles and push the screens up to their normal position.

13.   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.

14.   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)

15.   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

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

- CS-CAB-V-QPR82= (One Connect cable, 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)

Left One Connect box behind speakers S4 and S5

Right One Connect box behind speakers S8 and S9

41
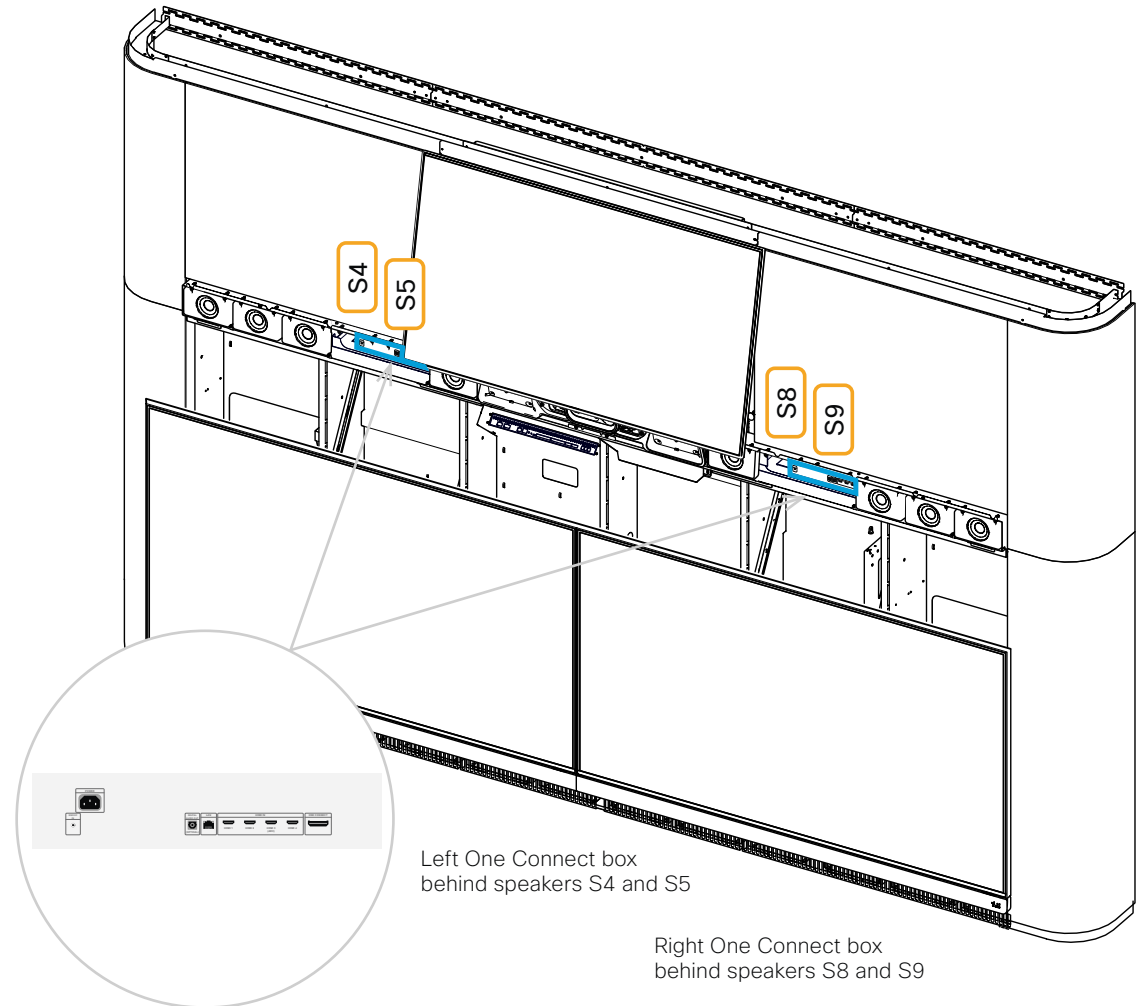
One Connect cable (page 2 of 4)

2. Tilt out the content screen

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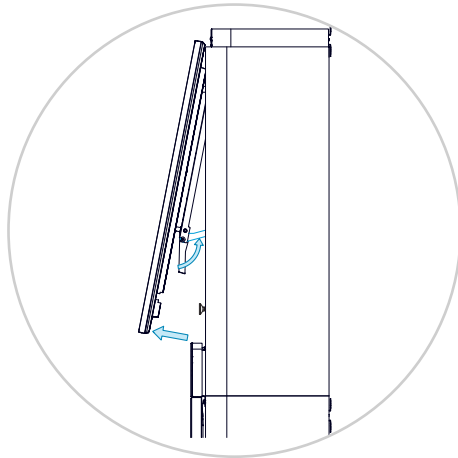
Side view

3. Move the main screens downwards

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

4. Remove the deco ring and speaker grille

See the Speaker grille section for illustrations.

5. Remove two speakers

Remove the second and third speakers, counting from the camera and outwards, on the side with the One Connect box or cable you are accessing.

Left One Connect box:

- 2x speakers (S4, S5)

Right One Connect box:

- 2x speakers (S8, S9)

6.   Disconnect the One Connect cable

Disconnect the One Connect cable:

    a. Unplug the One Connect cable from the One Connect box.
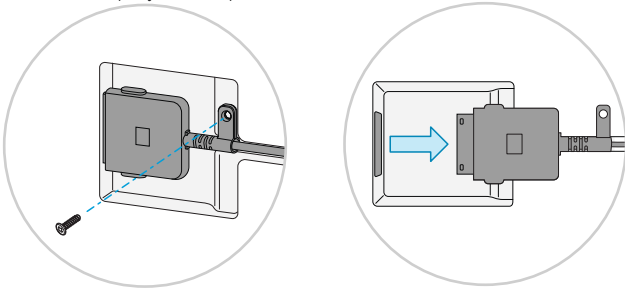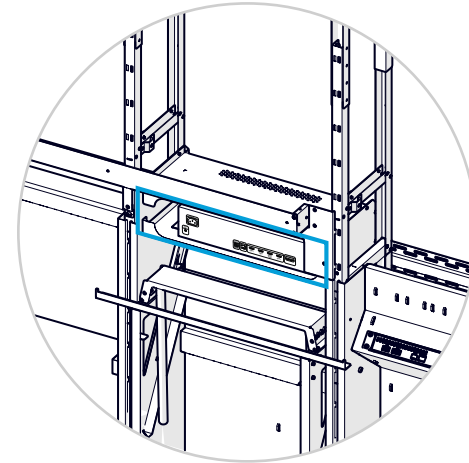
    b. Unfasten the cable from the main screen by removing the screw. Lightly screw the screw back into the display, to keep track of it.

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

   d. Unthread the cable and pull it out of the system.

7.   Connect the new One Connect cable

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

    a. Connect the new One Connect cable to the One Connect box.

    b. Thread the cable between the main screen and the rod that is closest to the connector.

    c. Connect the cable to the screen according to the Wiring diagram:
       Left screen: One Connect cable (S10)
       Right screen: One Connect cable (S11)

    d. Strap the cable to the wall mount structure. Allow for moving the screen up and down without straining or pinching the cable.

    e. Fasten the cable connector to the screen with the screw that you lightly screwed into the main screen earlier.

Refer to the Wiring diagram for details.

One Connect Box, front view
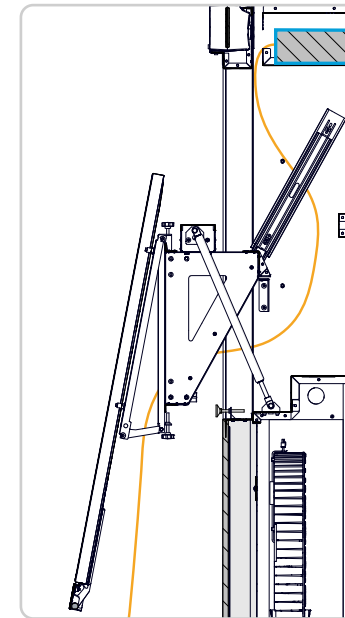
One Connect cable, side view

One Connect cable

8. Place the speakers back into the rack

Left One Connect box:

- 2x speakers (S4, S5)

Right One Connect box:

- 2x speakers (S8, S9)

9. Reattach the speaker grille and deco ring

Refer to the Speaker grille section for details.

10. Move the main screens up

Use the handles and push the screens up to their normal position.

11. 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.

