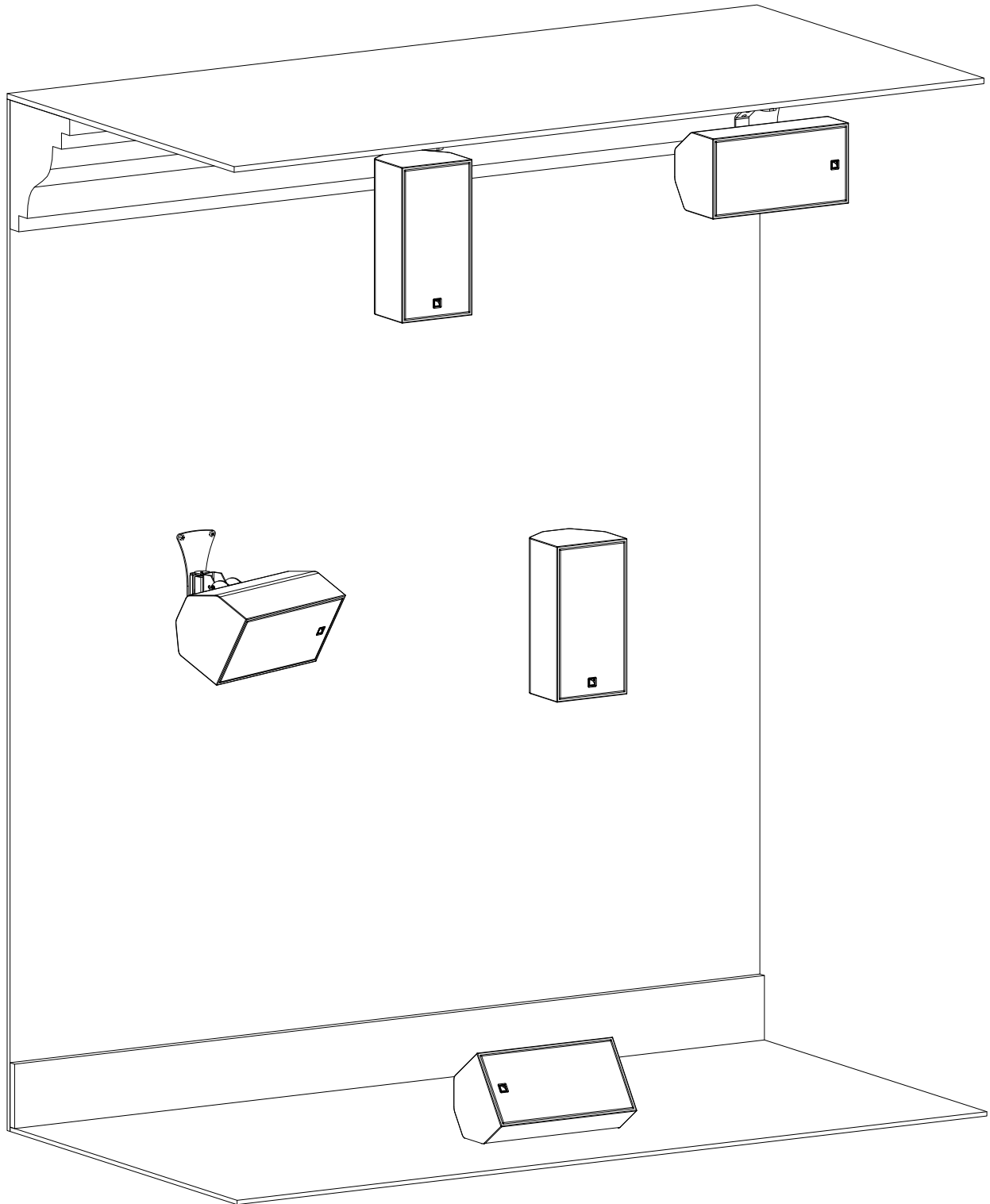


X6i



owner's manual (EN)



