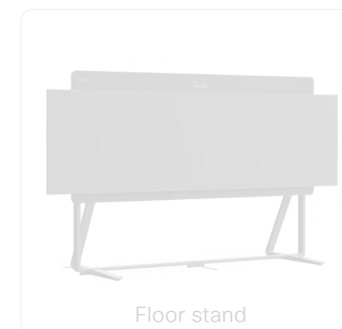
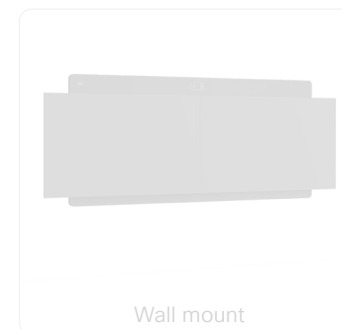


# Cisco Room Kit EQX

Installation guide, wall stand option



# Cisco Room Kit EQX



The Cisco Room Kit EQX system is designed to make your video conferencing room more versatile and flexible also for local meetings.

The Cisco Room Kit EQX is an all-in-one bundle with the Codec EQ and the Quad Camera as core. It gives the flexibility to bring your own external screens and integrate them with the purpose-built kit of room conferencing hardware components.

You can choose between three mounting options: wall mount, wall stand, and a freestanding floor stand.

The device supports advanced multi-camera scenarios, and offers speaker tracking, and intelligent presenter and audience views. Integrated microphones support the state of the art speaker tracking solution.

The device's integrated loudspeaker system consists of six main loudspeakers and a bass loudspeaker, driven by a sixteen channel amplifier.

You must connect external microphones for audio pickup, because the integrated microphones are only for speaker tracking. You can choose between analog, USB, or AES67 compatible Ethernet (IP) microphones, for example the Cisco Table Microphone (analog) or Cisco Table Microphone Pro (Ethernet). You can also install a full external DSP controlled microphone solution. More than one digital microphone requires a PoE compatible switch.

For more information, read the Cisco Room Kit EQX datasheet, which is available online.

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## BEFORE YOU START THE INSTALLATION

It is important that you read our *Room Preparation Guidelines* before you start the installation. They are available online.

During the installation you need both the *Installation guide* (this guide) and the *Wiring Diagram*. The wiring diagram is shipped with the product.

We recommend you to check if there are newer versions of the documents online. You find the version number on the first page (format: 78-xxxxxx-yyyy, where yyyy is the version number; or Dxxxxx.yy, where yy is the version number).

### Download information

You can download the room preparation guidelines, wiring diagram, and installation guides from:

<https://www.cisco.com/go/room-kit-eqx-installation>



This webpage contains installation guides for all products in the Cisco Room Series. Look for *Cisco Room Kit EQX*.

### Installation by instructed personnel

Due to the size and mass of the Room Kit EQX system, it must be installed according to our installation instructions by qualified personnel. The installer must determine whether the wall must be reinforced prior to the installation and calculate the number and type of screws required for a safe wall mounting.

### The product is fastened to the wall

The Room Kit EQX wall stand is fastened to the wall with brackets. The stand must be fastened so that it can safely support the product. The product may weigh up to 235 kg (518 lb), including screens\*.

### Perfectly flat floor

The stand must be level. If the floor is not perfectly flat, this must be compensated for before you fasten the stand to the wall.

### Power

Don't use an external multi-socket extension cord for the Cisco components; use the provided power strip.

### Temperature

Don't install the Room Kit EQX where it may be exposed to direct sunlight.

Because some heat might build up inside the Room Kit EQX, the screens must be rated for operation in ambient temperatures up to at least 40°C (104°F).

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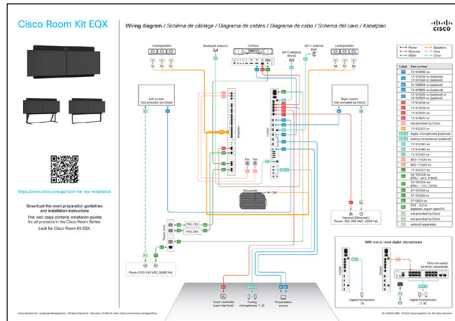
\* Maximum weight per screen allowed is 50 kg (110 lb).

# PACKAGING

You have received a pallet with several boxes. Except for the screens, which are not provided by Cisco, these boxes include the parts you need to install the wall mount version of Room Kit EQX.

When installing the system, you start with the mounting kit, which is in the box marked with A.

You find the complete wiring diagram and some information about the boxes just below the overpack lid on the pallet.



## Additional components required

- **Two screens**

Refer to the [Room preparation guidelines](#) online for screen requirement details and recommended screens.

- **Microphones** (if you have not included Cisco microphones in your order).

- **Ethernet switch** (if you have more than one digital microphone, such as Cisco Table Microphone Pro).

We recommend the switches covered in the [Configuration of Cisco CBS250, CBS350, and C1200 switches for use with Cisco video collaboration devices](#) technical paper online.

	Boxes on pallet	Reference used in this guide
Wall stand kit <sup>1</sup>		A
Center module <sup>1</sup>		B
Includes box with brackets and other components		Center kit
Side module 1,2 <sup>1</sup>		C1, C2
Cisco Codec EQ		Codec
Amplifier (Cisco DNAM IV)		Amplifier
Accessory kit 1		Acc kit 1
Loudspeakers		Loudspeakers

	Boxes on pallet	Reference used in this guide
Subwoofer		Subwoofer
Fans		Fans
Accessory kit 2		Acc kit 2
Camera (Cisco Quad Camera)		Camera
Cisco Room Navigator		Navigator
Grilles <sup>1</sup>		D
VESA bracket 1,2		VESA bracket 1, VESA bracket 2
Cisco Table Microphone Pro (optional) <sup>2</sup>		Table Mic Pro

<sup>1</sup> The box has a white label, as shown in the illustration, to help finding the box on the pallet.

<sup>2</sup> If you have ordered Cisco Table Microphone Pro (maximum 3), they are shipped in separate boxes on the pallet. If you have ordered the Cisco Table Microphone (maximum 3), they are shipped in Accessory kit 2.

# SCREWS AND TOOLS

## Recommended tools and equipment







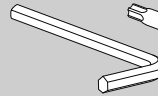
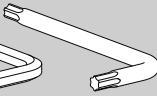
- Stepladder
- Drill
  - Torx T20 bit
  - Hex 4 mm bit
  - Appropriate drill bits for your wall material
  - Appropriate wall fasteners/anchors for your wall construction
- Laser level and/or spirit level
- Measuring tape
- Pencil

## Screws, nuts, spacers, and tools

Screws, nuts, spacers, and tools are in small cardboard boxes inside the bigger boxes [A](#), [Center kit](#) (placed inside [B](#)), and [D](#); and in a paper bag in [Acc kit 2](#).

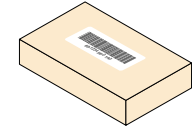
**We recommend:** When you open one of the bigger boxes, first look for the screw box and place it where you can easily find it when you need the screws.

Each step throughout this guide has an inventory list with all required parts for that step. These lists also include the number and type of screws, and in which box you find them.

		<b>A</b> (1 box)	<b>Center kit</b> (1 box)	<b>D</b> (2 boxes)	<b>Acc kit 2</b> (1 paper bag)
M6x12, Hex 4 mm		48x			
M6x8, Hex 4 mm		16x	8x	8x	
M4x8, Torx T20			21x		4x
M4x10, Torx T20			12x	70x	
Plastic washer				66x	
Sliding nut			12x		
 	Hex 4 mm    Torx T20		✓		

In addition:

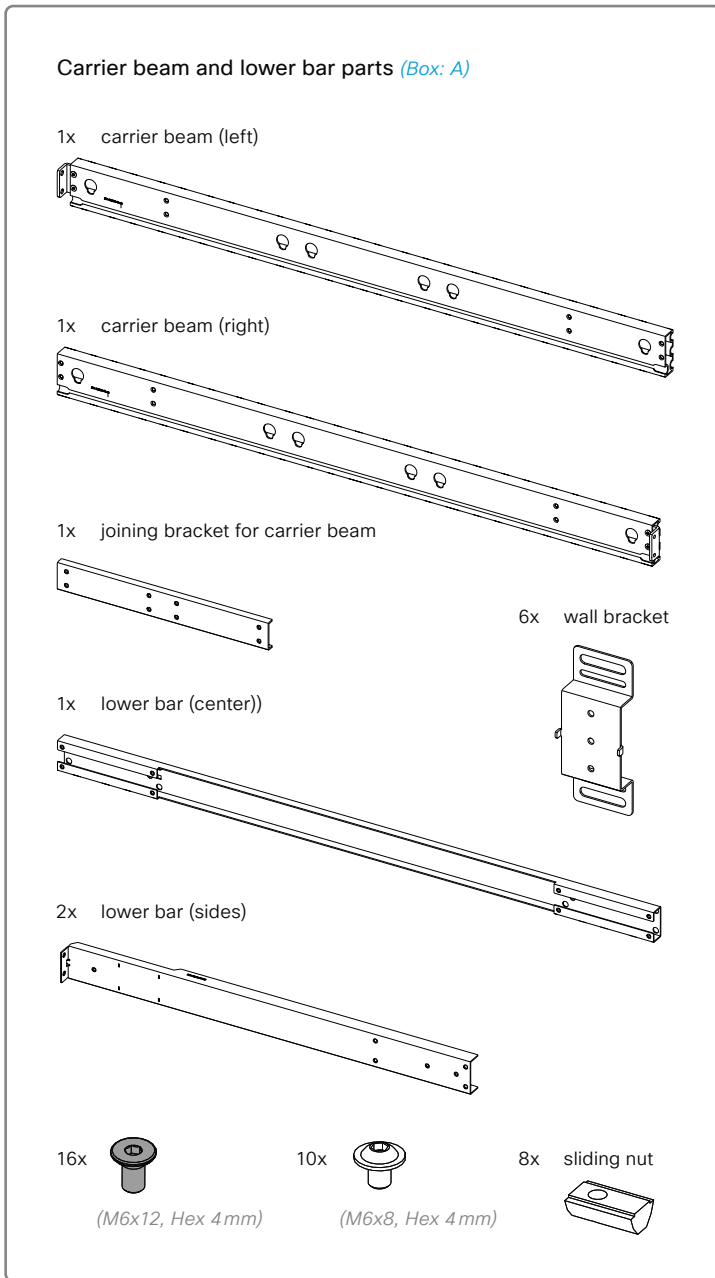
The installer must bring the number and type of screws required to safely fasten the wall stand frame to the wall ([step 3](#)).



The screw boxes are small, and with a white barcode sticker.

- Width: 115 mm (4.5 in.)
- Depth: 65 mm (2.6 in.)
- Height: 27 mm (1.1 in.)

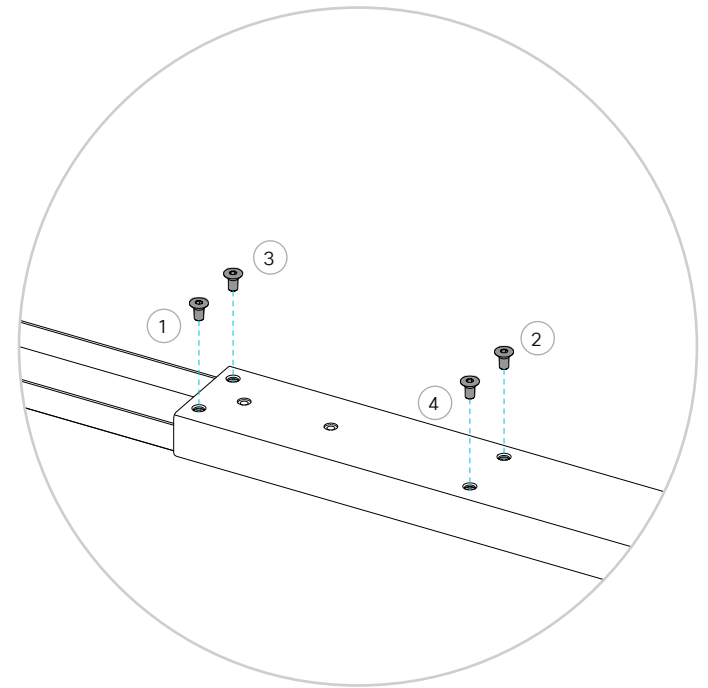
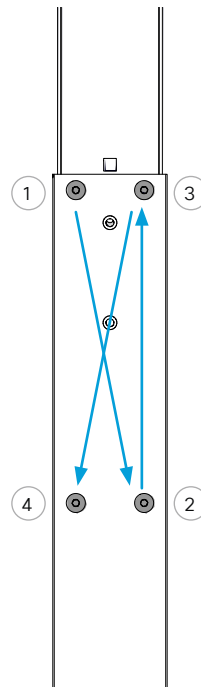
# 1. Assemble the lower bar and carrier beam



## Before you start

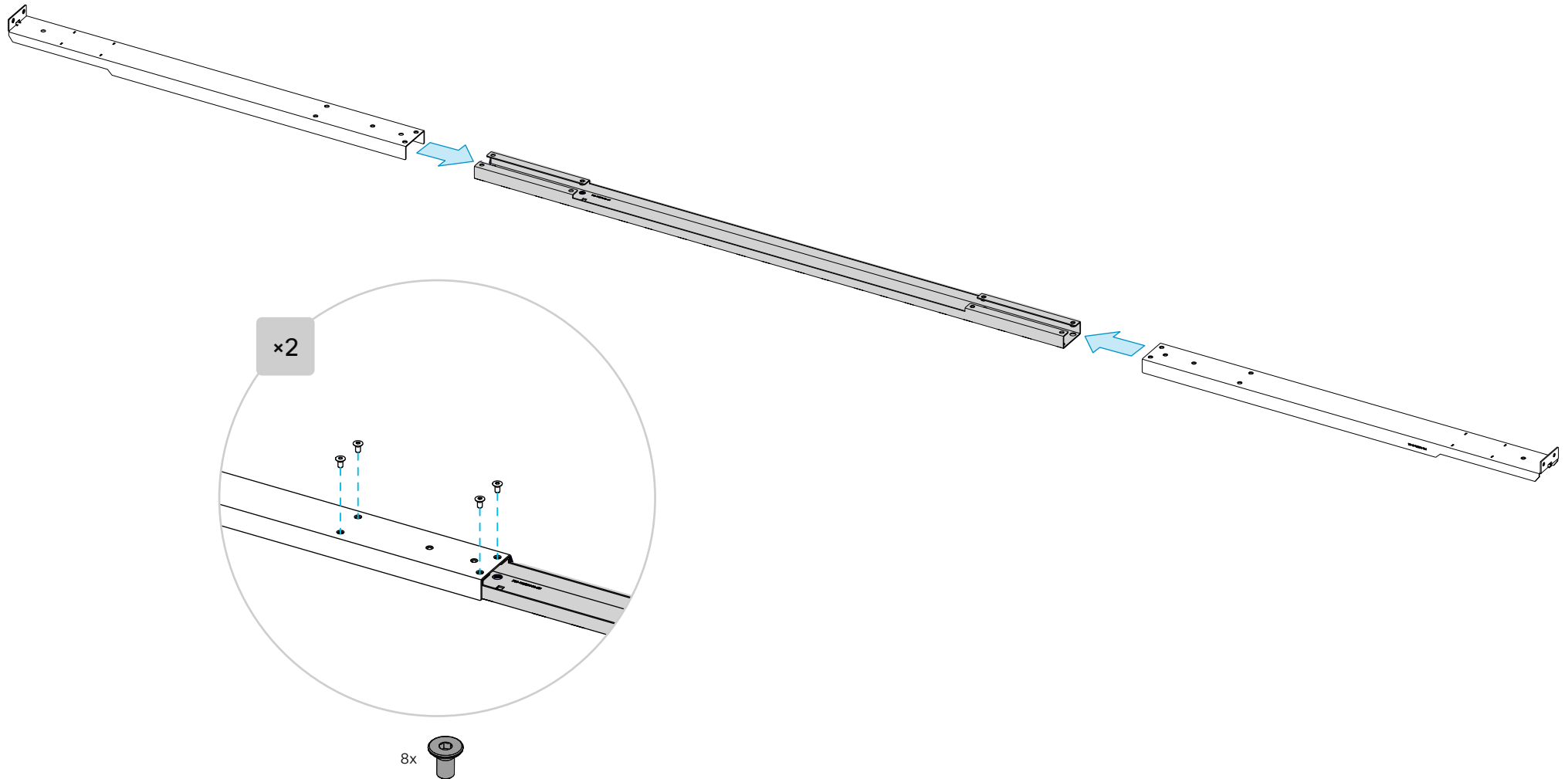
When assembling the wall stand, quite often there are four screws fixing two parts together. In those cases, we recommend the following:

1. Enter, but not tighten, the screws in the order shown here (zig-zag pattern).
2. Tighten the screws in the same order.



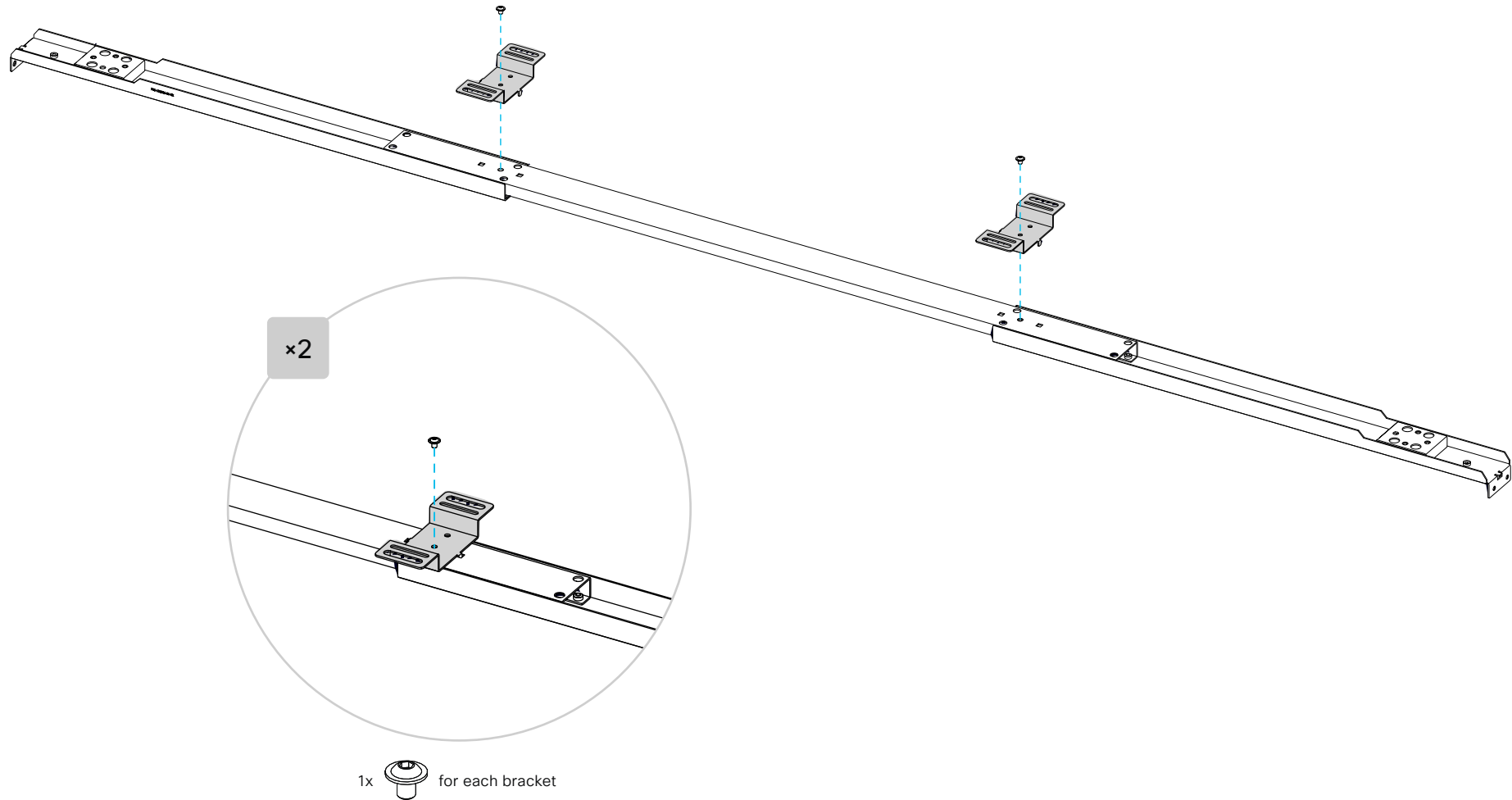
## 1.1. Assemble the lower bar

Slide the side parts onto the center part and fasten with 4 screws (M6x12, Hex 4 mm) each.



## 1.2. Add wall brackets to the lower bar

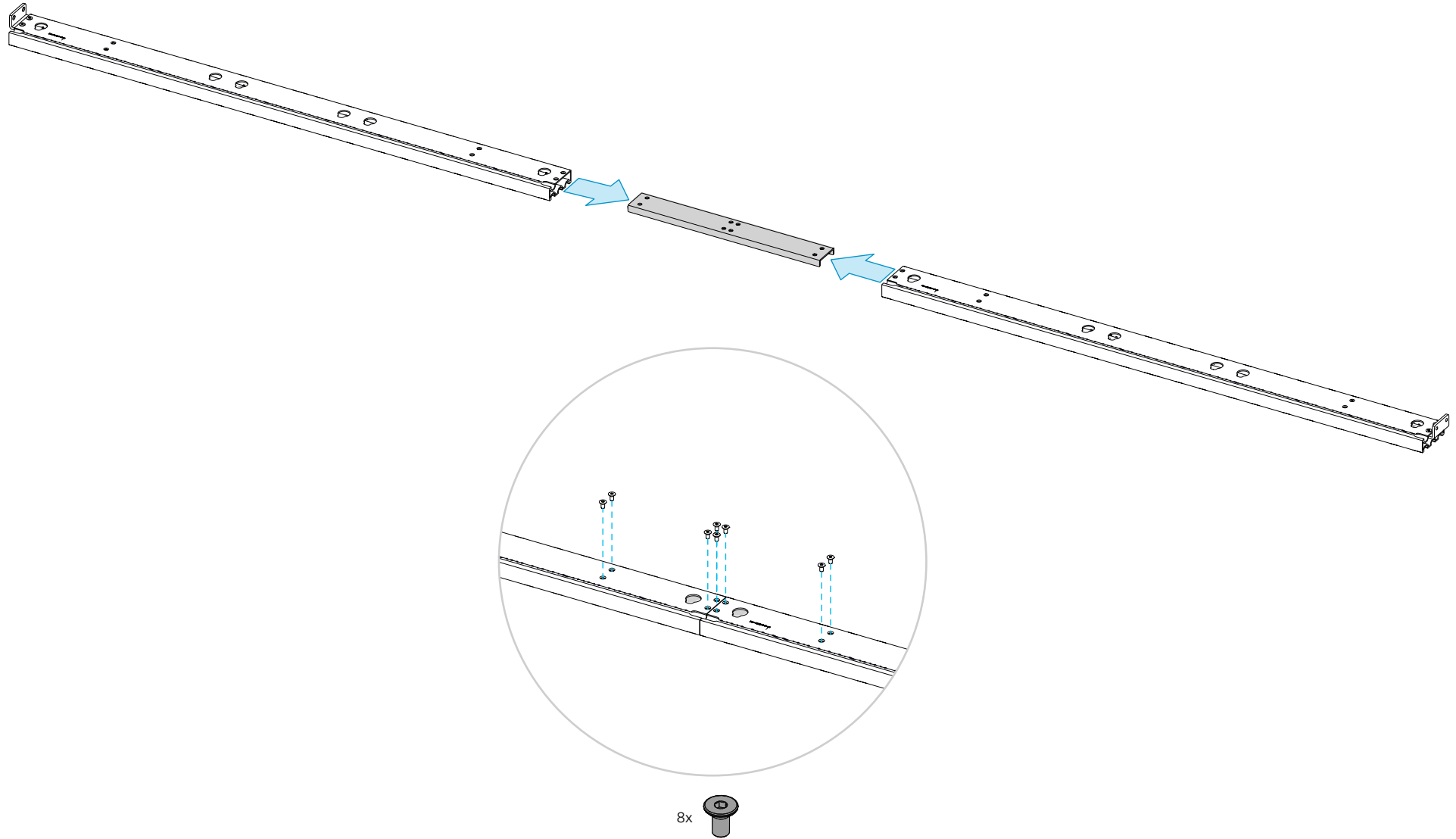
Flip the bar and fasten the two wall brackets with 1 screw (M6x8, Hex 4 mm) each.





### 1.3. Assemble the carrier beam

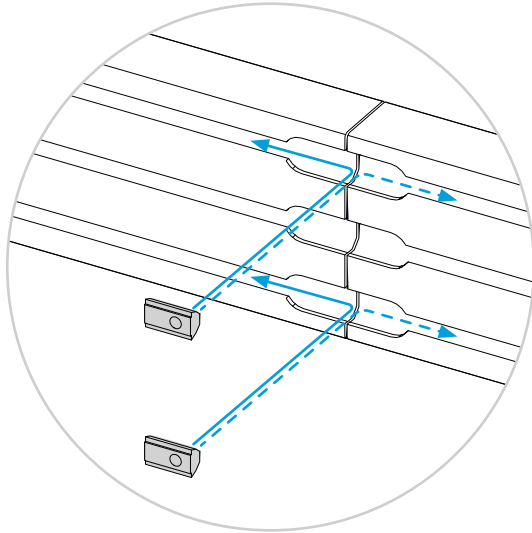
Connect the carrier beam parts together using the joining bracket and 8 screws (M6x12, Hex 4 mm).



## 1.4. Add wall brackets to the carrier beam

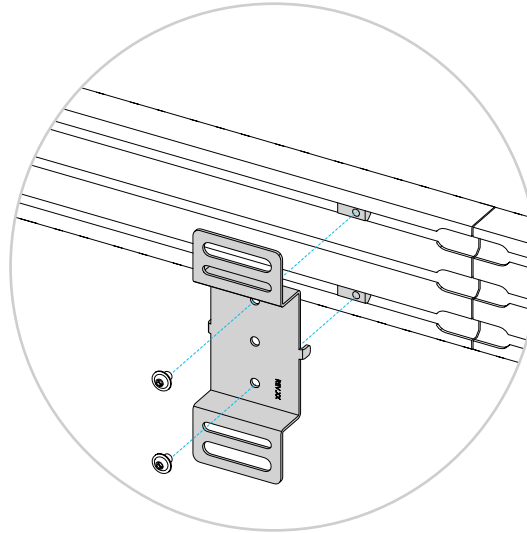
Repeat the following steps for all wall brackets: two brackets to the left of center, and two brackets to the right.


1. Enter one nut in the upper and lower notches at the rear of the carrier beam.



2x  for each bracket

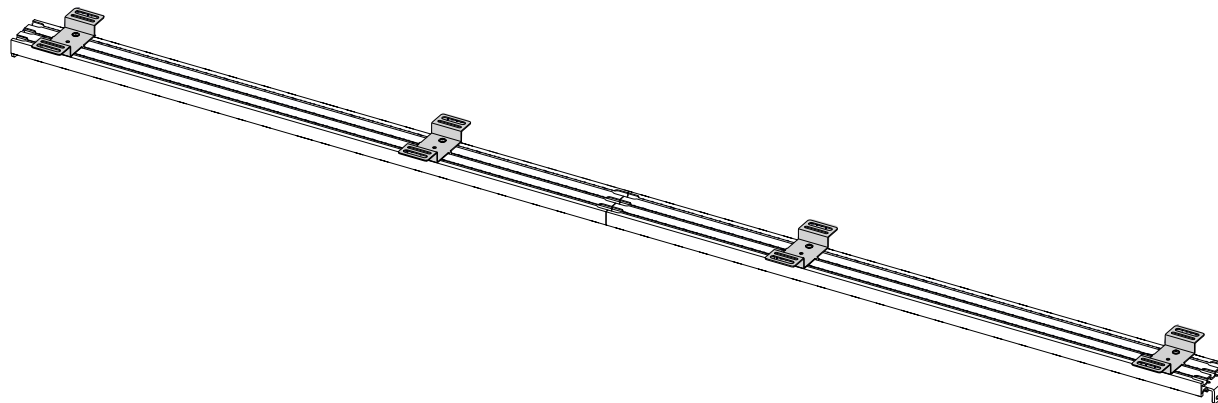
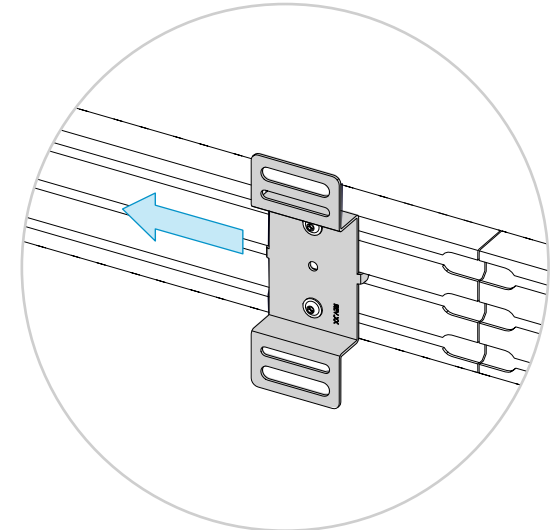
2. Fasten a wall bracket loosely to the nuts, which you just slid in, with two screws (M6x8, Hex 4 mm); don't tighten the screws.



2x  for each bracket

3. Slide the bracket on the beam to its correct position, and tighten the two screws.

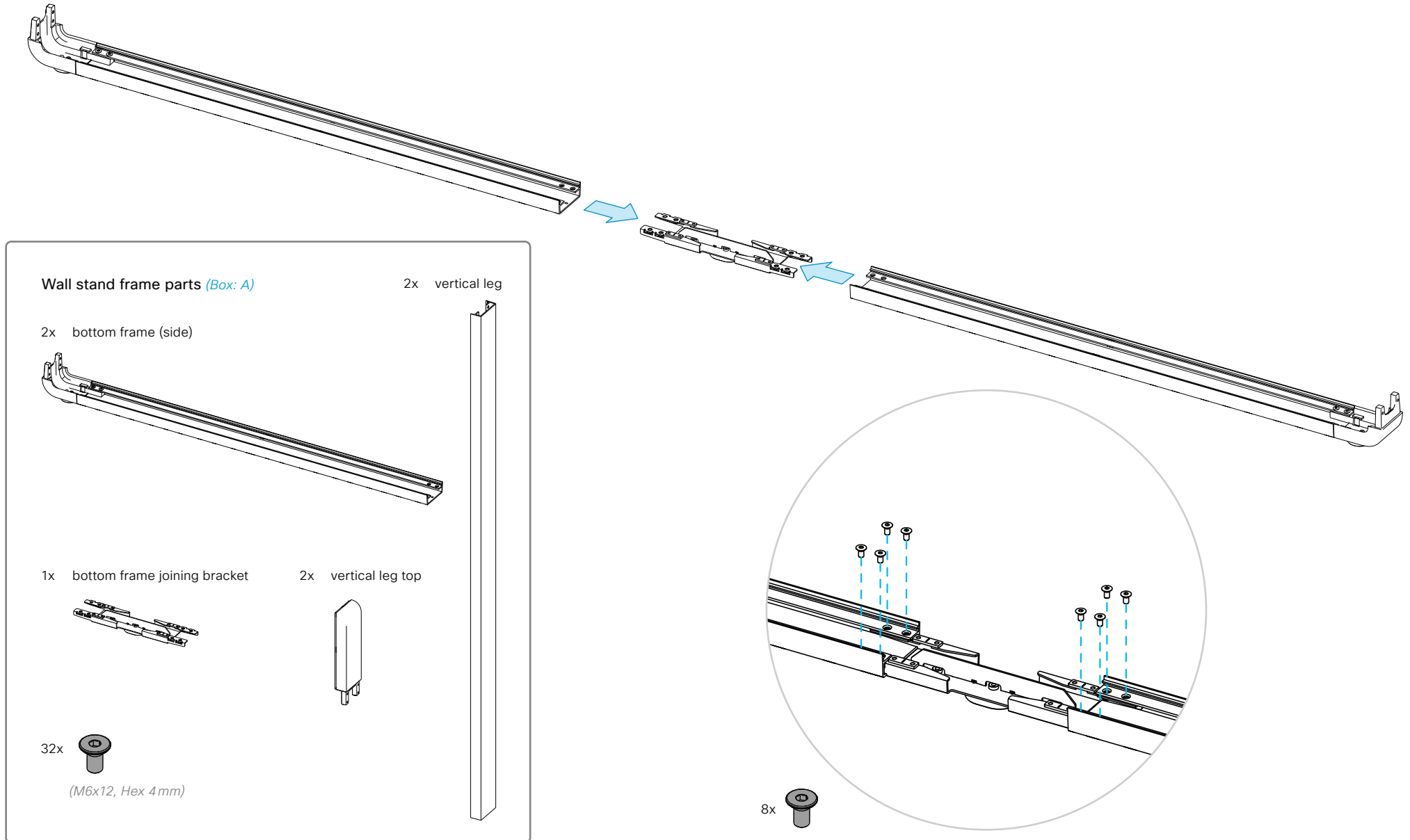
The position depends on your wall, so you may have to adjust the bracket position when fastening the stand to the wall in [step 3](#).



## 2. Assemble the wall stand frame

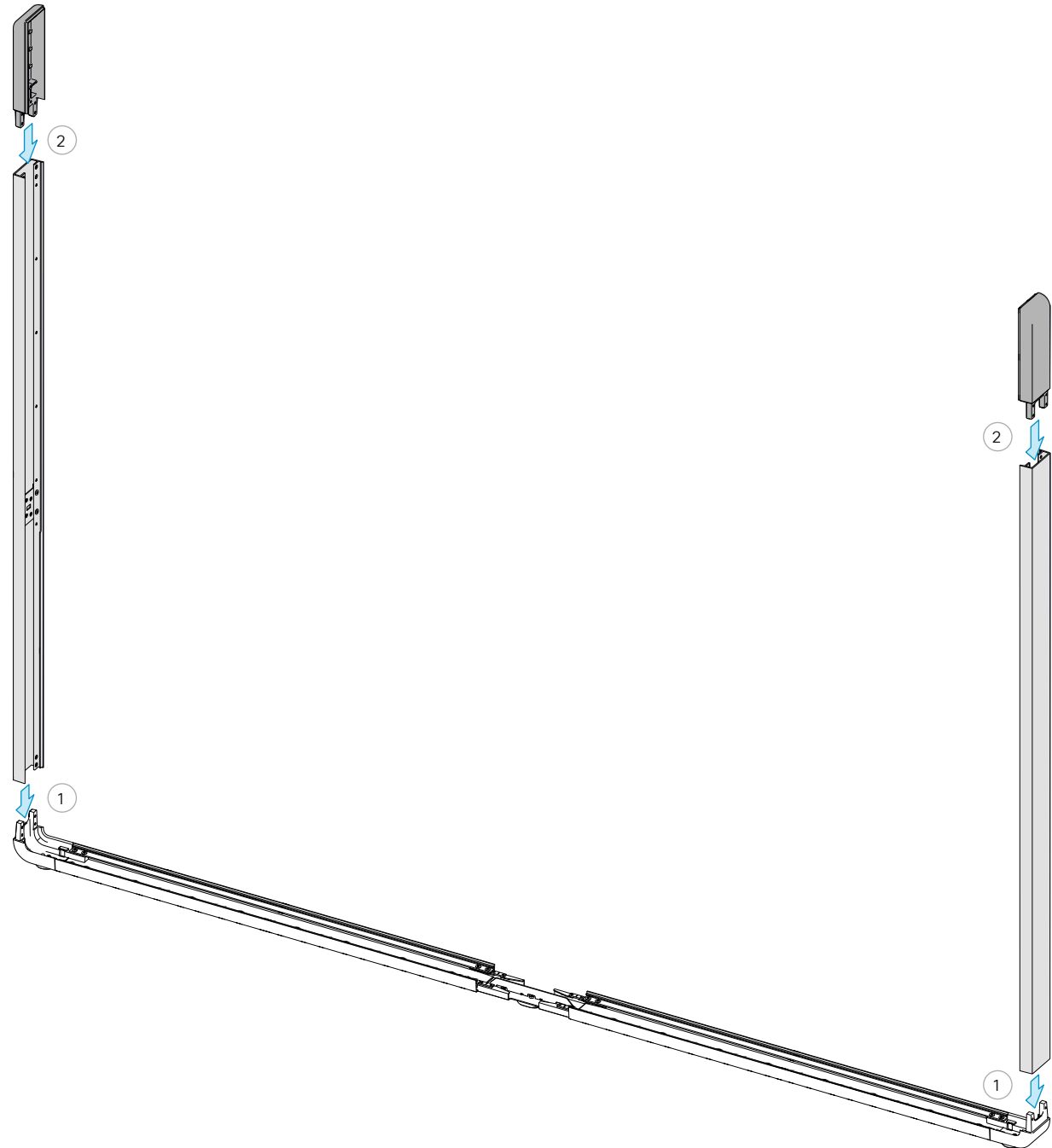
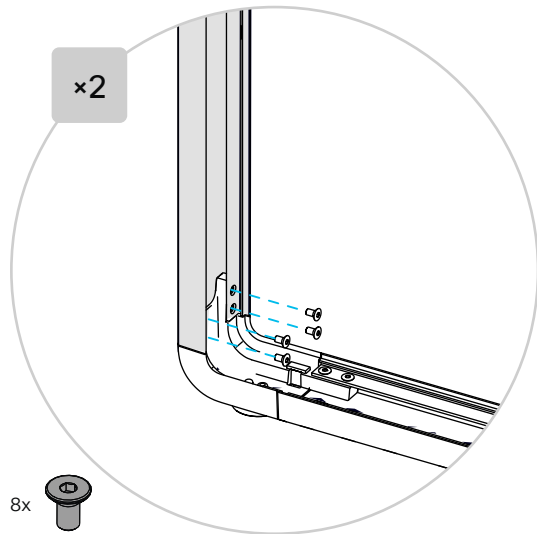
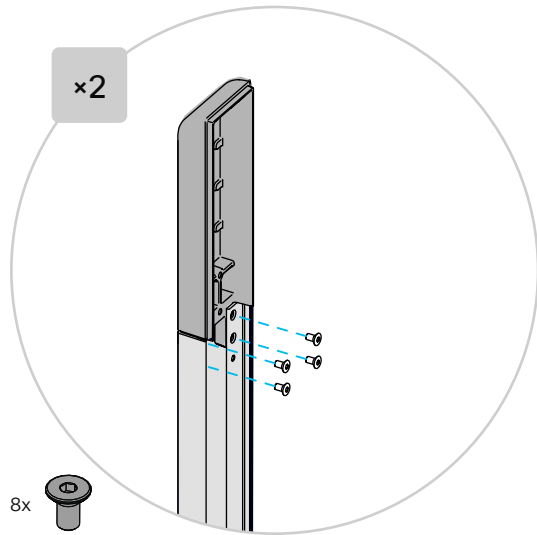
### 2.1. Join the lower frame parts

Connect the left and right frame parts together using the joining bracket and 8 screws (M6x12, Hex 4 mm).