12. 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)

13. 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.
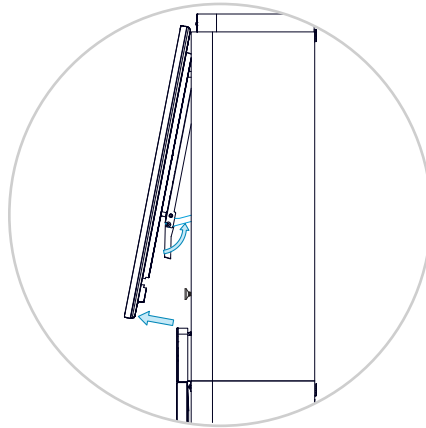
Speakers

Loudspeakers (page 1 of 2)

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.
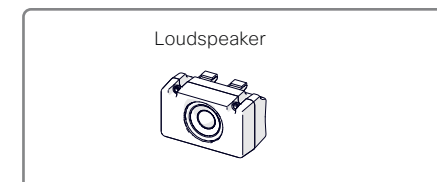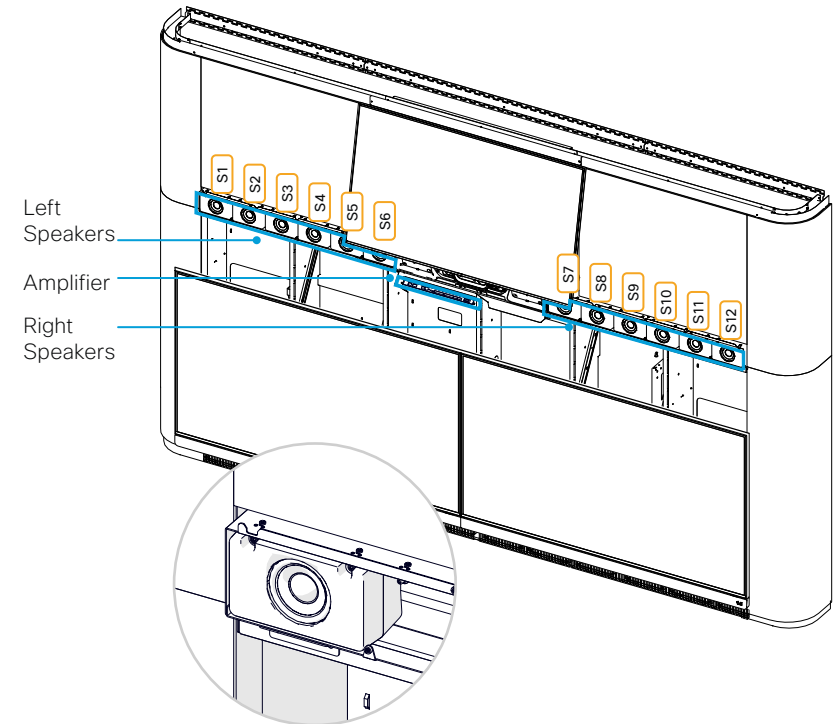
Side view

2. Move the main screens downwards

Pull both main screens downwards by using the handle at the bottom of the screen.

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.
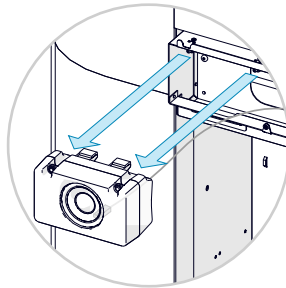
Left
Speakers

Amplifier

Right
Speakers

S1 S2 S3 S4 S5 S6
S7 S8 S9 S10 S11 S12
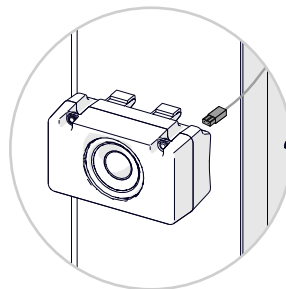
Loudspeaker

4. Disconnect power from the amplifier

Pull out the power cable from the amplifier connections panel. Refer to the Wiring diagram.

5. Pull the speaker out from the mounting structure

Check that the rubber gaskets stay firmly on the pegs.

6. Disconnect the cable

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.
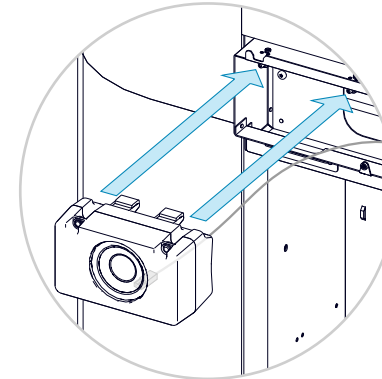
9. Power on the amplifier

Refer to the Wiring diagram for illustrations.

10. Reattach the speaker grille and deco ring

See Speaker grille for illustrations.

11. Move the main screens up

Use the handles and push the screens up to their normal position.

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.

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Subwoofers (page 1 of 2)

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. Move the main screens downwards

Pull both main screens downwards by using the handle at the bottom of the screen.
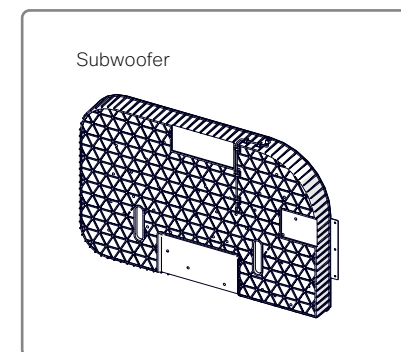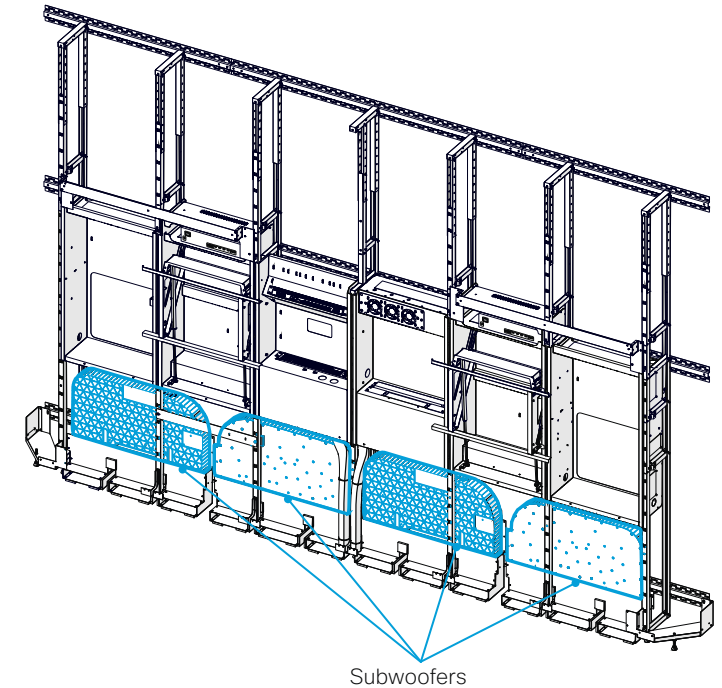
4. Remove one main screen

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

5. Remove the camera

Refer to the Camera section.

6. Remove loudspeakers

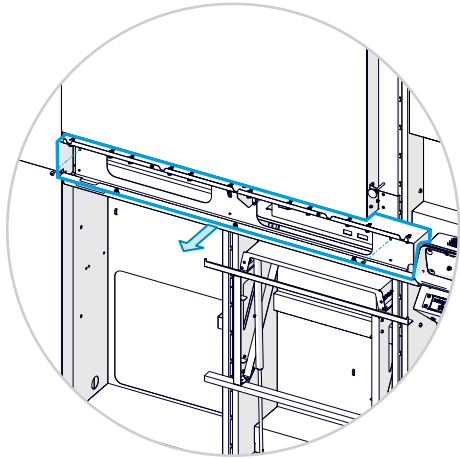Remove all loudspeakers on the side of the subwoofer that you are replacing. Refer to the Loudspeakers section.

Subwoofers

Subwoofer

Subwoofers (page 2 of 2)

7.   Remove the loudspeaker mounting structure

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

8.   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.

9.   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.

10.   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.

11.   Remove the subwoofer

12.   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.

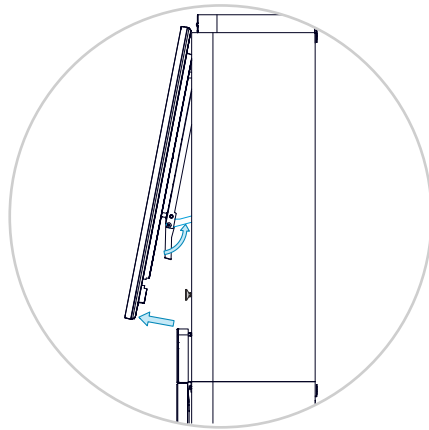Trim and cosmetic panels for left subwoofer

Content cavity
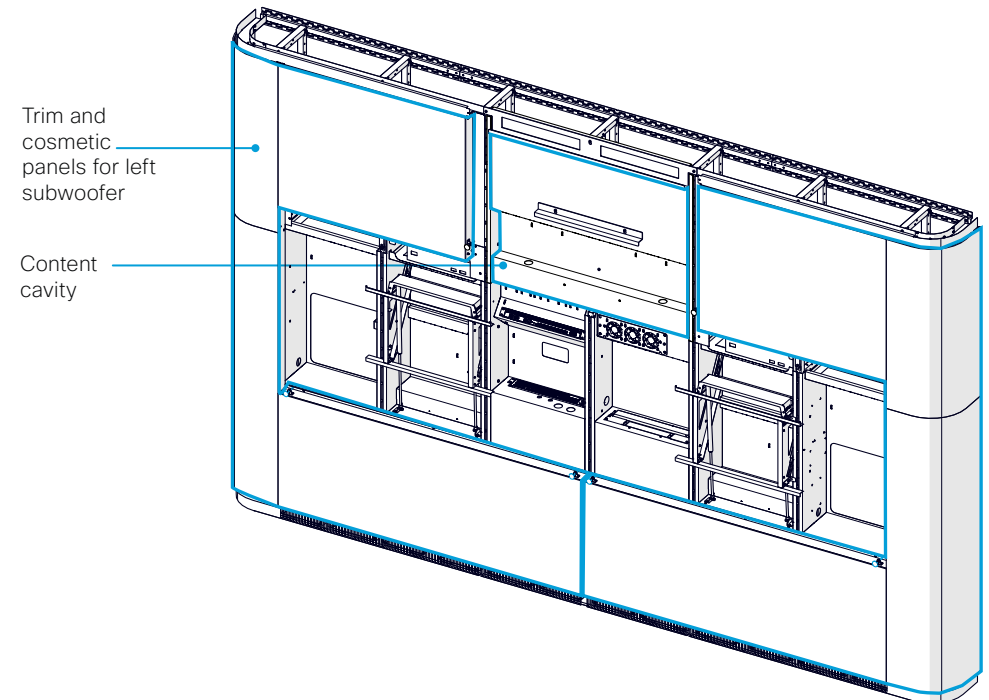
Camera

Camera

This section describes how to remove and replace the camera.