Document reference: X6i owner's manual (EN) version 2.0

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Safety

Instructions

-  **Inspect the system before any deployment.**
Perform safety related checks and inspections before any deployment.
- Perform preventive maintenance at least once a year.**
Refer to the preventive maintenance section for a list of actions and their periodicity.
Insufficient upkeep of the product can void the warranty.
- If any safety issue is detected during inspection, do not use the product before performing corrective maintenance.**
Check for issues. A rigging system part or fastener is missing or loose. A rigging system part exhibits: bends, breaks, broken parts, corrosion, cracks, cracks in welded joints, deformation, denting, wear, holes. A safety cue or label is missing.
-  **Never incorporate equipment or accessories not approved by L-Acoustics.**
-  **Read all the related PRODUCT INFORMATION documents shipped with the products before exploiting the system.**
-  **Do not store the product on an unstable cart, stand, tripod, bracket, or table.**
-  **Beware of sound levels.**
Do not stay within close proximity of loudspeakers in operation.
Loudspeaker systems are capable of producing very high sound pressure levels (SPL) which can instantaneously lead to permanent hearing damage to performers, production crew, and audience members. Hearing damage can also occur at moderate level with prolonged exposure to sound.
Check the applicable laws and regulations relating to maximum sound levels and exposure times.
-  **Risk of crushing injury**
Ensure that the wall or ceiling can support the load of the product.
It is recommended to mount only on solid structures. If mounting on a hollow structure (such as a wall cavity), place anchoring points on the framework (wall studs, ceiling joists), or reinforce the mounting area.
Select screws and anchors applicable to the wall or ceiling properties and to the load of the product. Prevent screws from loosening over time, using for example thread locker or lock washers.
-  **Risk of crushing injury**
When mounting the product on a ceiling using threaded rods, use lock nuts in addition to the mounting nuts to prevent the mounting nuts from loosening over time.
-  **Work with qualified personnel for rigging the system.**
Installation should only be carried out by qualified personnel that are familiar with the rigging techniques and safety recommendations outlined in this manual.
- Ensure personnel health and safety.**
During installation and set-up personnel must wear protective headgear and footwear at all times. Under no circumstances is personnel allowed to climb on a loudspeaker assembly.
- Respect the Working Load Limit (WLL) of third party equipment.**
L-Acoustics is not responsible for any rigging equipment and accessories provided by third party manufacturers. Verify that the Working Load Limit (WLL) of the suspension points, chain hoists and all additional hardware rigging accessories is respected.
- Respect the maximum configurations and the recommended safety precautions.**
For safety issue, respect the maximum configurations outlined in this manual. To check the conformity of any configuration in regards with the safety precautions recommended by L-Acoustics, model the system in Soundvision and refer to the warnings in Mechanical Data section.

Be cautious when flying a loudspeaker configuration.

Before installing/raising the product, check each individual element to make sure that it is securely fastened to the adjacent element. Always verify that no one is standing underneath the product when it is being installed/raised. Never leave the product unattended during the installation process.

As a general rule, L-Acoustics recommends the use of secondary safety at all times.

Be cautious when ground-stacking a loudspeaker array.

Do not stack the loudspeaker array on unstable ground or surface. If the array is stacked on a structure, platform, or stage, always check that the latter can support the total weight of the array.

As a general rule, L-Acoustics recommends the use of safety straps at all times.

Risk of falling objects

Verify that no unattached items remain on the product or assembly.

Risk of tipping

Remove all rigging accessories before transporting a product or an assembly.

Take into account the wind effects on dynamic load.

When a loudspeaker assembly is deployed in an open air environment, wind can produce dynamic stress to the rigging components and suspension points.

If the wind force exceeds 6 bft (Beaufort scale), lower down and/or secure the product or the assembly.

**Intended use**

This system is intended for use by trained personnel for professional applications.



As part of a continuous evolution of techniques and standards, L-Acoustics reserves the right to change the specifications of its products and the content of its documents without prior notice.

Check www.l-acoustics.com on a regular basis to download the latest document and software updates.



Long term exposure to extreme conditions may damage the product.

For more information, refer to the **Products weather protection** document, available on the website.



Read the maintenance section of this document before servicing the product.



Contact L-Acoustics for advanced maintenance.

Any unauthorized maintenance operation will void the product warranty.



This marking indicates that this product should not be disposed of with other household waste throughout the EU. To prevent possible harm to the environment or human health from uncontrolled waste disposal, recycle it responsibly to promote the sustainable reuse of material resources. To return your used device, please use the return and collection systems or contact the retailer where the product was purchased. They can take this product for environmentally safe recycling.



Introduction

X6i



X6i is a coaxial system designed for short throw installation applications that require discretion, elegance and yet power. The slender and streamlined design of X6i facilitates its integration in highend architectural settings where it provides clear, studio-like sound.

The passive loudspeaker features a 1.5" neodymium compression driver coaxially loaded by a 6.5" low frequency transducer in a bass-reflex cabinet. This coaxial arrangement produces a 90° axisymmetric directivity with a smooth tonal response free of secondary lobes over the entire frequency range.