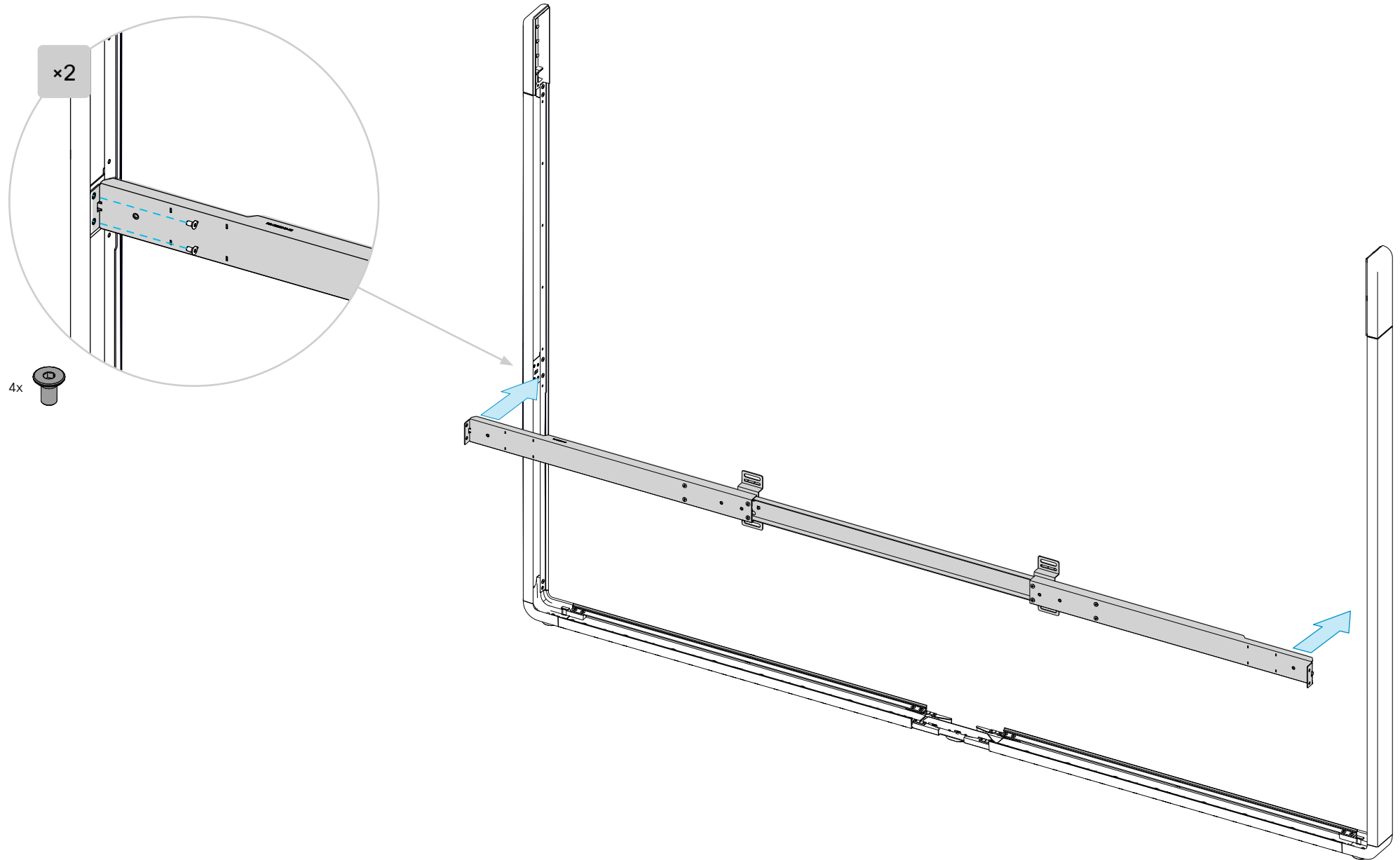
## 2.2. Add the verticals to the frame

First, connect the long verticals to the frame with 4 screws each (M6x12, Hex 4 mm), then fasten the top parts with 4 screws each (M6x12, Hex 4 mm).



### 2.3. Fasten the lower bar to the frame

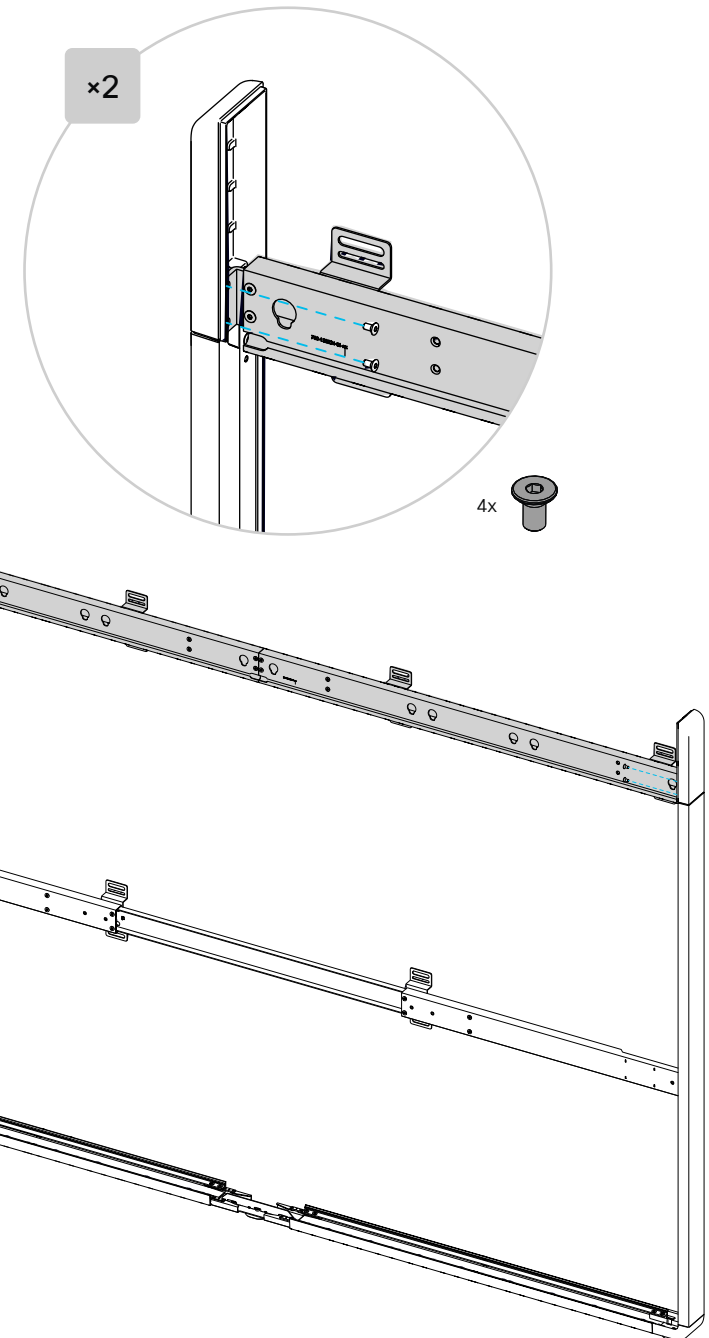
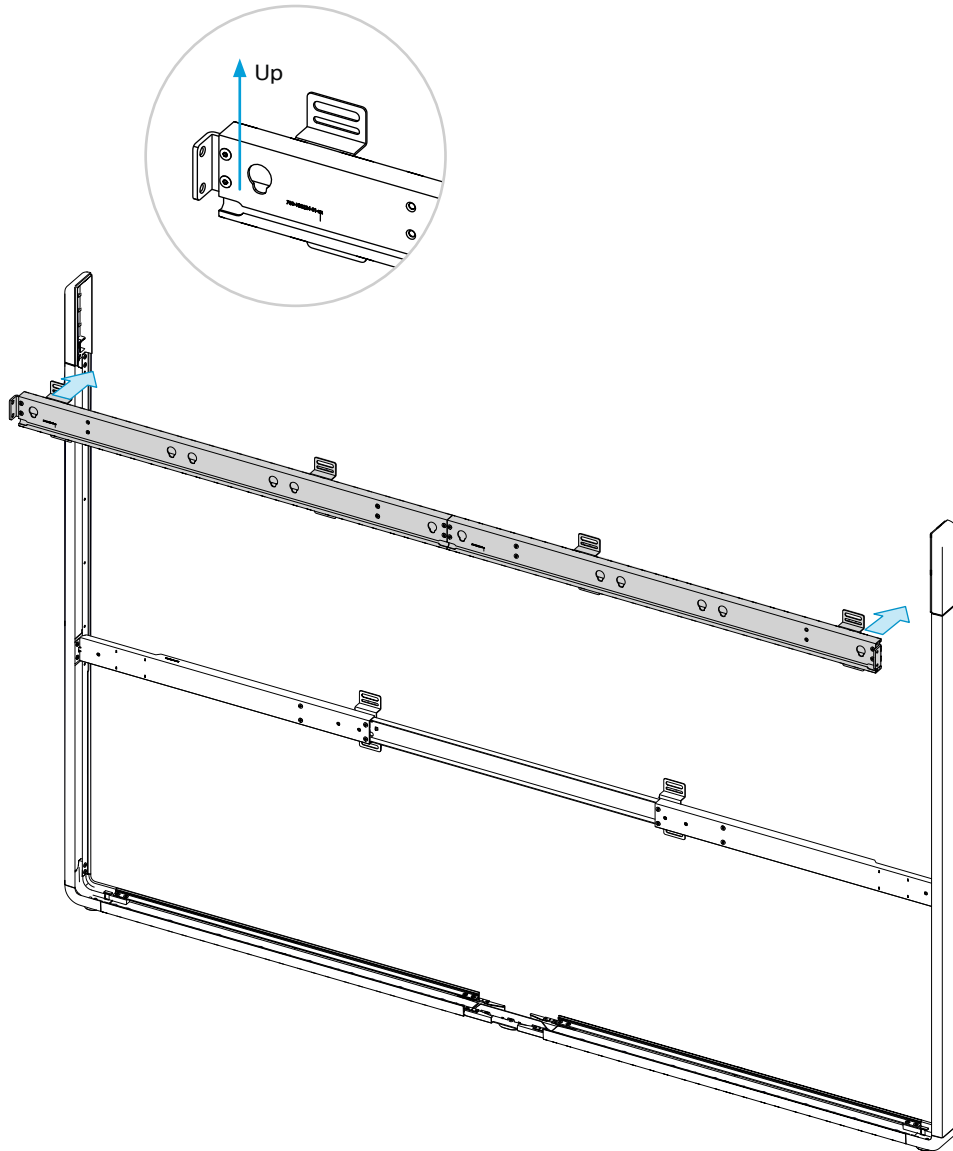
Fasten the bar that you assembled in [step 1.1](#) to the frame with 2 screws (M6x12, Hex 4mm) on each side.



## 2.4. Attach the beam to the frame

Fasten the beam that you assembled in [step 1.3](#) to the frame with two screws (M6x12, Hex 4 mm) on each side.

Check the key holes to avoid placing the beam upside down.



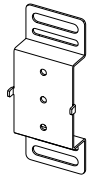
### 3. Fasten the frame to the wall

*Read before you continue:*

We provide 6 wall brackets to support the system: 4 for the carrier beam and 2 for the lower bar.

The brackets can slide on the beam so that you can place them where it suits best, for example where there are studs in the wall.

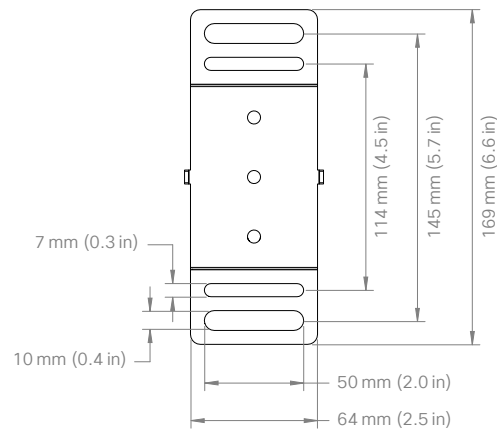
You can use the holes that fit best to attach the bracket to the wall.



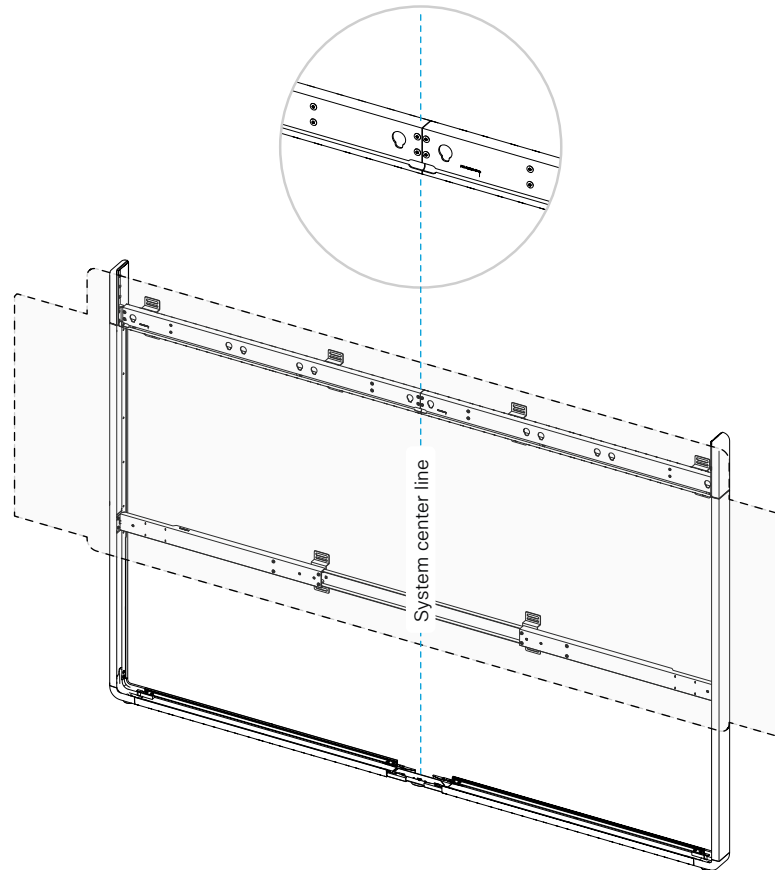
The installer must provide screws and fasteners that suites your type of wall.

The installer must decide where to place the brackets to safely support the system (weight up to 235kg (518lb) including screens\*).

Wall bracket dimensions:



1. Place the complete wall stand frame close to the wall.  
Be aware that the screens are wider than the frame; how much depends on the size of your screens.

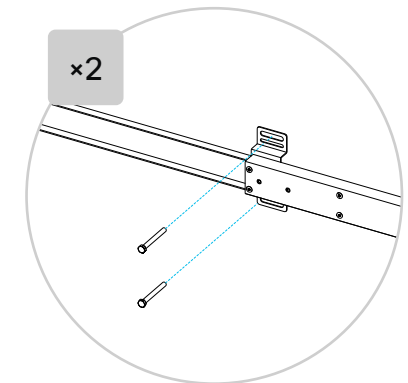
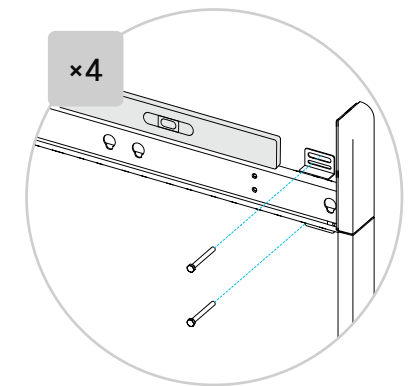


2. Make sure that **the beam is level when the stand rests on the floor.**

If not, you must add shims under the stand bumpers until level, or add spacers between the bumpers and frame (shims or spacers are not included).

3. Then, fasten all the 6 brackets to the wall. You can use any of the horizontal slots in the bracket.

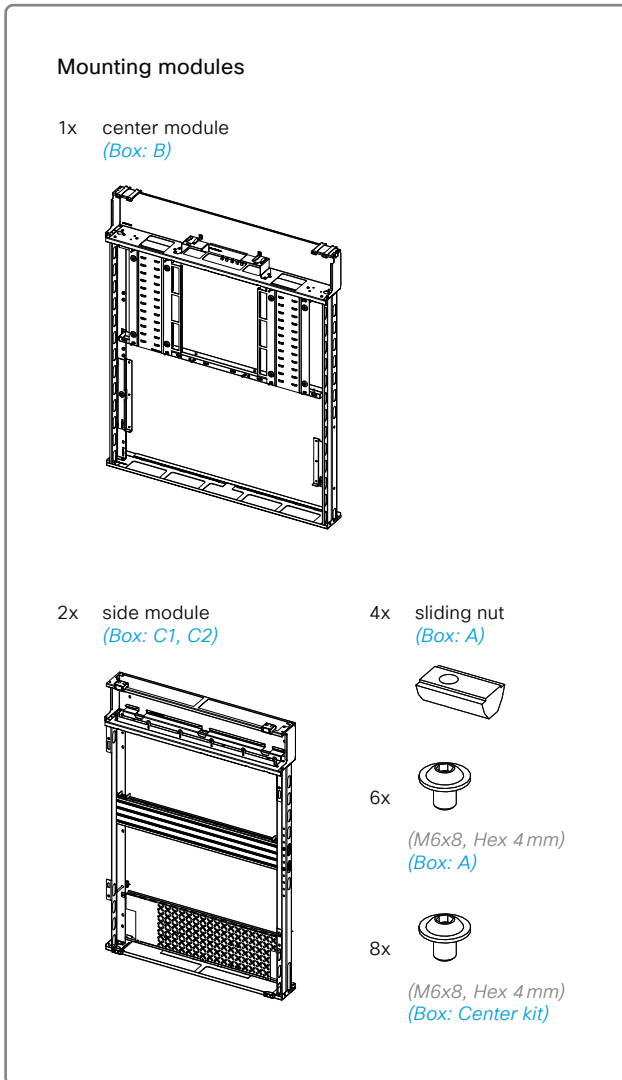
The installer must provide screws and fasteners that suites your type of wall.



\* Maximum weight allowed per screen is 50 kg (110lb).

## 4. Mount the modules

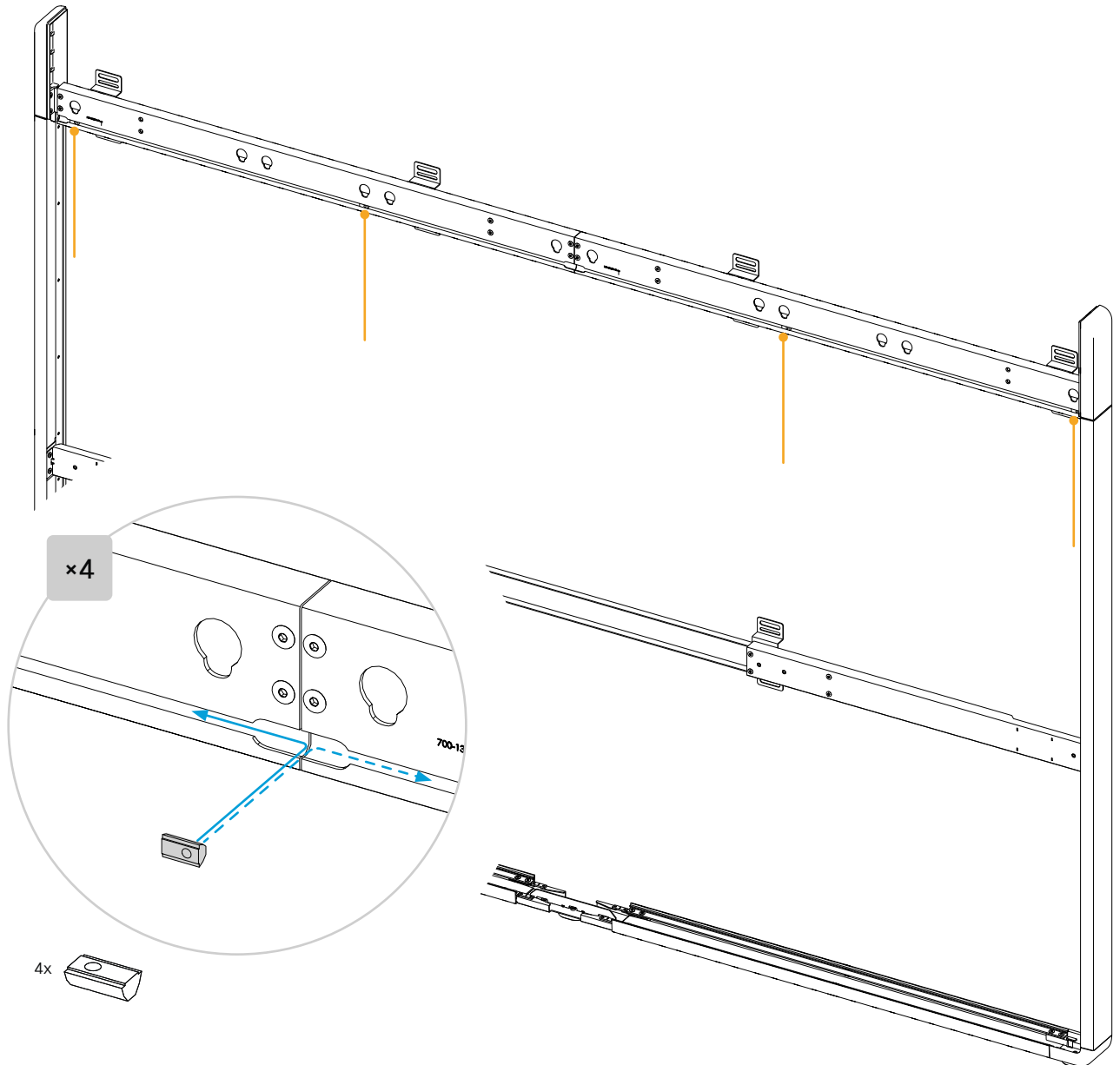
The main mounting structure is composed of three modules hanging on the carrier beam; one center module and two identical side modules.



### 4.1. Slide nuts into the carrier beam

Slide 4 nuts into the notch on the beam. Place the nuts below the keyholes, as shown in the illustration.

The nuts are required when fastening the modules to the beam in [step 4.4](#).

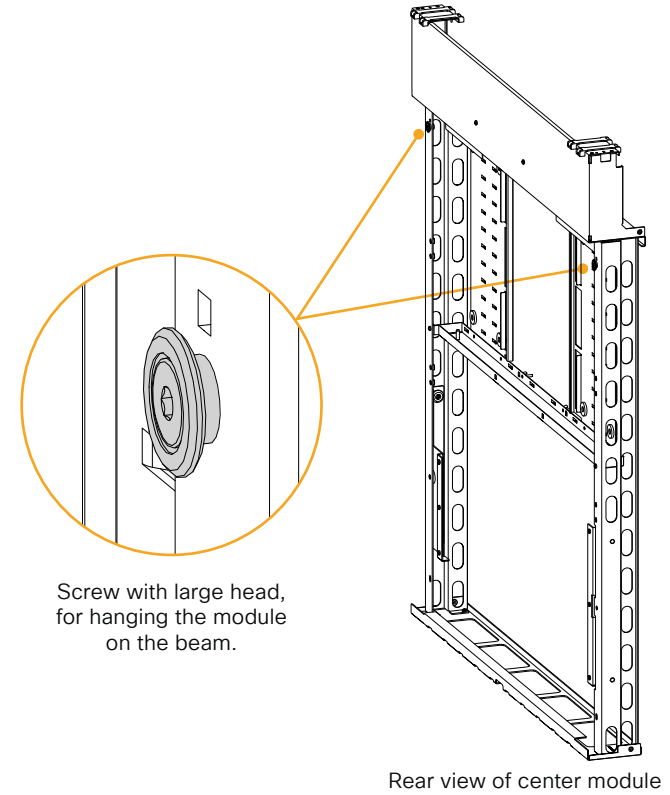
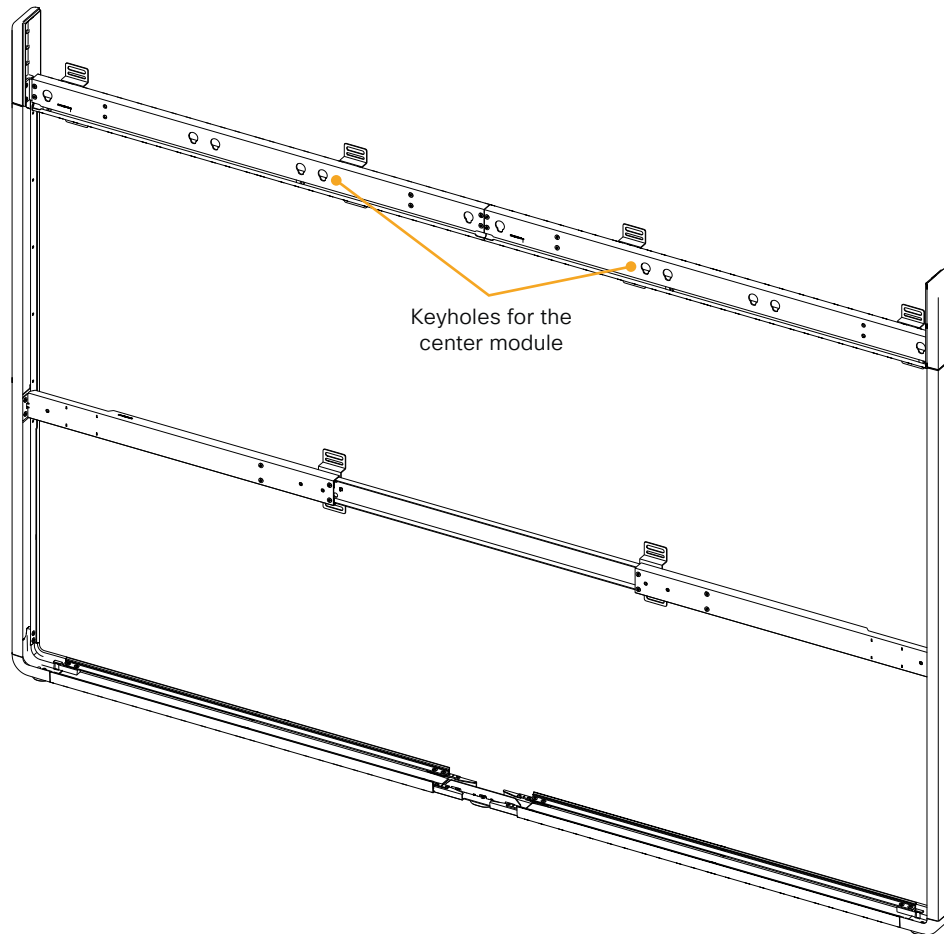




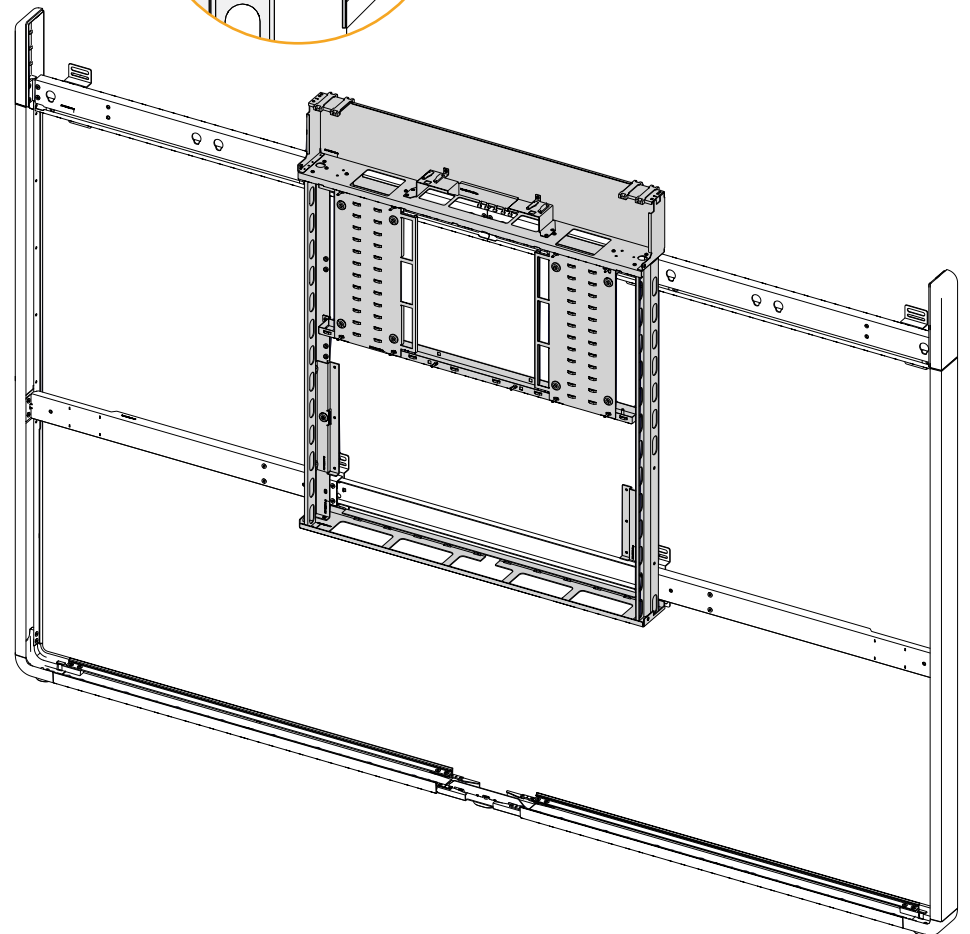
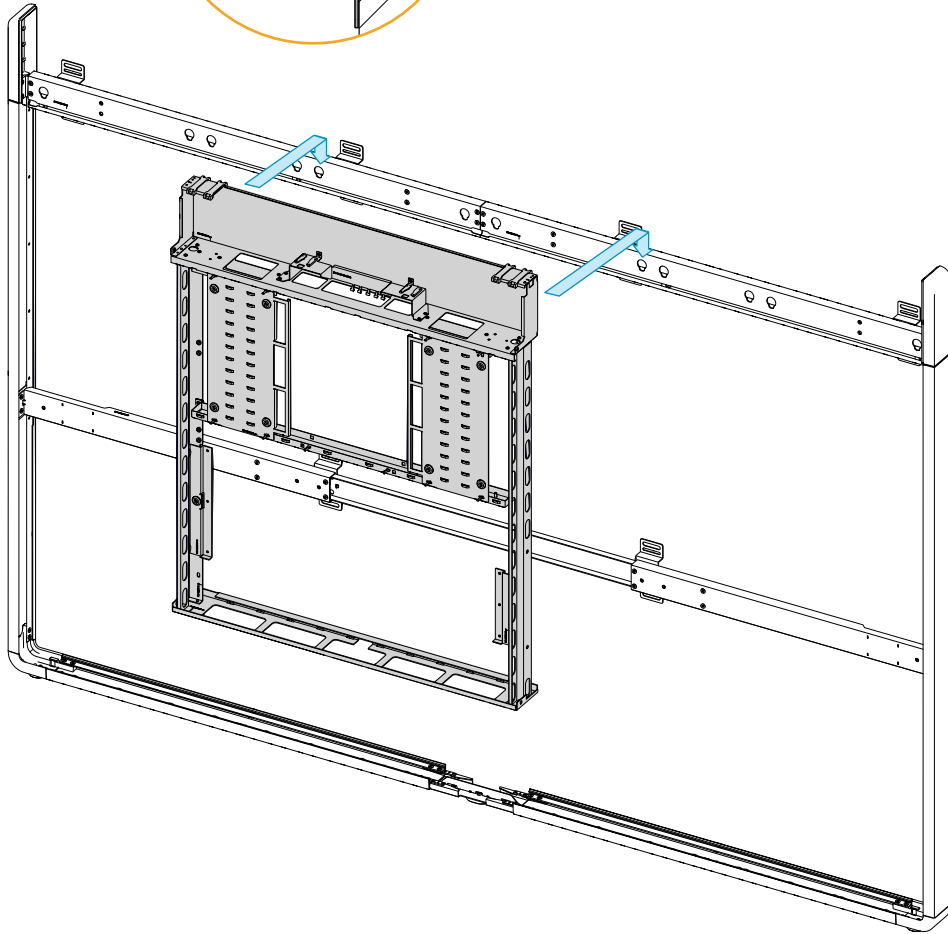
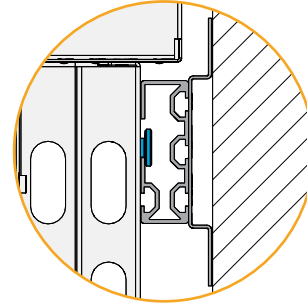
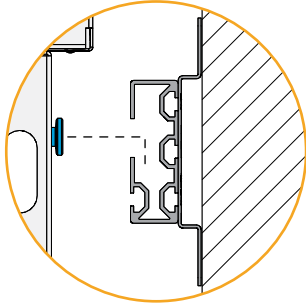
## 4.2. Hang the center module onto the beam

1. Observe the keyholes on the beam, and the large screw heads at the back of the center module.

These screw heads will hang in the keyholes.



2. Hang the large screw heads at the back of the module onto the beam keyholes.

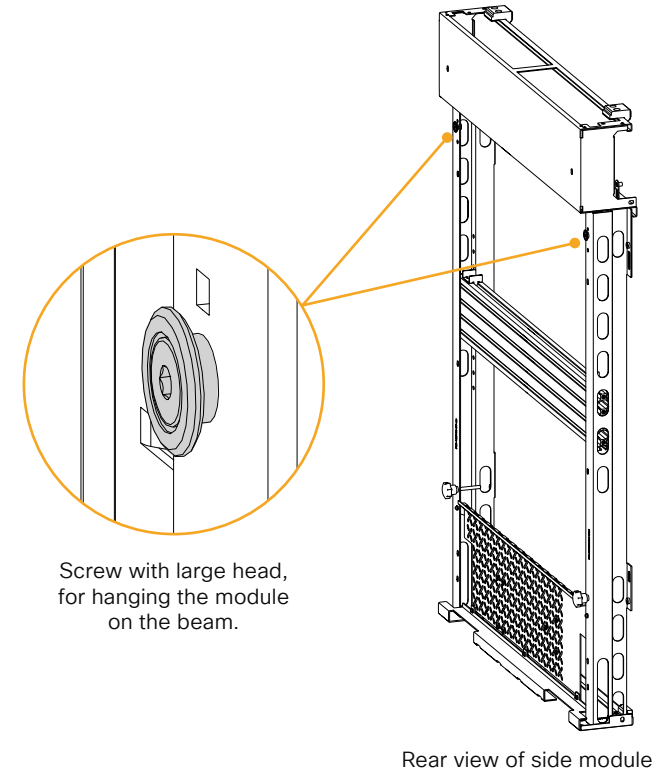
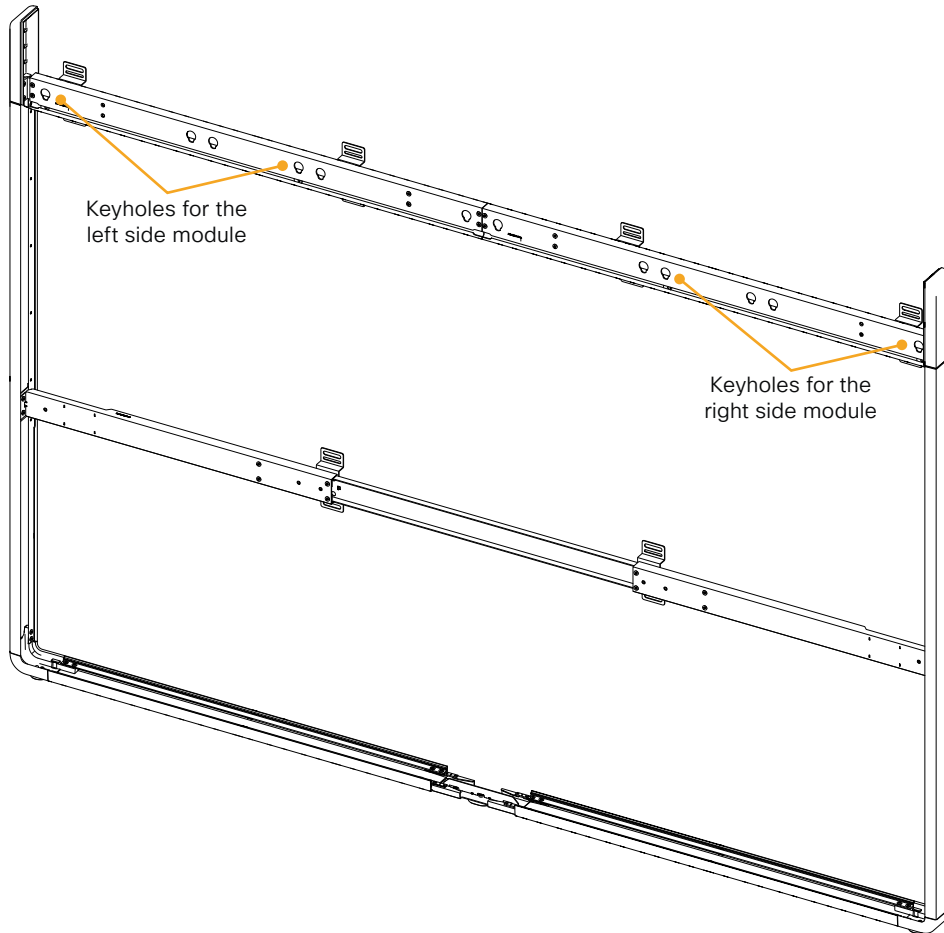


### 4.3. Hang the side modules onto the beam

Repeat this for both side modules; the side modules are identical.

1. Observe the keyholes on the beam, and the large screw heads at the back of the side modules.

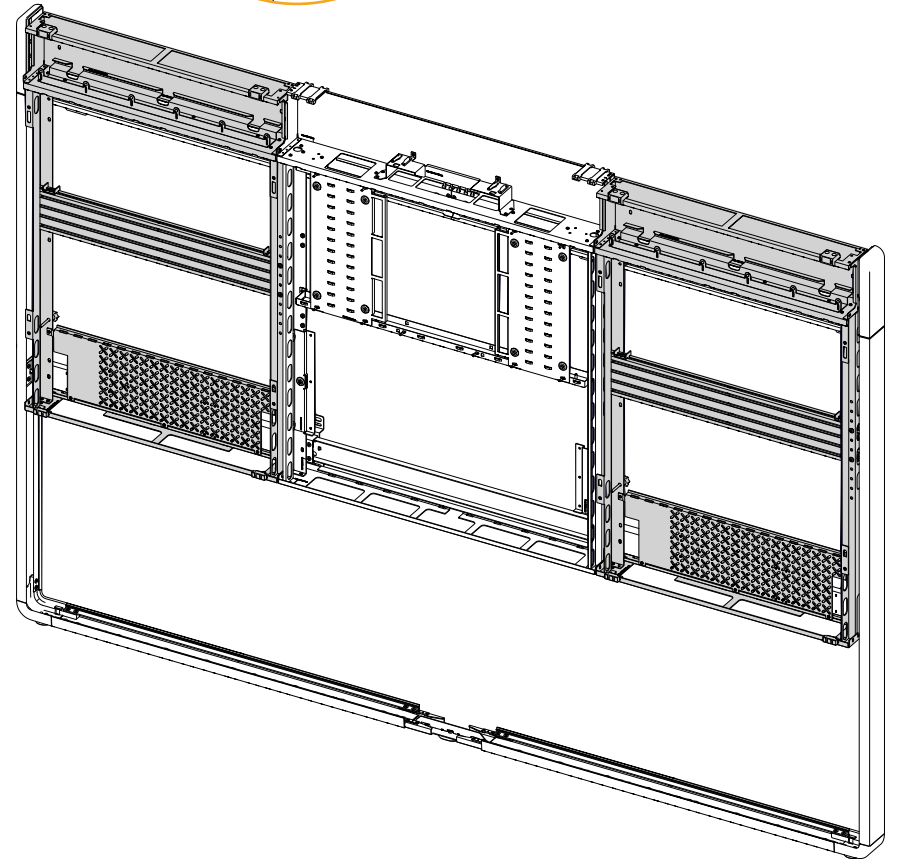
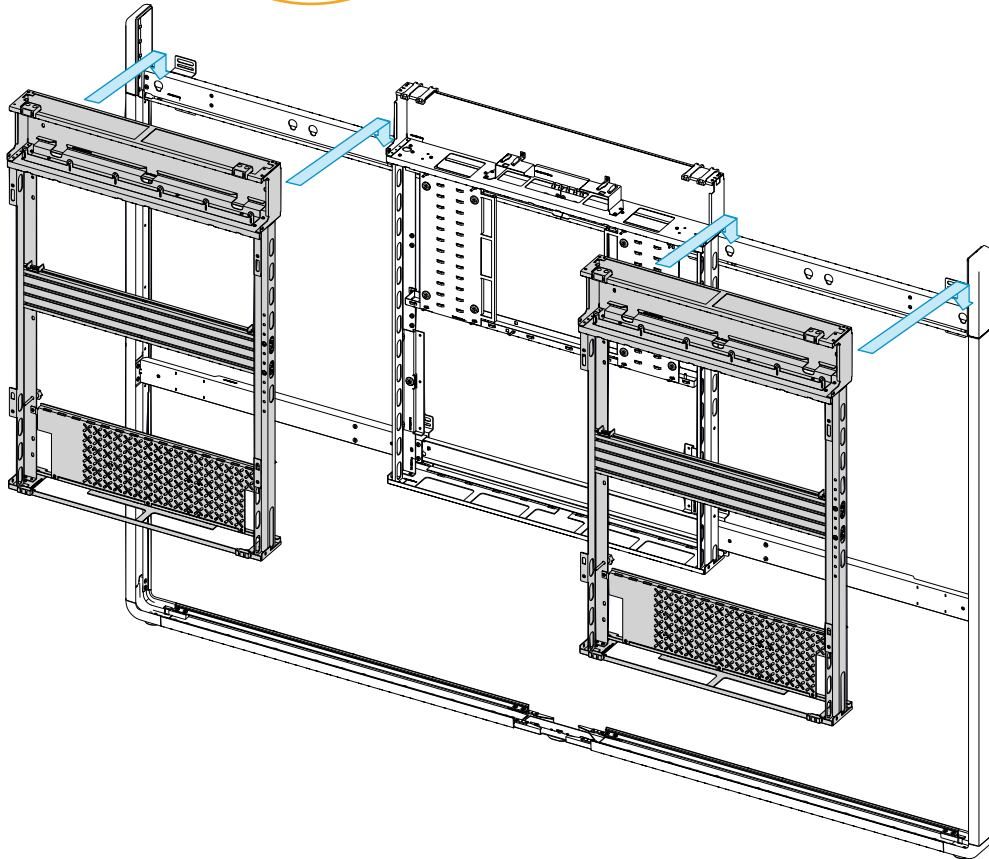
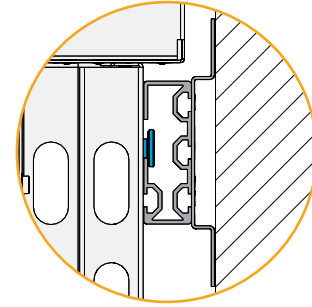
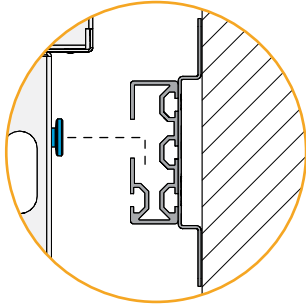
These screw heads will hang in the keyholes



2. Hang the large screw heads at the back of the module onto the beam keyholes.

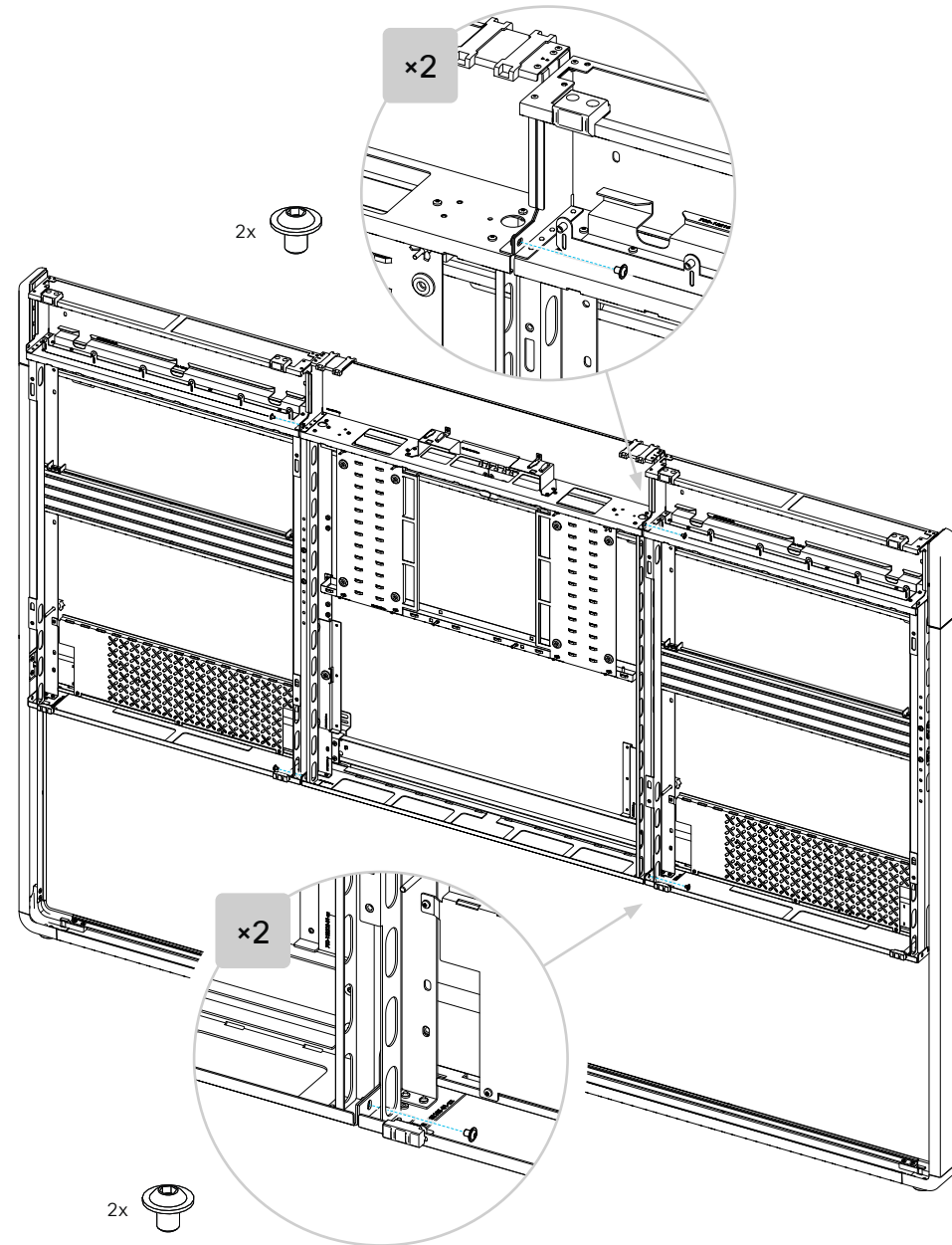


To avoid getting your fingers pinched between the modules, lift a side module by holding your hands on the top and bottom of the module; NOT on the side toward the center module.