PID: CS-RPQUADCAM= (camera)

1.   Tilt out the content screen

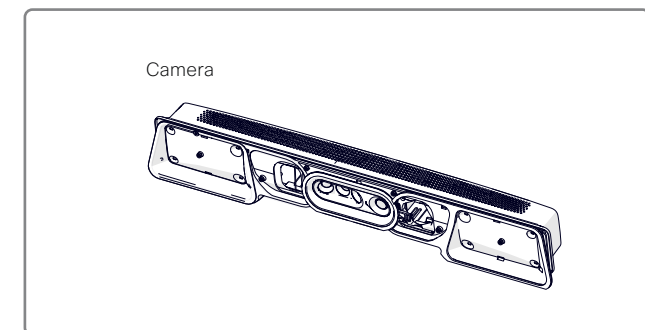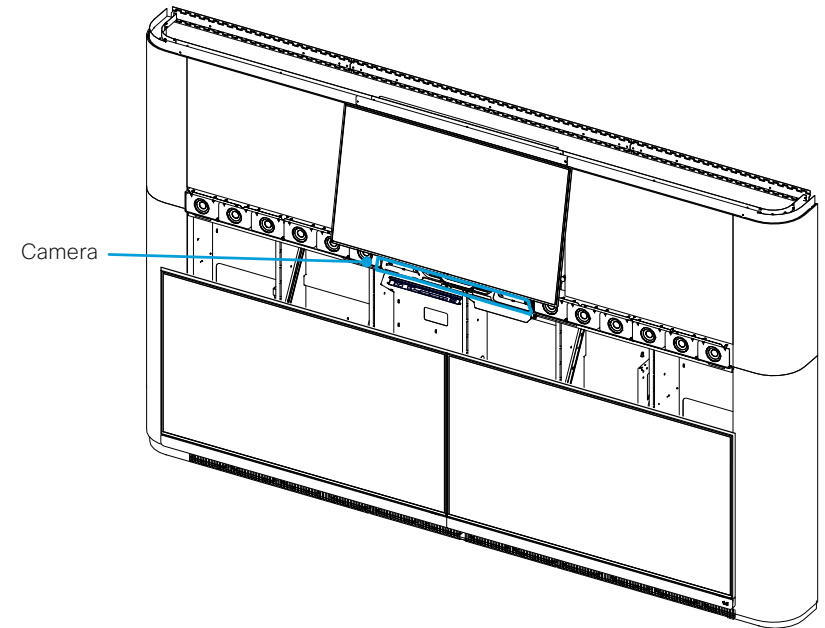Lift the lever behind the screen and fix the screen in a tilted position.

Side view

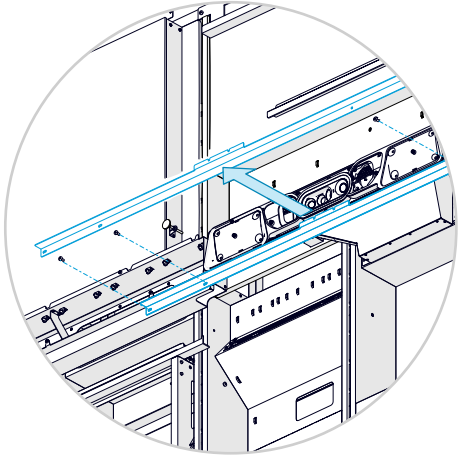## 2.   Move the main screens downwards

Pull both main screens downwards by using the handles at the bottom of the deco grille.
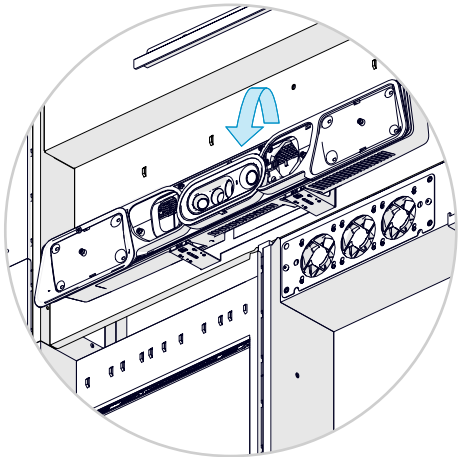
3.   Remove the deco ring and speaker grille

See Speaker grille for illustrations.

Camera
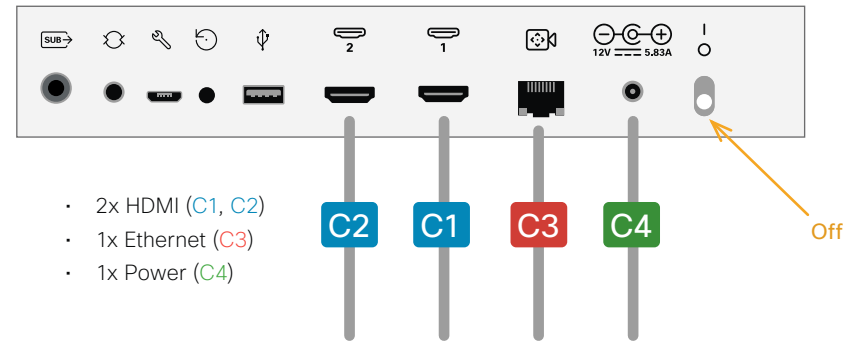
Camera

4. Remove the screen support profile

5. Tilt down the camera

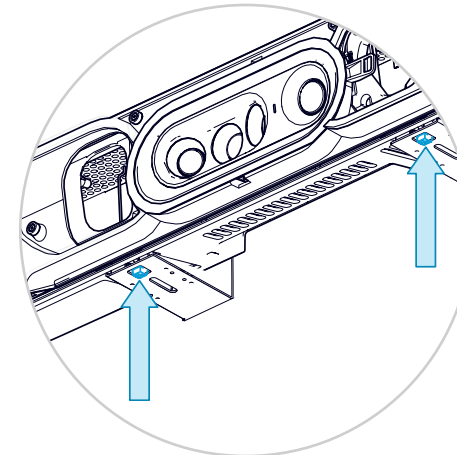## 6. Power off camera and disconnect the cables

Switch off the power and disconnect the cables. Refer to the Wiring diagram.

- 2x HDMI (C1, C2)
- 1x Ethernet (C3)
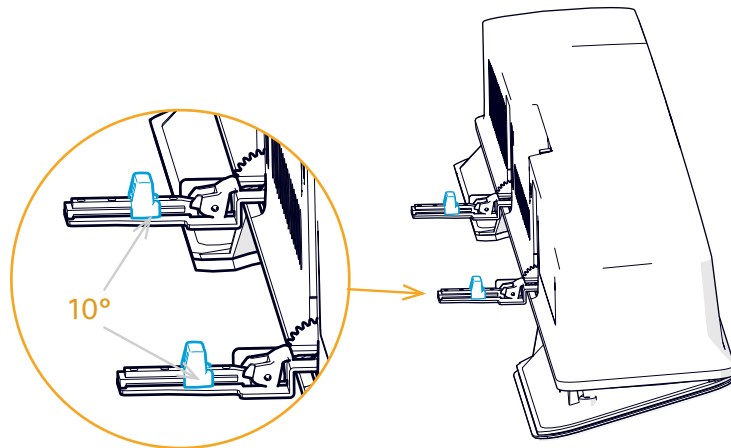- 1x Power (C4)

Off

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.

10°

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.

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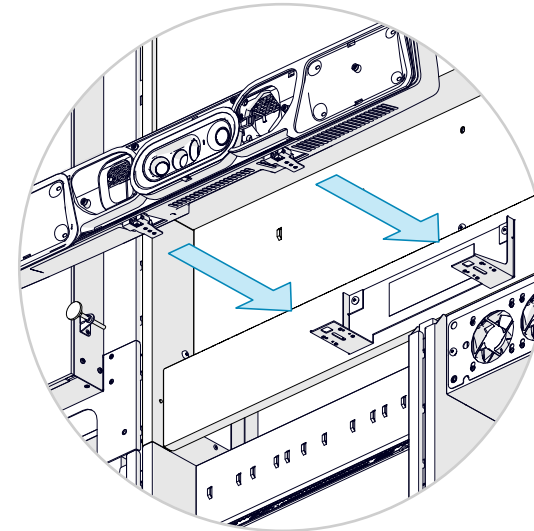
10. Connect the cables and switch on the power

a. Connect the cables to the camera according to the Wiring diagram: You may tilt the camera for easier access to the connector panel.

b. Fasten the cables to the rack cavity with velcro to prevent the cables from touching the camera and cause rattling noise.

c. Set the power switch in *On* position.