X6i can be driven by two presets to adapt to the acoustic needs of projects and to subwoofer coupling configurations. For strong vocal reinforcement, or when used alongside a subwoofer, the X6i preset boasts 123 dB of max SPL, down to 69 Hz. For standalone applications and close proximity listening experience, the [X6i_50] preset delivers full range sound reproduction down to 54 Hz, and produces 117 dB of max SPL.

The combination of pristine yet powerful sound and elegant form makes X6i ideal for vocal or musical reinforcement in small theaters, live clubs, luxury and hospitality spaces, houses of worship, home & yacht, broadcast and recording studios.

How to use this manual

The X6i owner's manual is intended for all actors involved in the system design, implementation, preventive and corrective maintenance of the X6i system. It must be used as follows:

1. Read the technical description for an overview of all system elements, their features, and their compatibilities.
 - [Electro-acoustical description](#) (p.14)
 - [Rigging system description](#) (p.18)
2. Prepare the system configuration. Read the mechanical safety instructions and consider the available configurations, both mechanical and acoustical.
 - [Mechanical safety](#) (p.36)
 - [X6i mechanical configurations overview](#) (p.46)
 - [Loudspeaker configurations](#) (p.38)
3. Before rigging the system, perform mandatory inspections and functional checks.
4. To deploy the system, follow the step-by-step rigging instructions and refer to the cabling schemes.
 - [Rigging procedures](#) (p.46)
 - [Connection to LA amplified controllers](#) (p.170)

As part of a continuous evolution of techniques and standards, L-Acoustics reserves the right to change the specifications of its products and the content of its document without prior notice. Please check www.l-acoustics.com on a regular basis to download the latest document and software updates.





Contact information

For information on advanced corrective maintenance:

- contact your Certified Provider or your L-Acoustics representative
- for Certified Providers, contact the L-Acoustics customer service: customer.service@l-acoustics.com (EMEA/APAC), laus.service@l-acoustics.com (Americas).

Symbols

The following symbols are used in this document:

-  This symbol indicates a potential risk of harm to an individual or damage to the product. It can also notify the user about instructions that must be strictly followed to ensure safe installation or operation of the product.
-  This symbol indicates a potential risk of electrical injury. It can also notify the user about instructions that must be strictly followed to ensure safe installation or operation of the product.
-  This symbol notifies the user about instructions that must be strictly followed to ensure proper installation or operation of the product.
-  This symbol notifies the user about complementary information or optional instructions.

Revision history

version number	publication date	modification
1.0	Apr. 2024	Initial version.
2.0	Aug. 2024	<ul style="list-style-type: none">• Added new warning related to cable clip (X6i (p.18)).• Updated rigging procedures involving PAN accessory with TILT/TILTxx.• Updated Ceiling-mounting X6i vertically with VBAR and TILT5/TILT15/TILT40 (p.138).• Updated Flying X6i with X6i-HBAR (p.153).• Added Corrective maintenance (p.179).• Added corrections and improvements.

System components

Loudspeaker enclosures

X6i	2-way passive coaxial enclosure: 6,5" LF + 1.5" HF diaphragm (installation version)
SB10i	Ultra-compact subwoofer: 1 × 10" (installation version)
SB6i	Ultra-shallow subwoofer: 2 × 6.5"

Powering and driving system

LA2Xi	Install-specific amplified controller 4 × 640 W / 4 ohms
LA4X	Amplified controller 4 × 1000 W / 8 ohms
LA7.16i	Install-specific amplified controller 16 × 1300 W / 8 ohms
LA12X	Amplified controller 4 × 2600 W / 4 ohms



Refer to the LA2Xi / LA4X / LA7.16i / LA12X owner's manual for operating instructions.

Cables

SPCON	2-point speakON adaptor (2.5 mm ² gauge) for terminal blocks
2 × 2.5 mm ² cable	Speaker cable with bare wire endings Adapt the cable length to the installation.
custom 2-point speakON cable	2-point speakON cable (2.5 mm ² gauge) to bare wire cable This cable needs to be custom made.



Information about the connection of the enclosures to the LA amplified controllers is given in this document.

Refer to the LA2Xi / LA4X / LA7.16i / LA12X owner's manual for detailed instructions about the whole cabling scheme, including modulation cables and network.