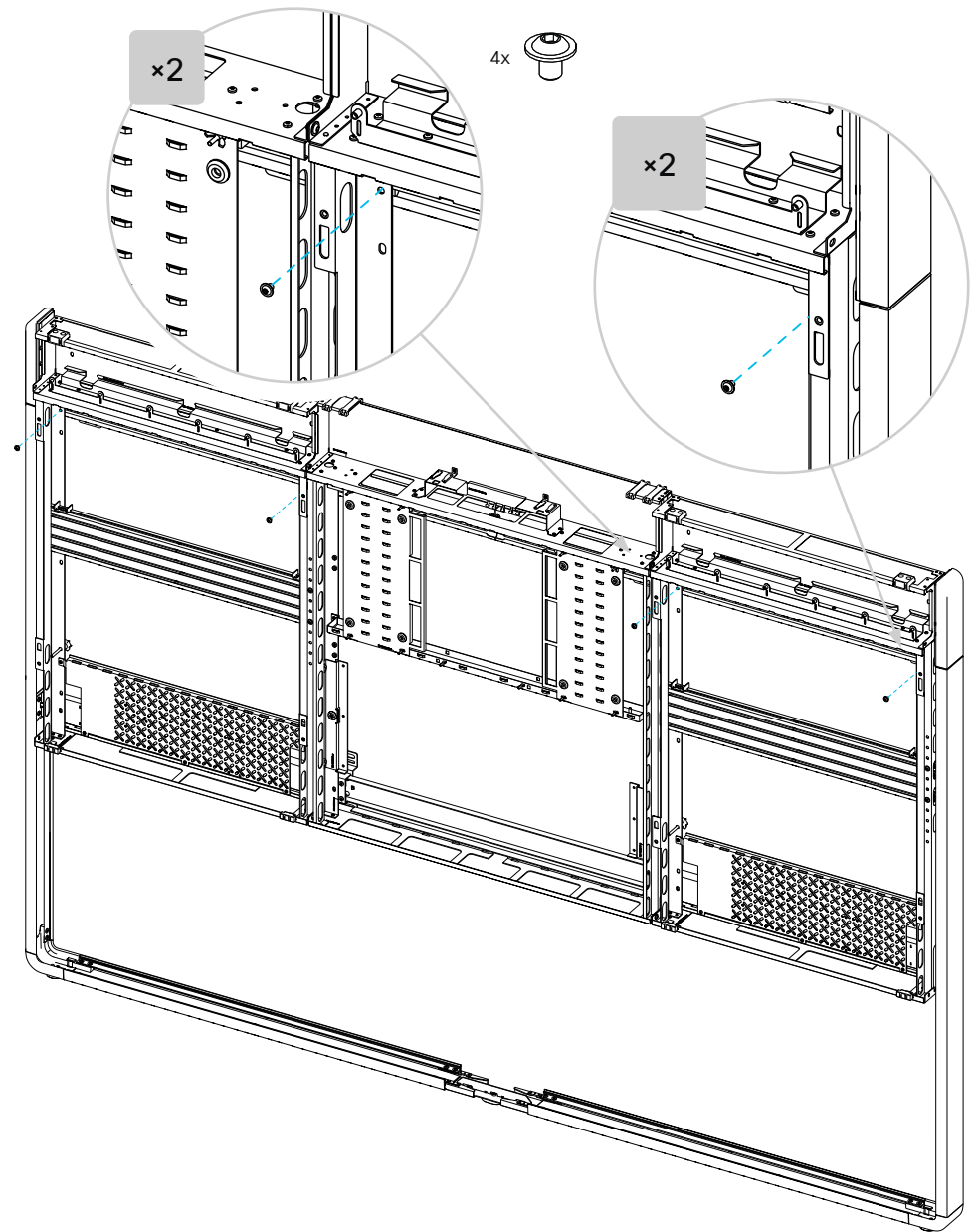


#### 4.4. Fasten the modules

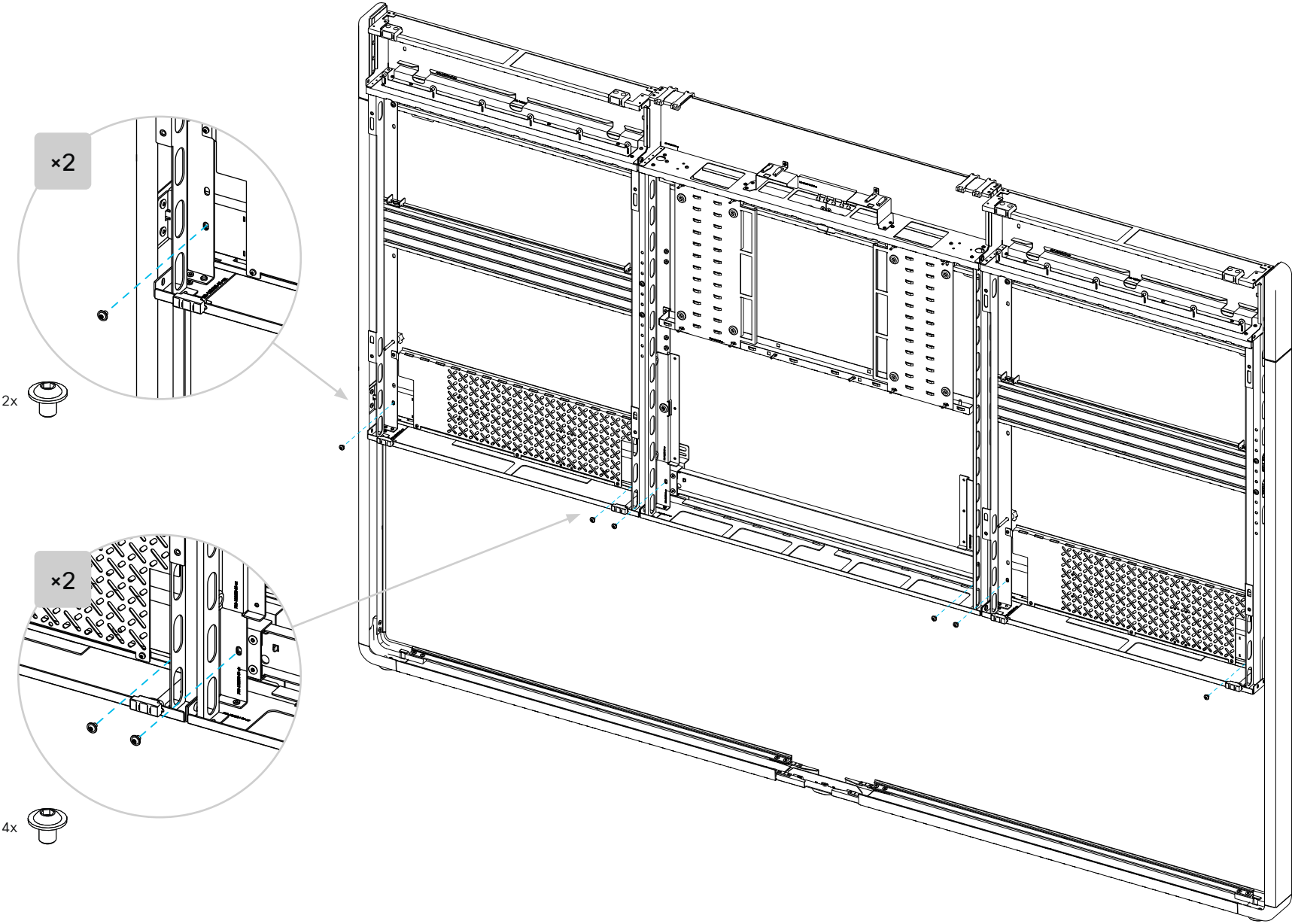
1. Fasten both side modules to the center module with 2 screws (M6x8, Hex 4 mm) each.



2. Fasten the modules to the beam with 4 screws (M6x8, Hex 4 mm) in total. The screws enter the nuts that you added in [step 4.1](#).

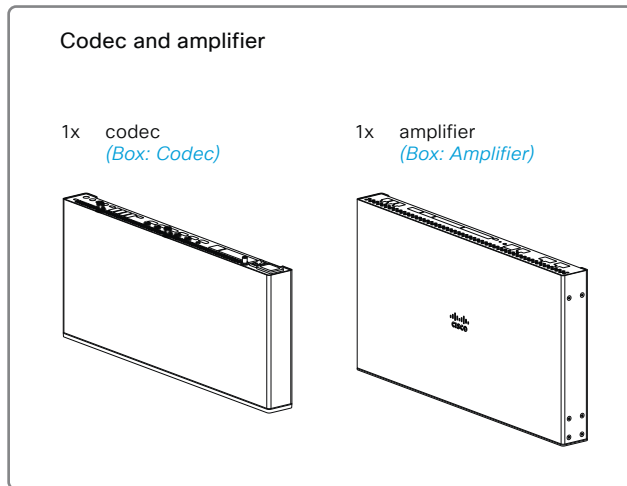
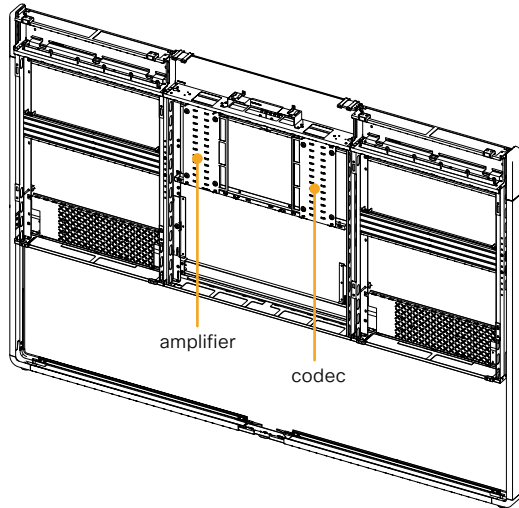


3. Fasten the modules to the bar with 6 screws (M6x8, Hex 4 mm) in total.



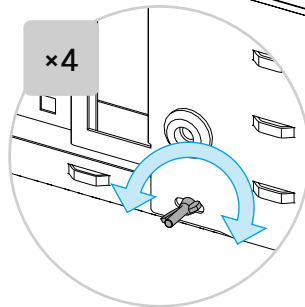
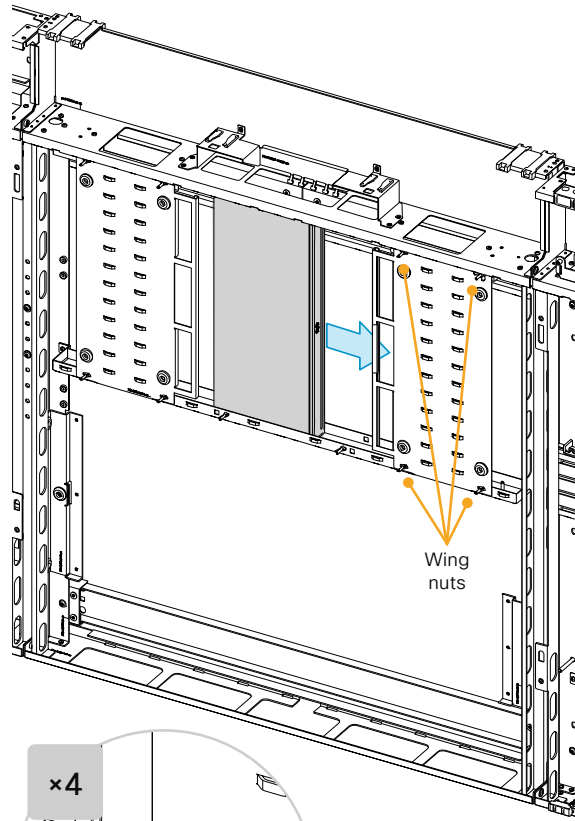
## 5. Insert the codec and amplifier

The codec and amplifier are placed in the center module, in bays behind metal clamps.



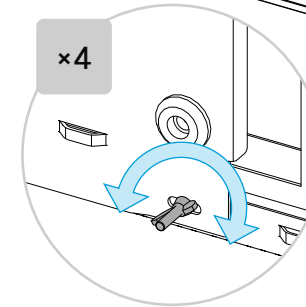
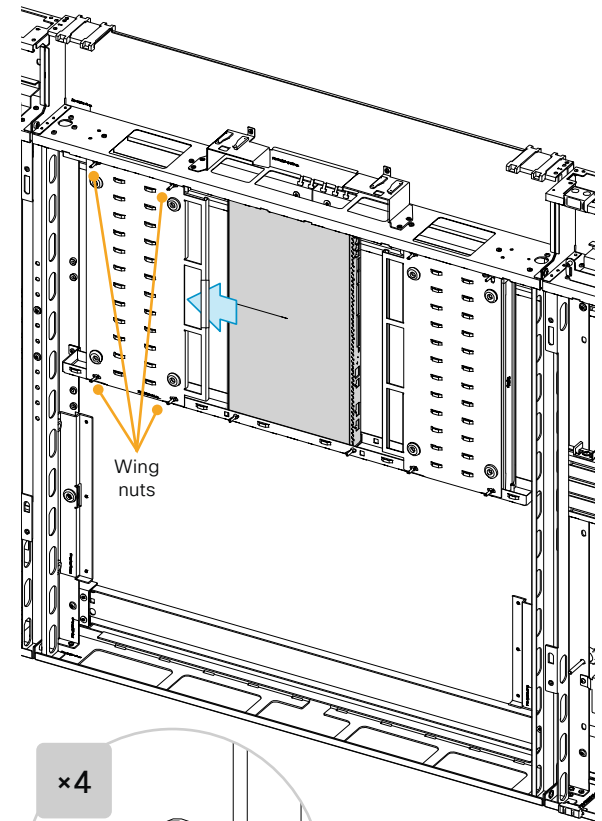
### 5.1. Insert the codec

1. Loosen slightly the four wing nuts that hold the right metal clamp in place.
2. Slide the codec fully into the bay behind the clamp. **Connectors facing toward center; power socket up.**
3. Slide the metal clamp to the right until it stops against the codec in place. then tighten the four wing nuts to keep the codec in place.



### 5.2. Insert the amplifier

1. If the amplifier has rack ears, remove them. (*Torx T10*).
2. Loosen slightly the four wing nuts that hold the left metal clamp in place.
3. Slide the amplifier fully into the bay behind the clamp. **Connectors facing toward center; fan connectors up.**
4. Slide the metal clamp to the left until it stops against the amplifier edge; then tighten the four wing nuts to keep the amplifier in place.



# ABOUT CABLING

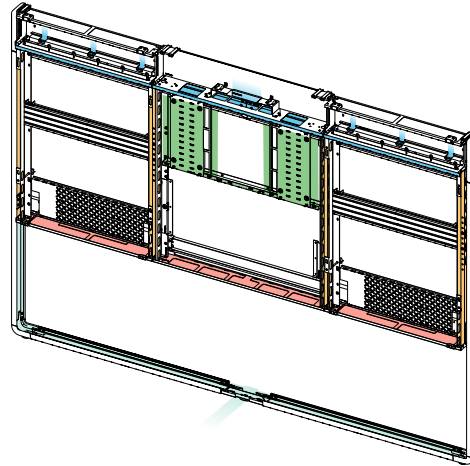
When you mount components in [step 6](#) onward, you route and connect associated cables at the same time. Here are some important notes for correct, nice, and tidy cabling.

**Do not connect to power yet!**

Do not connect any power cables to wall socket outlets before [step "29. Finish-up"](#) on [page 72](#).

## Cable routing

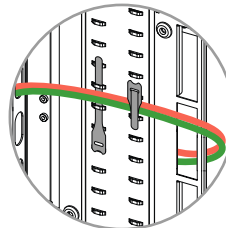
The colored areas in this illustration show the main areas for cable routing. See more details on the next page.



In each step, we show the recommended route for that specific cable; without explicitly showing which hole to thread each and every cable through.

## Organize cables neatly using velcro

We strongly recommend that you fasten the cables to the steel structure with velcro straps ([Box: Center kit](#)). This is to avoid strain on cables and connectors, to avoid rattling noise, and for a neat and tidy look.

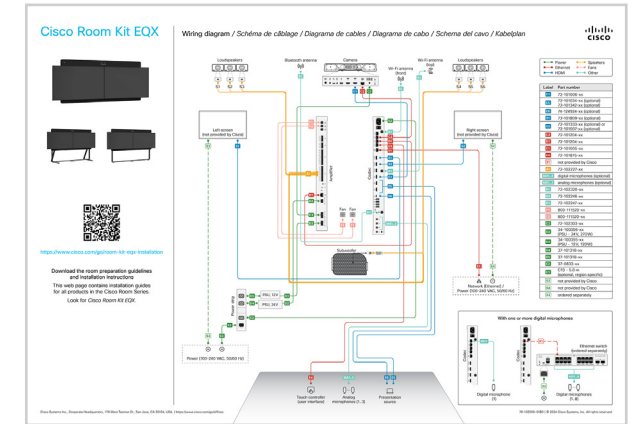


The steel structure is equipped with many fastening points for velcro straps.

The 3 nylon cable ties ([Box: Center kit](#)) are for securing the camera cables in [step 12.3](#).

## Wiring diagram

A full wiring diagram is shipped with the product. It is also available online, at <https://www.cisco.com/go/room-kit-eqx-installation>



The wiring diagram also gives guidance how to route the cables.

## Cable marking

Each cable has a **part number**, which is printed on the cable. The installation guide and wiring diagram refer to cables by a **label**, for easy reference.

The wiring diagram has a table that maps each **label** to a **part number**.

Label	Part number
<b>C1</b>	72-101006-xx
<b>E5</b>	72-101034-xx (optional) 72-101342-xx (optional)
<b>E6</b>	74-124924-xx (optional)

## Where are the cables

The cables are in the accessory kit boxes ([Box: Acc kit 1](#), [Acc kit 2](#)).



## The main cable routing areas

**Behind the flap** - from the channels and through the holes for the camera and loudspeakers. Keep the cables away from the loudspeakers to avoid rattling noise. Use the supplied velcro straps.

**The bottom trays.** Keep the cables away from the bass to avoid rattling noise. Use the supplied velcro straps.

**The channels between the modules.** Also the channels on the sides can be used, if convenient for the socket outlet location in your room.

Thread cables through the holes where convenient.

**In the stand.** You can route cables in the stand. The stand covers will hide them.

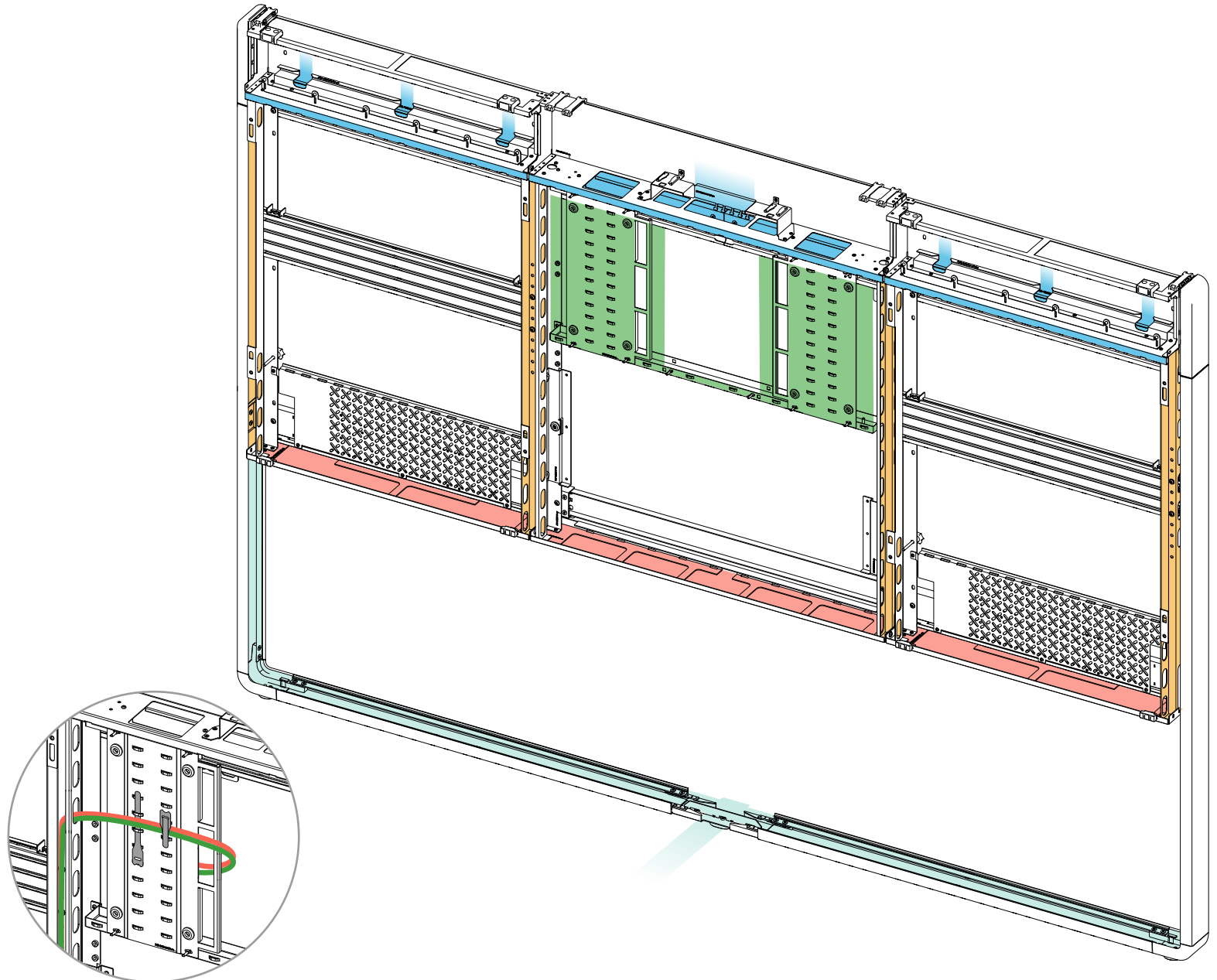
You can lead cables out from the stand only at center. You can lead them toward front (the table), back, or down.

**In front of the codec and amplifier clamps.** All cables for the codec/amplifier comes from the channels between the modules.

Lead the cables out through one of the holes, across the clamp, and then back again to the connector panels. This is important for strain relief.

When done, fasten the cables with velcro.

A few cables also run across from left to right just below the clamps. Keep the cables away from the bass to avoid rattling noise. Use the supplied velcro straps.



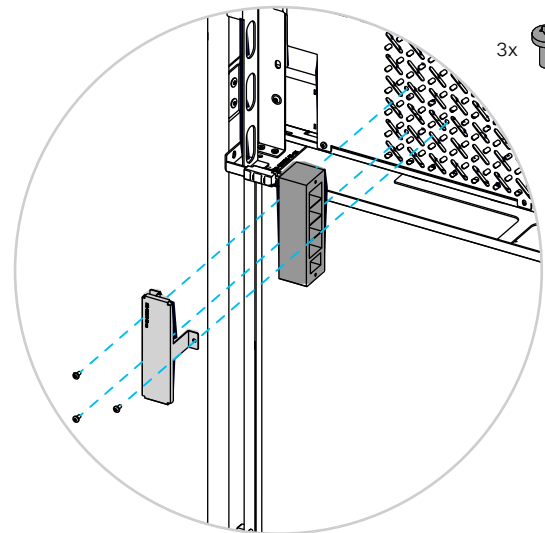
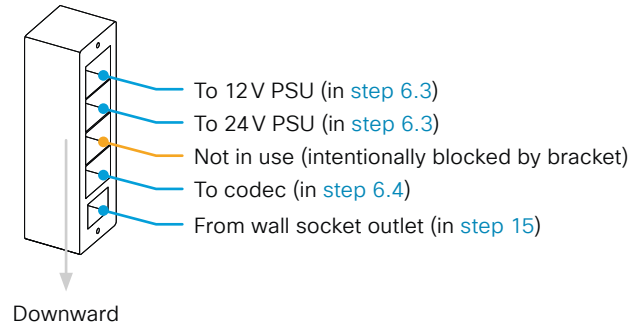
## 6. Mount the power strip and PSUs

The power strip and PSUs are placed in the left side module, close to the bottom.

Don't connect the power strip to the wall socket outlet now.

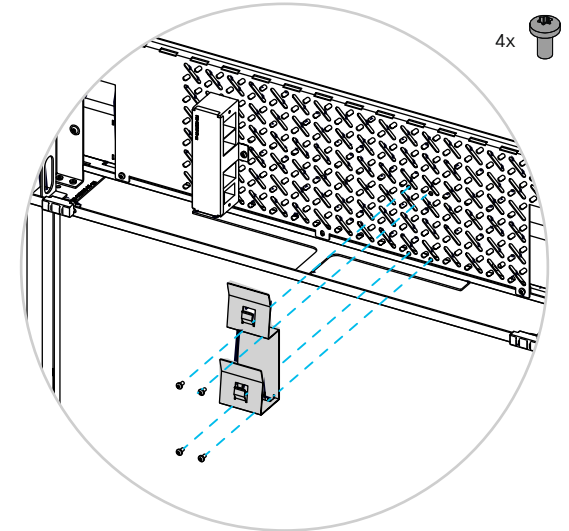
### 6.1. Mount the power strip

Place the bracket over the power strip and fasten it to the back plate with three screws (M4x8, Torx T20).



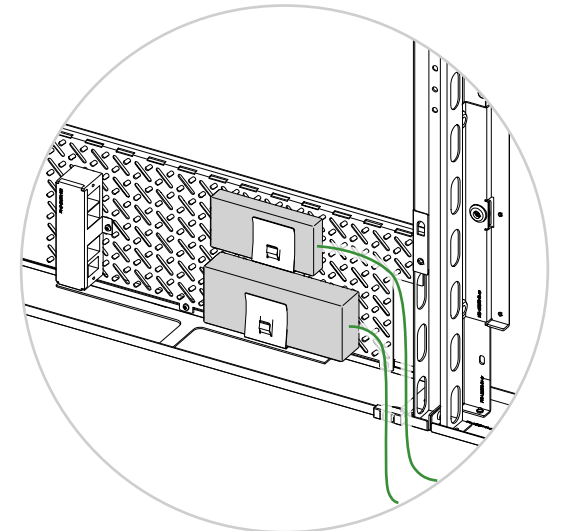
### 6.2. Mount the PSUs

1. Fasten the PSU bracket to the back plate with four screws (M4x8, Torx T20).



2. Slide the two PSUs into the bracket. The smaller 12V PSU is above the larger 24V PSU.

The cables that are fixed to the PSUs are to the right.

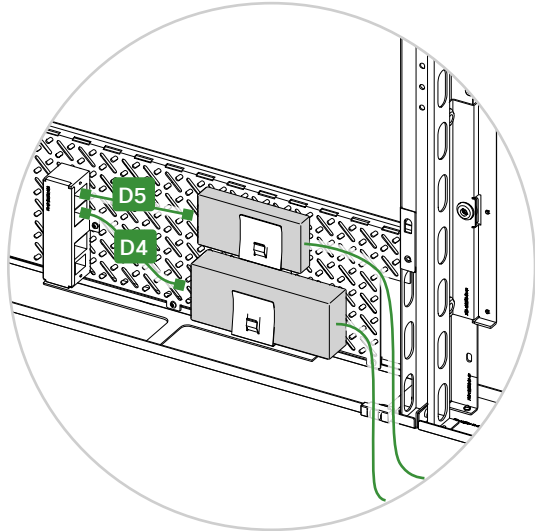


**Power strip and PSUs**

1x Power strip (Box: Acc kit 1)	1x Power strip bracket (Box: Center kit)
1x PSU, 12V (Box: Acc kit 1)	1x PSU bracket (Box: Center kit)
1x PSU, 24V (Box: Acc kit 1)	7x (M4x8, Torx T20) (Box: Center kit)

### 6.3. Connect the PSU cables

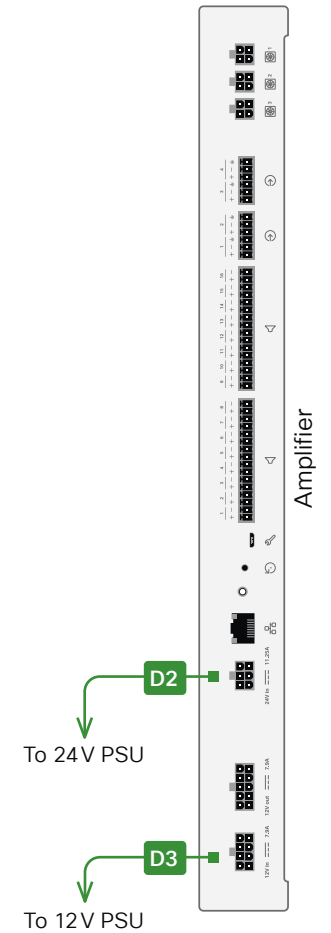
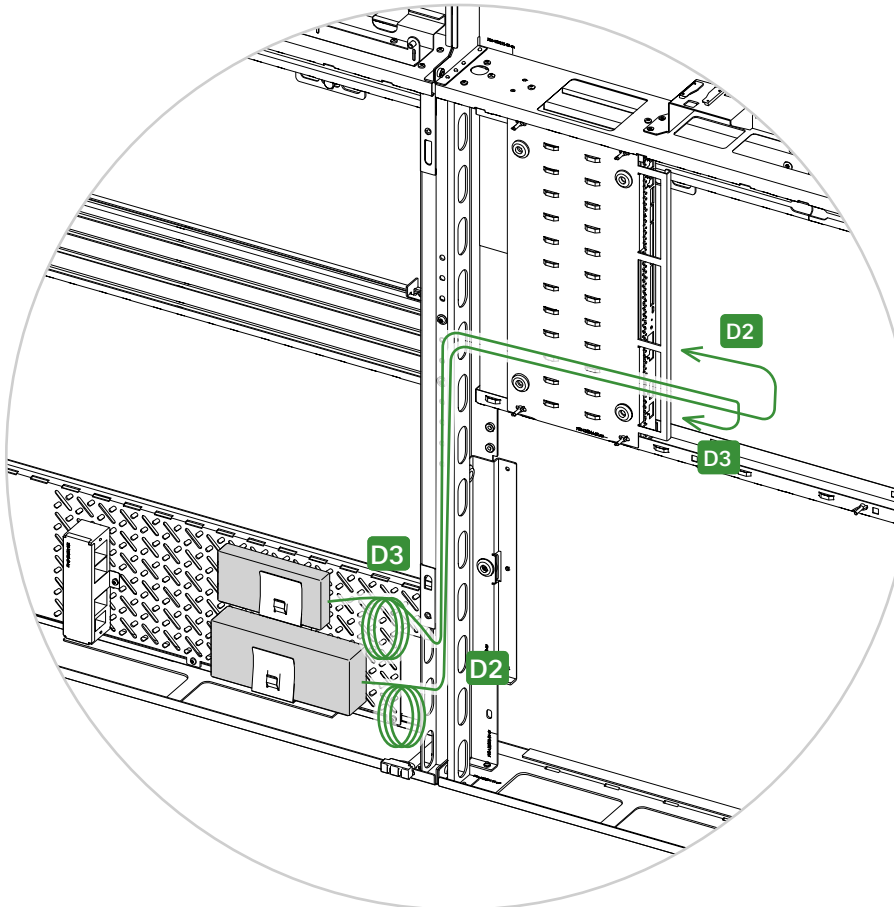
1. Connect the PSUs to the power strip:
  - D4 for the 24V PSU
  - D5 for the 12V PSU



2. The 24V PSU (the largest one) has a power switch. Switch it to ON.

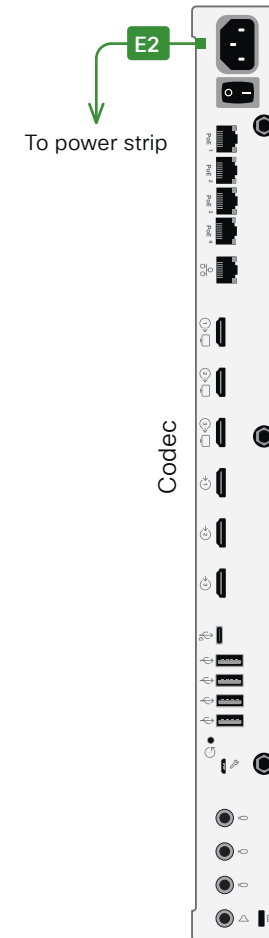
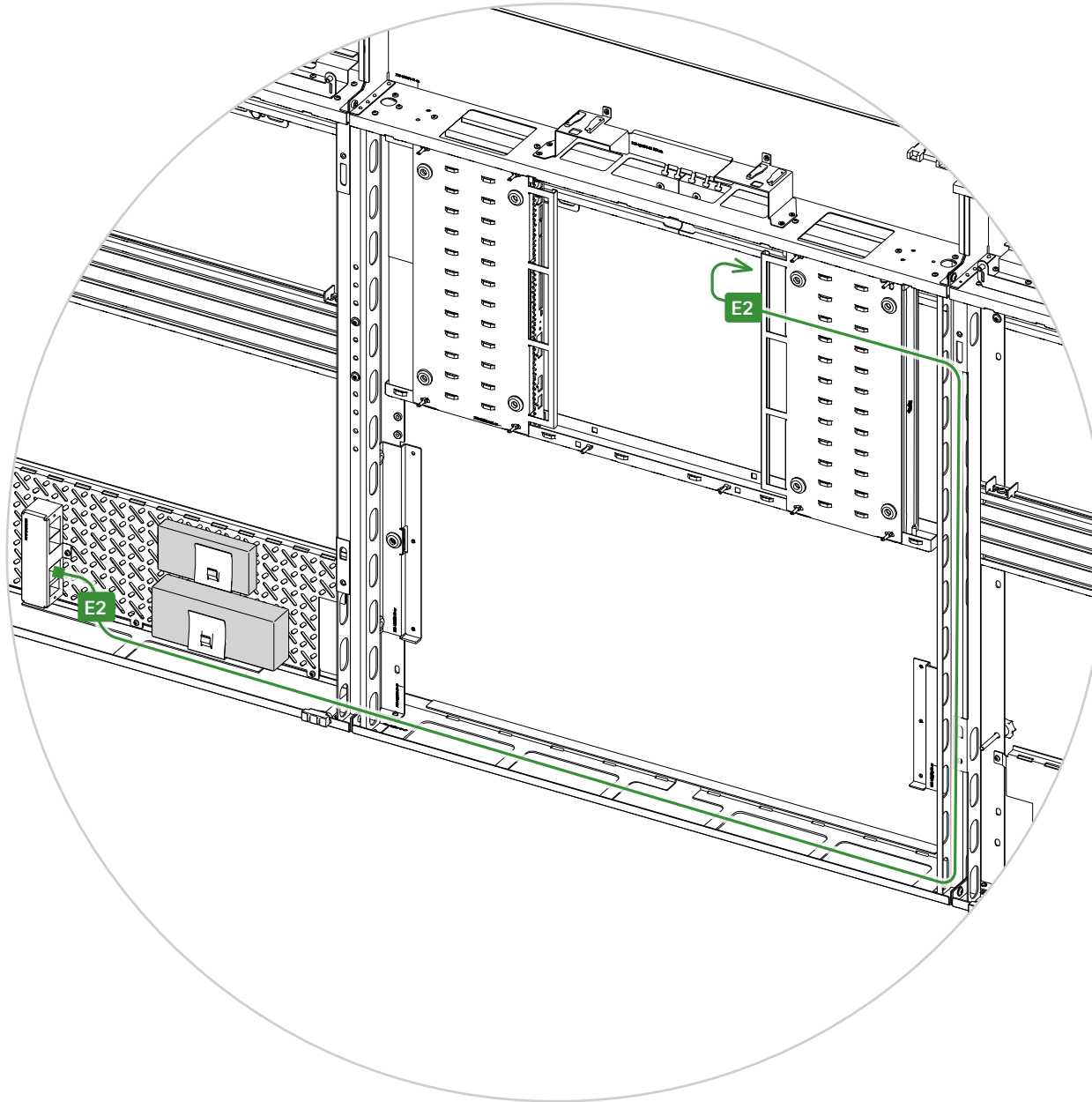
3. Guide the cables as shown in the illustration, and connect the PSUs to the amplifier:
  - D2 for the 24V PSU
  - D3 for the 12V PSU

Coil and strap (with velcro) excess cable close to the PSUs, see illustration.