- 2x HDMI (C1, C2)
- 1x Ethernet (C3)
- 1x Power (C4)

C2 C1 C3 C4

On
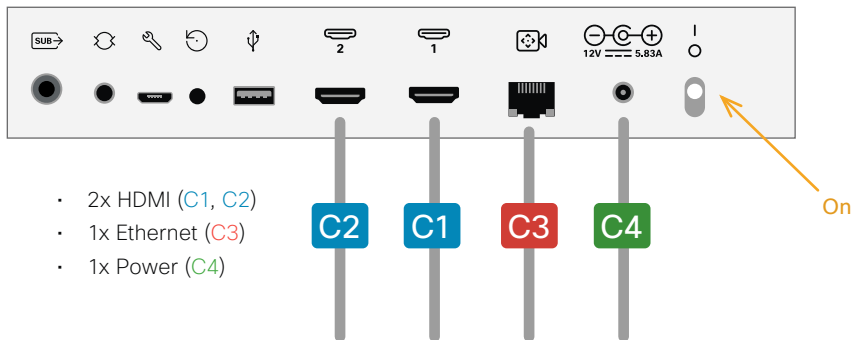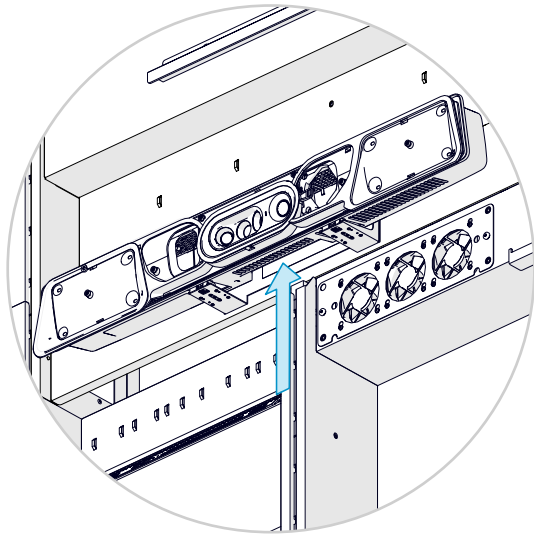
11. Mount the screen support profile
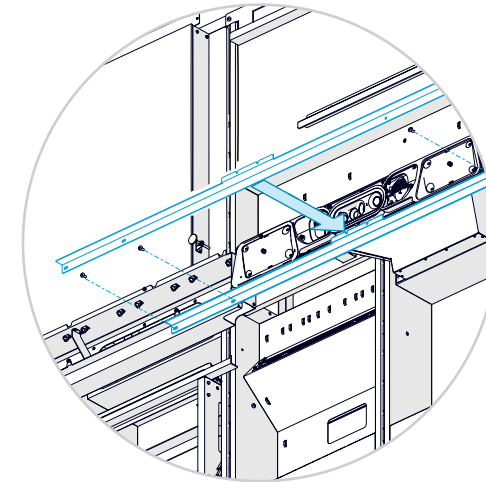
12. Mount the speaker grille and deco ring

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

13. Move the main screens up

Use the handles and push the screens up to their normal position.

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.

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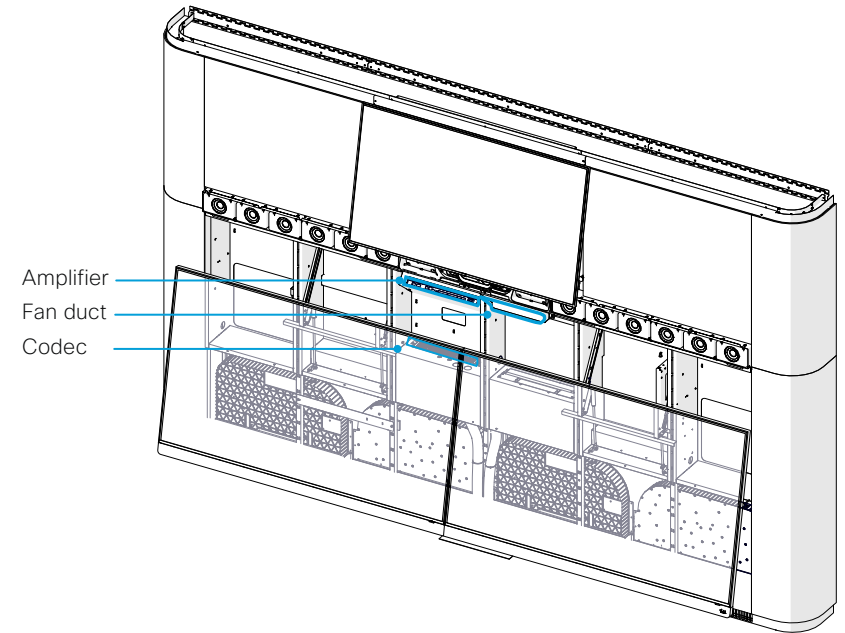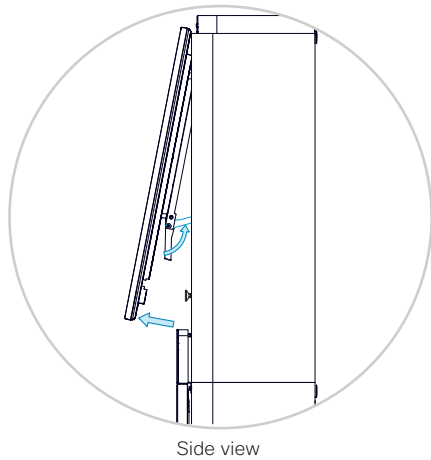
Fan and antenna

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.

Side view

## 2.   Move the main screens downwards

Pull both main screens downwards by using the handle at the bottom of the screen.

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

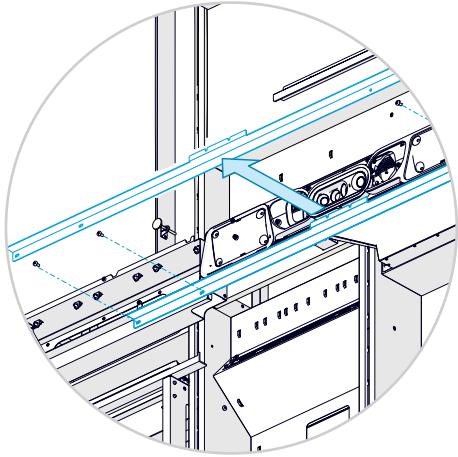See the codec connections panel. Refer to the Wiring diagram.
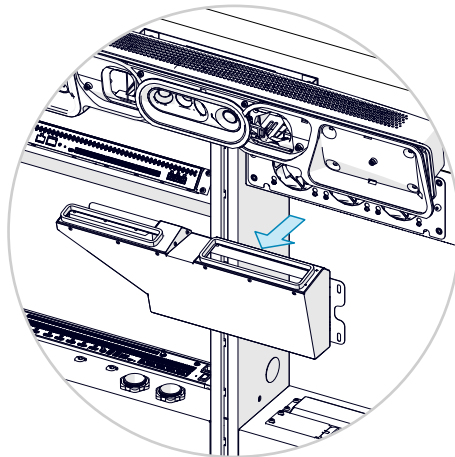
Amplifier

Fan duct

Codec
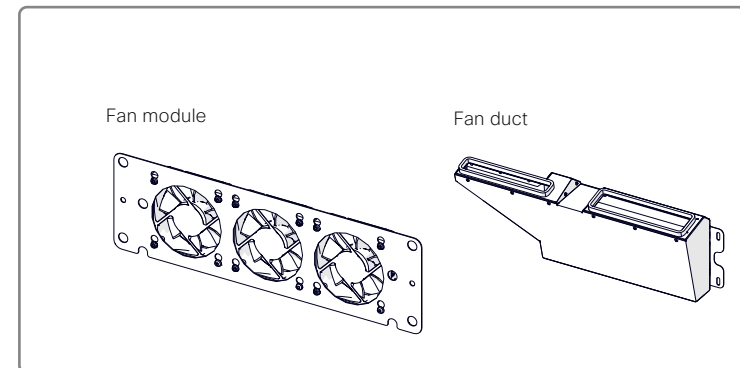
Fan module

Fan duct

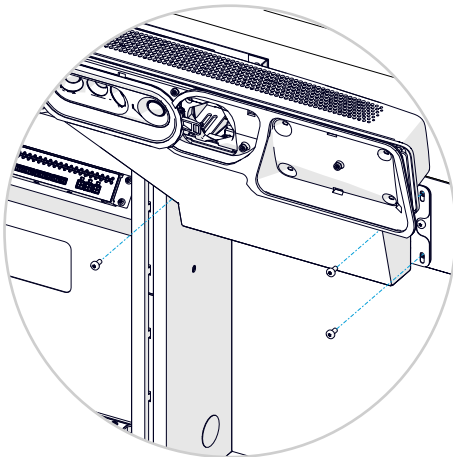## 5. Disconnect power from the amplifier

Pull out the power cable from the amplifier connections panel. Refer to the Wiring diagram.

6. Remove the screen support profile

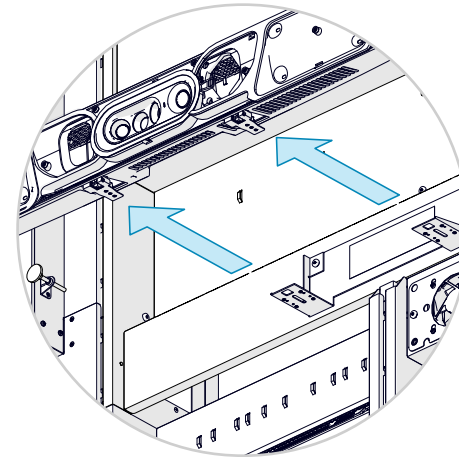
7. Unscrew and remove the fan duct

8. Remove the camera

a. Tilt down the camera.
b. Set camera power switch to OFF
c. Remove the cables
d. Pull out the camera
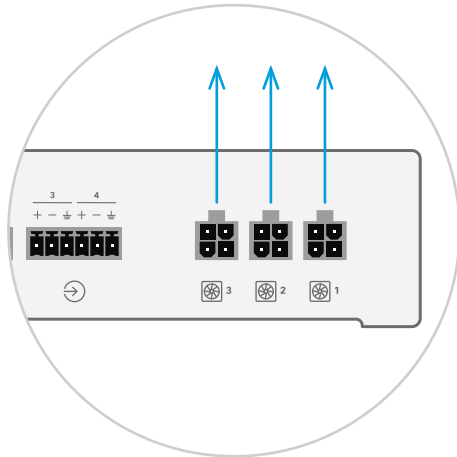
Refer to the Camera section for details.

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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.
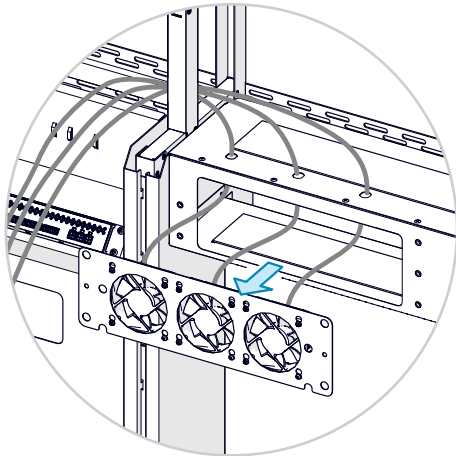
11. Remove the fans from the plate

Remove all the fans from the fan plate.