Rigging elements

X6i-onCW	On-wall or on-ceiling mounting accessory with silent blocks for X6i
WALLx2	Wall-mounting kit
PANx2	Adjustable pan accessory kit +/-45°
PAN	Adjustable pan accessory +/-45°
WALL	Wall-mounting accessory
TILT	Adjustable tilt accessory from 0° to 40°
TILT5	Fixed tilt accessory 5°
TILT15	Fixed tilt accessory 15°
TILT40	Fixed tilt accessory 40°
TILT-SUPPORT	Support plate for TILT/PAN/WALL accessories
GROUND	Ground-mounting accessory
GROUND55	Ground-mounting accessory for 55° site angle
GROUND35	Ground-mounting accessory for 35° site angle
X6i-HBAR	Rigging accessory for horizontally-oriented X6i

- VBAR Rigging accessory for vertically-oriented loudspeaker
- CEILING-PENDANT Rigging accessory for ceiling-hung pendant loudspeaker
- POLE Pole-mount adapter

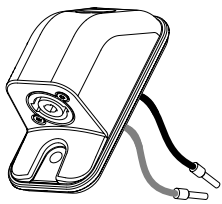
Software applications

- Soundvision 3D acoustical and mechanical modeling software
- LA Network Manager Software for remote control and monitoring of amplified controllers

-  Refer to the Soundvision help.
-  Refer to the LA Network Manager help.