## 6.4. Connect the codec power cable

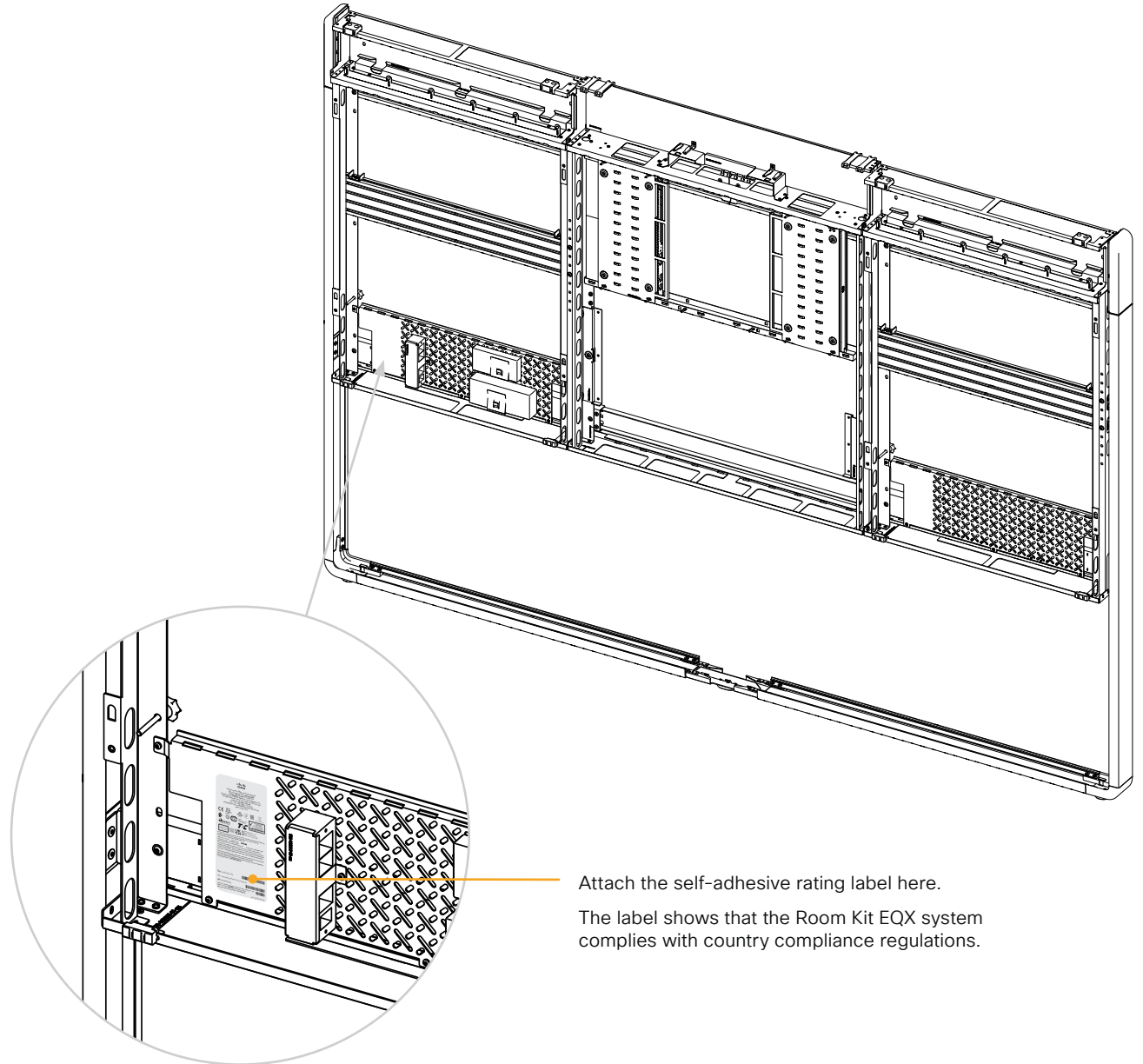
Connect the power cable between the codec and the power strip, E2.



## 7. Attach the rating label

Rating label (Box: Acc kit 2)

1x rating label



Attach the self-adhesive rating label here.

The label shows that the Room Kit EQX system complies with country compliance regulations.

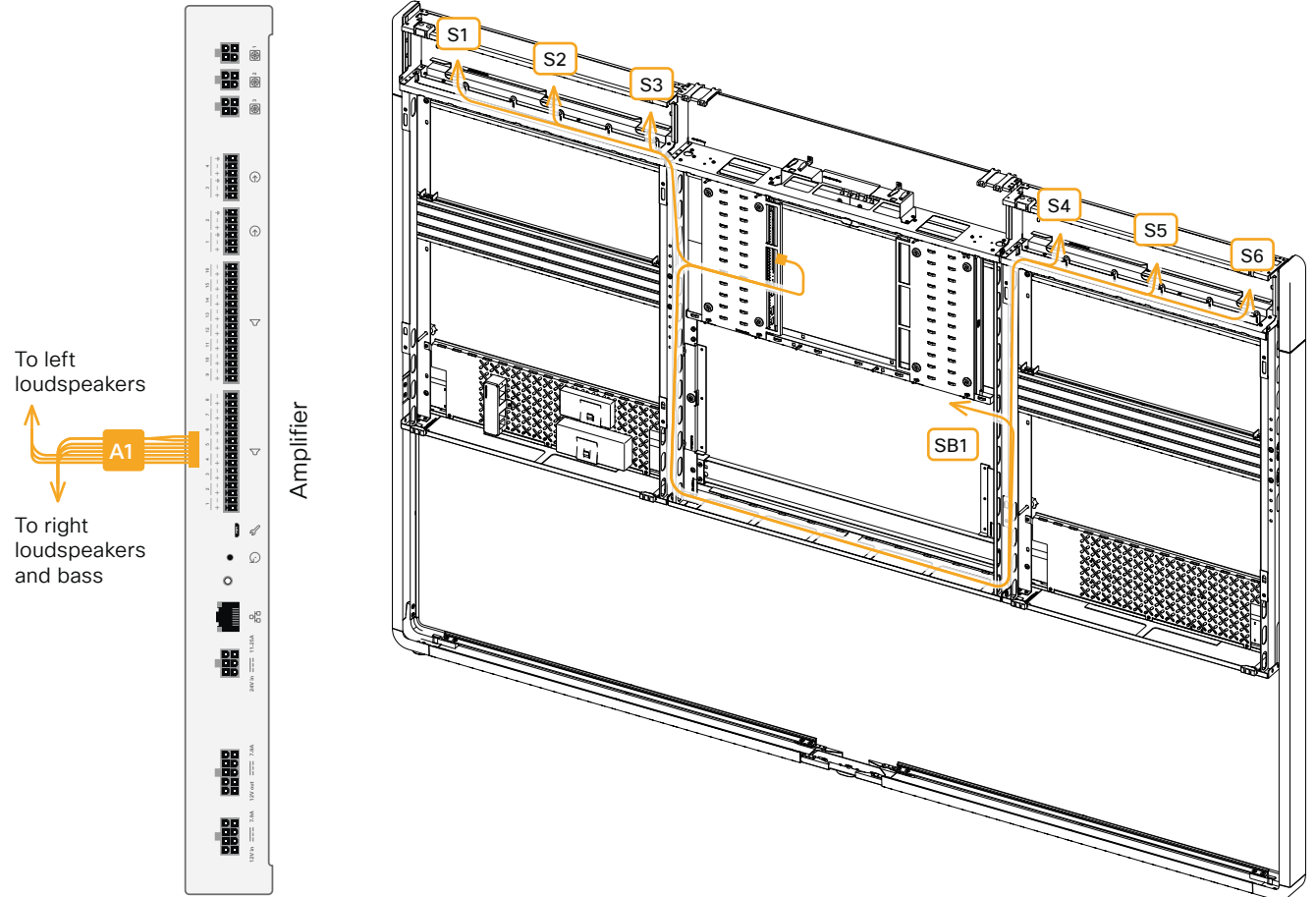
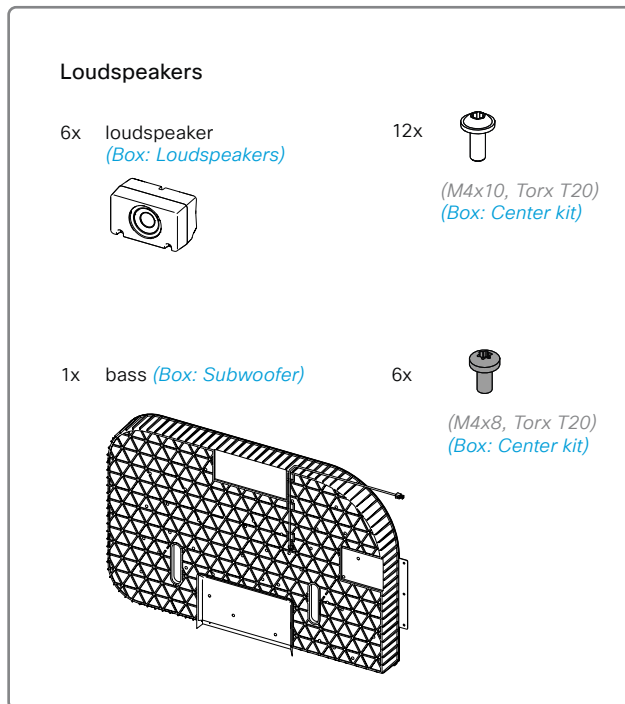
## 8. Mount the loudspeakers

There are three loudspeakers on each side - and a bass unit. Their cables are bundled, and have a common connector connected to the amplifier. The other ends of the cable bundle are labeled S1, S2, S3, S4, S5, S6, SB1 to identify which cable goes to which loudspeaker.

### 8.1. Connect and arrange the cables

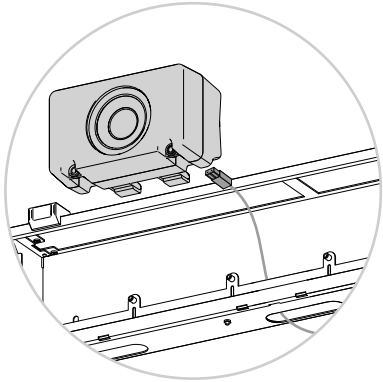
1. Connect the loudspeaker cable to the amplifier.
2. Route the other ends of the cable bundle as shown in the illustration. Let the ends hang freely at this point.

Check the labels, because it is important for the audio experience that the correct cable is connected to the correct loudspeaker.



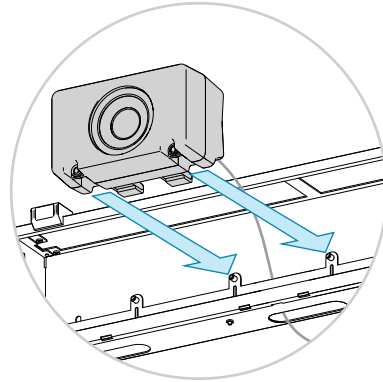
## 8.2. Insert the loudspeakers

The speakers are identical. Repeat this procedure for all loudspeakers; three on each side of the camera.

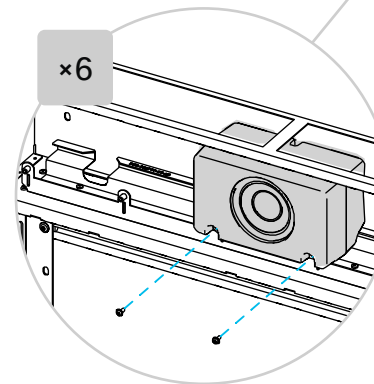
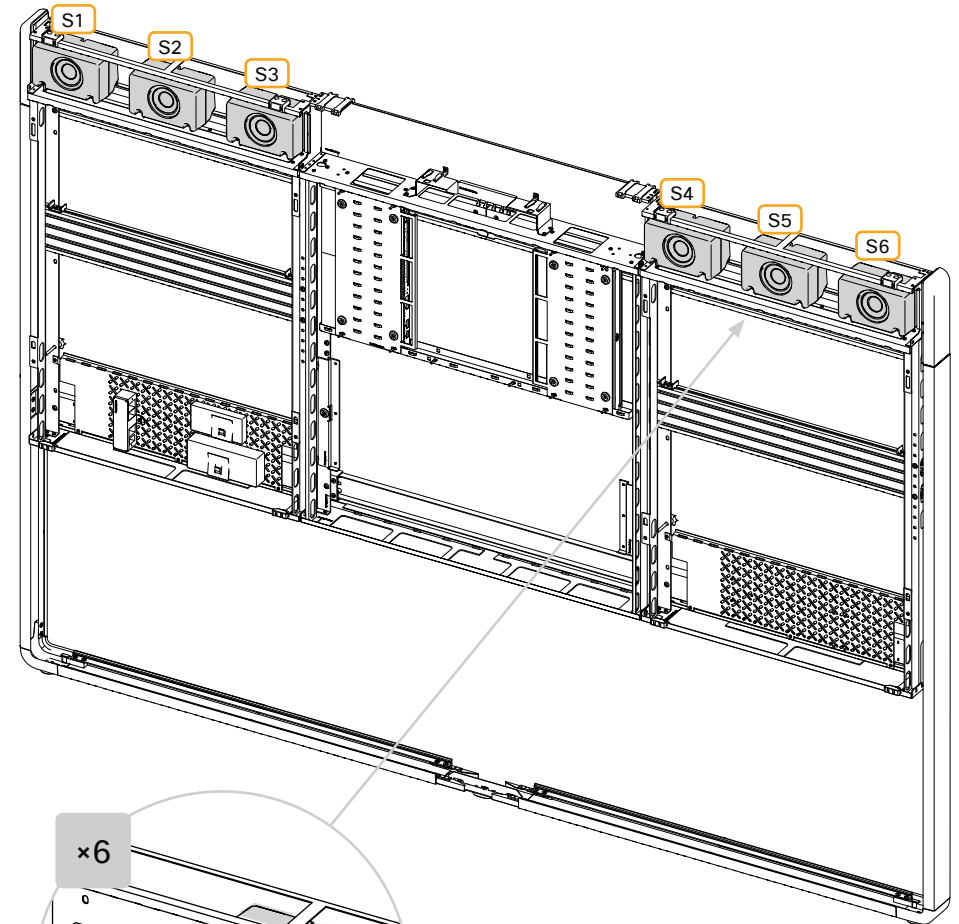


1. Connect the correct cable to the loudspeaker.

The cables are marked with S1 to S6 - counting from the left, see illustration.



2. Enter the loudspeaker onto the pegs.  
Check that the rubber gaskets stay firmly on the pegs.  
Make sure that no cables are touching the loudspeakers. If they do, they may cause rattling noise.
3. Fasten each loudspeaker with two screws (*M4x10, Torx T20*).

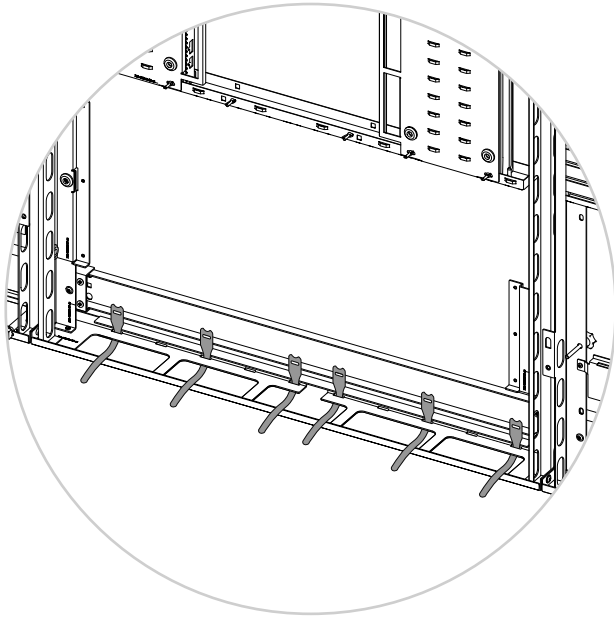


12x 

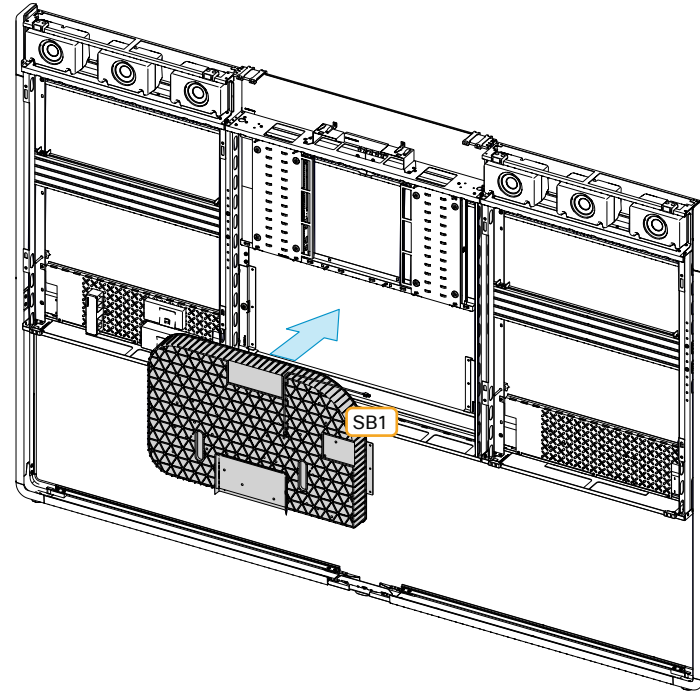
### 8.3. Add velcro straps to the lower tray

We recommend you add 6 velcro straps to the center tray now, because it's more difficult when the bass is in place.

You will use them to secure the cables that run underneath the bass later in the installation process.

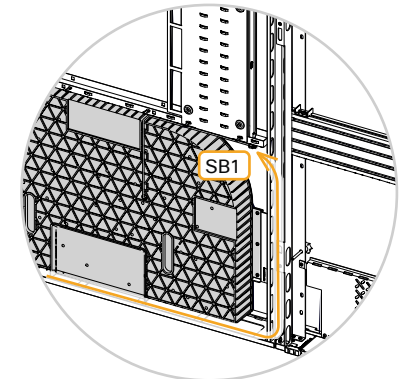
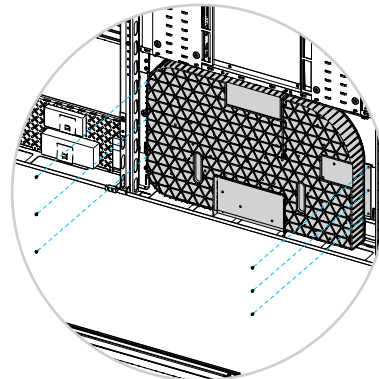


### 8.4. Insert the bass



1. Place the bass in the frame, and fasten with six screws (M4x8, Torx T20).

2. Connect the cable to the bass. The cable is marked with SB1.



Make sure that no cables are touching the bass. If they do, they may cause rattling noise.

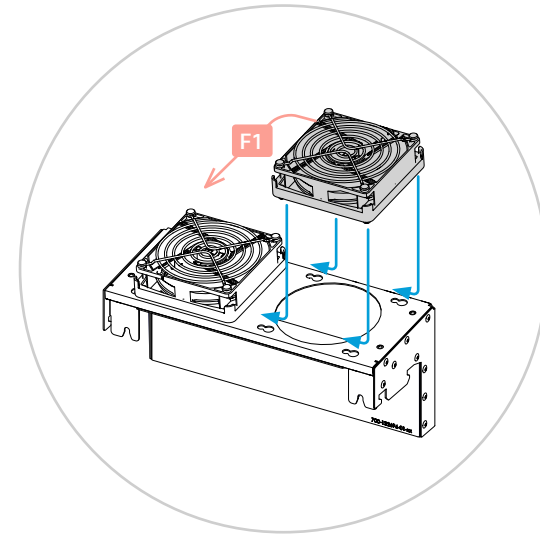
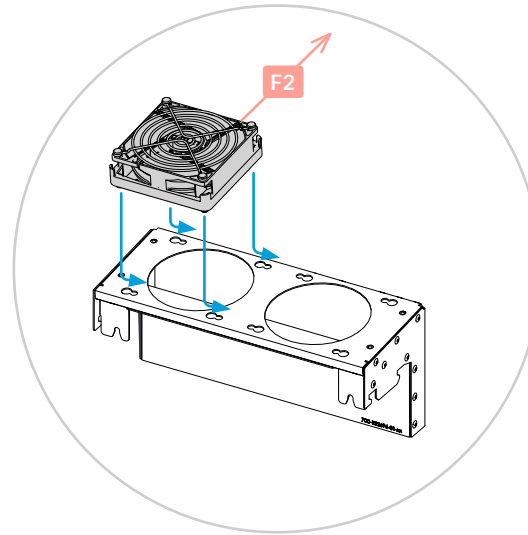


## 9. Mount the fan module

The fan module is placed above the bass. It contains two identical fans.

### 9.1. Assemble the fan module

1. Rotate the fans so that the **F2** cable is facing backward and the **F1** cable is facing left (see illustrations). Then slide the fans onto the bottom part of the fan duct.

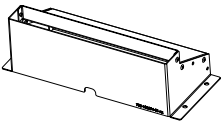


#### Fan module

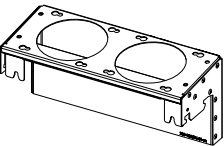
2x Fan (Box: Fans)




1x Fan duct top (Box: Center kit)

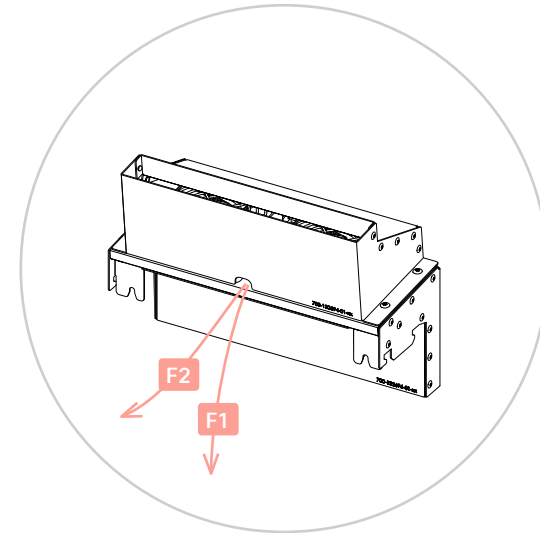
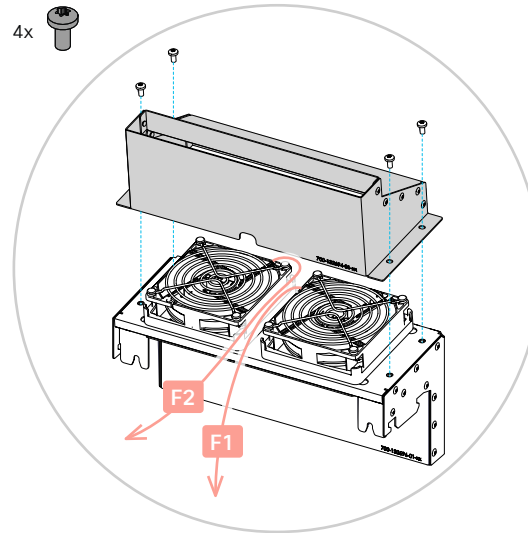


1x Fan duct bottom (Box: Center kit)



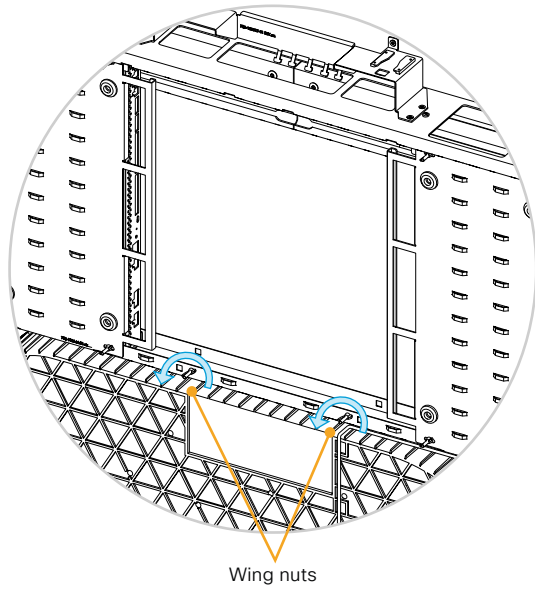
4x   
(M4x8, Torx T20)  
(Box: Center kit)

2. Place the top part of the fan duct on top, and fasten it with 4 screws (M4x8, Torx T20). Make sure the cables (**F1**, **F2**) comes through the slot at front without being pinched.

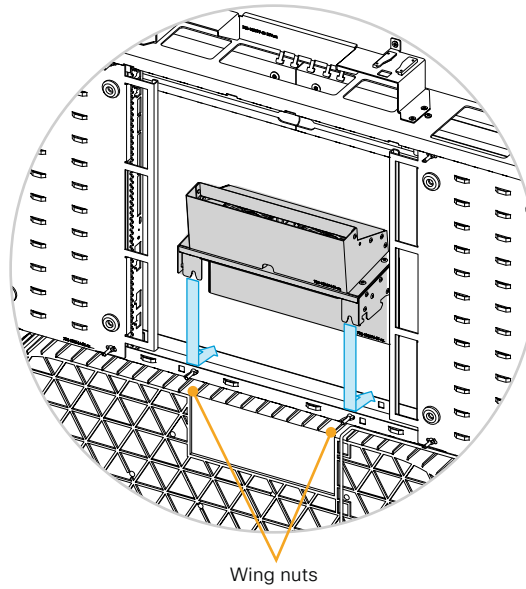


## 9.2. Install the fan module

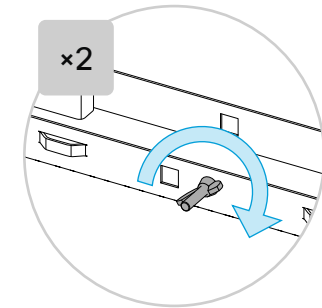
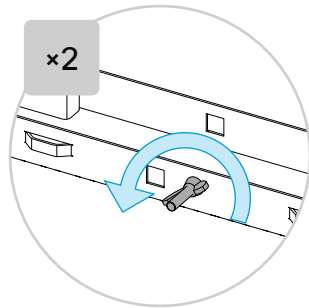
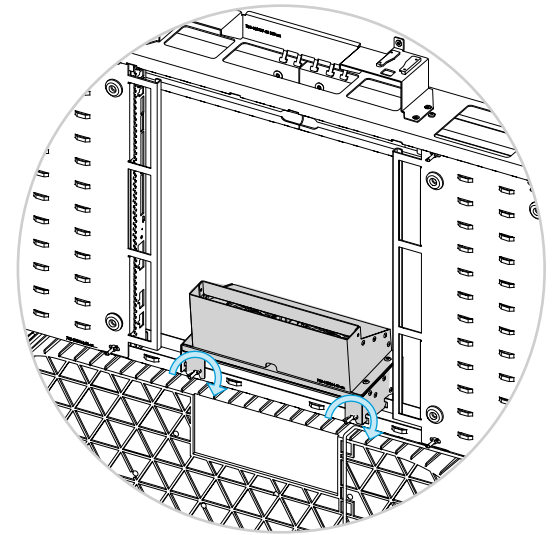
1. Loosen the two wing nuts, but not remove them.



2. Lower the fan module down onto the screws with wing nuts, and then push it into the groove.

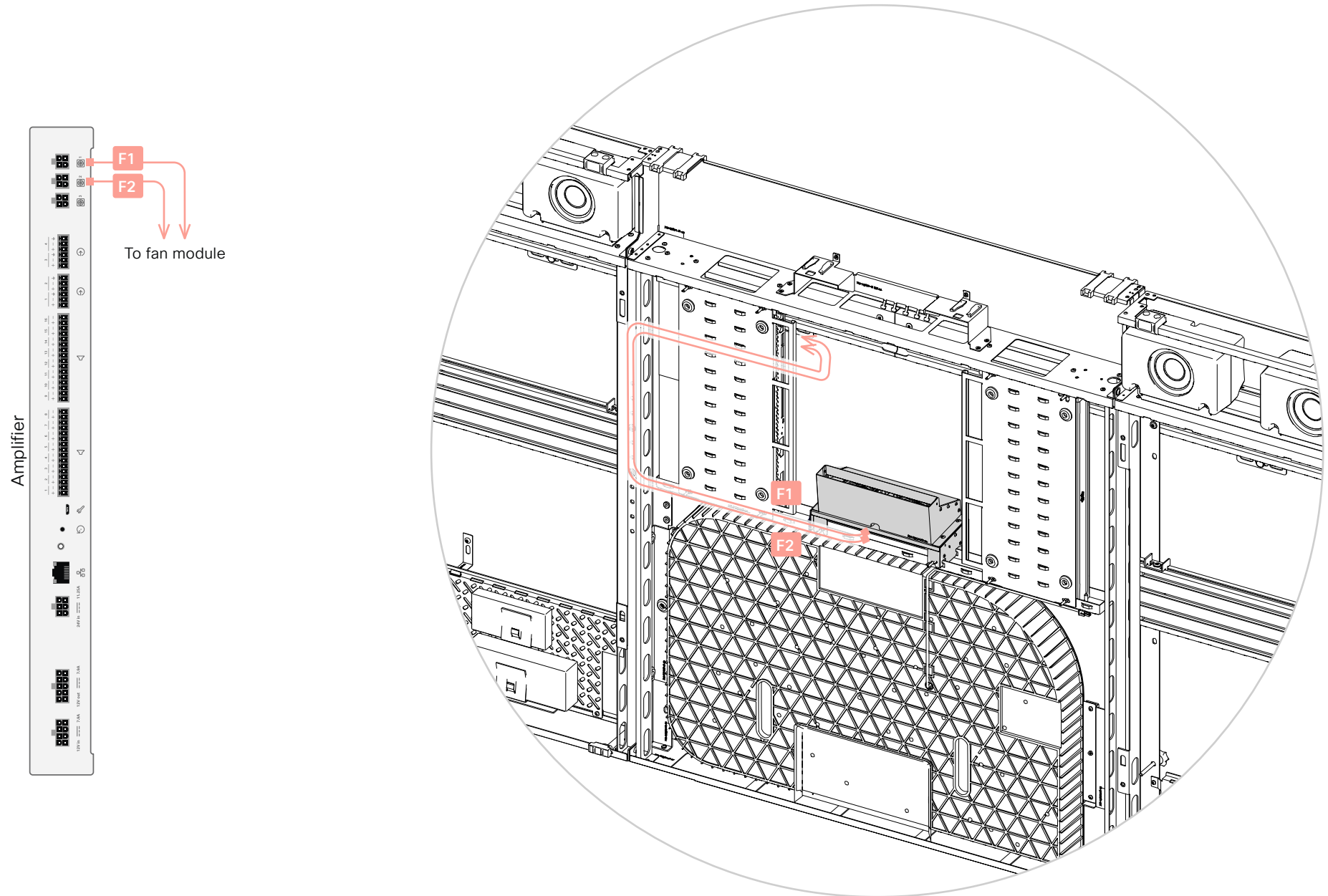


3. Tighten the two wing nuts.



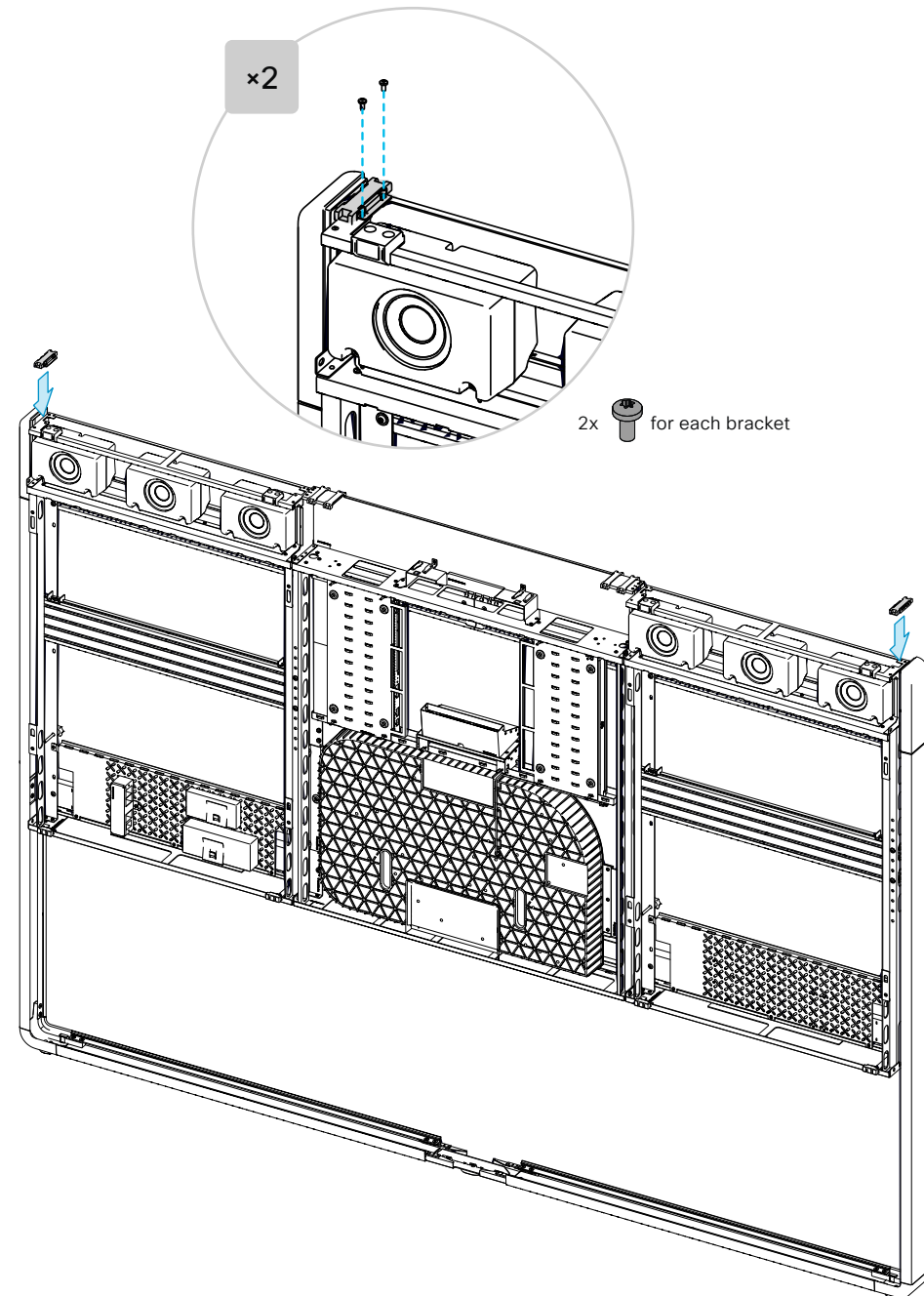
### 9.3. Connect the fans to the amplifier

Guide the fan cables (F1, F2) as shown in the illustration, and connect them to the amplifier. The two fans are identical.



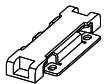
## 10. Mount the top brackets

Fasten the small top brackets, one on each side, with two screws each (M4x8, Torx T20).



### Top brackets (Box: Center kit)

2x top bracket



4x



(M4x8, Torx T20)

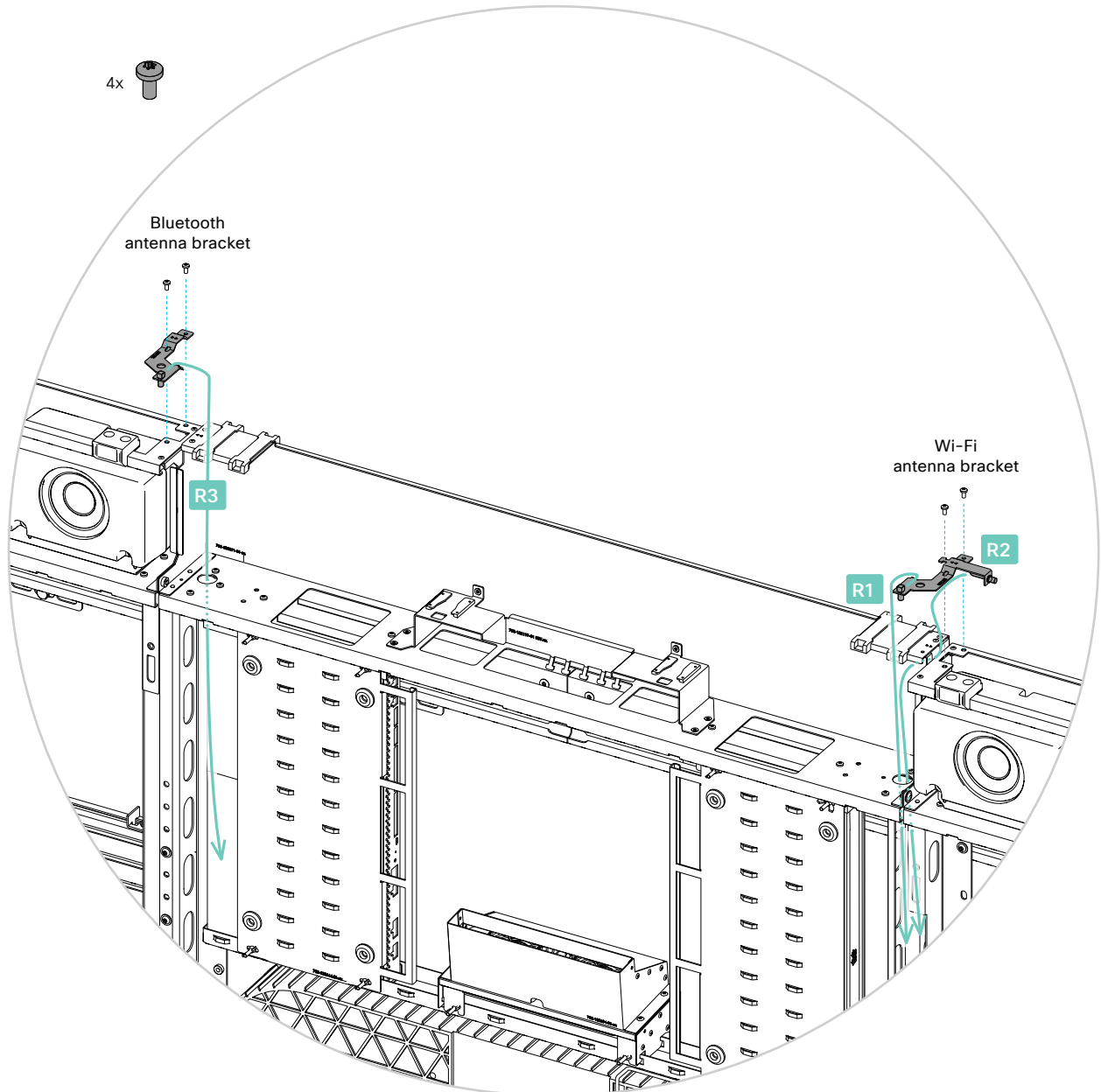
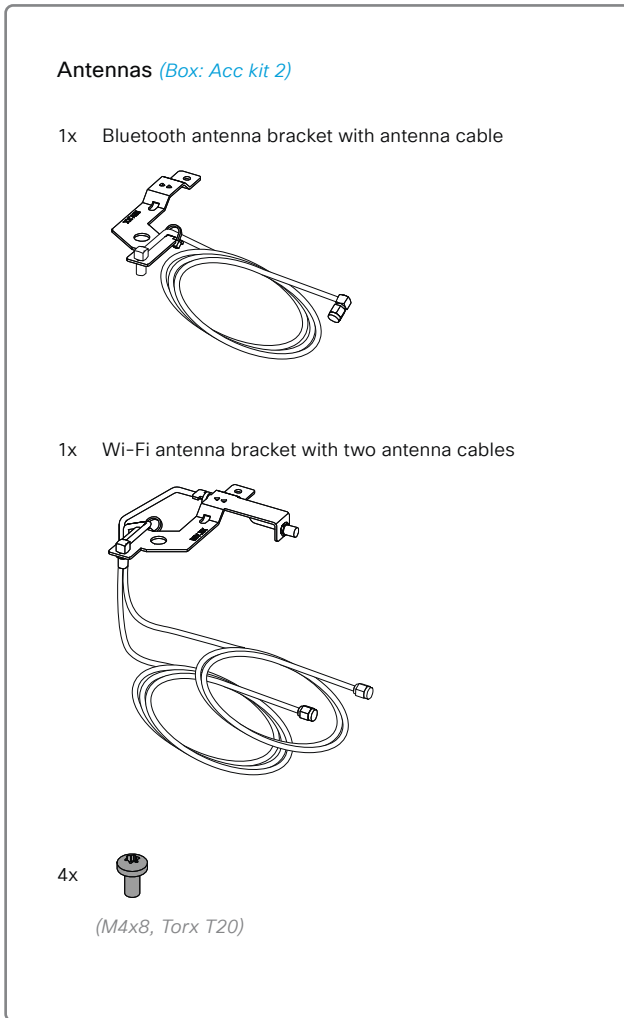
# 11. Mount the antenna brackets

The system has two Wi-Fi antennas and one Bluetooth® antenna.