12. Mount the new fans on the plate

Mount each new fan onto the fan plate.

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13. Mount the fan module

Tie the nylon draw tape to the new fan cables.
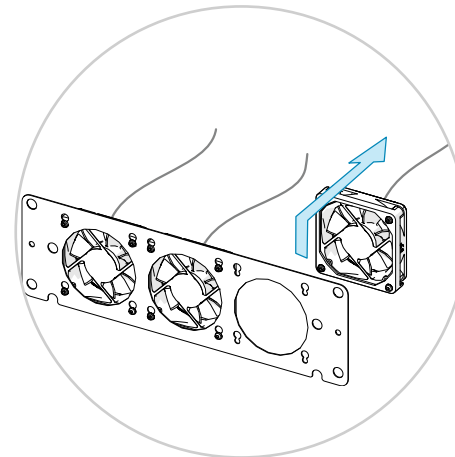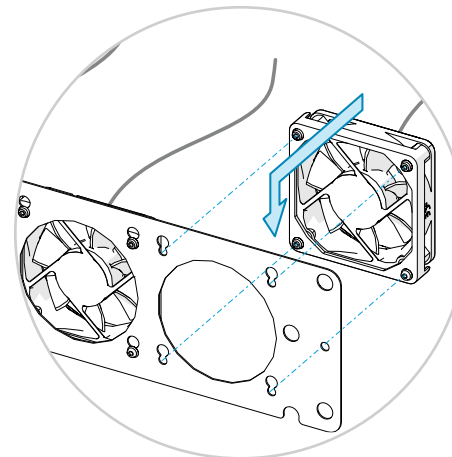
Hold the fan module with the cables upward. Thread the cables through the small holes in the cooling cavity, and insert the fan module in the slot.

Fasten the screw on either side.
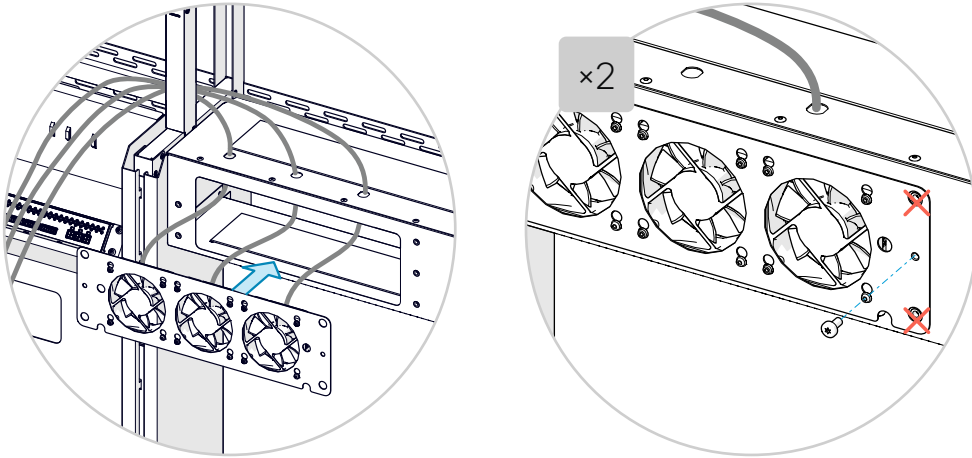
14. Connect the cables to the amplifier

Remove the nylon tape from the cables and connect the cables to the amplifier. Refer to the Wiring diagram.
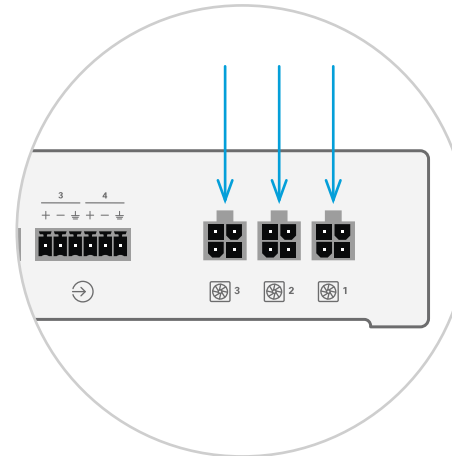
15. Mount the camera

a. Snap the new camera onto the bracket

b. Connect the cables

c. Set camera power switch to ON

Refer to the Camera section for details.

16. Mount the fan duct

The fan duct is placed in front of the fans, just below the camera.
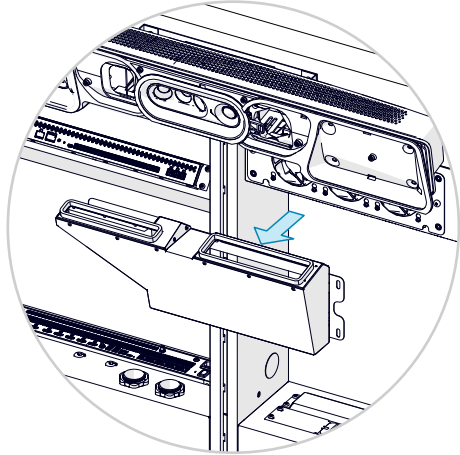
It's fastened with three screws. Push the duct gently upward toward the camera when tightening the screws.
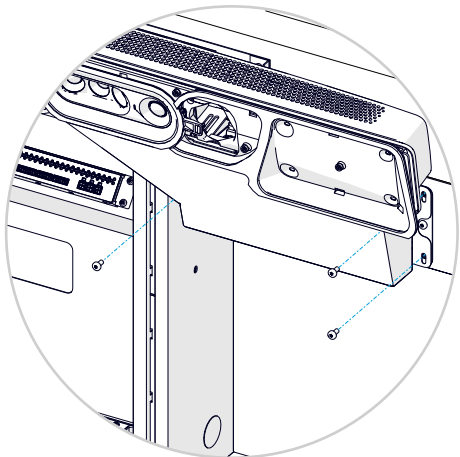
You want the duct as close to the camera as possible, but don't push so hard that the camera is moved out of position.

17. Mount the screen support profile
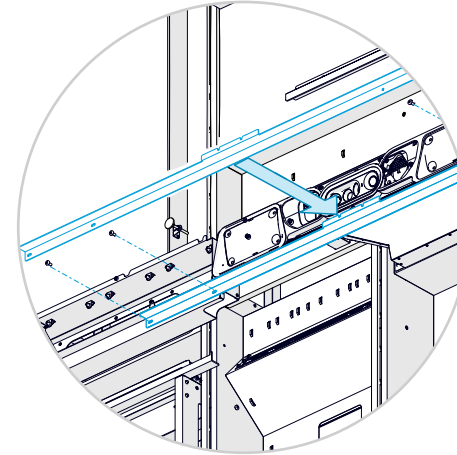
18. Connect power to the amplifier

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.

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 screens up

Use the handles and push the screens up to their normal position.

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

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

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

1. Follow all the steps to remove the LEFT main screen

See the Main screens section.

2. Switch off the power switch on the codec

Refer to the Wiring diagram for an illustration of the codec connector panel.

Codec

Antennas

Antenna support

Antenna kit

Antenna support with two antennas

Cable gland
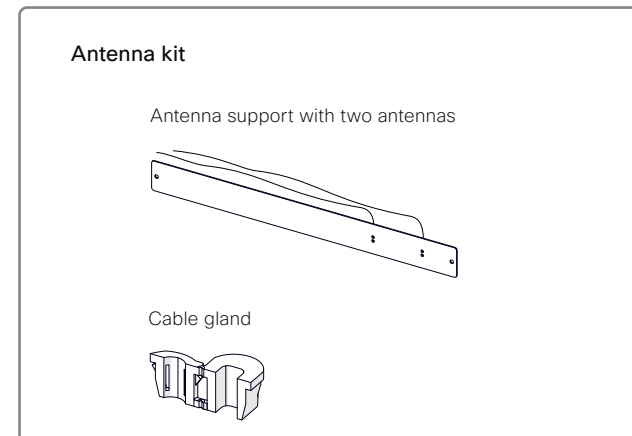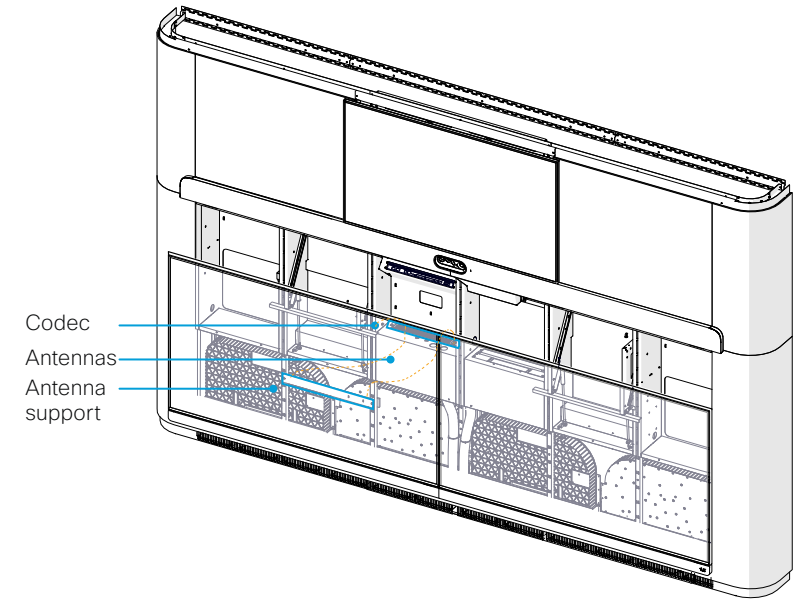
Antenna kit