System component illustrations

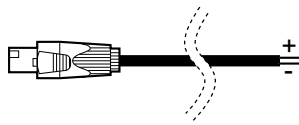
Cables



SPCON

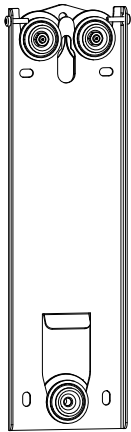


2 × 2.5 mm² cable

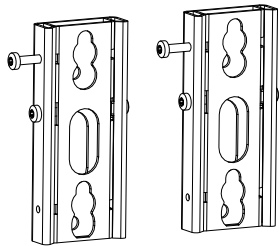


custom 2-point speakON cable

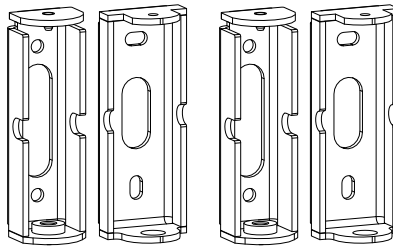
Rigging accessories



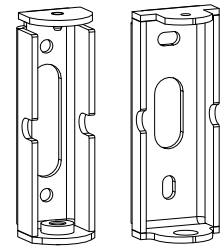
X6i-onCW



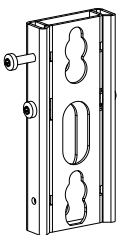
WALLx2



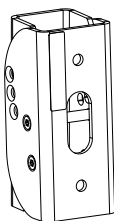
PANx2



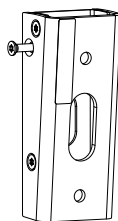
PAN



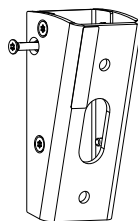
WALL



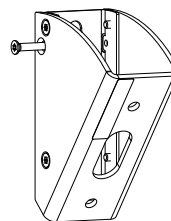
TILT



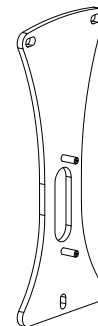
TILT5



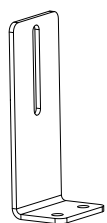
TILT15



TILT40



TILT-SUPPORT



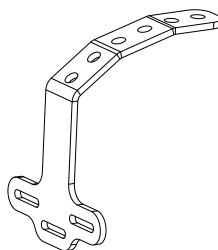
GROUND



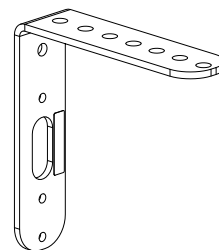
GROUND55



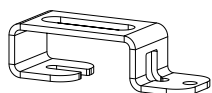
GROUND35



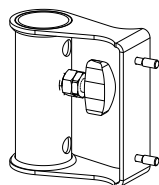
X6i-HBAR



VBAR

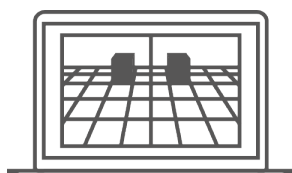


CEILING-PENDANT

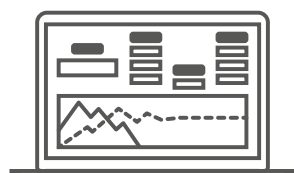


POLE

Software applications



Soundvision

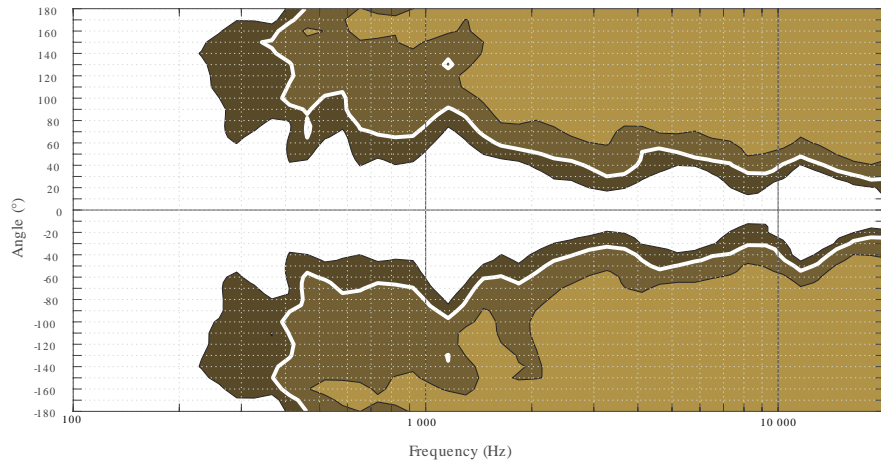
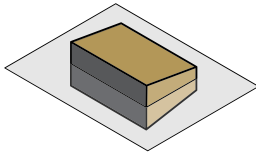
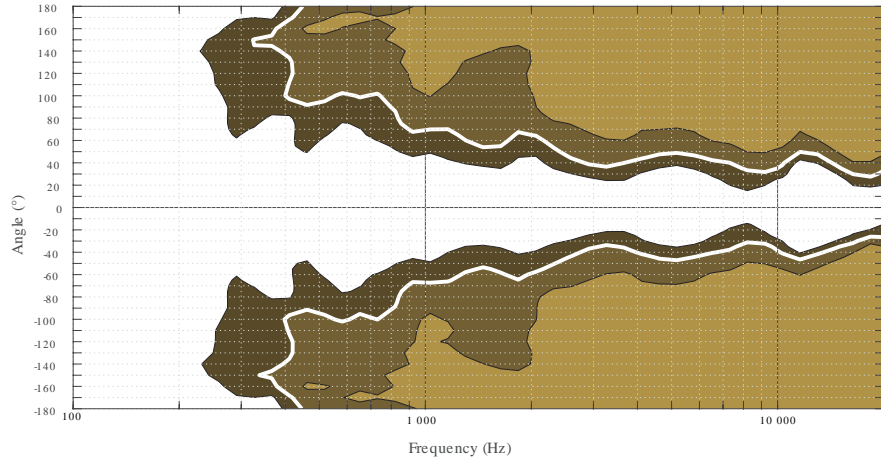
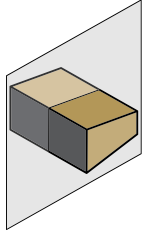


LA Network Manager

Electro-acoustical description

Directivity

X6i features a coaxial transducer arrangement that generates an axisymmetric directivity pattern of 90°.



Dispersion angle diagram of a single X6i using lines of equal sound pressure at -3 dB, -6 dB, -12 dB.

Preset description

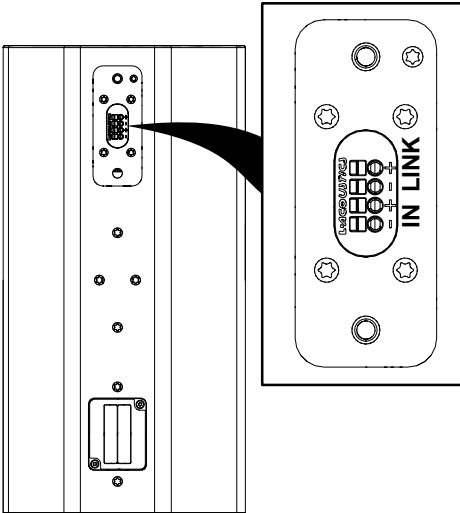
[X6i] [X6i_50] [X6i_MO]

outputs	channels	routing	gain	delay	polarity	mute
OUT 1	PA	IN A	0 dB	0 ms	+	ON
OUT 2	PA	IN A	0 dB	0 ms	+	ON
OUT 3	PA	IN B	0 dB	0 ms	+	ON
OUT 4	PA	IN B	0 dB	0 ms	+	ON

[SB10_60] [SB10_100] [SB10_200] [SB6_60] [SB6_100] [SB6_200]

outputs	channels	routing	gain	delay	polarity	mute
OUT 1	SB	IN A	0 dB	0 ms	+	ON
OUT 2	SB	IN A	0 dB	0 ms	+	ON
OUT 3	SB	IN A	0 dB	0 ms	+	ON
OUT 4	SB	IN A	0 dB	0 ms	+	ON

Connectors



X6i

4-point terminal block with push-in connection

Internal pinout for L-Acoustics 2-way passive enclosures

Terminal block points	IN +	IN -
Transducer connectors	+	-

SPCON terminal block to speakON adapter

SPCON is a 2-point speakON to bare wire adaptor for X6i. The cables have a gauge of 2.5 mm² and the ends are equipped with ferrules. SPCON replaces the connector sealing plate.