The antenna cables are pre-mounted on the brackets; the whip antennas themselves are mounted in [step 13](#).

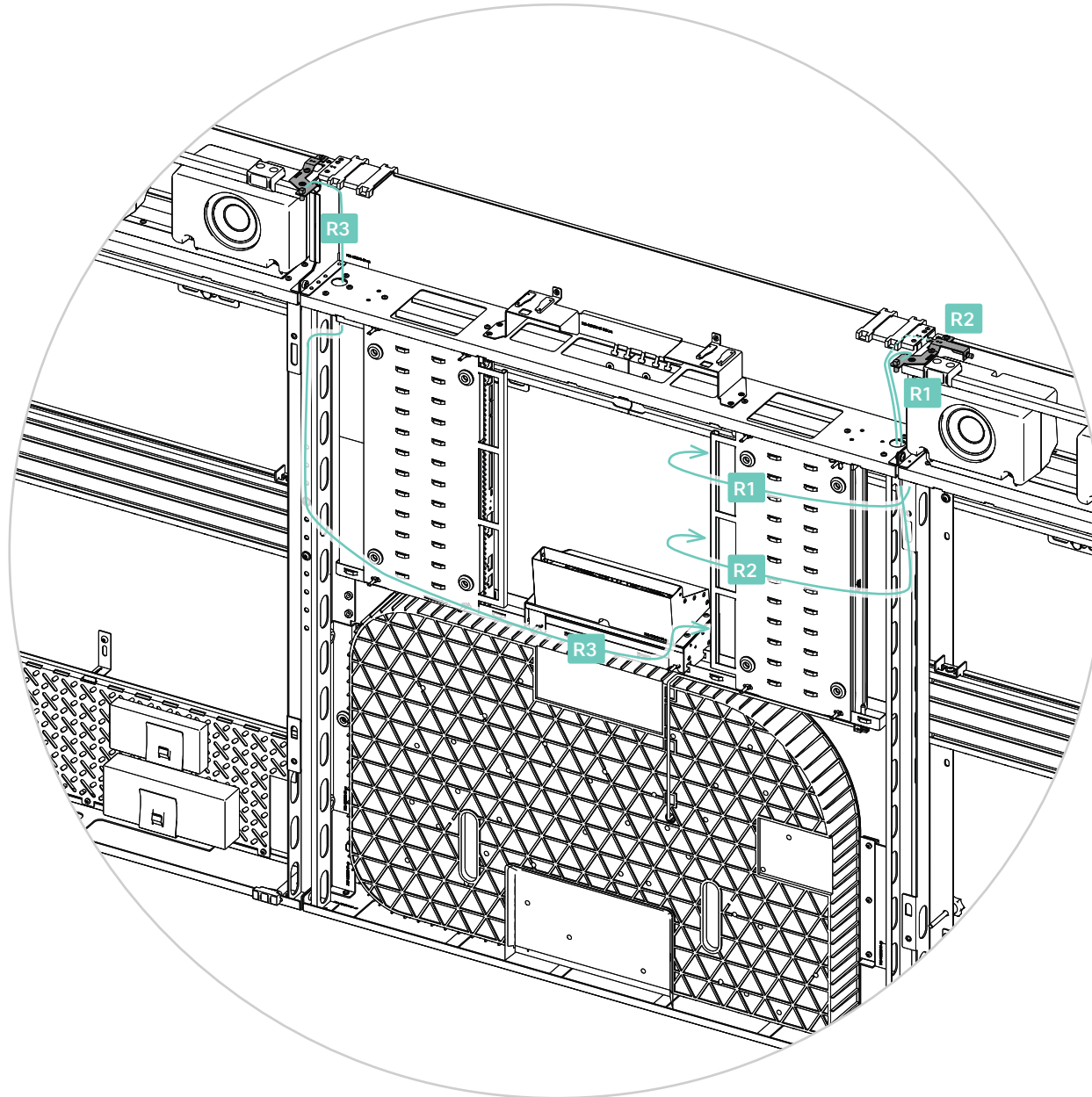
## 11.1. Fasten the antenna brackets

Thread the antenna cables through the holes, and fasten the two antenna brackets with two screws each (M4x8, Torx T20).



## 11.2. Route the antenna cables and connect them to the codec

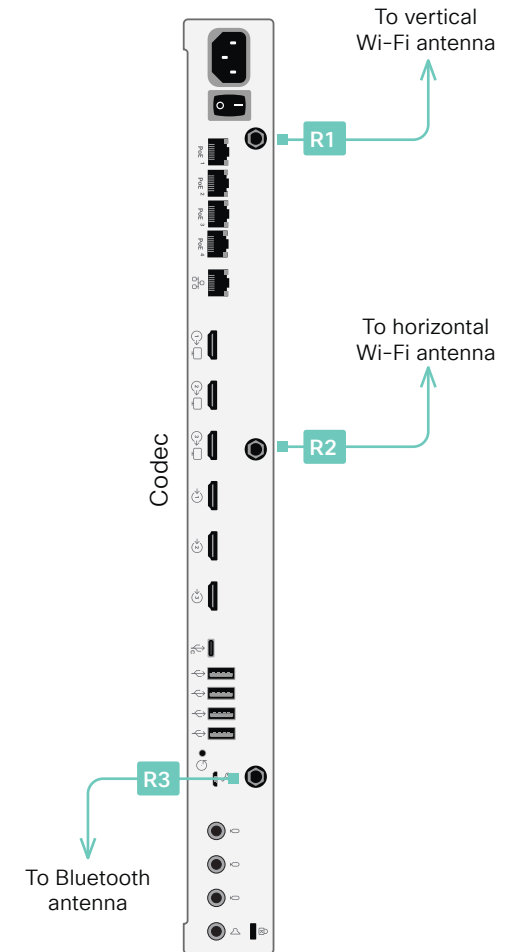
1. Route the antenna cables as shown in the illustration.



2. Connect the antenna cables to the codec.

It's important to connect the correct antenna to the correct connector on the codec.

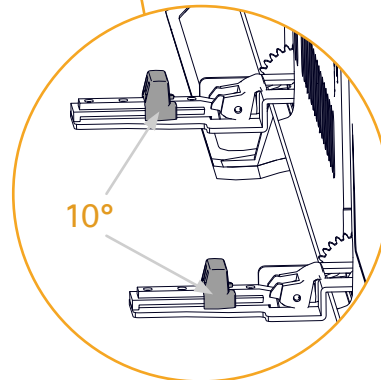
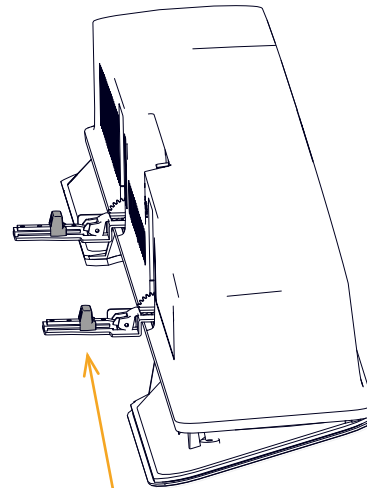
For more details, see the full wiring diagram that were shipped with the system. It's also available online.



## 12. Insert the camera

### 12.1. Set the camera tilt angle to 10°

There are two sliders for adjusting the camera tilt angle at the bottom of the camera.

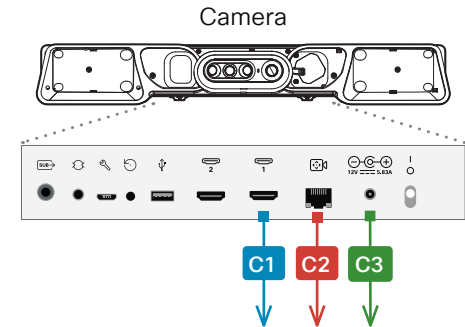


Flip down the hinges and **move the sliders to 10°**, which is the required tilt angle for this product.

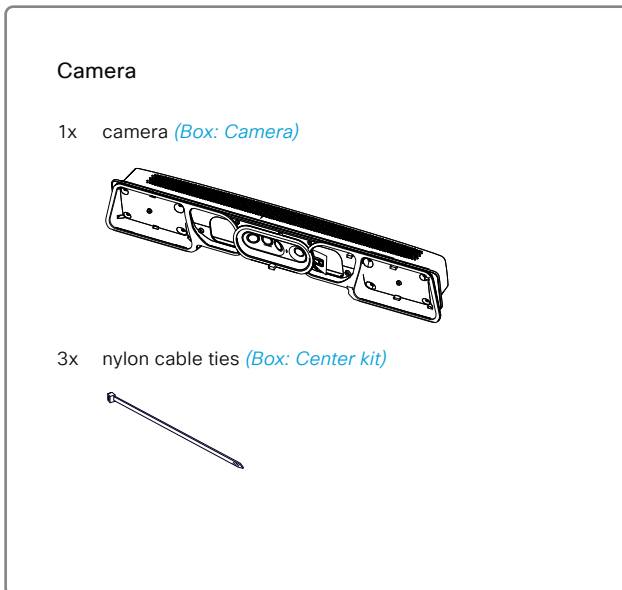
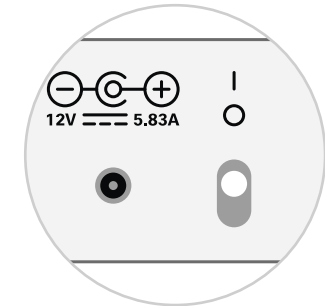
**Flip the hinges back when done.**

### 12.2. Connect cables to the camera

1. Connect cables to the camera (C1, C2, C3). Let the other end hang freely for now.

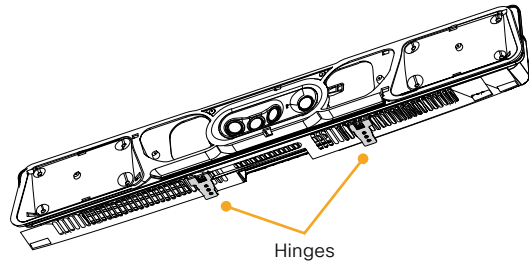


2. Check that the camera power switch is On.

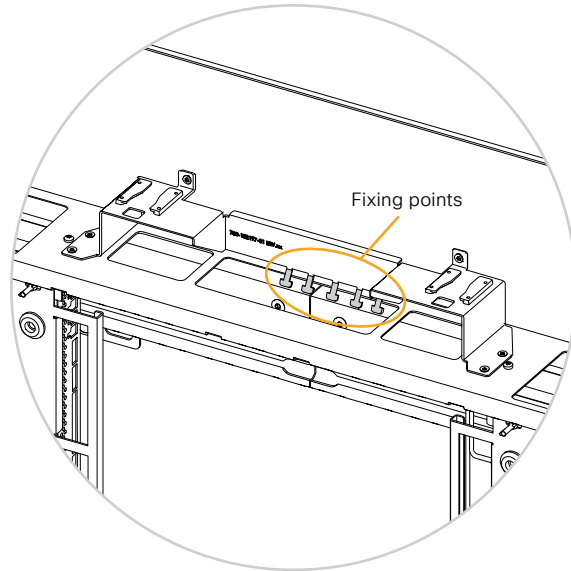


### 12.3. Snap the camera onto the bracket

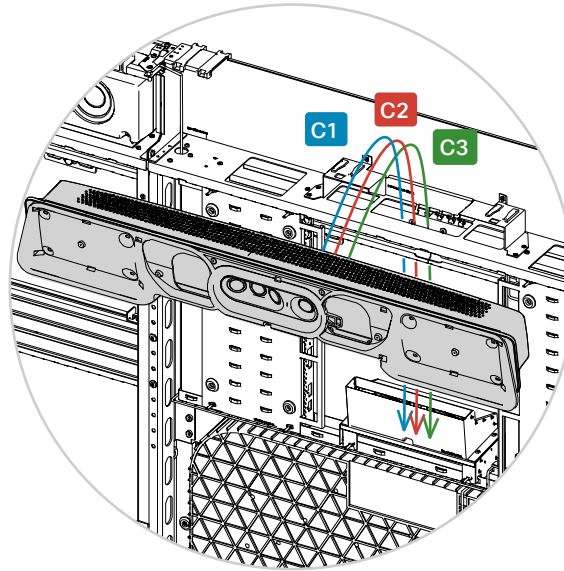
1. Observe the small hinges below the camera. They will snap onto the bracket in step 4.



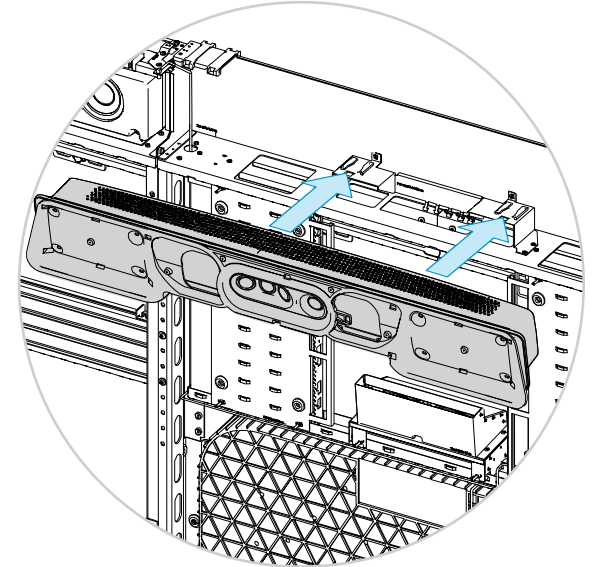
2. Observe these fixing points under the camera bracket. They will be used to secure the camera cables in step 5.



3. Thread the cables down the hole by the camera bracket.



4. Click the camera hinges onto the bracket, without pinching or disconnecting the cables.



Make sure the camera sits firmly in place by gently trying to pull it.

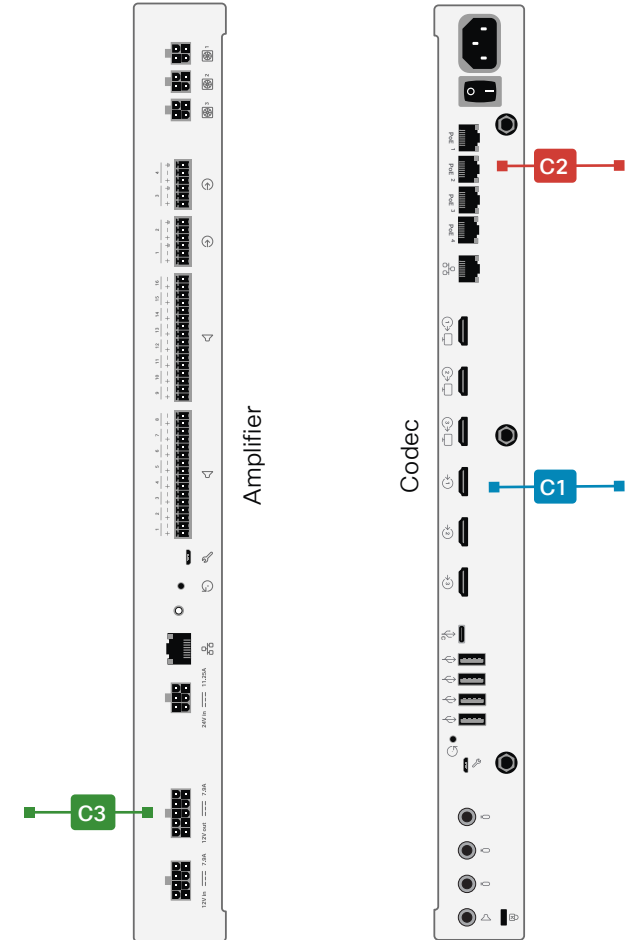
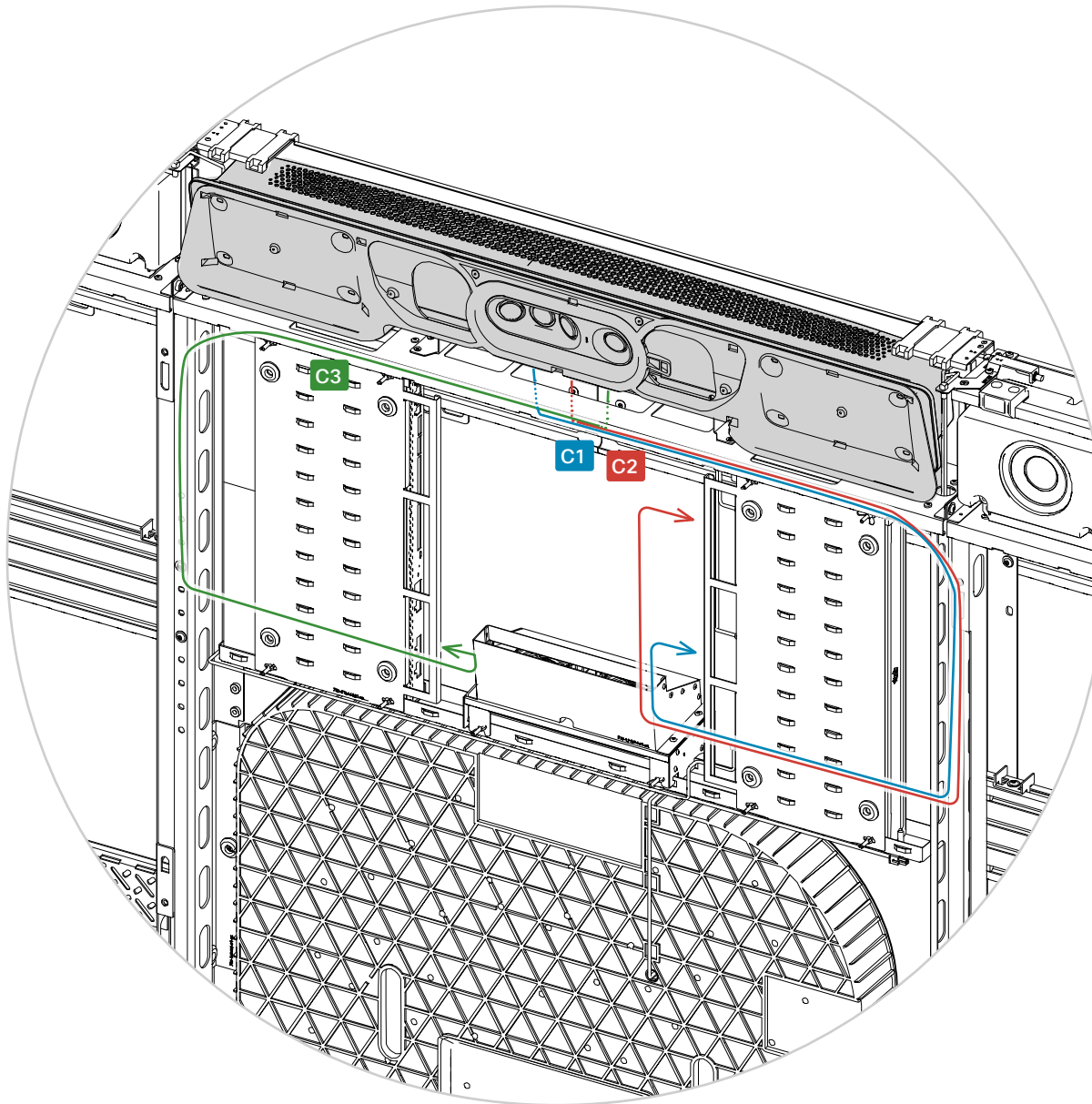
5. To avoid accidentally pulling out the camera cables, secure them to the fixing points under the camera bracket with the supplied nylon cable ties.



## 12.4. Connect the camera to the codec and amplifier

Route the cables as shown in the illustration.

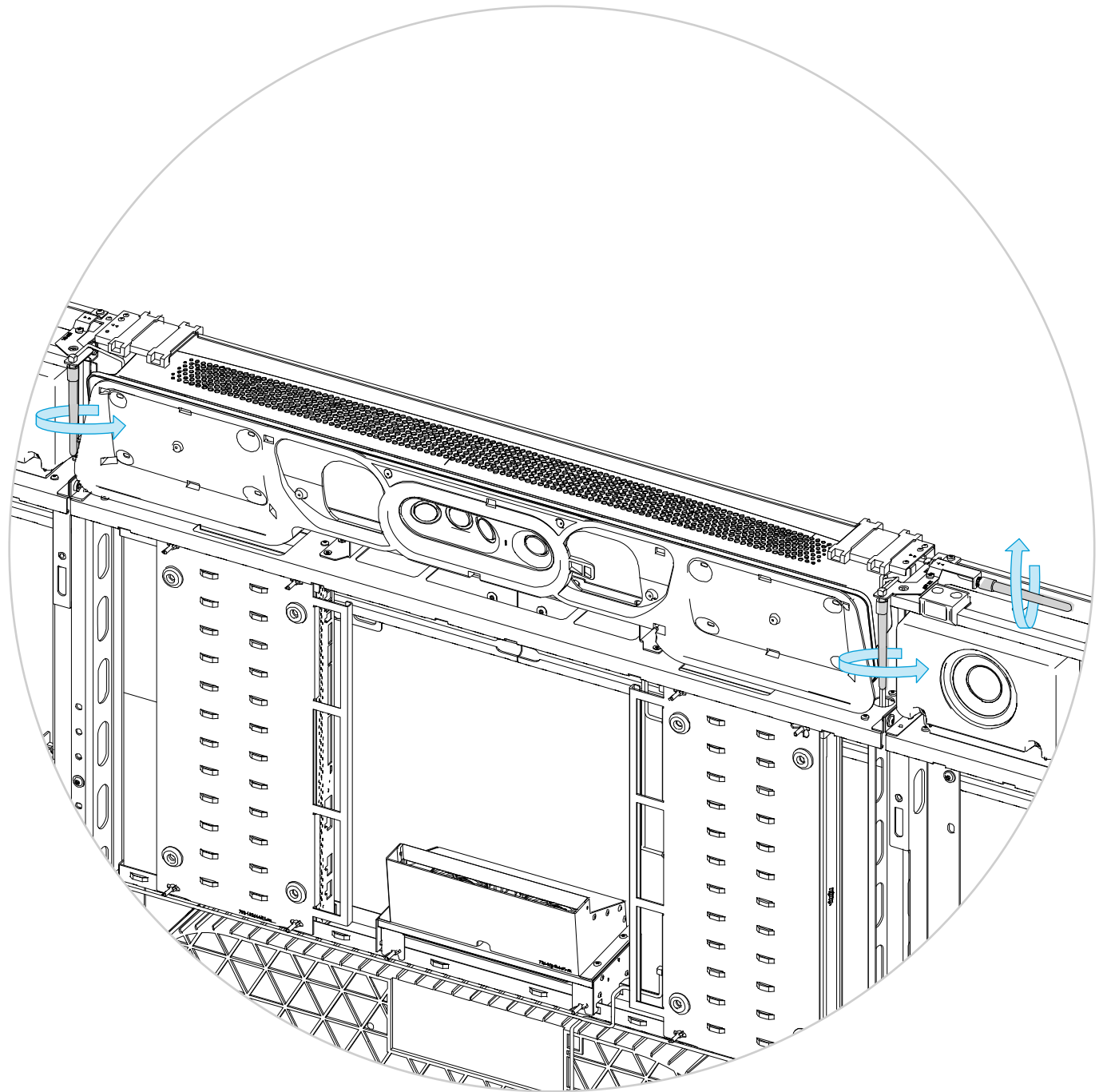
- Connect the HDMI (C1) and camera control (C2) cables to the codec.
- Connect the power cable (C3) to the amplifier.



## 13. Attach the antennas

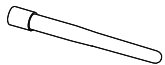
Attach whip antennas to the antenna brackets that were mounted in [step 11](#): one to the left of the camera, and two to the right of the camera.

The three whip antennas are identical.



Antennas (Box: Acc kit 2)

3x antennas



## 14. Connect screen cables

### HDMI cables for the screens:

- Connect the left (S1) and right (S2) screen HDMI cables to the codec.
- Route the cables as shown, and leave the end for the screen hanging freely. The cables will be connected to the screens in [step 29](#).

### Power cables for the screens:

- Fasten the power cables for the left (S3) and right (S4) screens to the corresponding side module with velcro straps.

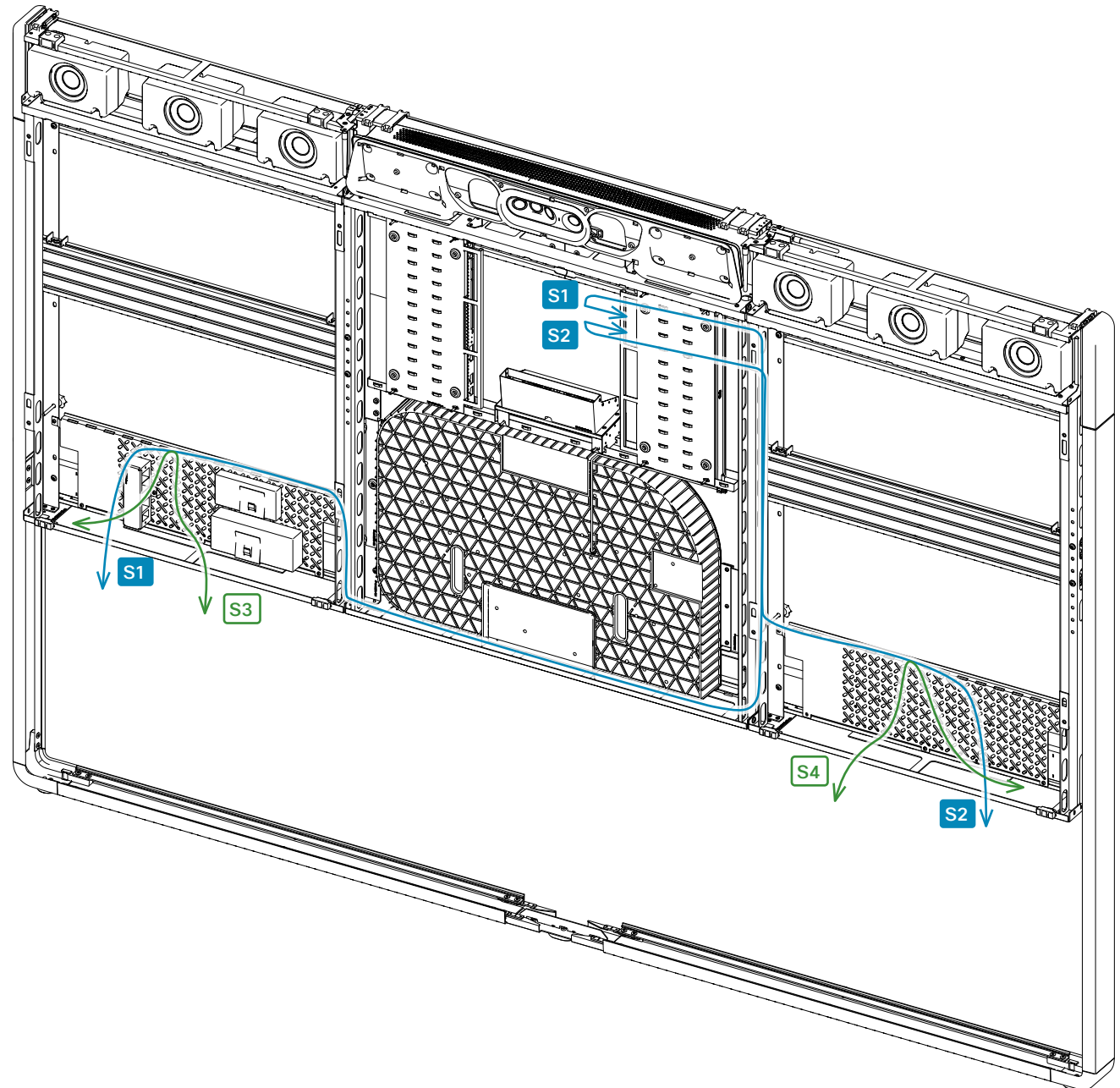
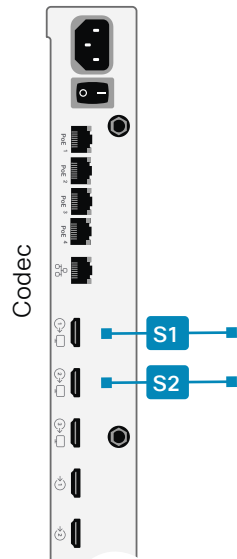
The best placement depends on your screens and the position of your power outlets.

These power cables are most often shipped with the screens. If it is inconvenient to open the screen boxes now, you can fasten the power cables to the side modules later.

- Use the regular cable routes when leading the cables toward the wall socket outlets.

**Don't connect them to the wall socket yet.**

- The cables will be connected to the screens in [step 29](#).



## 15. Connect power and network cables

### Connect amplifier to codec:

- Connect the cable between the amplifier and the codec (D1). Route it as shown in the illustration.

### Main network cable:

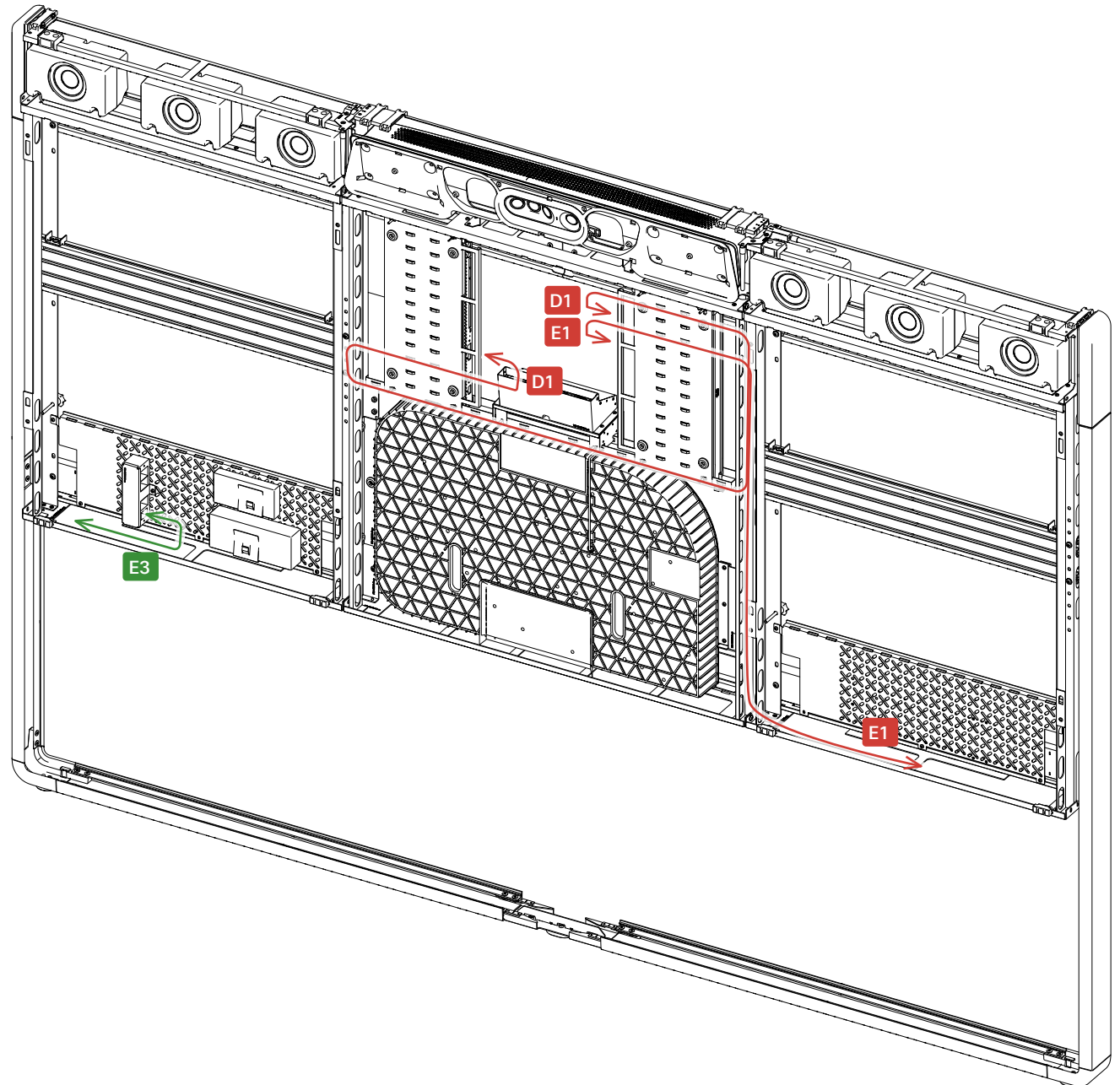
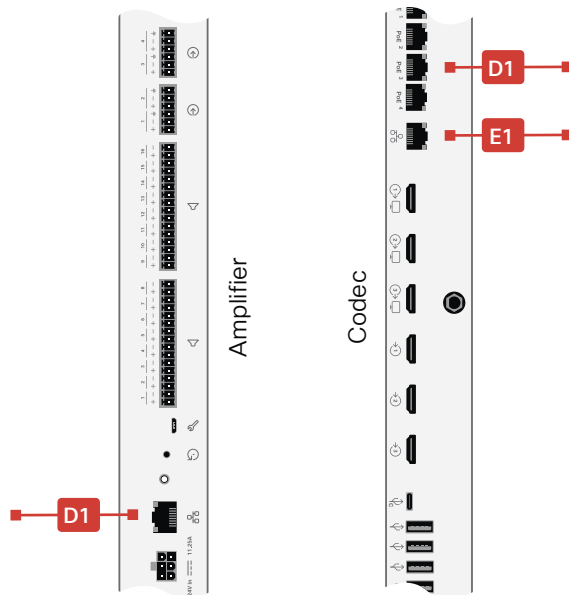
- Connect the network cable to the codec (E1). Use the regular cable routes when leading the cable toward the network wall socket.

Don't connect it to the wall socket yet.

### Main power cable:

- Connect the cable to the power strip (E3). Use the regular cable routes when leading the cable toward the network wall socket.

Don't connect it to the wall socket yet.

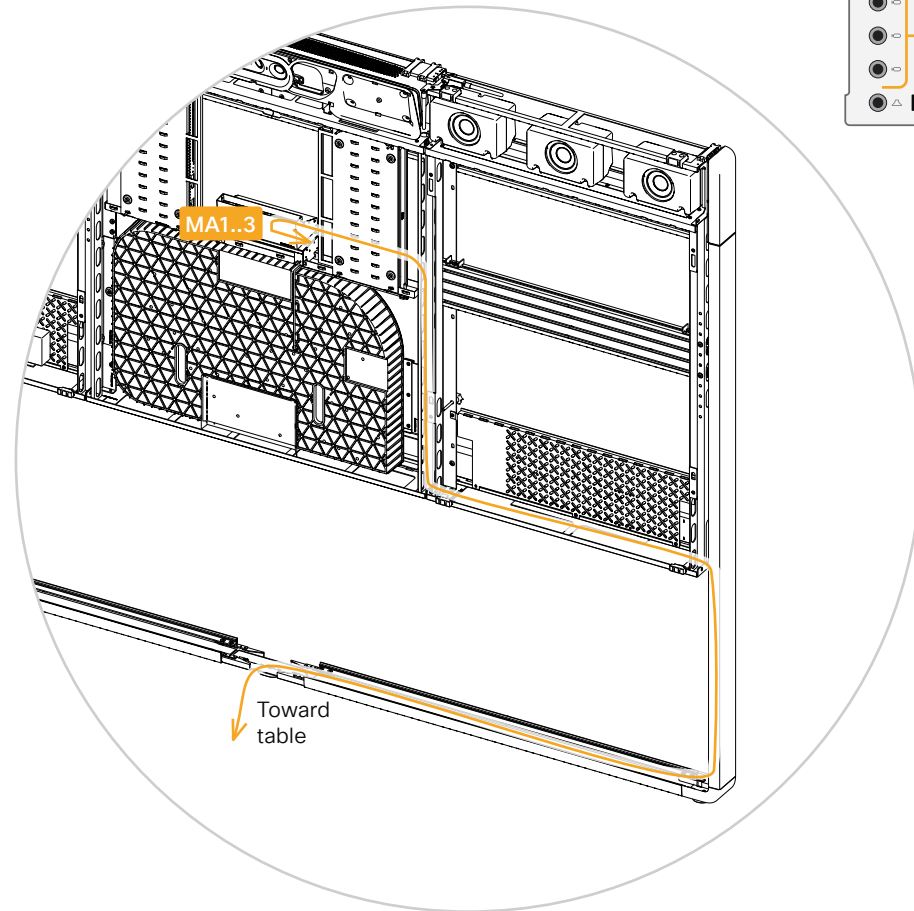
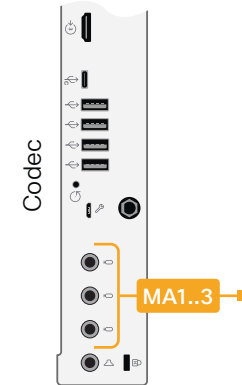


## 16. Connect the microphones

The system needs external microphones. You may have ordered analog or digital microphones from Cisco, or you may rely on a 3<sup>rd</sup> party microphone solution.

*Analog microphones:*

- Lead the microphone cables from the table to the system using the regular cable routes. Then connect them to the codec (MA1..3).

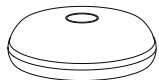


### Microphones (optional)

(0..3)x Table Microphone  
*Box: Acc kit 2)*



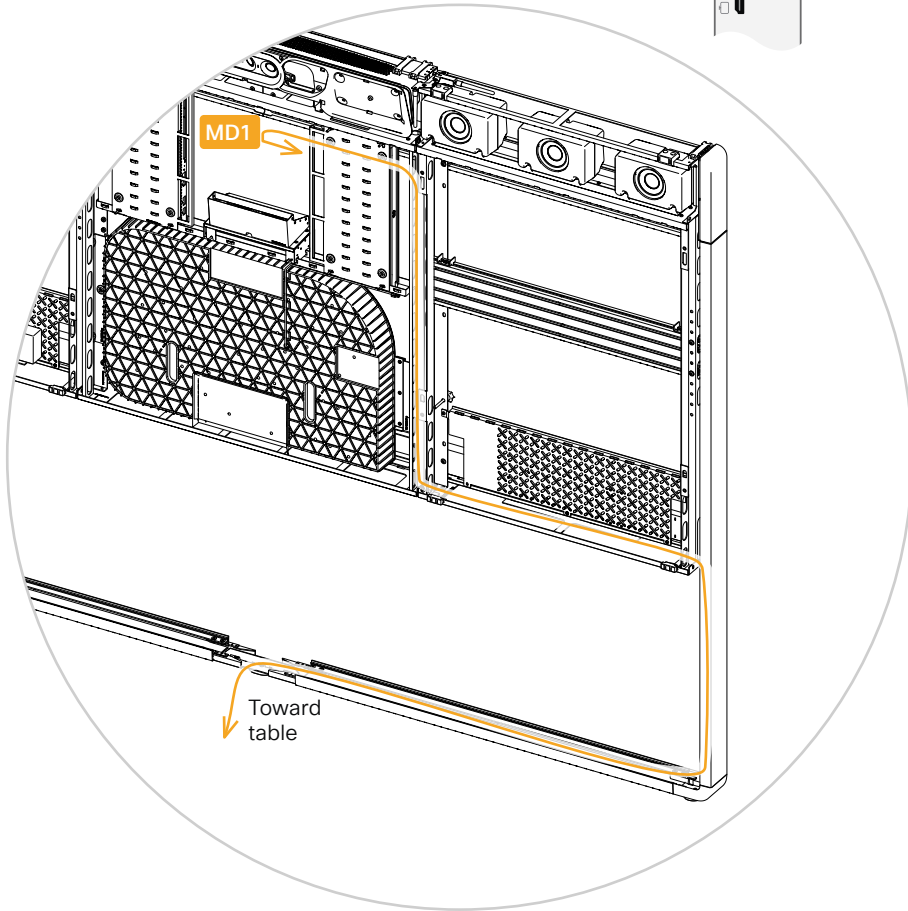
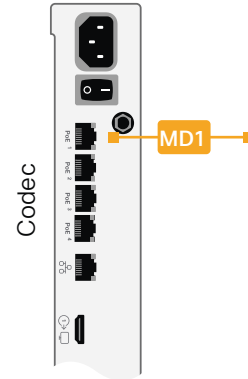
(0..3)x Table Microphone Pro  
*Box: Table Mic Pro)*



You may have microphones from a 3<sup>rd</sup> party vendor.