3.   Remove the trim on the left side

The trim is above the lower front panel. There are five screws.
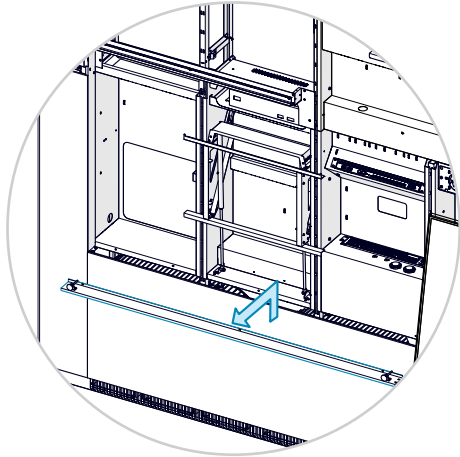
4.   Remove the lower front panel on the left side

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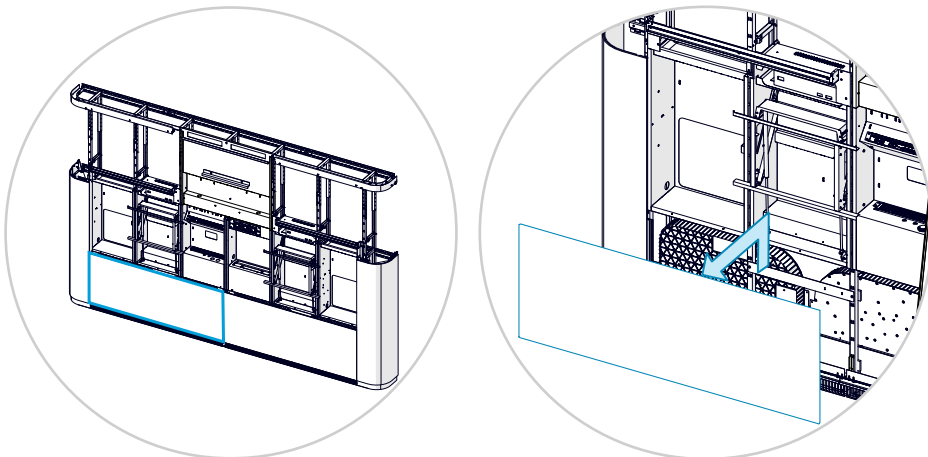
5.   Disconnect the antenna from the codec

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.
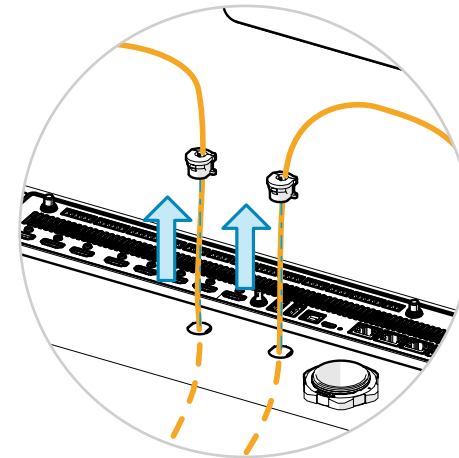
6.   Remove the antenna support from the rack

Unscrew the two screws and remove the antenna support.

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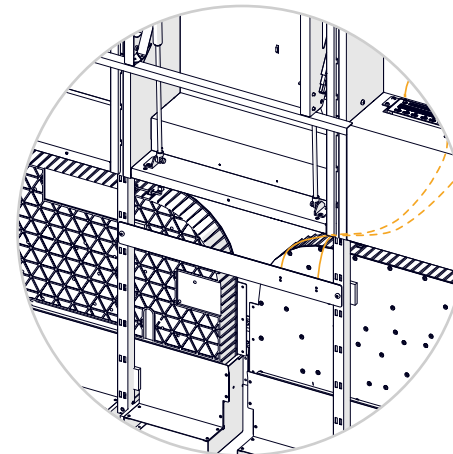
7. Install the new antennas

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.
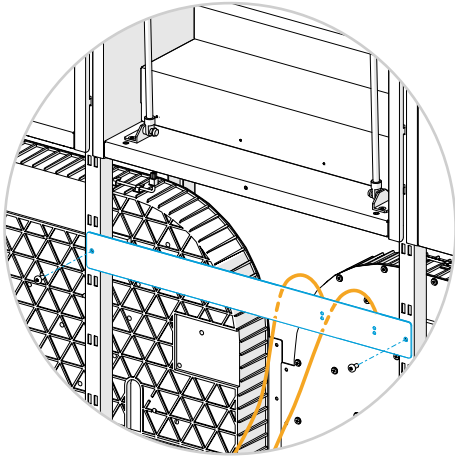
b. Thread the two antennas up through the small holes in the rack cavity, and connect them to the codec. Both antennas are identical, it does not matter which cable goes where, but both needs to be connected.
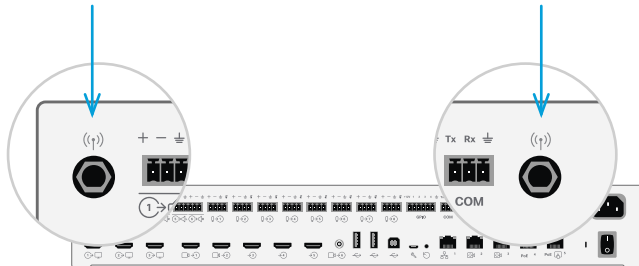
c. Guide the antennas around the codec as shown above. Then, attach the cable glands for strain relief.
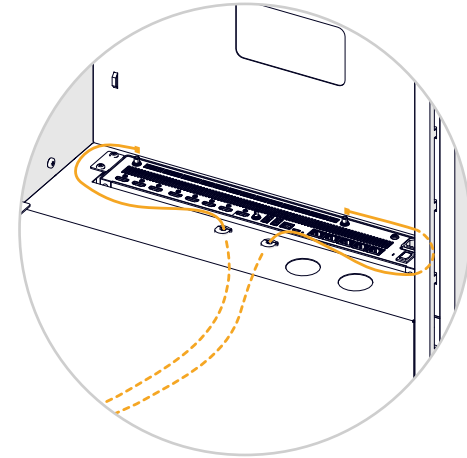
d. Fasten the antennas to the risers with Velcro to prevent them from touching the subwoofers and cause rattling noise.

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.
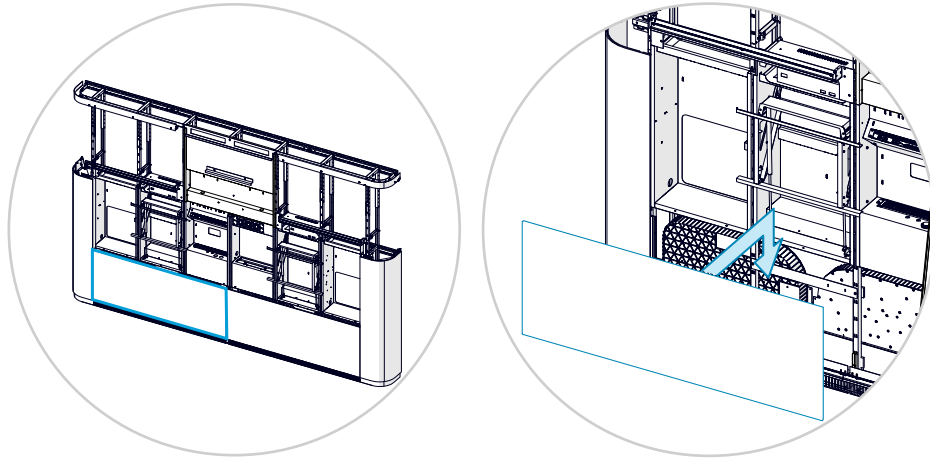
9. Mount the trim

Fit the trim fully into the groove of the front panel, before you fasten the screws.
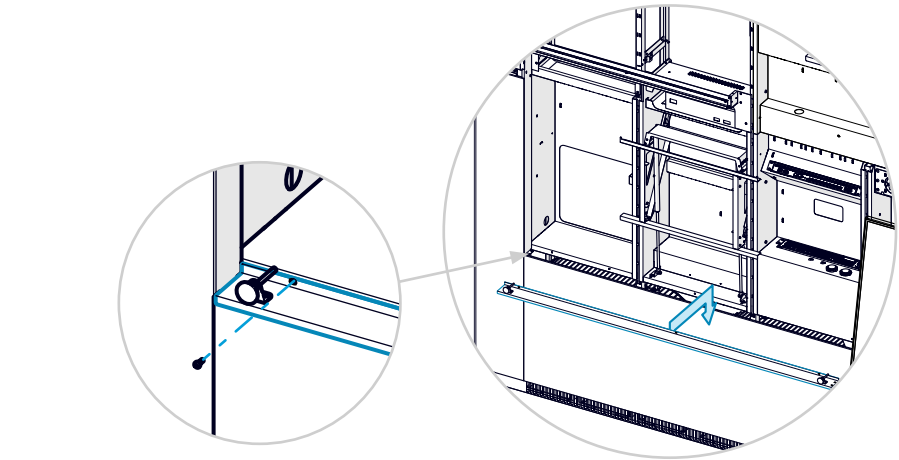
This side toward the corner
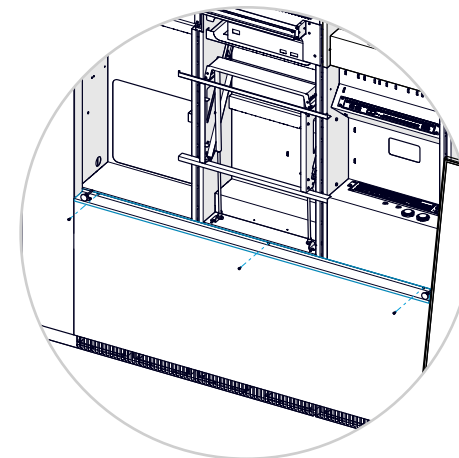
Three screws from the front.
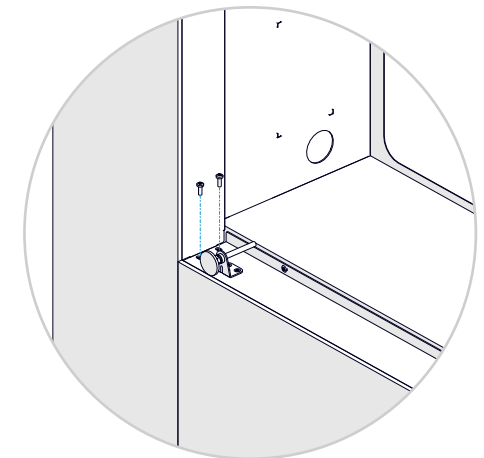
In the corner, two screws from the top. Push the corner panel toward center when fastening these screws.