Risk of electric shock

When SPCON is connected to an amplified controller, the bare wires carry electrical voltage.

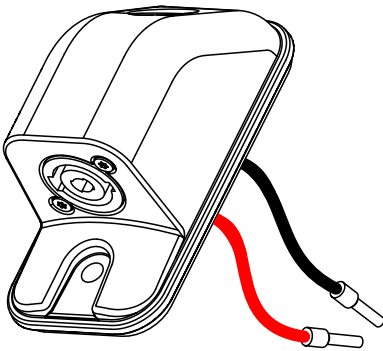
Always mount SPCON to the enclosure **before** connecting the speaker cable to SPCON.

Always disconnect the speaker cable from SPCON **before** removing SPCON from the enclosure.

If the speaker cable cannot be disconnected, unplug the amplified controller from the mains.

SPCON is **not compatible** with the following rigging accessories:

- X6i-onCW
- WALLx2
- PANx2
- GROUND55
- GROUND35
- GROUND



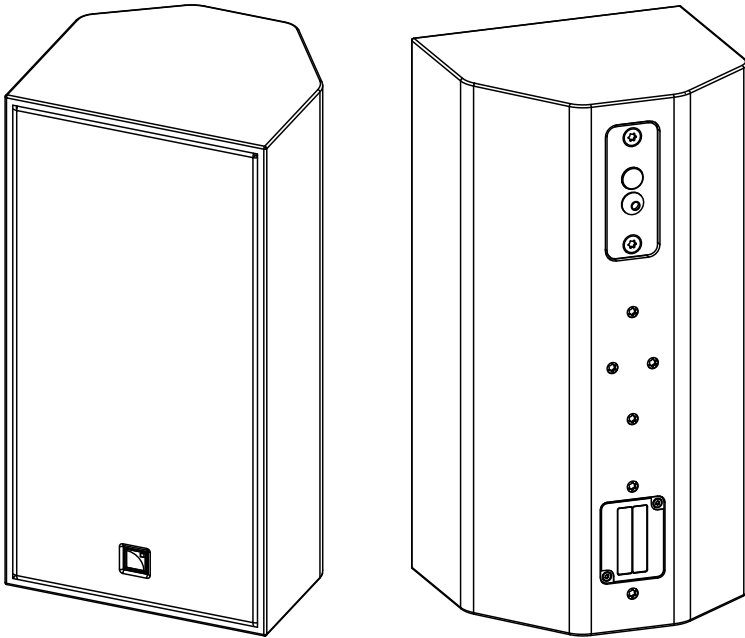
SPCON

2-point speakON

Rigging system description

X6i

X6i is a loudspeaker enclosure dedicated for installation projects. X6i can be mounted on a wall, on a ceiling, flown, or secured to the ground with dedicated rigging accessories, using the inserts at the back.



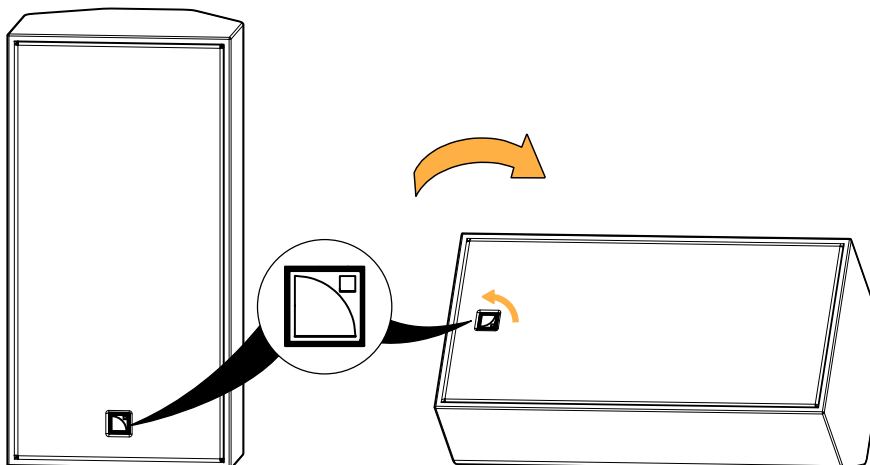
⚠ Secondary safety for flown, wall-mounted, or ceiling-mounted enclosures

Use one insert at the back of the enclosure to implement a secondary safety.