*One digital microphone:*

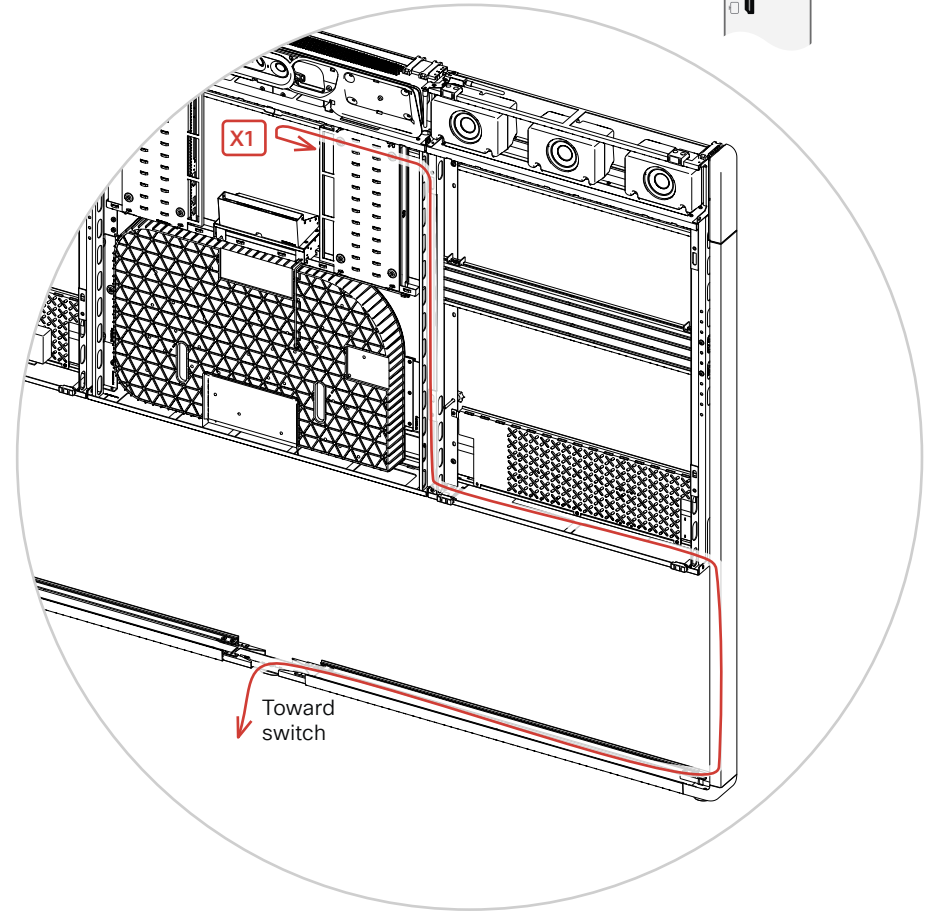
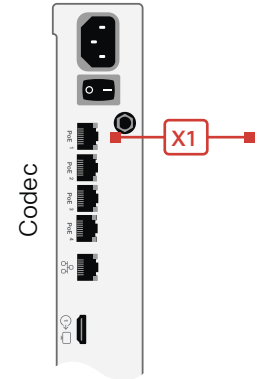
- Lead the microphone cable from the table to the system using the regular cable routes. Then connect it to the codec (MD1).



*More than one digital microphone:*

You must connect the microphones to the codec via an Ethernet switch (see the wiring diagram):

- Place an Ethernet switch by the table and connect it to the codec (X1).
- Connect the microphones to the switch (MD1..3).



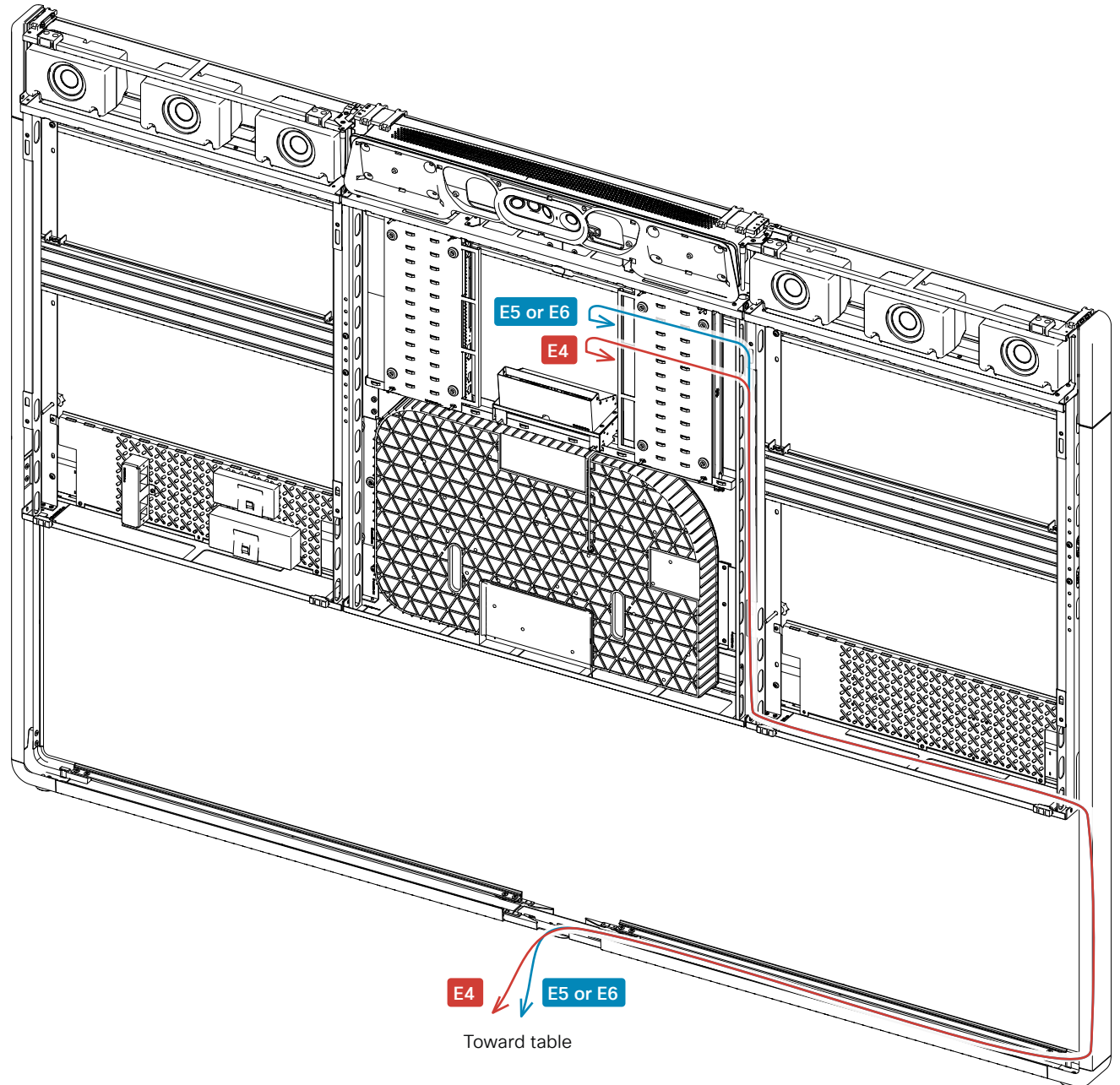
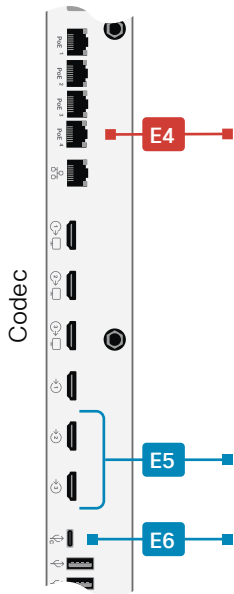
## 17. Connect the Room Navigator and presentation cables

### Room Navigator:

- Connect the Room Navigator to the codec (E4).  
**Or alternatively**, if you have connected an Ethernet switch by the table as described for digital microphones in [step 16](#), you can choose to connect the Room Navigator (E4) to this switch instead of to the codec. This alternative is not shown in the wiring diagram.

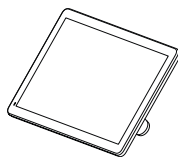
### Presentation cable:

- Connect one or more presentation cables to the codec. You may use HDMI (E5) or USB-C (E6).
- Use the regular cable routes when leading the cables toward the table.



### Room Navigator

1x Room Navigator  
(Box: Navigator)

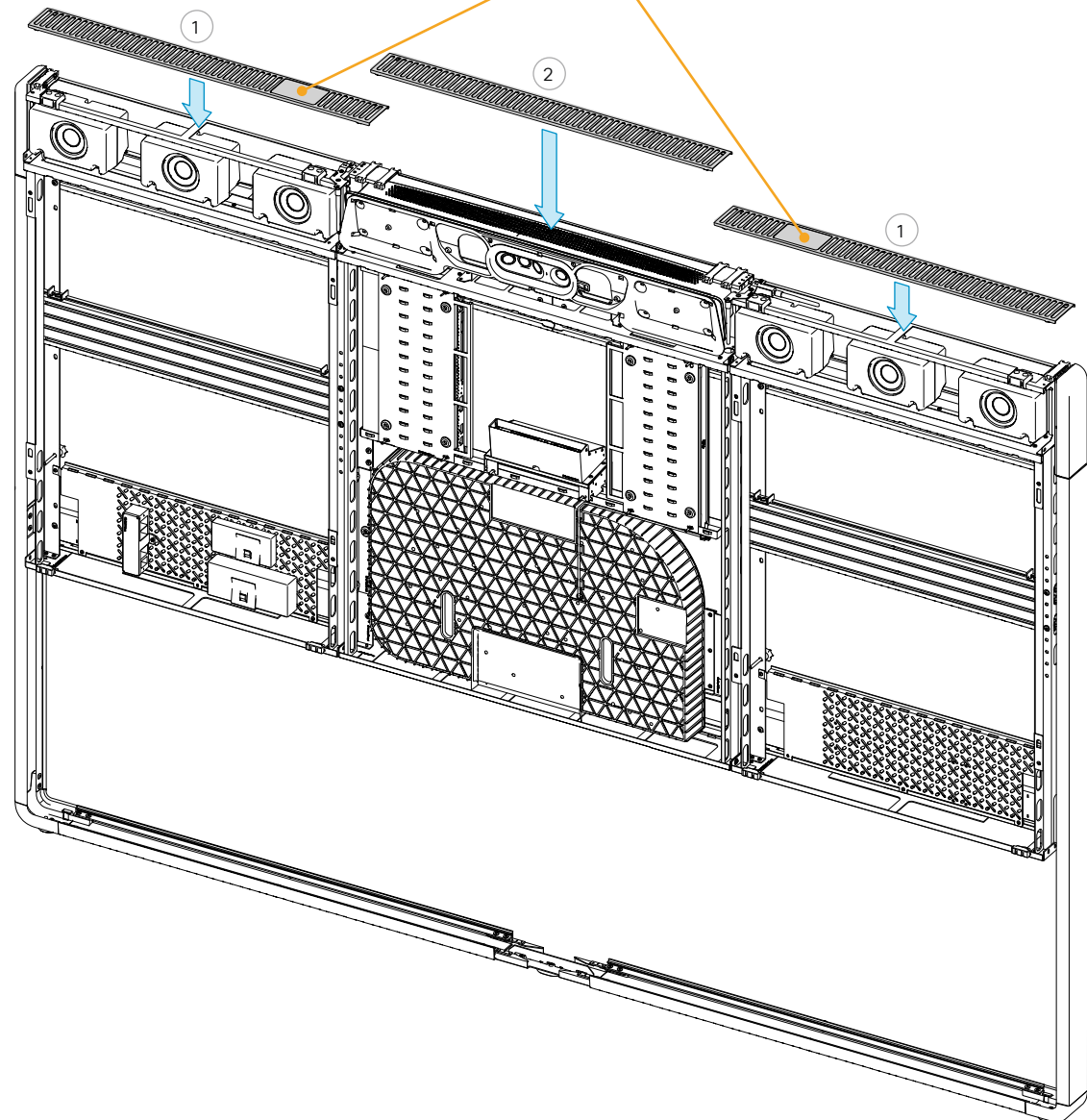


## 18. Mount the top covers

Place the top covers as shown in the illustration. Left and right first, then the center top cover. The covers shall rest on the rubber grommets on both ends.

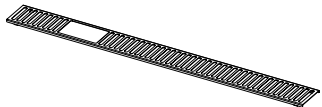
To avoid rattling noise, make sure the covers don't touch any metal parts. Also, make sure not to interfere with the antenna cables.

Note that these areas are toward center  
(that is, above the antennas)

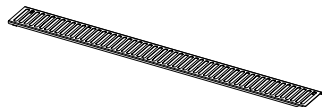


### Covers (Box: A)

2x top cover (left and right)



1x top cover (center)





## 19. Tidy up cabling and check power

### 19.1. Tidy up the cabling

Now, **you're done with all the cabling** behind the grilles and screens!

We recommend you tidy up and fasten all cables nicely to the frame with velcro. Make sure to keep cables away from the bass and speakers to avoid rattling noise.

Remember to tighten the velcro straps that secures the cables below the bass.

### 19.2. Check power

We recommend you to **temporarily** connect the system to the socket outlet, and check that the LEDs of these components light up:

1. The camera (has power switch)
2. The codec (has power switch)
3. The amplifier (no power switch)
4. The 24 V PSU (has power switch)
5. The Room Navigator (no power switch)

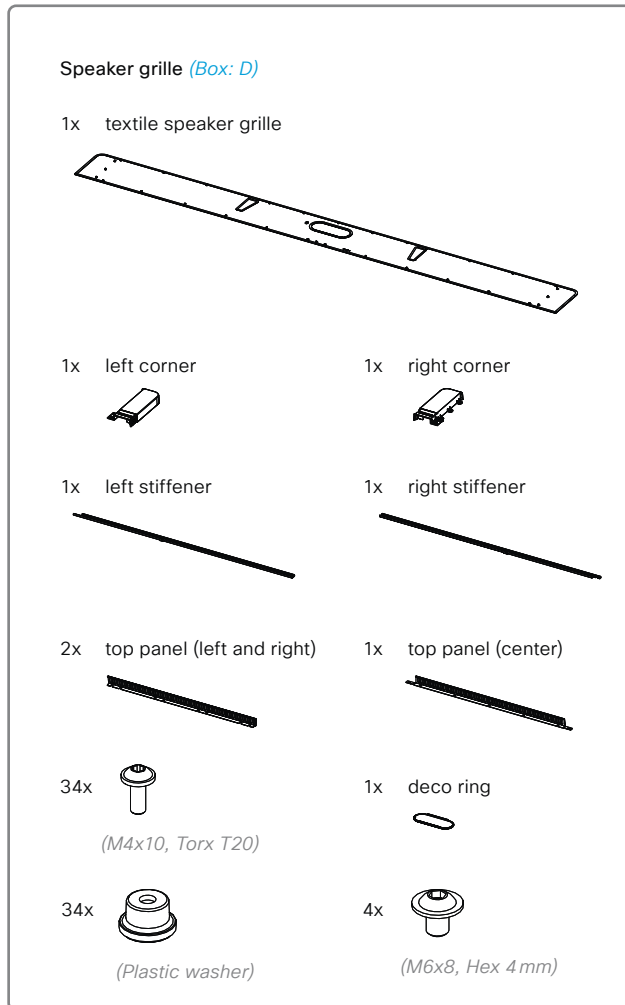
When you've seen the LEDs light up as expected, **unplug the socket outlet and continue with the installation.**

If the LEDs don't light up as expected, go back and check the cabling and power switches.

## 20. Mount the speaker grille

Both the speaker grille (assembled in this step) and bottom grille (to be assembled in [step 21](#)) consist of several parts. The corners and stiffeners are identical for both grilles; the top/bottom panels are different.

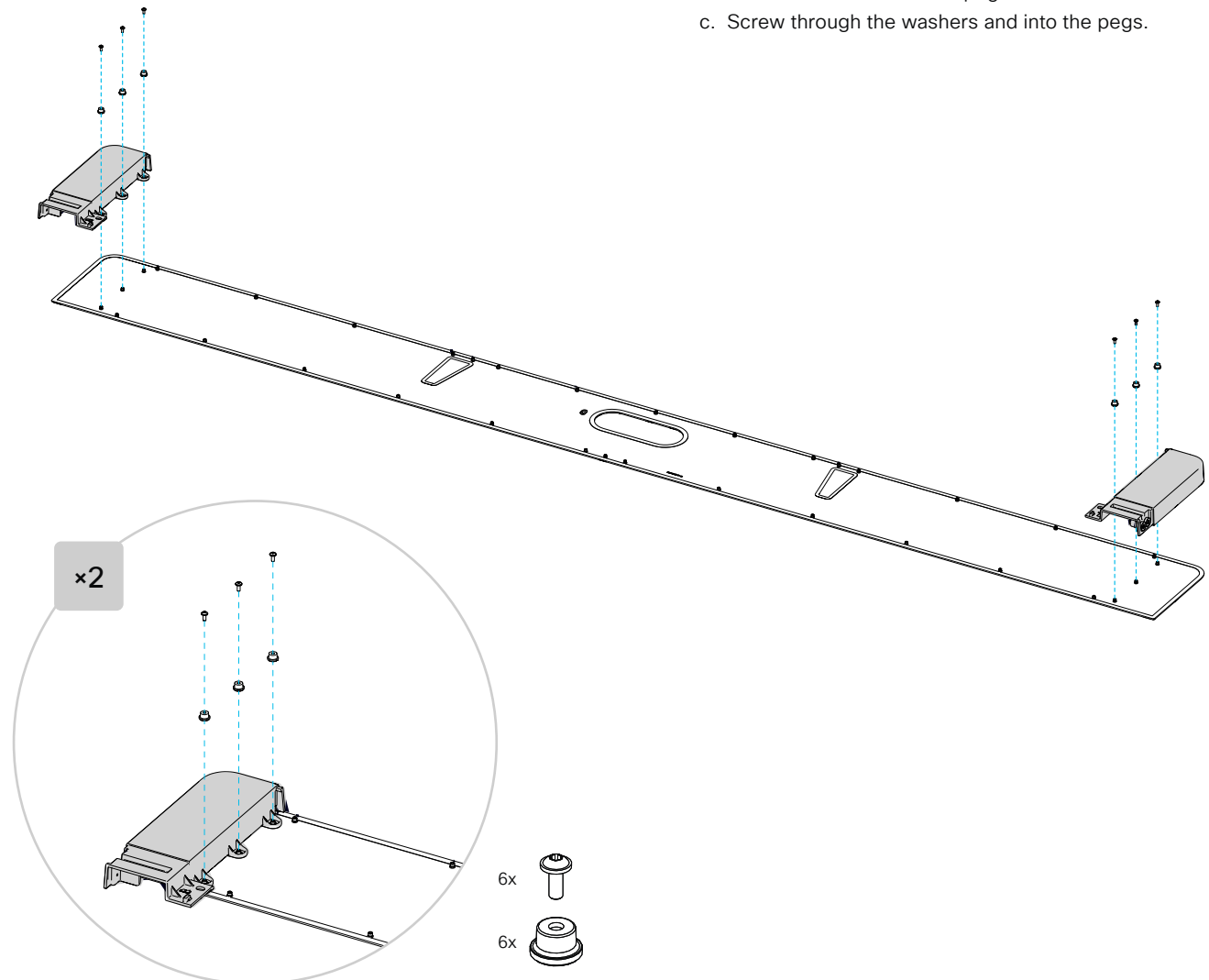
There are marks on the parts, identifying which goes on the left side and which goes on the right side. Left and right, referring to the grille laying like shown in the illustrations.



### 20.1. Assemble the speaker grille

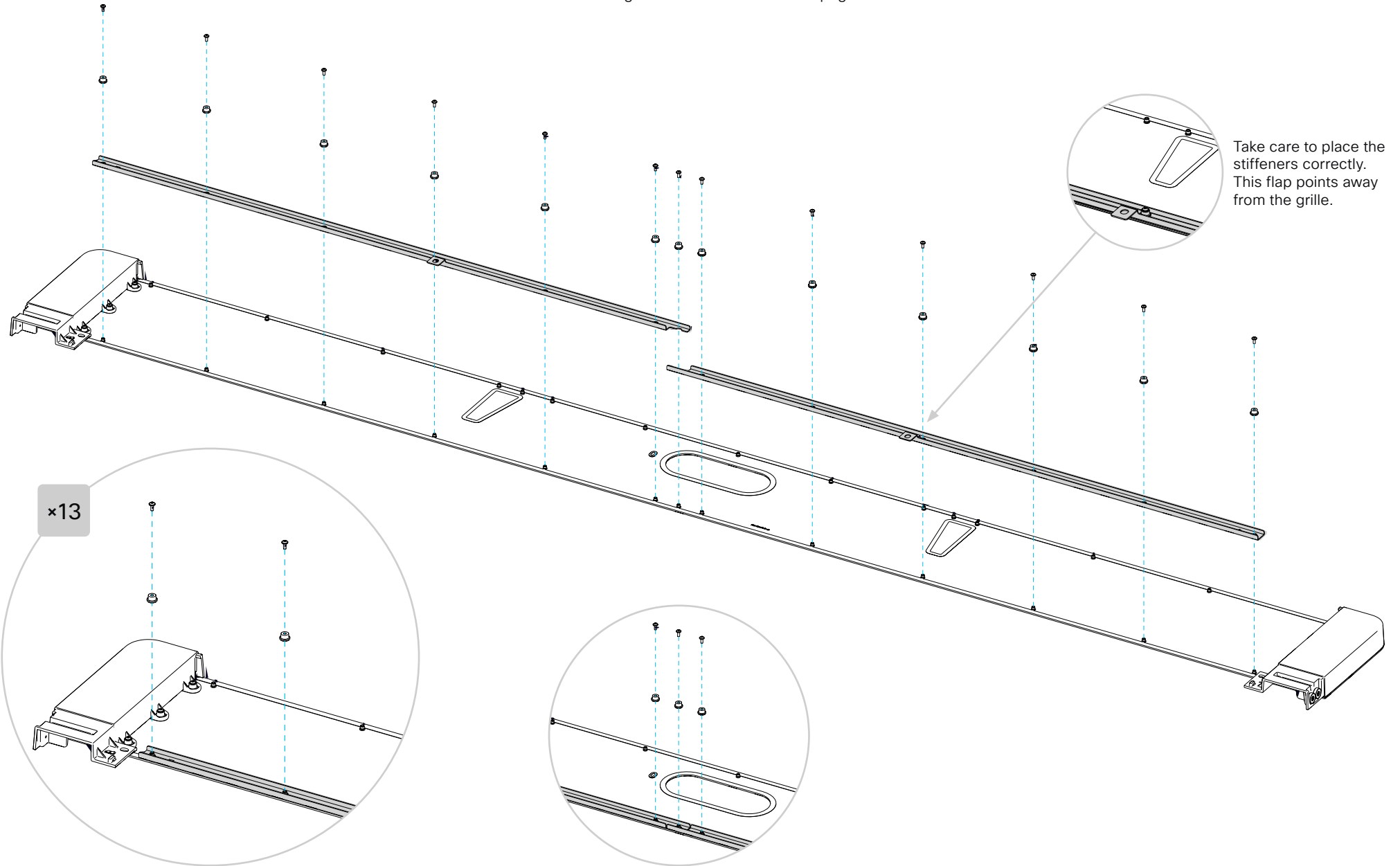
1. Place the textile speaker grille on a flat and clean surface, front side down.

2. The pegs on the grille has threaded holes for screws.
- The left and right corners are fastened to the rear of the grille with three screws (M4x10, Torx T20) and washers (Plastic washer) for each corner.
- a. Place the corner onto the pegs as shown in the illustration.
  - b. Place the washers on the pegs.
  - c. Screw through the washers and into the pegs.



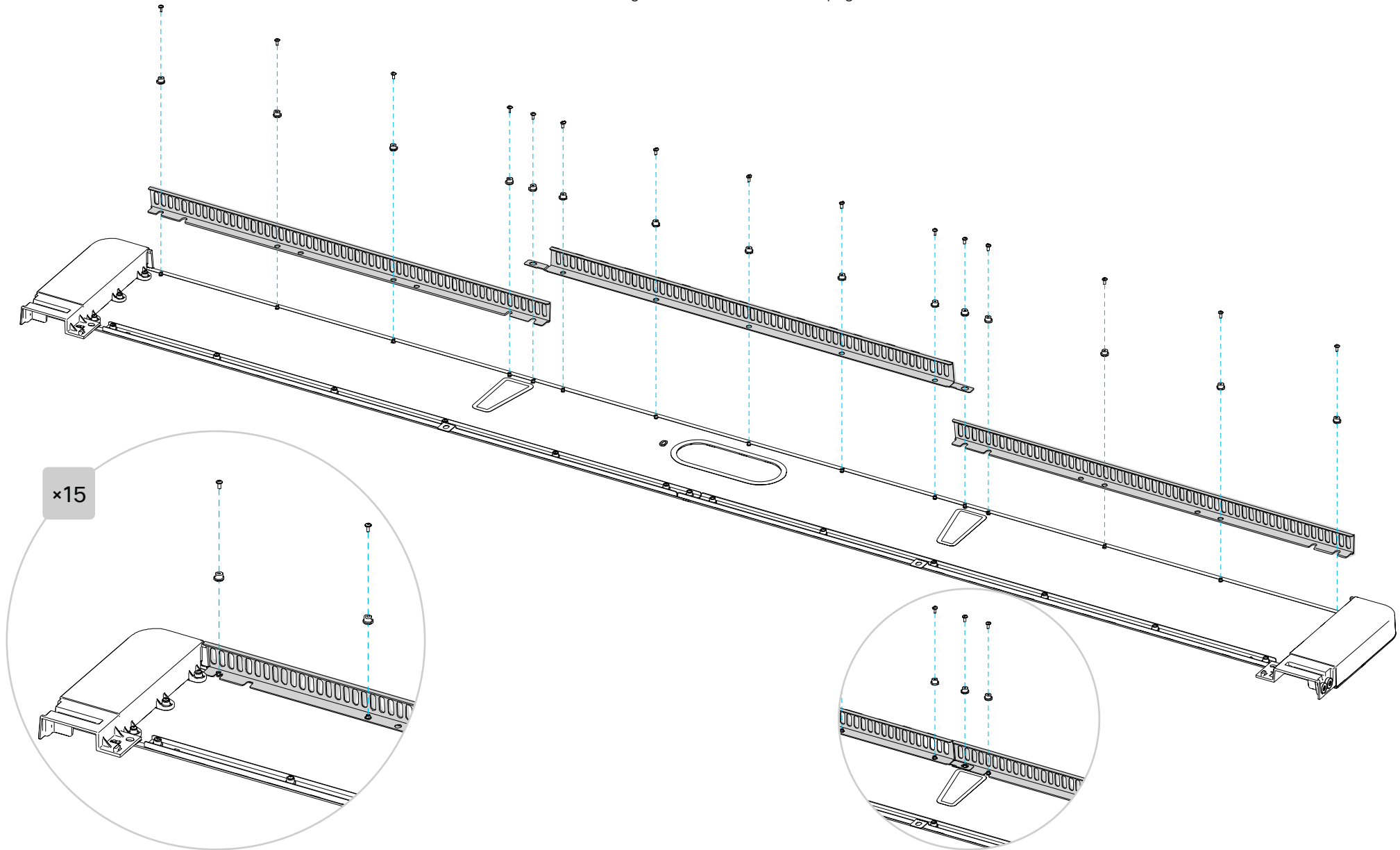
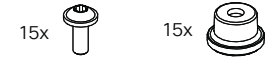
3. The left and right stiffeners are fastened to the grille with 13 screws (M4x10, Torx T20) and washers (Plastic washer) in total.

- a. Place the stiffeners onto the pegs as shown in the illustration.
- b. Place the washers on the pegs.
- c. Screw through the washers and into the pegs.



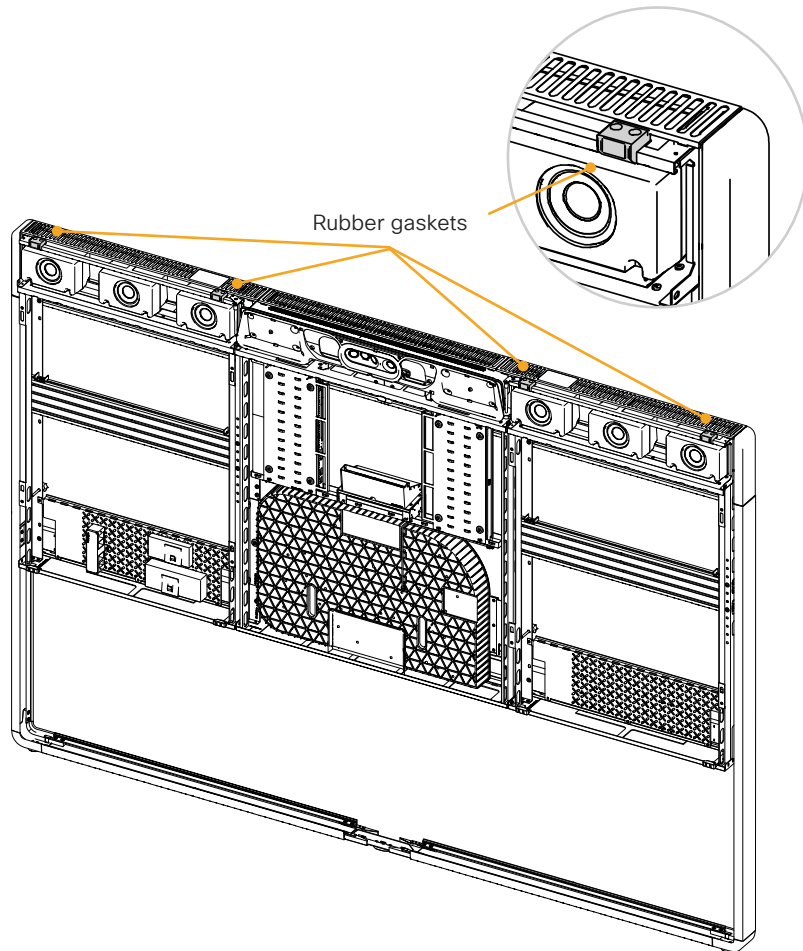
4. The top panels are fastened to the grille with 15 screws (M4x10, Torx T20) and washers (Plastic washer) in total.

- a. First, place the left and right panel onto the pegs as shown in the illustration. Then, place the center panel on top.
- b. Place the washers on the pegs.
- c. Screw through the washers and into the pegs.

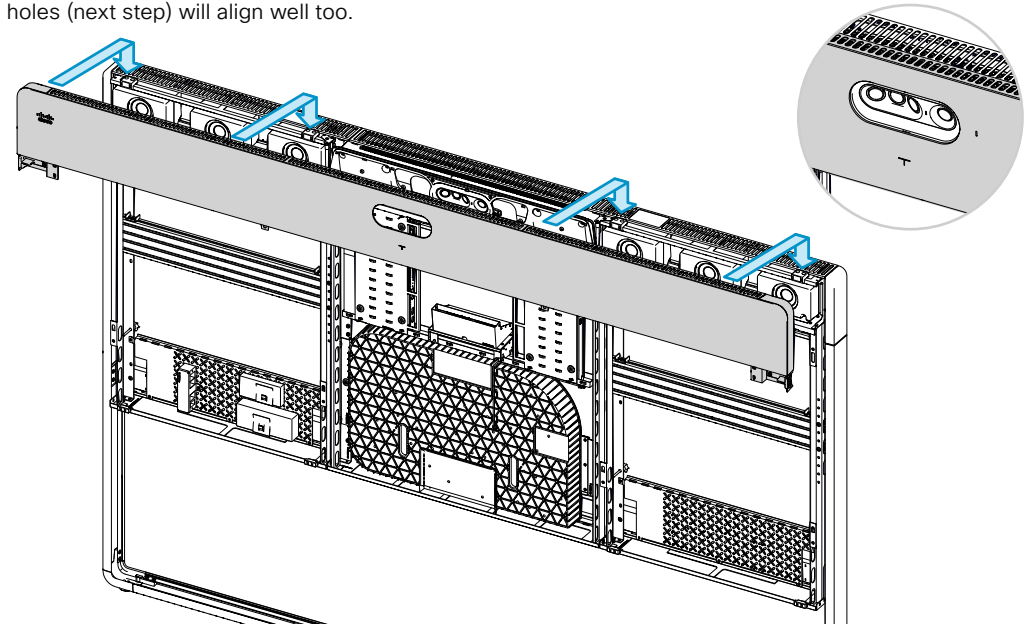


## 20.2. Attach the speaker grille

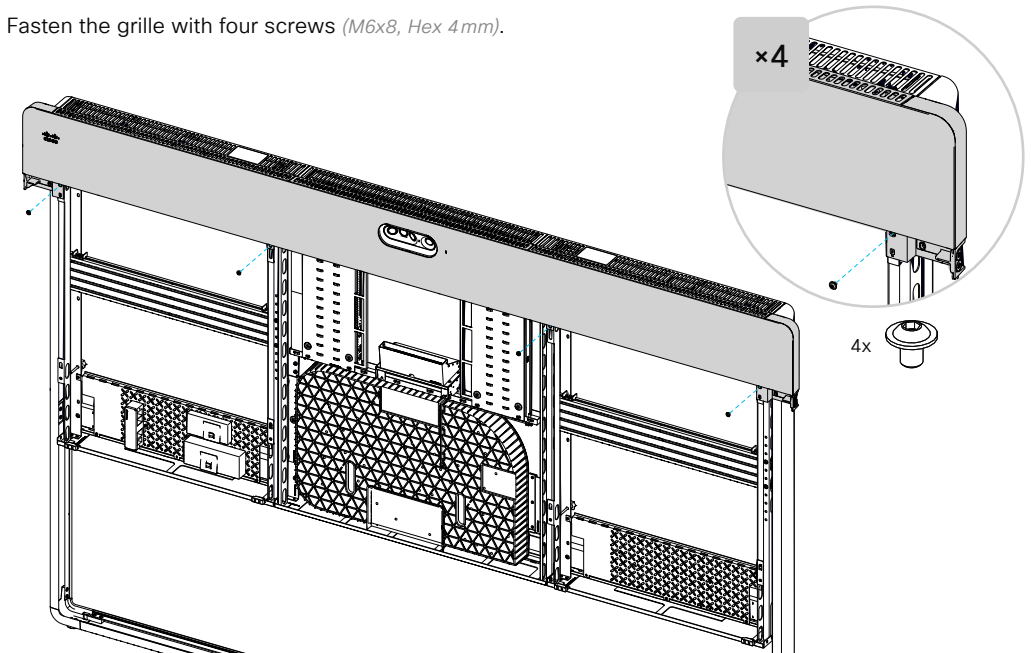
1. Observe the rubber gaskets that the grille will rest on.



2. Hang the speaker grille onto the steel frame and let it rest on the rubber gaskets. Move it sideways so that the hole for the camera aligns well. Then the screw holes (next step) will align well too.

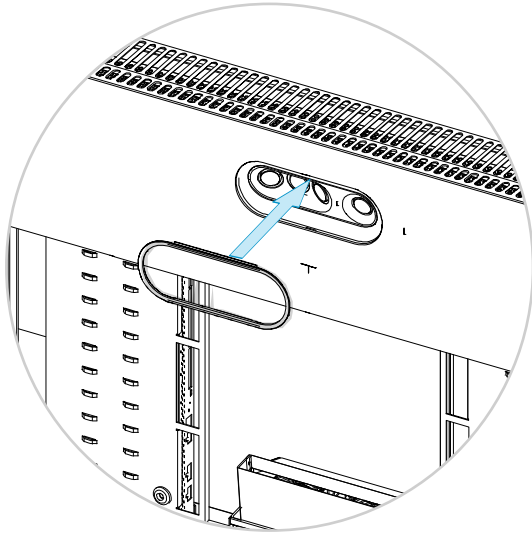


3. Fasten the grille with four screws (M6x8, Hex 4mm).



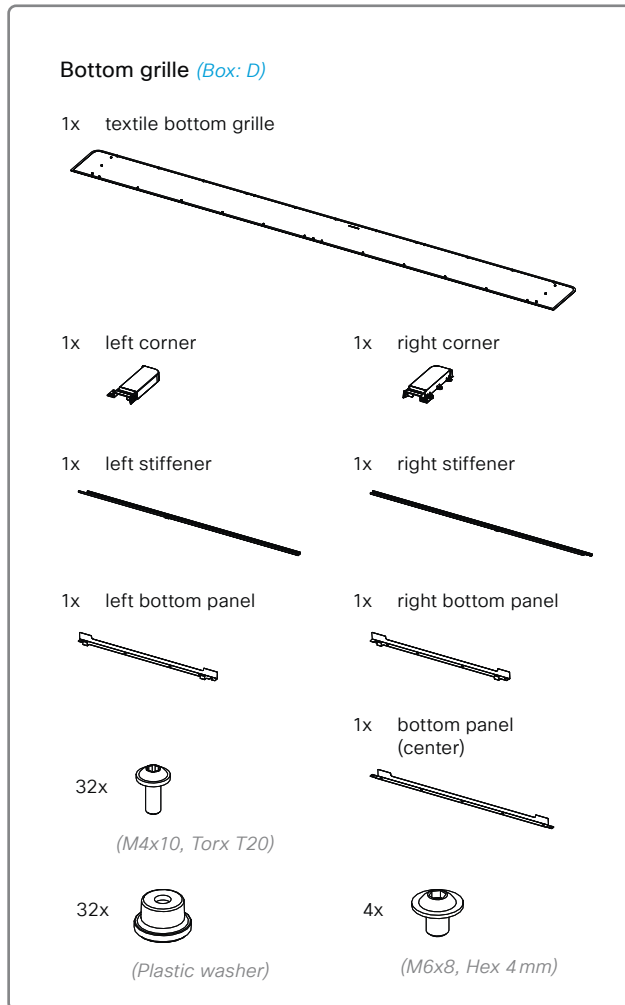
### 20.3. Insert the deco ring

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



## 21. Mount the bottom grille

Both the speaker grille (assembled in [step 20](#)) and bottom grille (assembled in this step) consist of several parts. The corners and stiffeners are identical for both grilles; the top/bottom panels are different.