Antenna kit

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 screens up

Use the handles and push the screens up to their normal position. Also push them together to meet at the center split line.

Codec and amplifier

Codec (page 1 of 2)

Cisco Codec Pro

PIDs:

- CS-CODEC-PRO=, CS-CODEC-PRO-NR=, CS-CODECPRO-NR-K7= (codec without rack ears)
- CS-CPRO-RACKEARS= (rack ears for codec)

1.   Move the main screens downwards

Pull both main screens downwards by using the handles 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 and illustration of the codec connector panel.

4.   Unscrew the screws holding the codec

Codec

×2

Codec Pro   Rack ears

Codec (page 2 of 2)
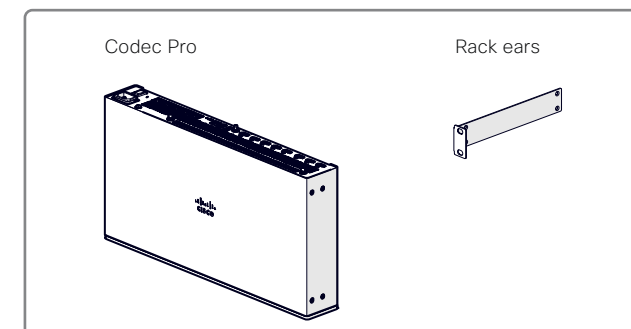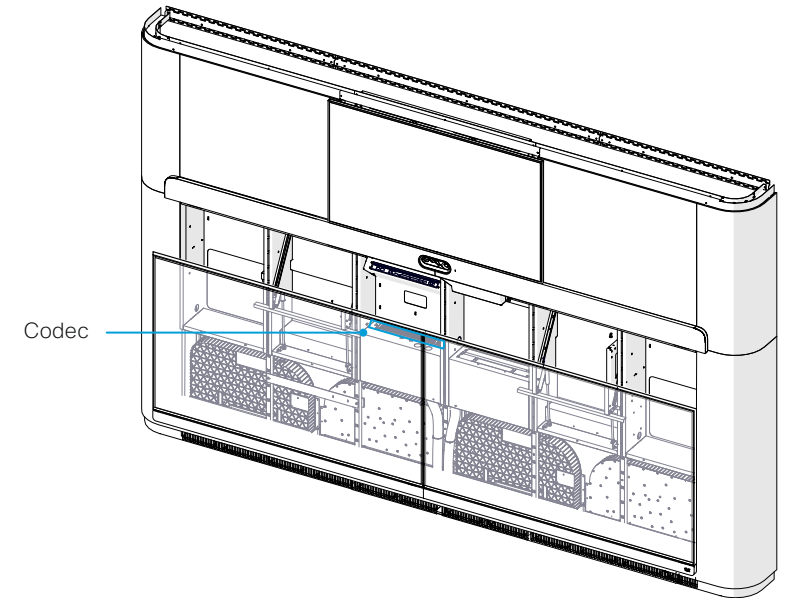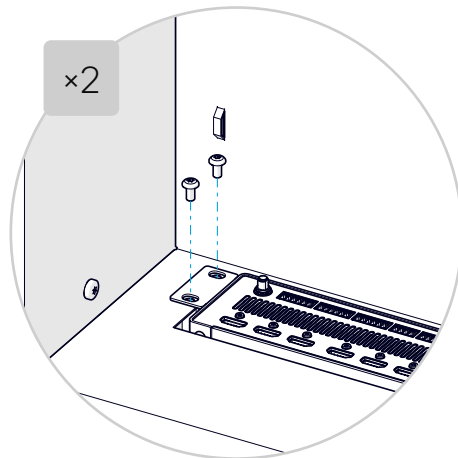
5.   Remove the codec from the rack
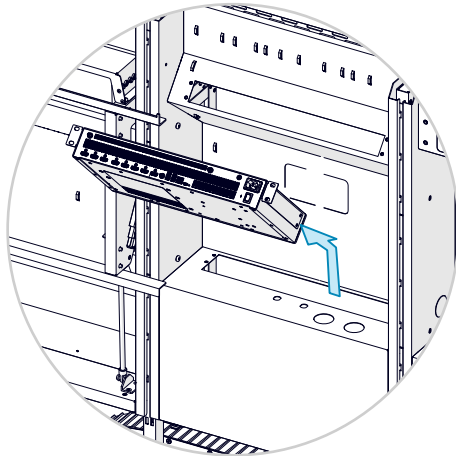
6.   Remove rack ears from the codec
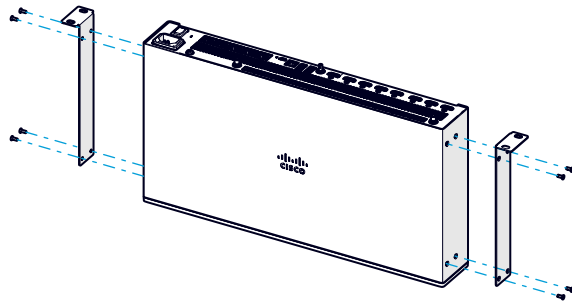
7.   Place the rack ears onto the new codec

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 screens up

Use the handles and push the screens up to their normal position.

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 main screens downwards

Pull both main screens downwards by using the handles 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.

3.   Unscrew the screws holding the amplifier

Amplifier

×2

Amplifier with rack ears
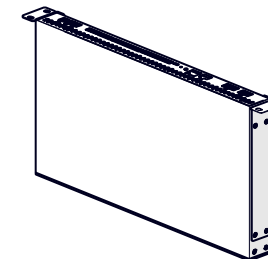
4. Remove the amplifier
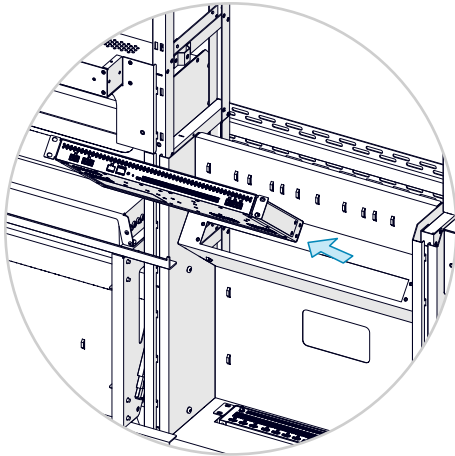
5. Mount the new amplifier

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 screens up

Use the handles and push the screens up to their normal position.

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Power supply units for the amplifier

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.
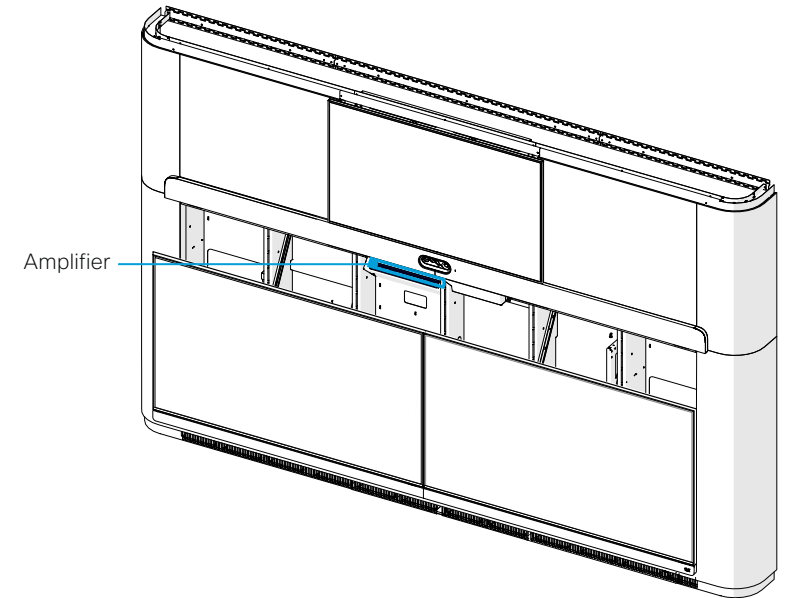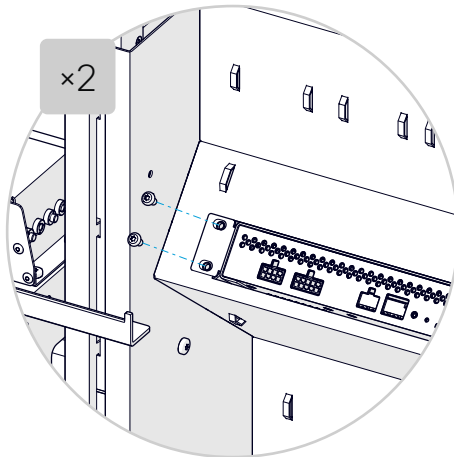
PIDs:

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

1. Move the main screens downwards

Pull both main screens downwards by using the handles 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.