⚠ Risk of acoustic leaks

Always put the placeholder screws back in place when the inserts are not in use.

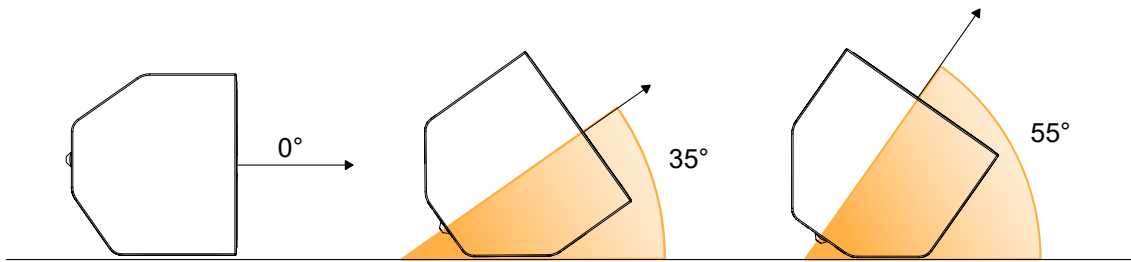
The logo on the grill can be rotated to adapt to every position.



⚠ Weather resistance

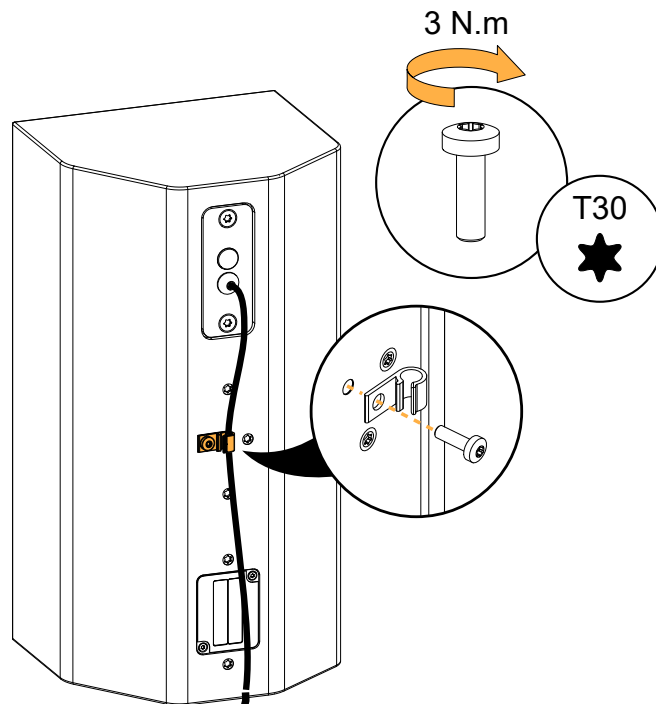
X6i reaches IP55 protection level when it is in the vertical position, with the connector at the top.

When on the ground, the shape of the cabinet provides three possible monitor angles: 0°, 35°, or 55°. Ground-mounting accessories can be used for more stability, see [GROUND / GROUND35 / GROUND55](#) (p.34).



X6i includes a cable clip to run the speaker cable along the cabinet. Mount the cable clip on any available insert in the middle of the enclosure with the provided M6×20 Torx screw.

! Do not mount the cable clip on a rigging accessory.



Elements for wall-mounting



Risk of crushing injury

Ensure that the wall or ceiling can support the load of the product.

It is recommended to mount only on solid structures. If mounting on a hollow structure (such as a wall cavity), place anchoring points on the framework (wall studs, ceiling joists), or reinforce the mounting area.

Select screws and anchors applicable to the wall or ceiling properties and to the load of the product. Prevent screws from loosening over time, using for example thread locker or lock washers.

Refer to [APPENDIX A: Specifications for screws and anchors](#) (p.214).

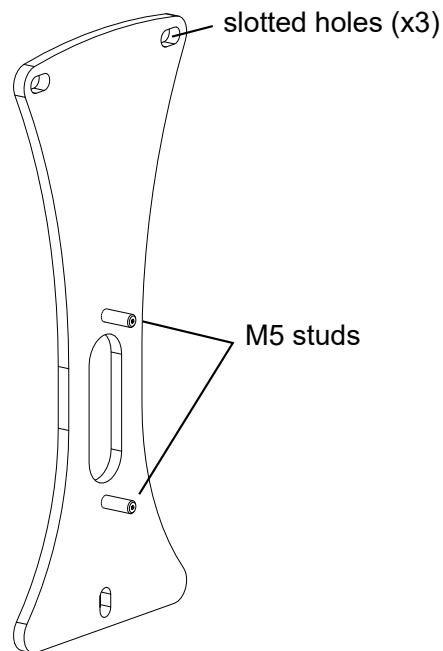
TILT-SUPPORT

TILT-SUPPORT is a support plate for individual X6i wall-mounting accessories. TILT-SUPPORT must be used to ensure the safety of the assembly with WALL, PAN, TILT5, TILT15, TILT40, or TILT.