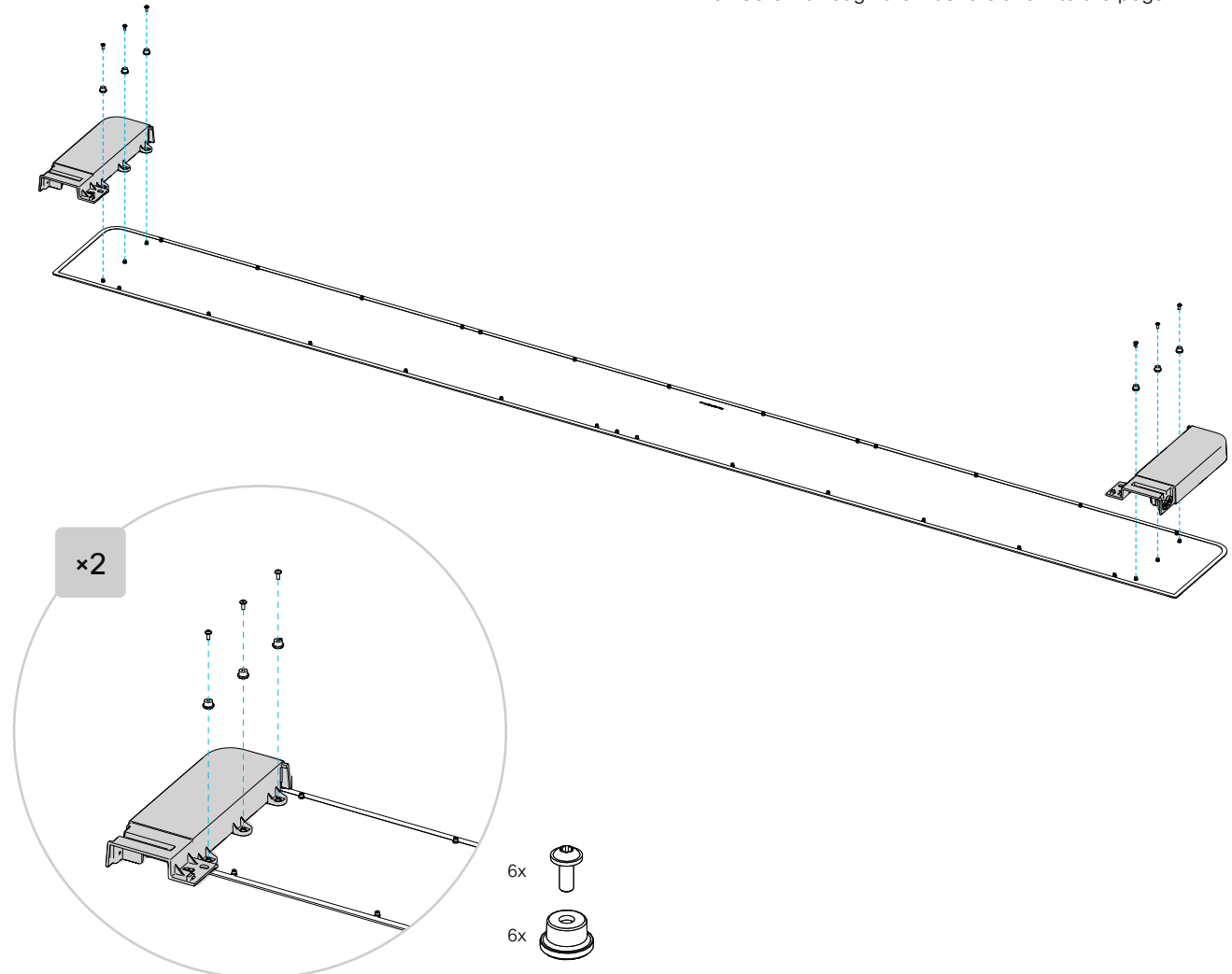
### 21.1. Assemble the bottom grille

1. Place the textile bottom grille on a flat and clean surface, front side down.

2. The pegs on the grille has threaded holes for screws.

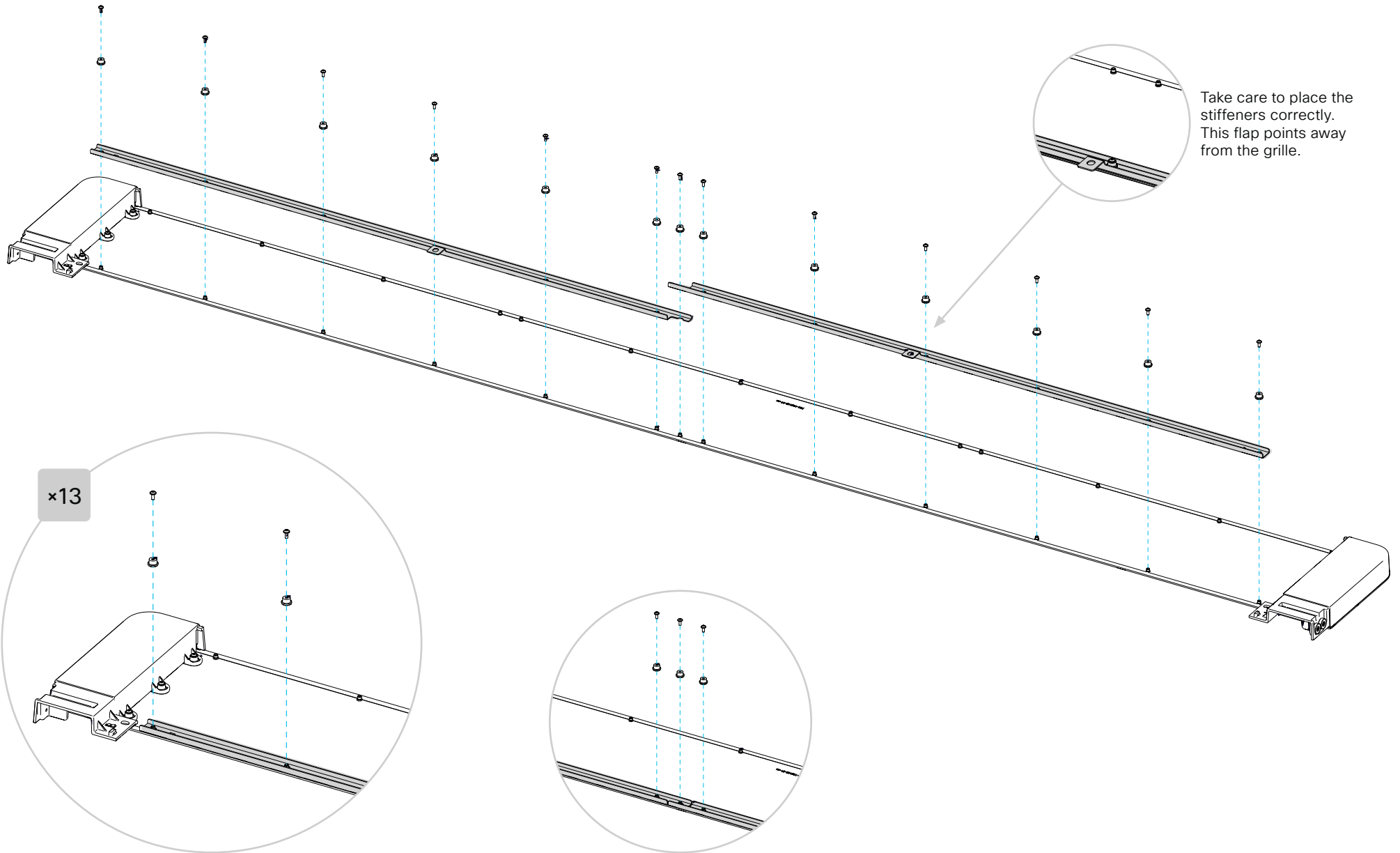
The left and right corners are fastened to the rear of the grille using three screws (M4x10, Torx T20) and washers (Plastic washer) for each corner.

- a. Place the corner onto the pegs as shown in the illustration.
- b. Place the washers on the pegs.
- c. Screw through the washers and into the pegs.



3. The left and right stiffener are fastened to the grille with 13 screws (M4x10, Torx T20) and washers (Plastic washer) in total.

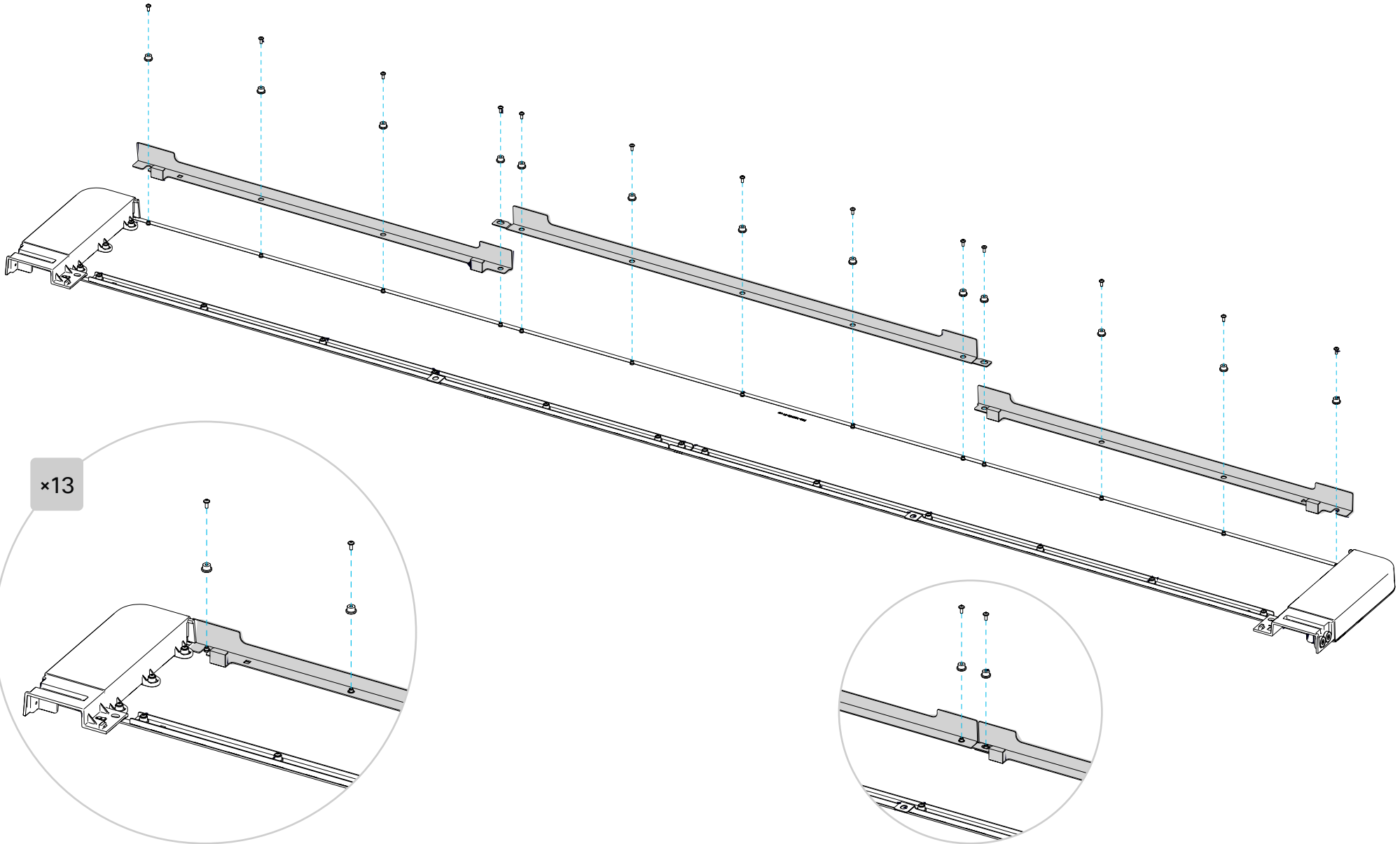
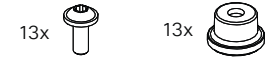
- a. Place the stiffeners onto the pegs as shown in the illustration.
- b. Place the washers on the pegs.
- c. Screw through the washers and into the pegs.





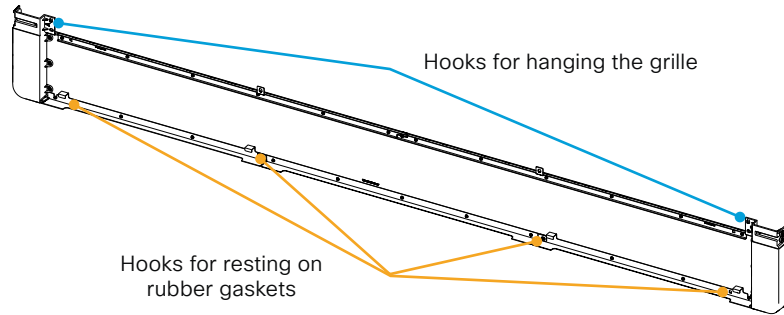
4. The bottom panels are fastened to the grille with 13 screws (M4x10, Torx T20) and washers (Plastic washer) in total.

- a. First, place the left and right panel onto the pegs as shown in the illustration. Then, place the center panel on top.
- b. Place the washers on the pegs.
- c. Screw through the washers and into the pegs.

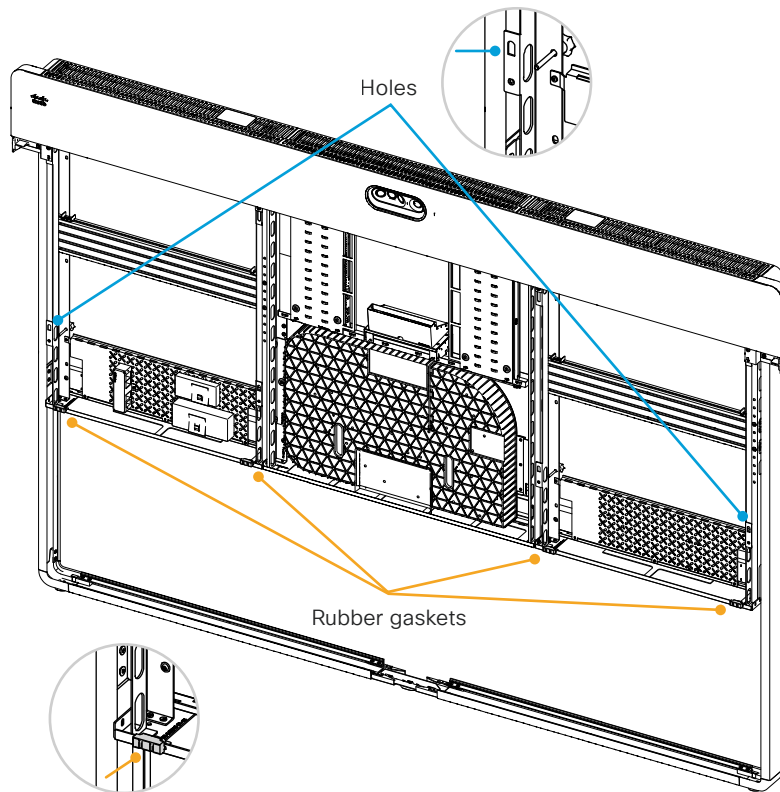


## 21.2. Attach the bottom grille

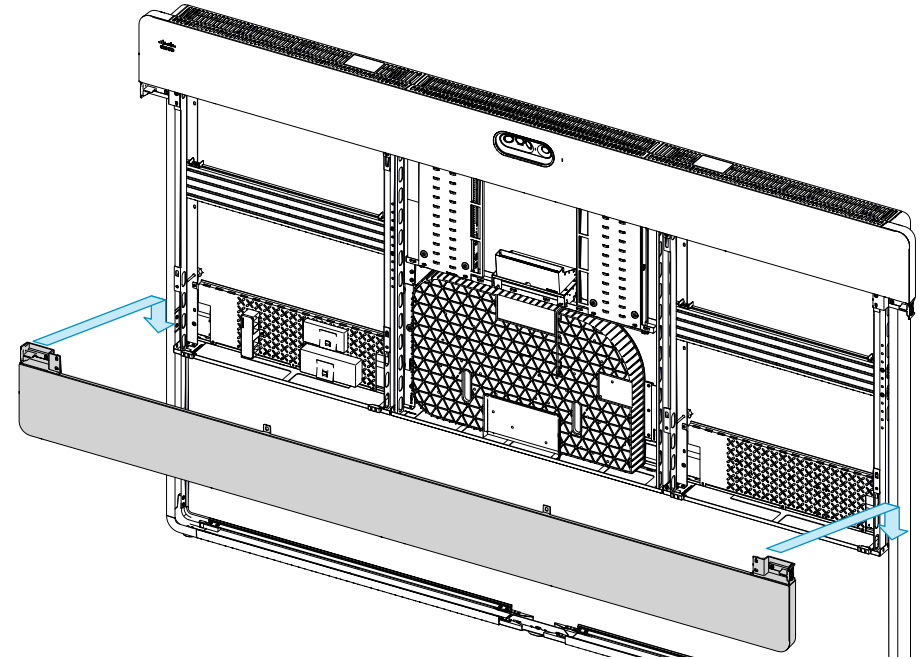
1. Observe the following hooks on the grille rear side.



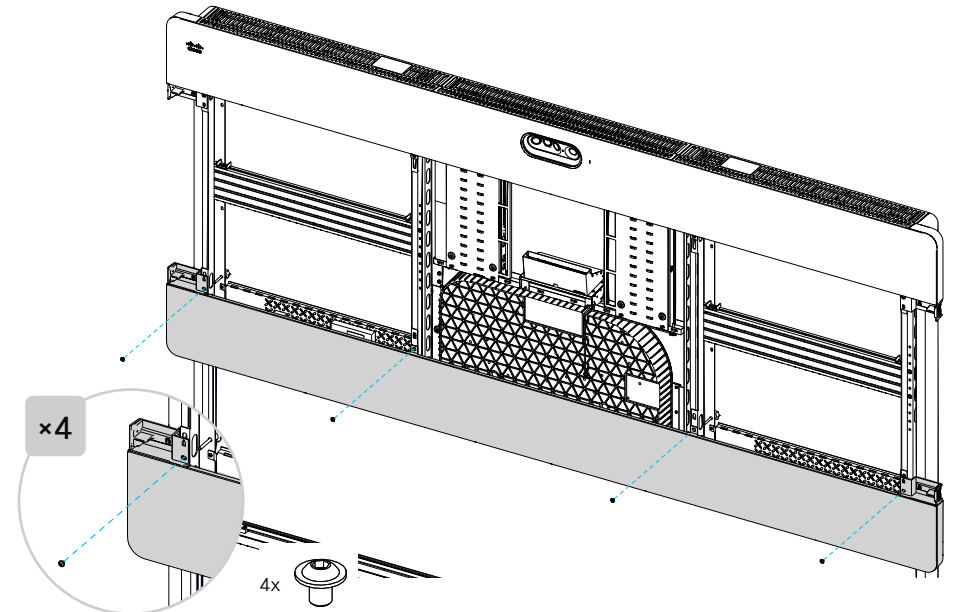
2. Observe the holes that the grille will hang in, and rubber gaskets it will rest on.



3. Hang the bottom grille in the holes and let it rest on the rubber gaskets.

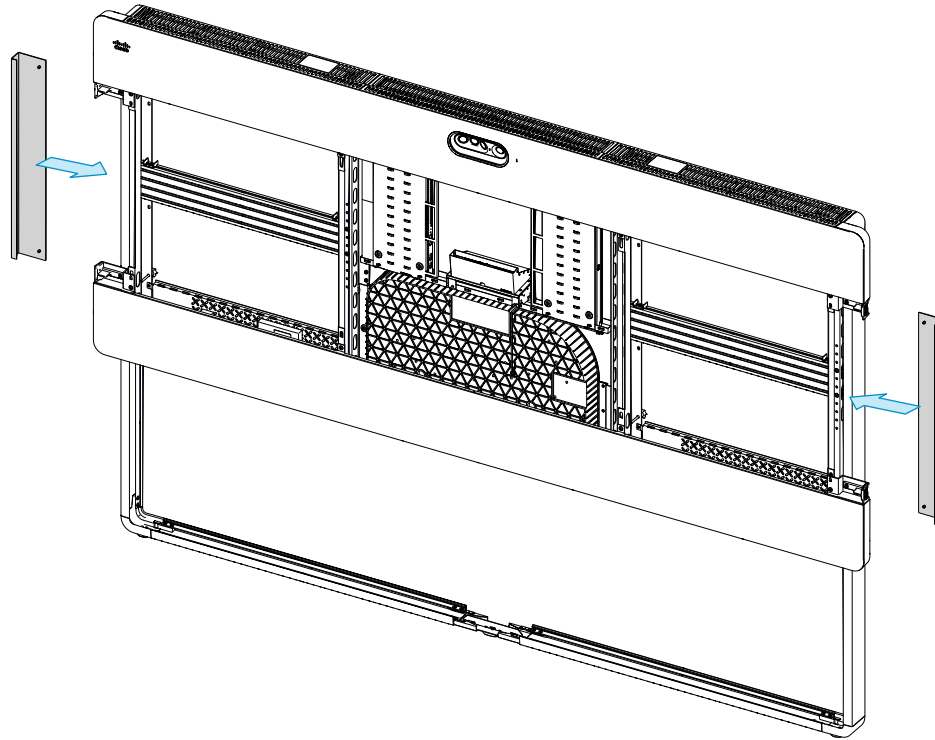


4. Fasten the grille with four screws (M6x8, Hex 4 mm).



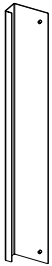
## 22. Mount the side panels

1. Insert the side panels as shown. Align them so that the top and bottom gaps are equal.



Side panels (Box: D)

2x side panels

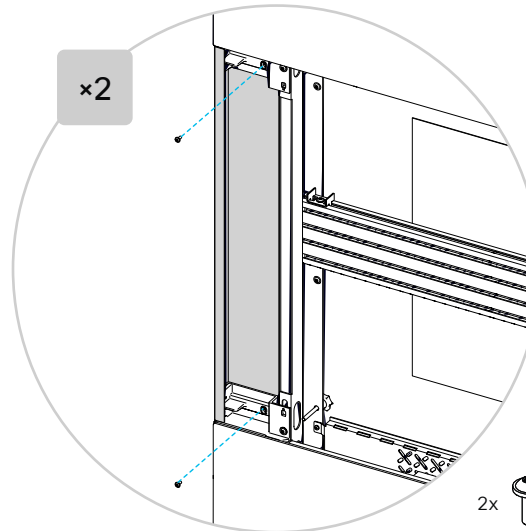


4x



(M4x10, Torx T20)

2. Fasten each panel with two screws (M4x10, Torx T20).

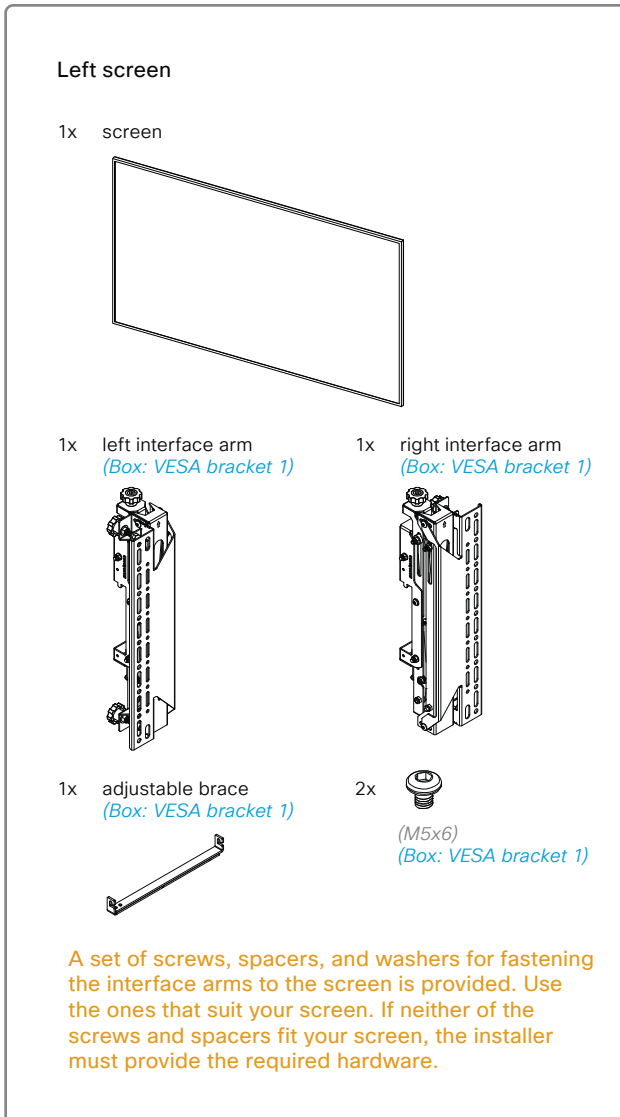


x2

2x for each panel

## 23. Prepare the left screen

Mount the brackets on the VESA holes on the back of the screen. See the installation guide that follow the brackets for more details than provided here.



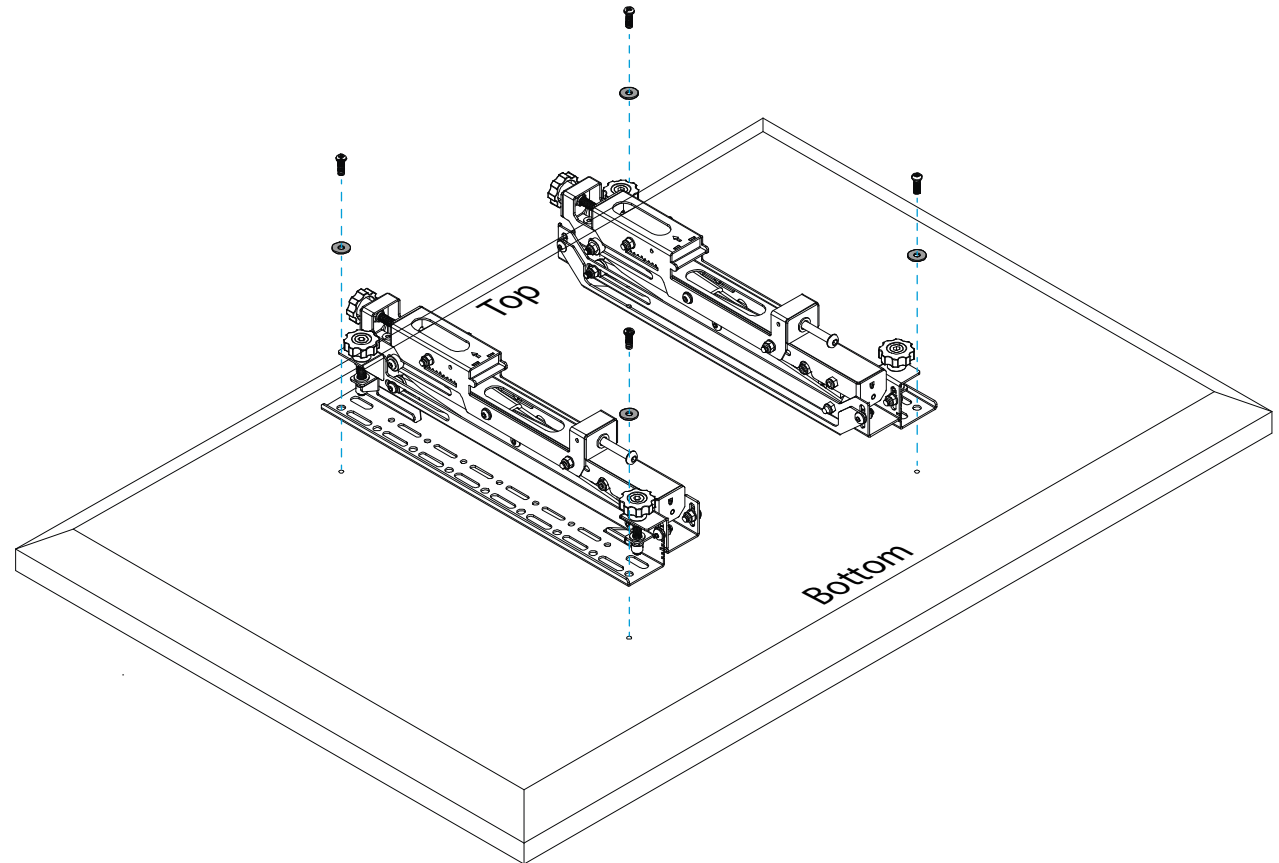
### 23.1. Attach the interface arms to the back of the screen

Attach the interface arms to the back of the screen; the row of holes facing the screen edge. Ensure the same holes are used on both arms.

The interface arms come with an interface kit, that is, a set of screws and spacers; use the ones that suits your screen. If neither of the screws and spacers fits your screen, you must provide your own.

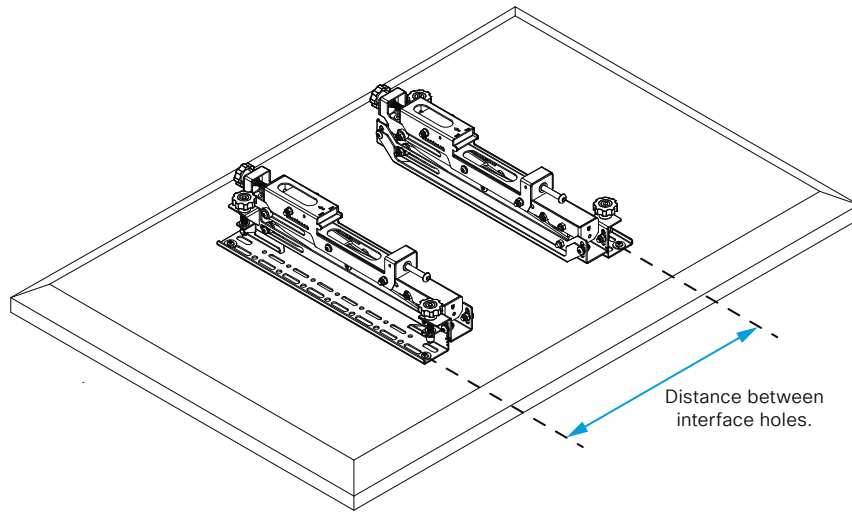
**Note:** Follow the guidelines given by the screen vendor how to handle the screen.

Whether you keep the screen in the packaging bottom tray, or place it on a flat, even, soft surface with the back facing upward, always take care not to make any scratches on the screen.

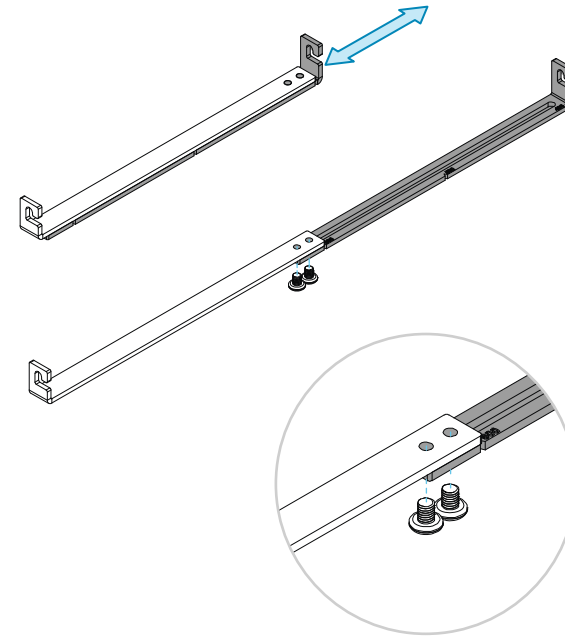


## 23.2. Connect the interface arms with the adjustable brace

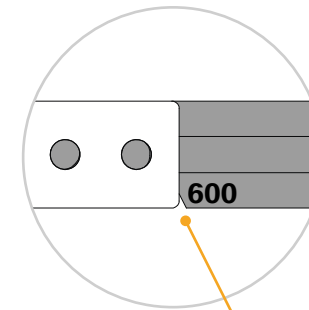
1. Measure the horizontal distance between the interface holes on your screen.  
The adjustable brace supports distances ranging from 400mm to 600mm.



2. Extend the brace and fix it at the desired length by tightening the two screws.



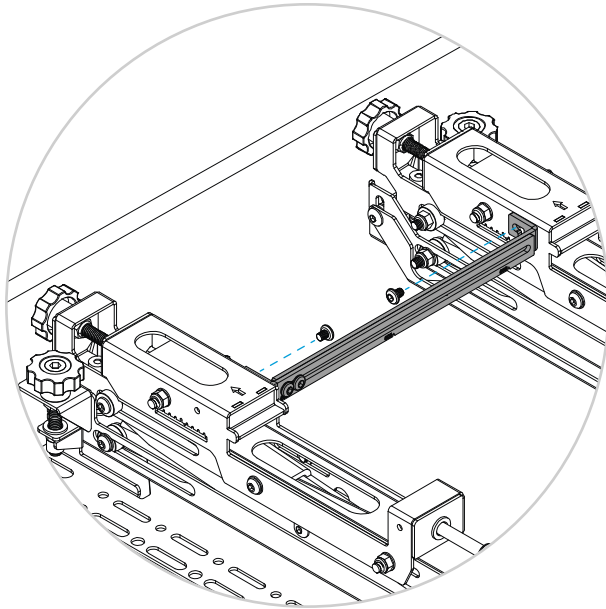
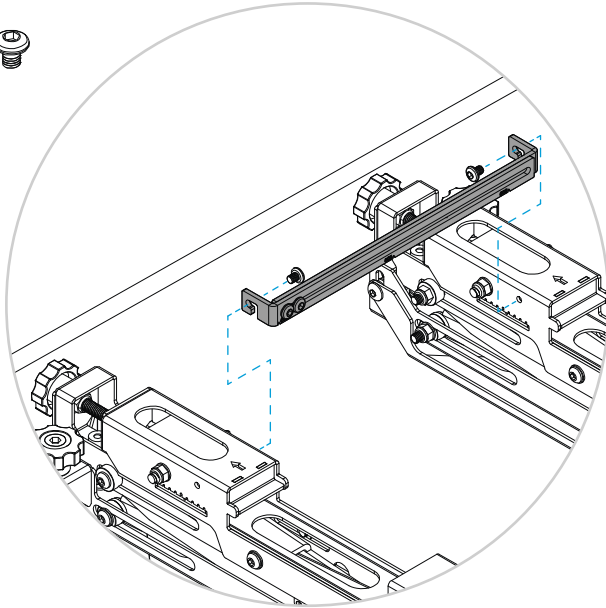
Notches show the fixing position for 400mm, 500mm, and 600mm distances.



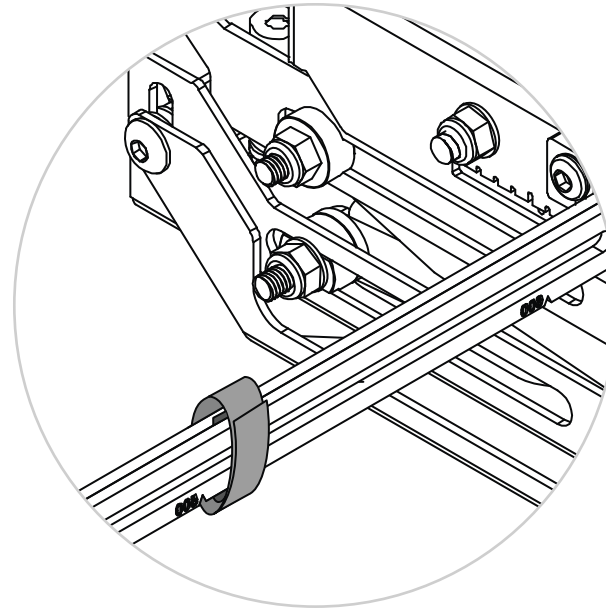
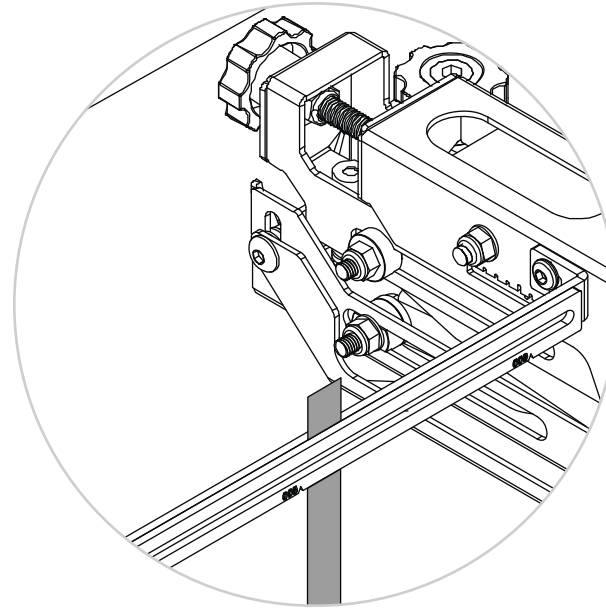
Example: If the interface holes are 600mm apart, extend the brace to the notch marked with 600.

3. Place the brace between the interface arms and fasten it with two screws (M5x6).

2x 



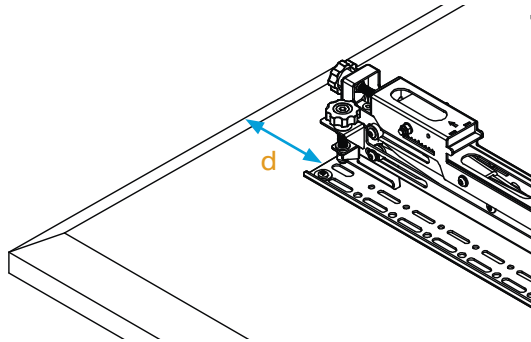
4. If the brace is not extended to its full length, add velcro tight between and around the two brace parts to avoid metal touching metal. This prevents rattling noise.



## 24. Adjust the VESA rail position

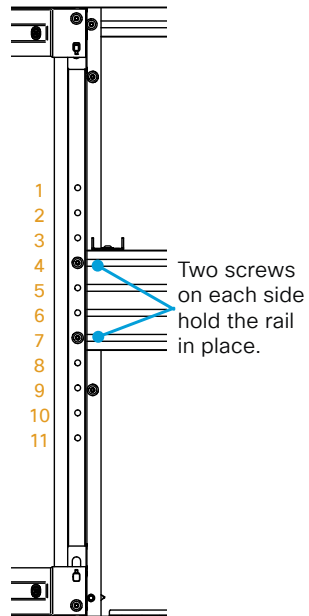
### 24.1. Find the correct VESA rail position

1. Measure the distance  $d$  between the interface arms and the top of the screen.



2. Check the table to find which holes to move the VESA rail to.

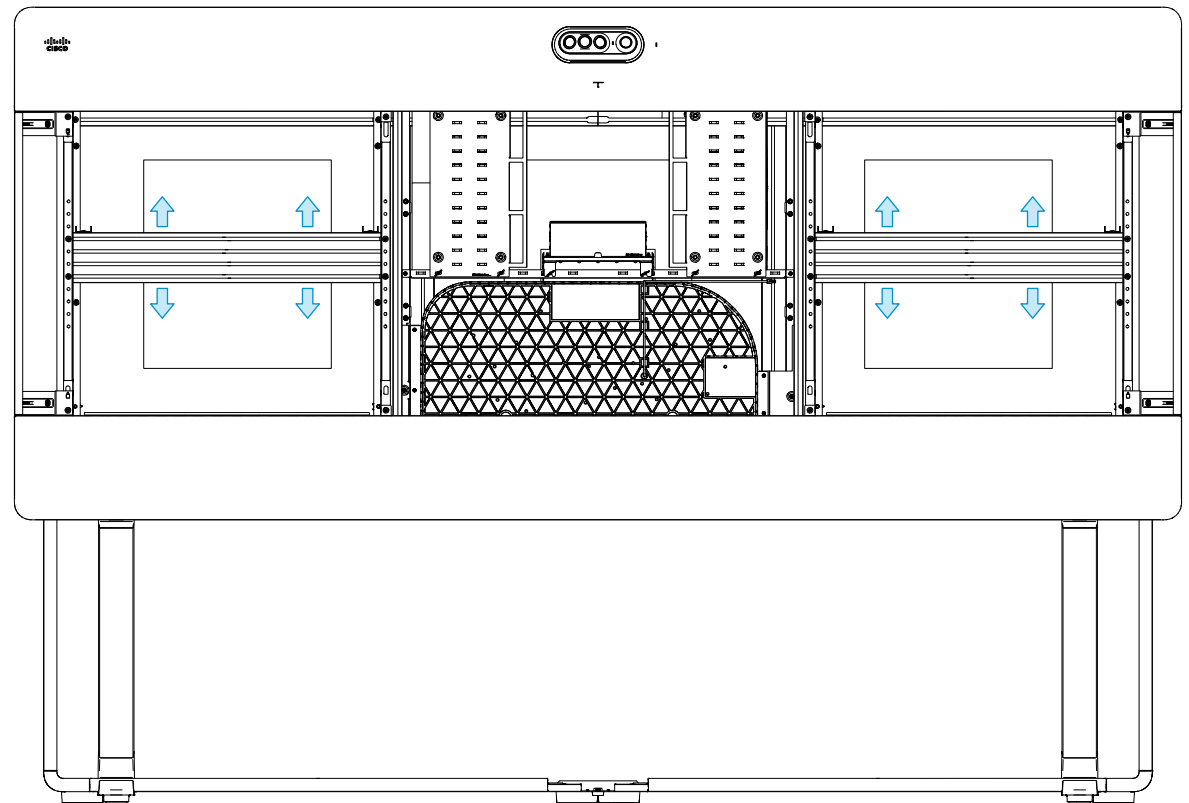
Distance $d$	Fasten the VESA rail in these holes
105-135 mm (4.1-5.3 in.)	1 and 4
135-165 mm (5.3-6.5 in.)	2 and 5
165-195 mm (6.5-7.7 in.)	3 and 6
195-225 mm (7.7-8.9 in.)	4 and 7
225-255 mm (8.9-10.0 in.)	5 and 8
255-285 mm (10.0-11.2 in.)	6 and 9
285-315 mm (11.2-12.4 in.)	7 and 10
315-345 mm (12.4-13.6 in.)	8 and 11



### 24.2. Adjust the VESA rail position

Repeat for both VESA rails:

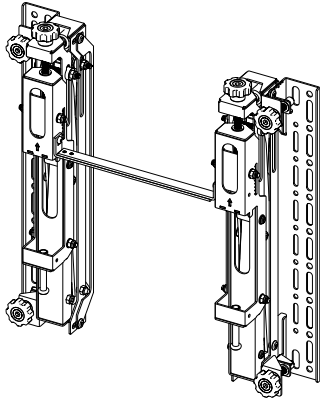
1. Hold the VESA rail, while you unscrew the four screws that holds it in place.
2. Move the rail to the position given in the look-up table.
3. Insert the screws again and tighten to hold the rail firmly in its new position.



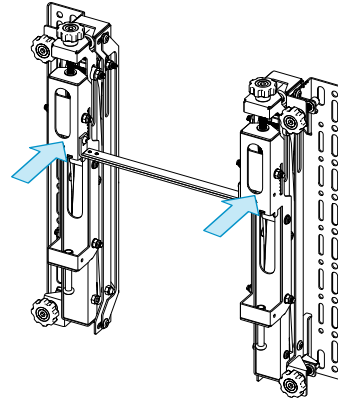
#### Example:

If  $d = 215$  mm (8.5 in.), you must fasten the rail in holes 4 and 7.

## SCREEN POP-IN / POP-OUT MECHANISM



Interface arms in pop-in mode

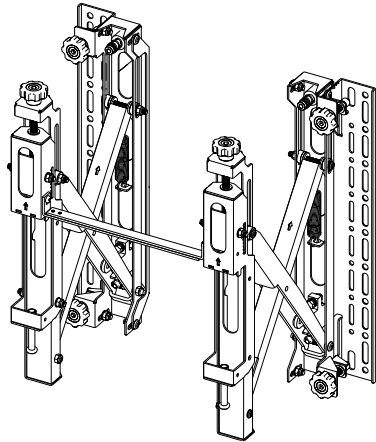


### Push to pop out

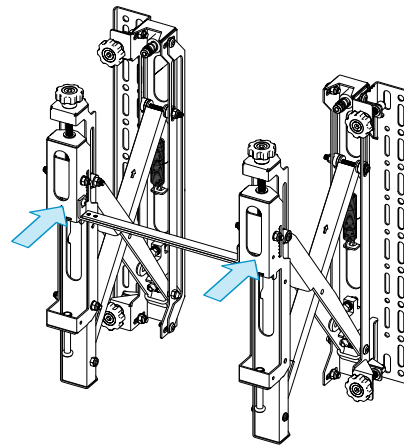
The interface arms pop out quickly, so mind your fingers!