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

Amplifier

PSUs
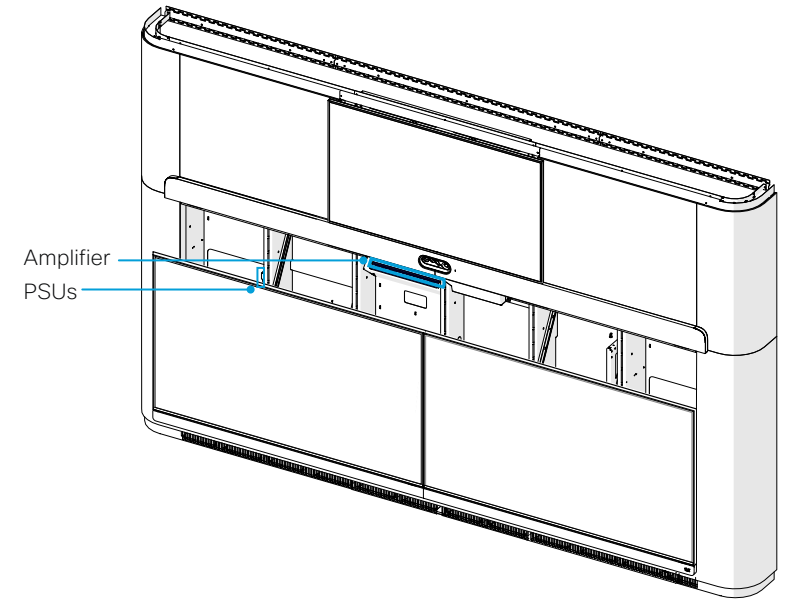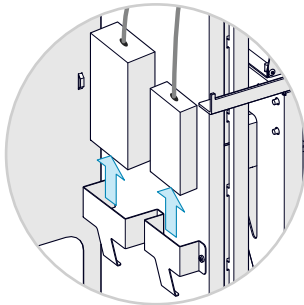
5. Install the new PSU into the bracket

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 screens up

Use the handles and push the screens up to their normal position.

Switch

Ethernet switch in the system

There are two Ethernet switches that can be used. The switch that is currently shipped is the Cisco Catalyst 1000-16FP-2G-L; however, early shipments included the Cisco Catalyst 3560CX-12PC-S.

PIDs:

- WS-C3560CX-12PC-S or C1000-16FP-2G-L (Ethernet switch)

- CS-SWCH-RACKEAR= (rack ears for Ethernet switch)

1. Move the main screens downwards

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

2. Disconnect all Ethernet cables from the switch

3. Remove the screws holding the Ethernet switch

×2

Switch

Ethernet switch

Rack ears
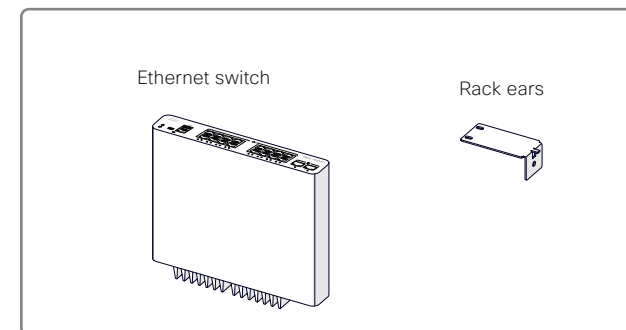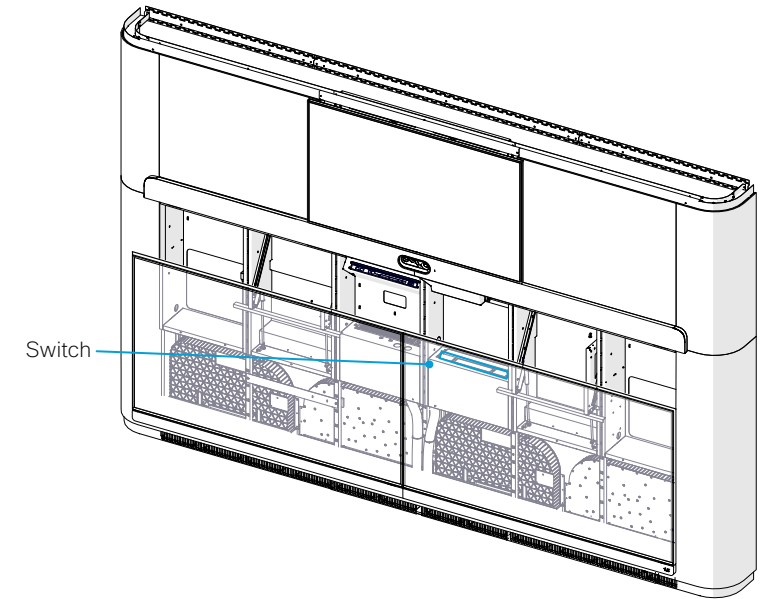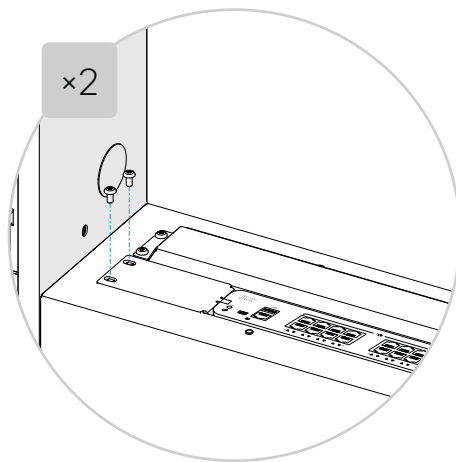
Ethernet switch in the system

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.
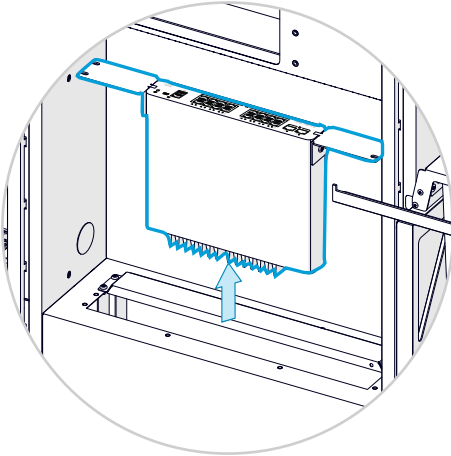
5.   Remove rack ears from the switch
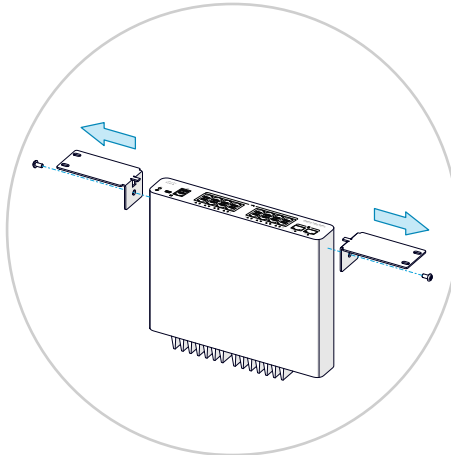
6.   Place the rack ears onto the new switch

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

8.   Fasten the screws for the switch

×2
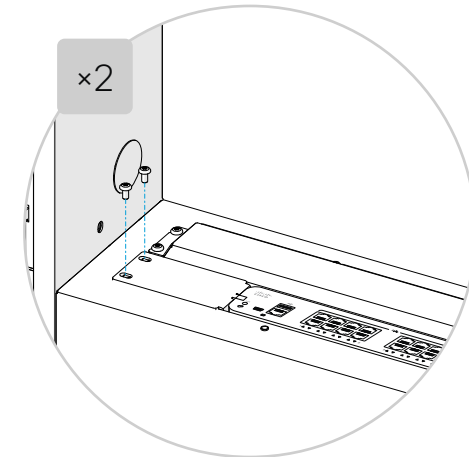
9.   Connect Ethernet cables to the switch

Connect the Ethernet cables to the switch according to the Wiring diagram.

10.   Move the main screens up

Use the handles and push the screens up to their normal position.

Ethernet switch in the table

There are two Ethernet switches that can be used. The switch that is currently shipped is the Cisco Catalyst 1000-16FP-2G-L; however, early shipments included the Cisco Catalyst 3560CX-12PC-S.

PIDs:

- WS-C3560CX-12PC-S or 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

Ethernet switch

Ethernet switch

Mounting tray

Cisco contacts

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

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

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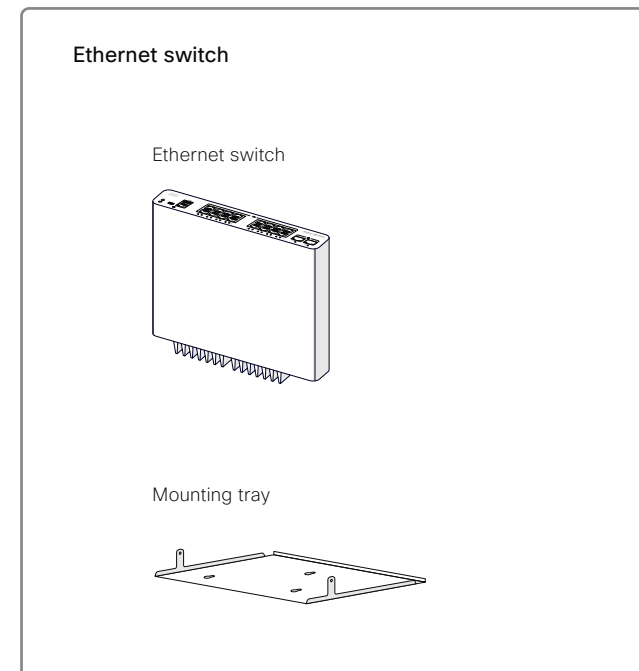ARE BELIEVED TO BE ACCURATE BUT ARE PRESENTED WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED. USERS MUST TAKE FULL RESPONSIBILITY FOR THEIR APPLICATION OF ANY PRODUCTS.

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