When the screen is hanging on the interface arms, gently push the screen edge at the horizontal position where the interface arms are mounted.

This unlocks the interface arms, and the screen will pop out.



Interface arms in pop-out mode



### Push to pop in

When the screen is hanging on the interface arms, gently push the screen edge at the horizontal position where the interface arms are mounted.

This locks the interface arms in popped-in mode.

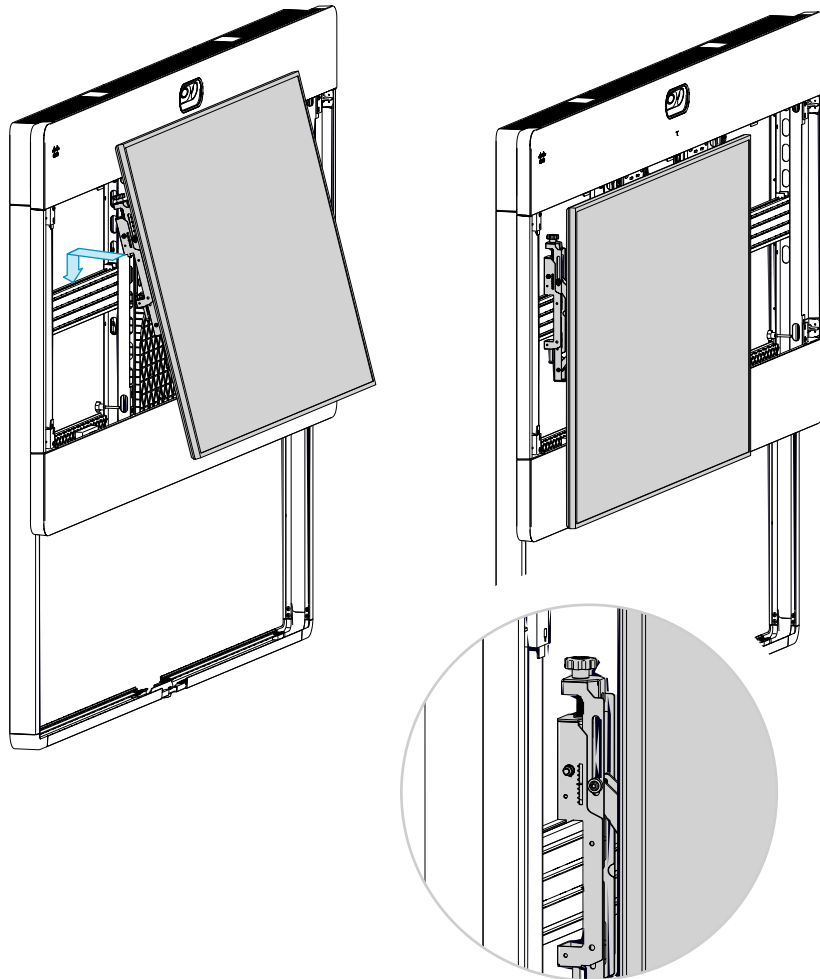
If they don't lock, it's probably because you are not able to push them all the way in. Use the depth adjustment wheels (see step 27.2) to make more space between the screen and mounting structure. Then, try again.



## 25. Mount the left screen

### 25.1. Hang the screen on the VESA rail

1. Push both interface arms firmly, to put them in pop-out mode. **They pop out quickly, so mind your fingers!**
2. Hang the screen onto the rail **50-70 mm (2-3 in.) to the side** of the system center line. Make sure the interface arms hook into the groove as shown in the close-up.

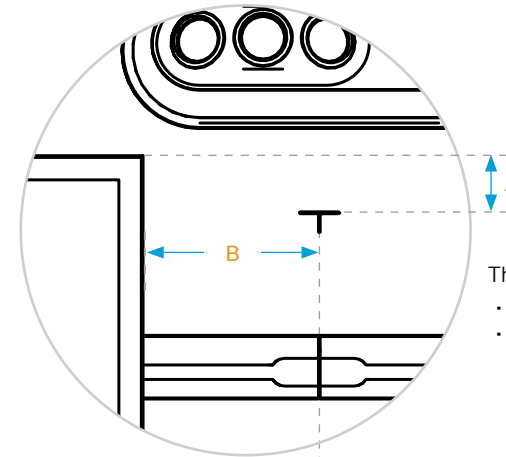


The interface arms hooks into the groove on top of the rail.

3. Push the screen gently, so that the screen stays popped in.

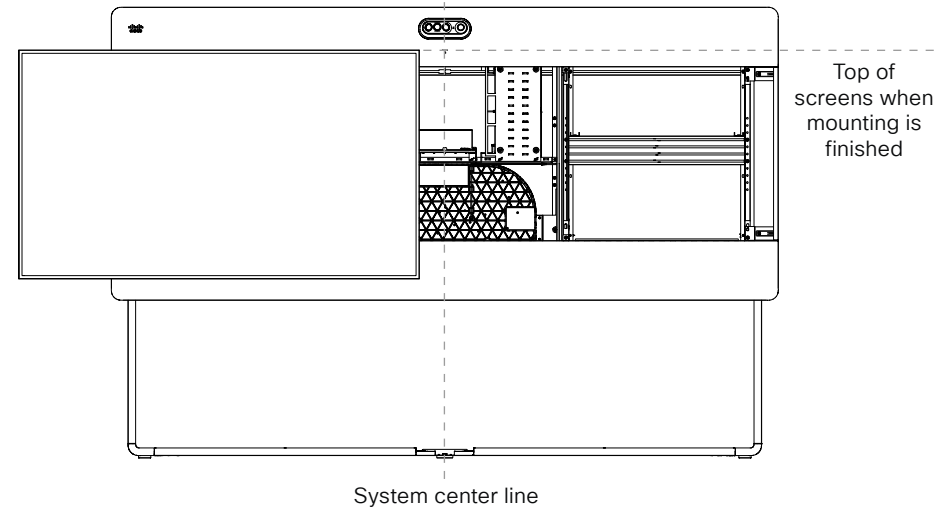
If it doesn't lock in pop-in mode, use the lower depth adjustment wheels (see step 27.2) to make more space between the screen and mounting structure. Then, try again.

4. If the VESA rail has the correct position (step 24), the distance **A** should be less than 15 mm (0.59 in.) (either above or below the T-mark). If it's not you must lift off the screen and move the rails up or down accordingly. Otherwise, you will not be able to fine-adjust the screen height to match the T-mark in step 27.
5. Measure the distance **B** accurately; you need it in step 25.2.



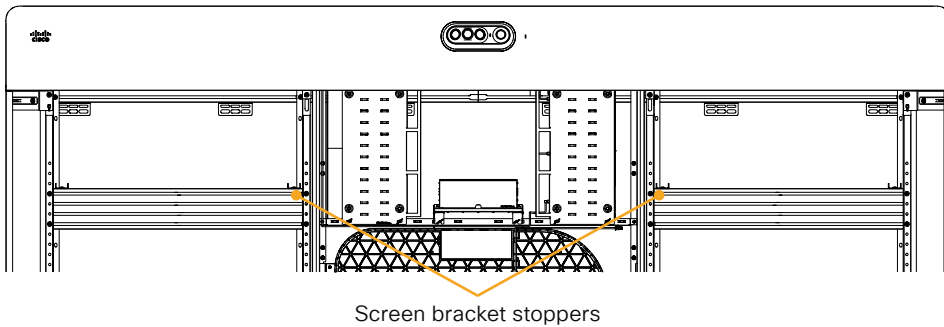
The **T-mark** on the grille shows:

- The system center line
- The top of the screens



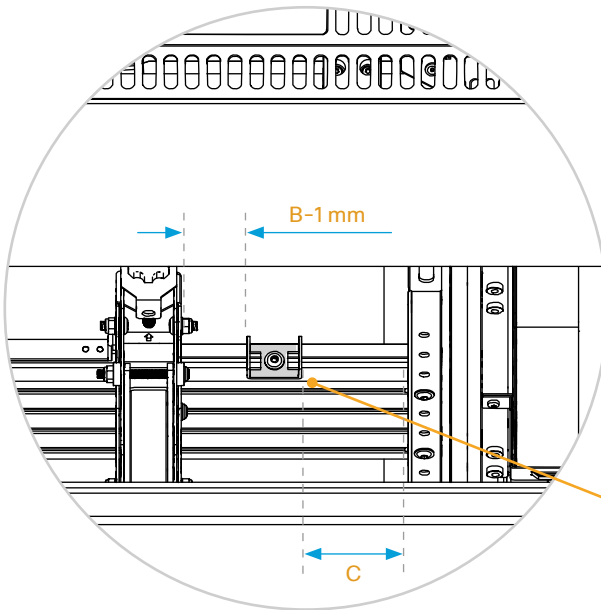
## 25.2. Move the screen bracket stoppers

1. Push the screen gently, to pop out the screen.
2. Locate the screen bracket stoppers that are fastened on top of the rails.



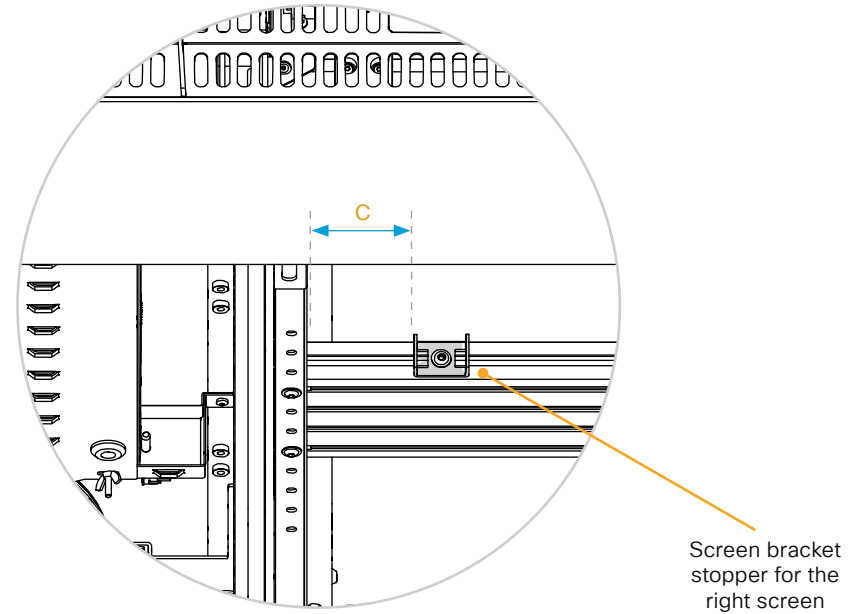
3. Loosen the screw (Hex 4 mm) and slide the stopper as shown in the illustration.

That is, the distance between the stopper and the closest interface arm should be **B-1 mm** (where **B** is the distance that you measured in step 25.1).



4. Tighten the screw to fasten the stopper in its new position.

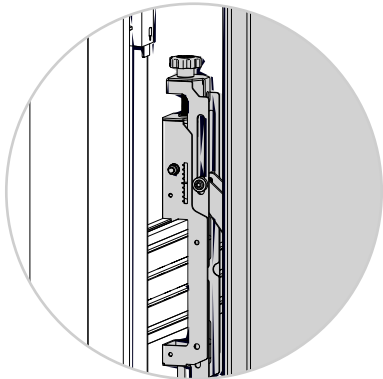
5. Measure the distance **C** for the bracket stopper that you just moved. Then, move the stopper for the right screen to match this distance. Tighten the screw when the stopper is in its new position.



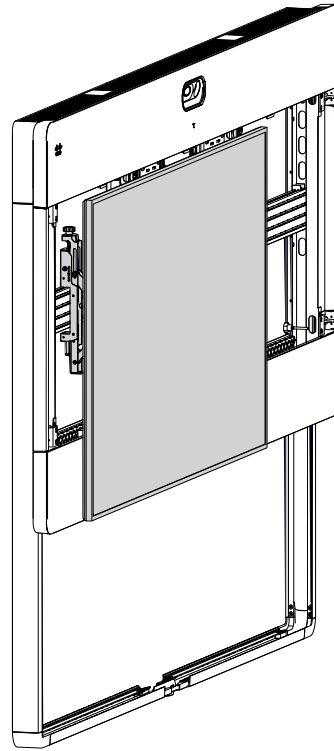
### 25.3. Move the screen to its correct position

1. Lift the left screen slightly and move it so that its right interface arm touches the screen bracket stopper.

Make sure the interface arms hook into the groove as shown in the close-up.



The interface arms hook into the groove on top of the rail.

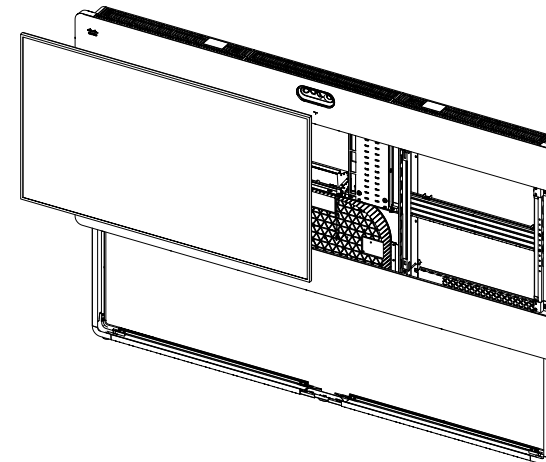
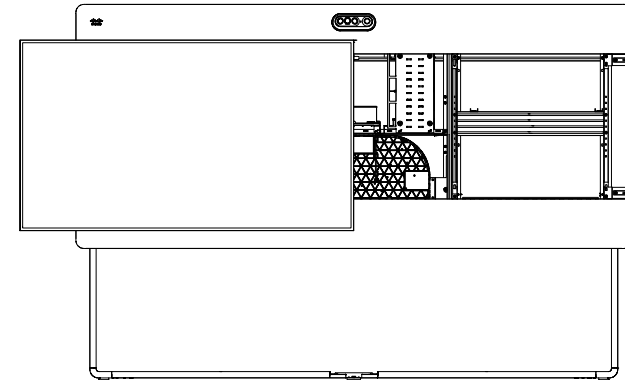


2. Push the screen gently, so that the screen stays popped in.

Now, check how the upper right corner of the screen matches the T-mark on the grille.

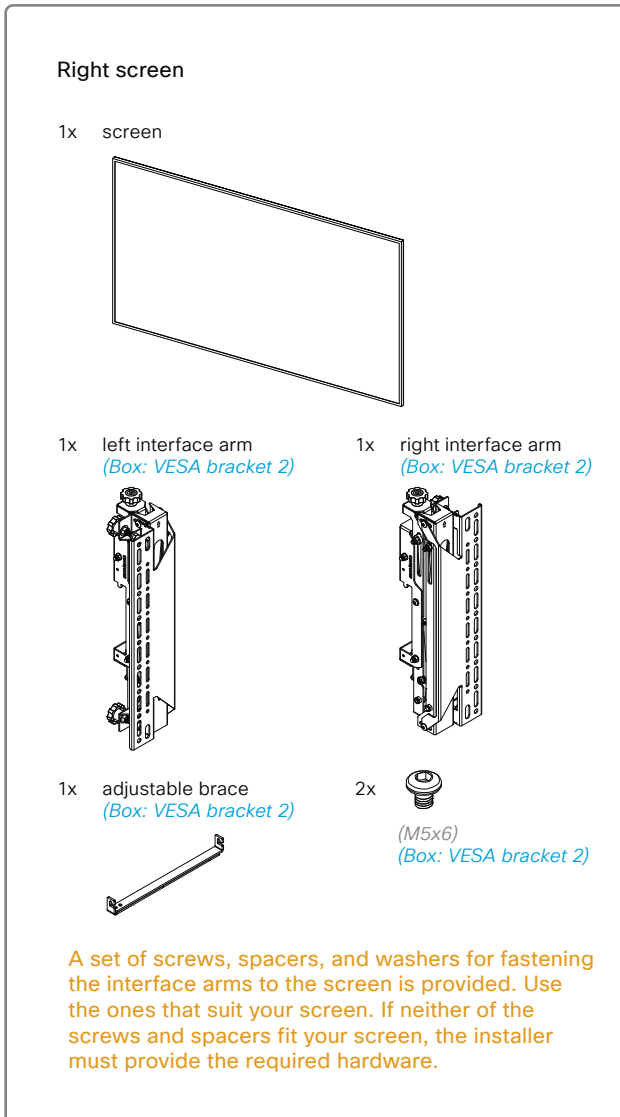
- If it's off horizontally, move the screen bracket stopper until it matches (refer to step 25.2).
- If it's off vertically more than +/- 20 mm (0.79 in.), you have to go back to step 24 and adjust the VESA rail position.

You will fine-adjust the height and depth of both screens in step 27.



## 26. Mount the right screen

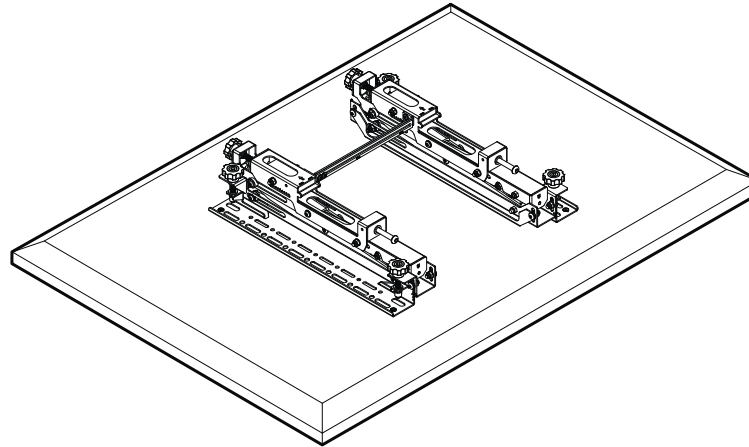
Mount the brackets on the VESA holes on the back of the screen. See the installation guide that follow the brackets for more details than provided here.



### 26.1. Attach the interface arms

Repeat the following steps for the right screen:

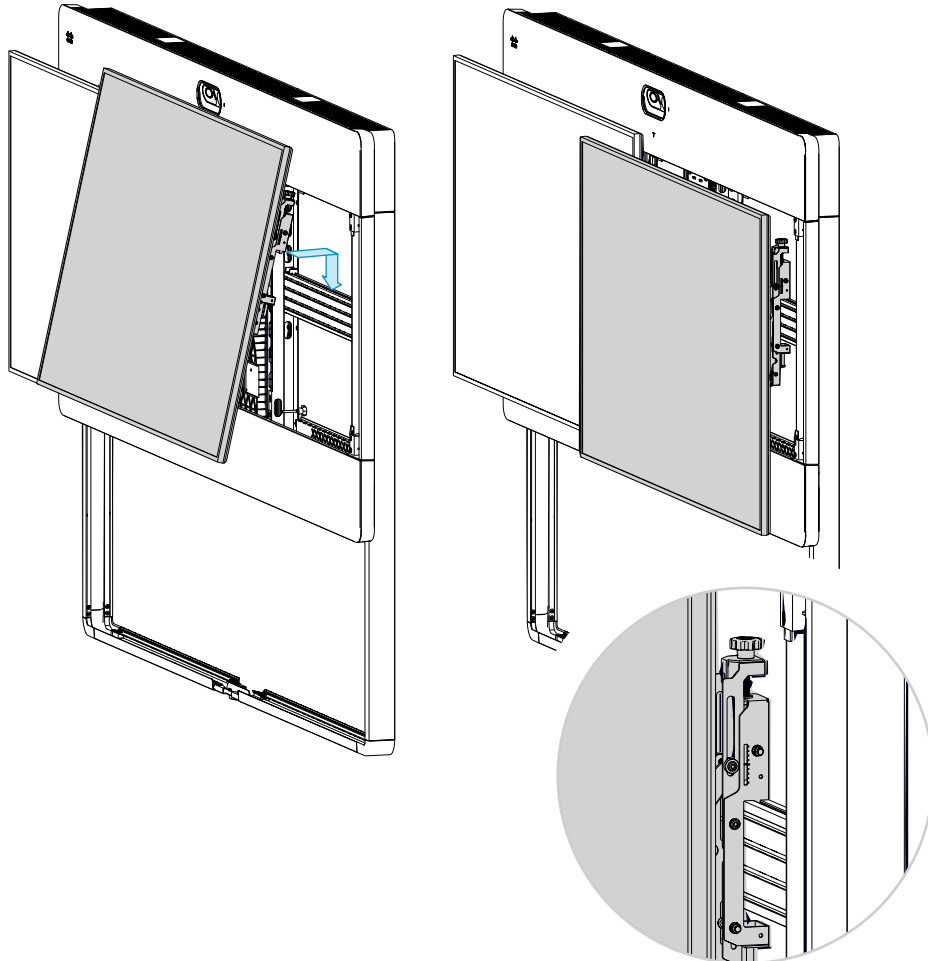
1. Step 23.1 – “Attach the interface arms to the back of the screen”
2. Step 23.2 – “Connect the interface arms with the adjustable brace”



## 26.2. Hang the right screen on the VESA rail

1. Push both interface arms firmly, to put them in pop-out mode. **They pop out quickly, so mind your fingers!**
2. Hang the right screen onto the VESA rail so that its left interface arm touches the screen bracket stopper.

Make sure it hooks into the groove as shown in the close-up.



The interface arms hooks into the groove on top of the rail.

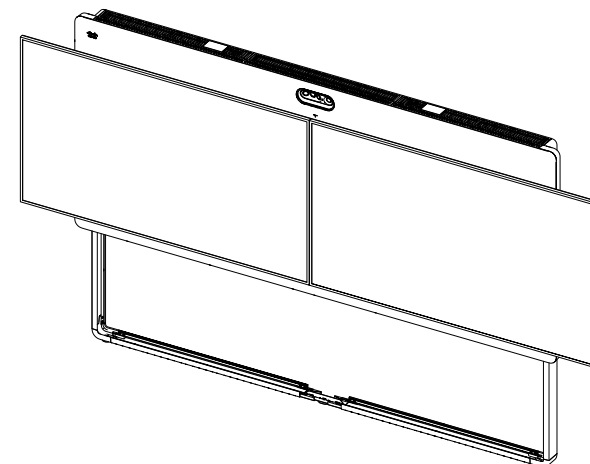
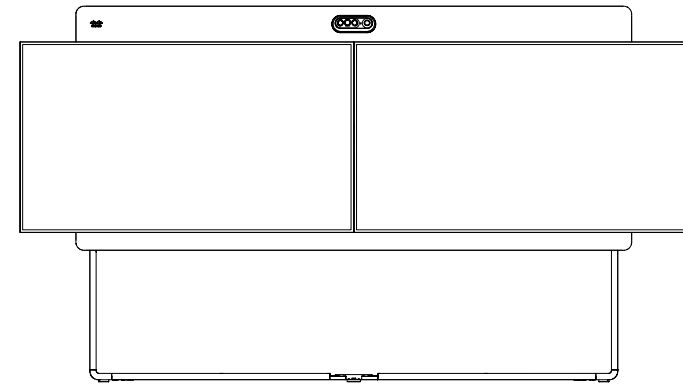
3. Push the screen gently, so that the screen stays popped in.

If it doesn't lock in pop-in mode, use the lower depth adjustment wheels (see step 27.2) to make more space between the screen and mounting structure. Then, try again.

Now, check how the upper left corner of the screen matches the T-mark on the grille.

- If it's off horizontally, move the screen bracket stopper until it matches (refer to step 25.2).
- If it's off vertically more than +/- 20 mm (0.79 in.), you have to go back to step 24 and adjust the VESA rail position.

You will fine-adjust the height and depth of both screens in step 27.



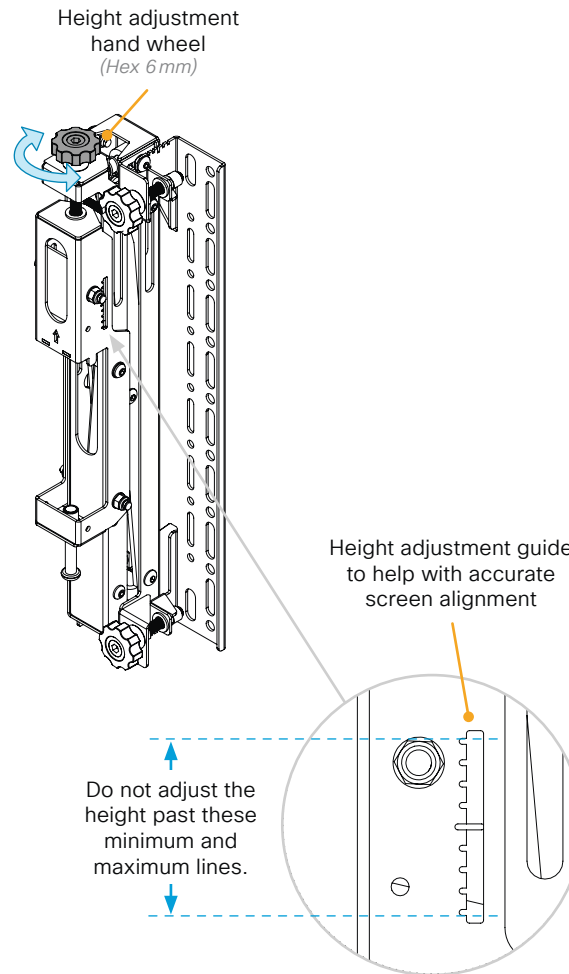
## 27. Fine-adjust the screens

You can fine-adjust the screen height and depth using the hand wheels on the interface arms.

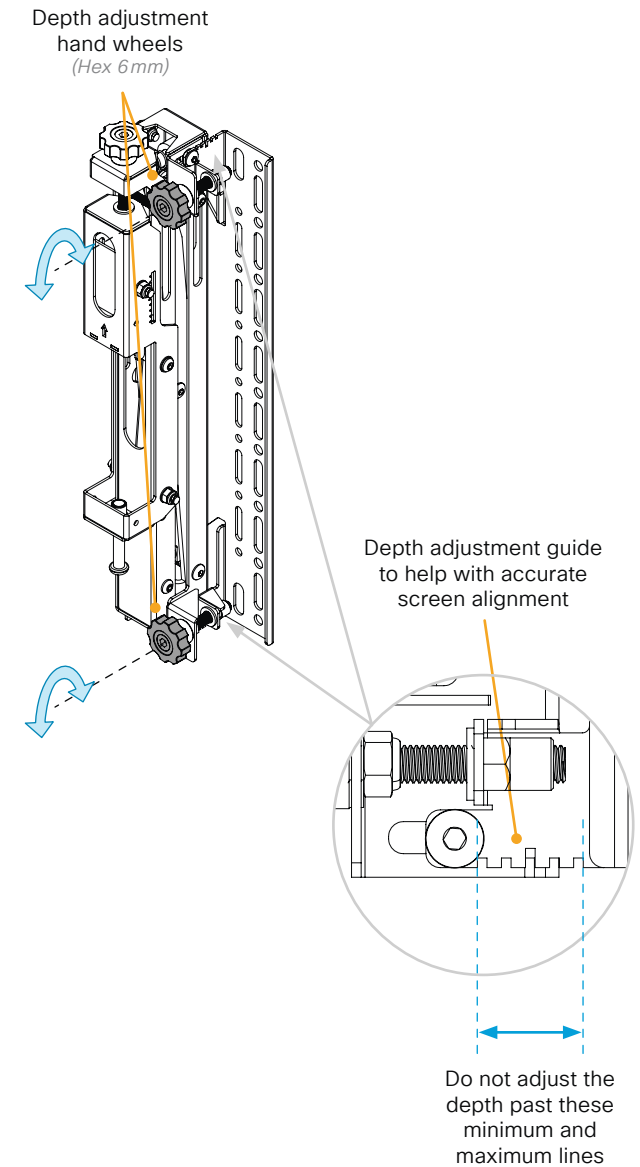
- Ensure the screens are level and at the same height using the **height adjustment hand wheels**.
- Ensure the screens are plumb with corners equidistant from the grilles using the **depth adjustments hand wheels**.

Refer to the installation guide that follows the interface arms for more details.

### 27.1. Height adjustment +/- 20 mm (0.79 in.)



### 27.2. Depth adjustment +/- 10 mm (0.39 in.)

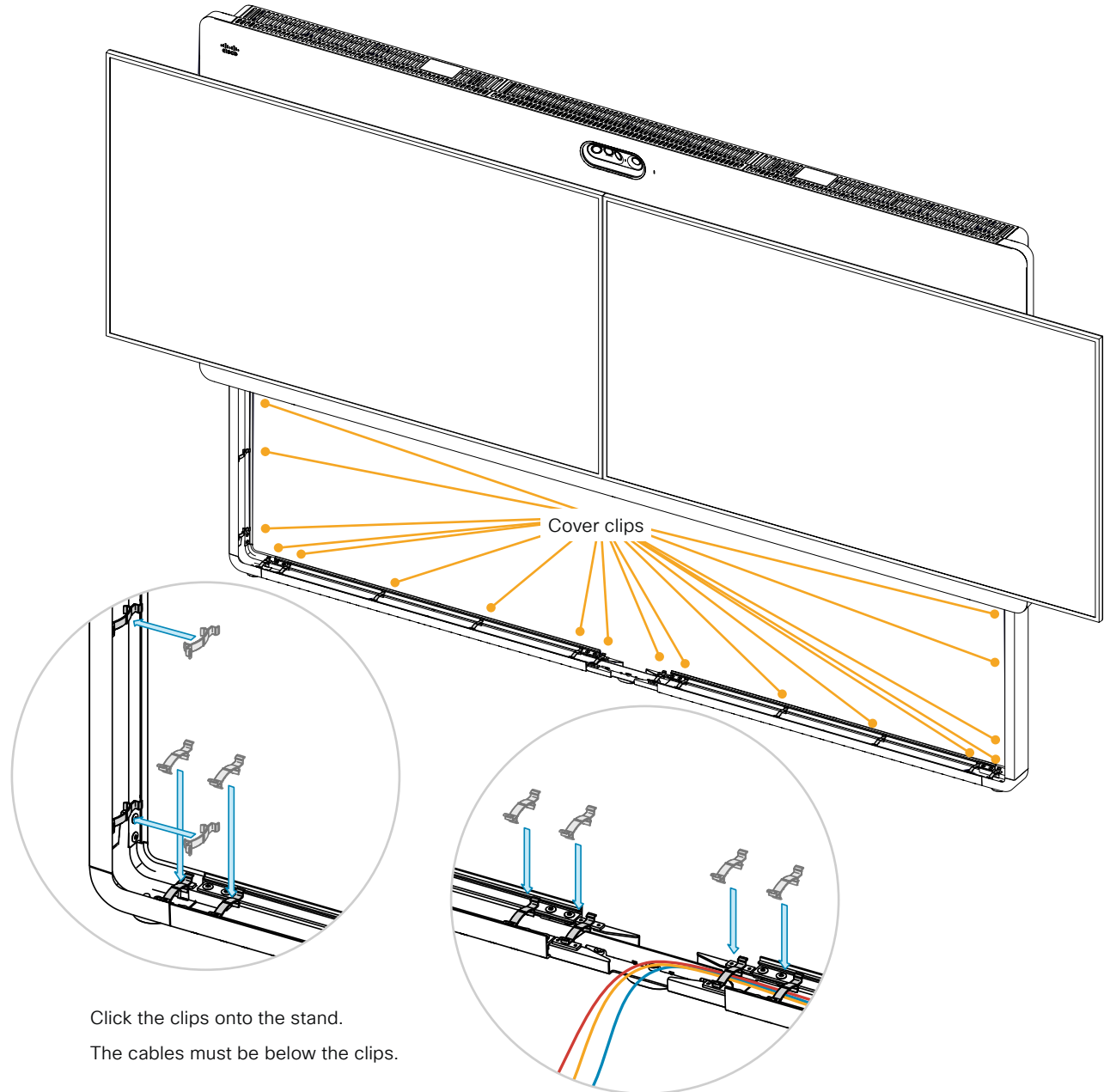
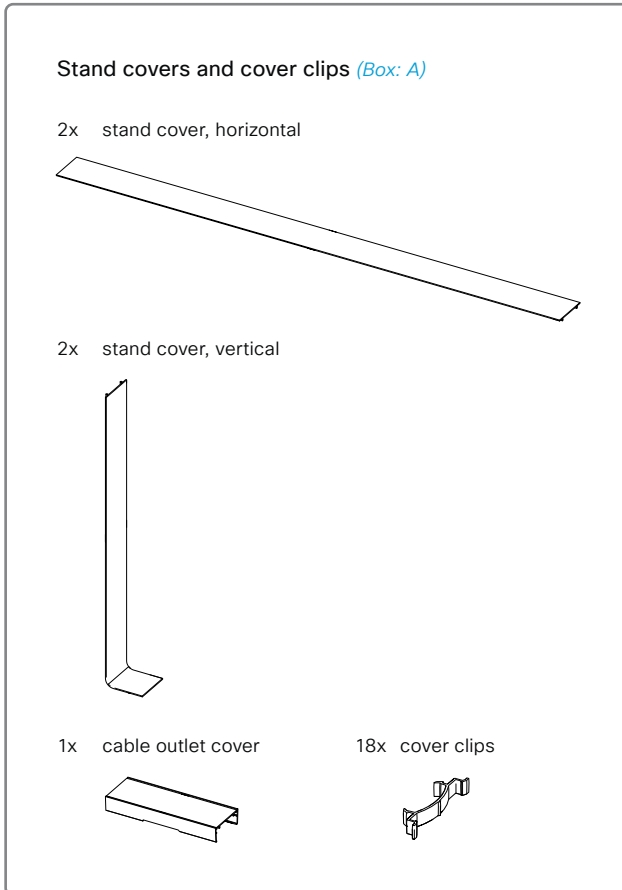


## 28. Attach the stand covers

1. Make sure all cables that will be routed in the stand are in place.
2. Click the 18 clips onto the stand.

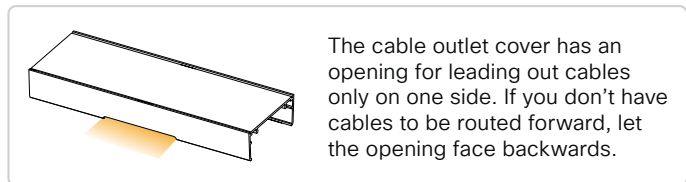
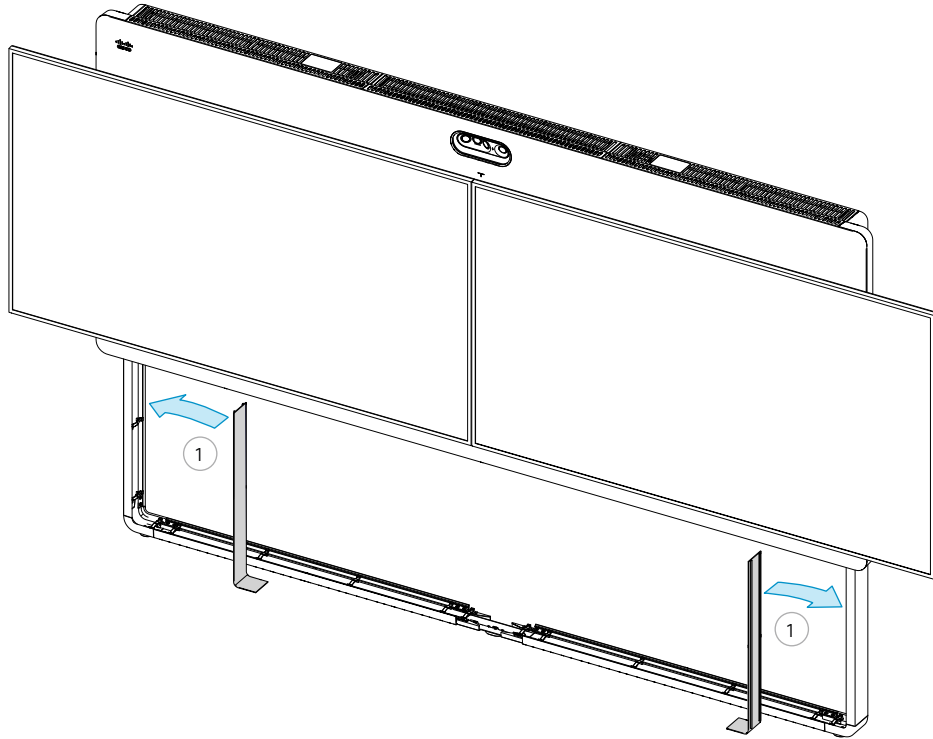
The cables must be under the clips because the covers will snap to the clips in [step 28.2](#).

### 28.1. Tidy up cables and add cover clips



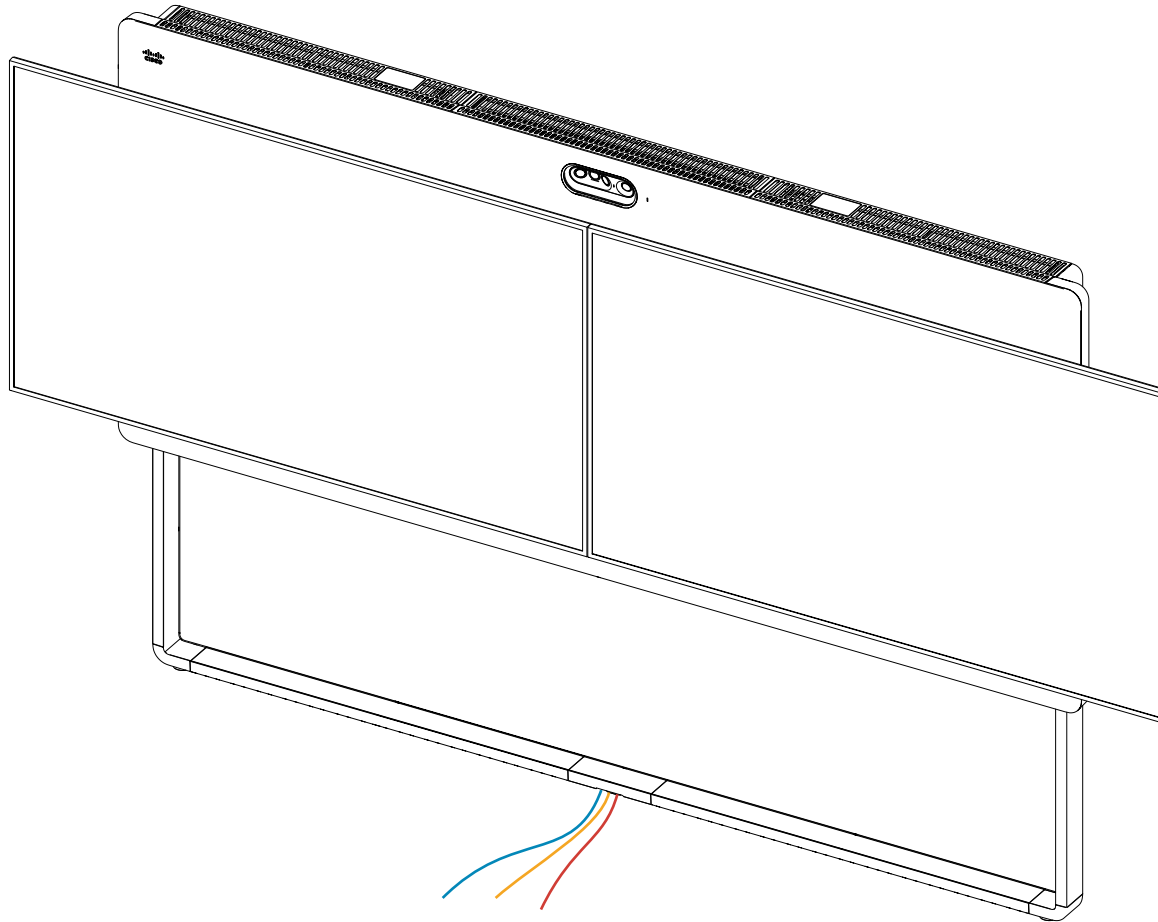
## 28.2. Add the stand covers

The stand covers snap to the clips that you added in the previous step. Add the covers in the order shown.





## 29. Finish-up



1. Remove protection foils from the screens.
2. Connect the HDMI (S1, S2) and power (S3, S4) cables to the screens.
3. Also connect the screen power cables (S3, S4) to a wall socket outlet.
4. Connect the system to the Ethernet (E1) and power (E3) outlets.
  - The power switches on the camera, codec, and 24 V PSU must be ON.
5. Follow the instructions on-screen.
  - Choose device type “Room Kit EQX” when prompted.\*  
If choosing the wrong device type, the system will not work as expected. You will have to factory reset the device and run the set-up wizard again to fix the issues.

\* Alternatively, run the following API command to set the correct device type (refer to the device API-guide online):

```
xCommand SystemUnit ProductPlatform Set Platform: ROOMKITEQX
```

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