TILT-SUPPORT is composed of:

- a main part with two M5 self-clinching studs
- fasteners for assembly

TILT-SUPPORT features three Ø 6.4 mm / 0.25 in slotted holes for vertical and horizontal adjustment during installation.



TILT-SUPPORT fasteners



x2



x2

M5 hex locknut

thick plain washer Ø
5 mm

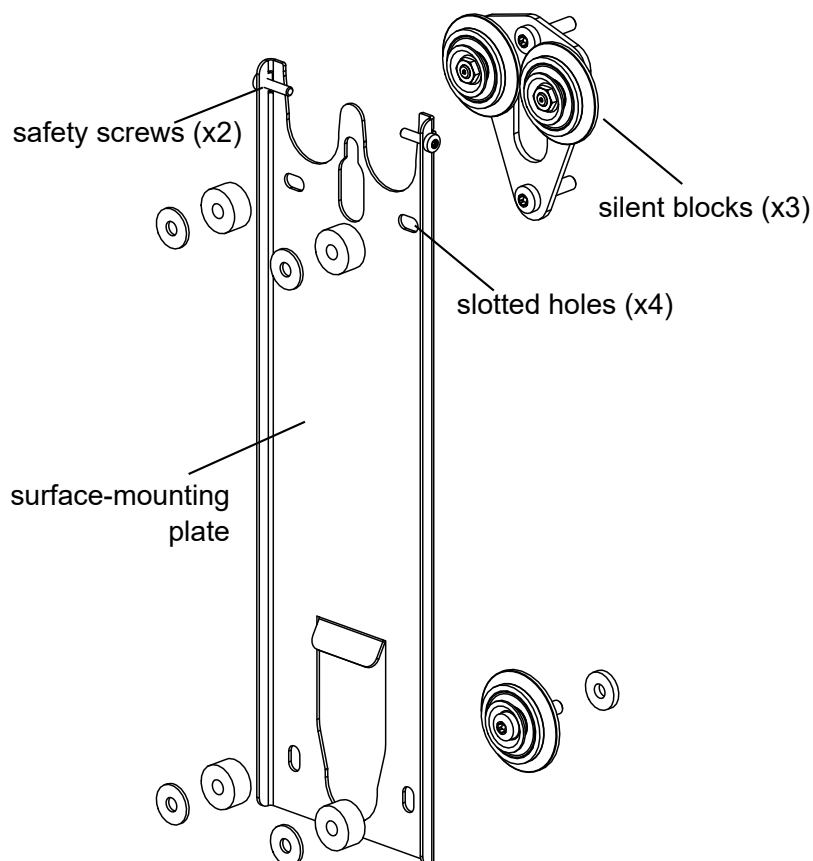
X6i-onCW

X6i-onCW is a rigging interface with silent blocks for mounting one X6i on a wall or on a ceiling. X6i-onCW is composed of:

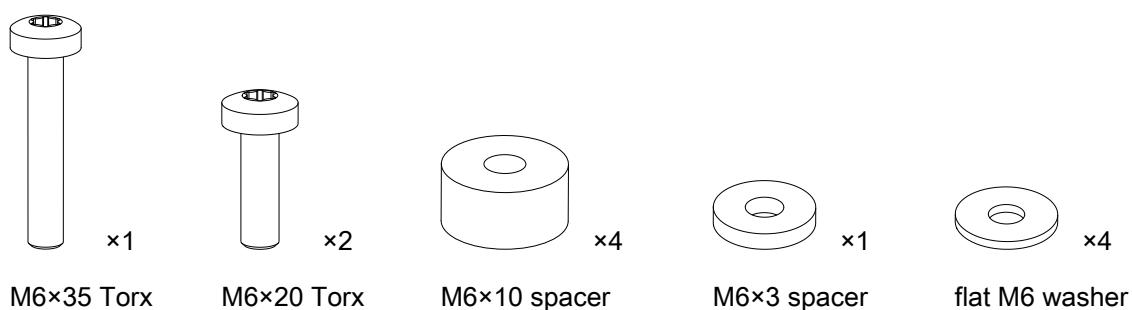
- one surface-mounting plate
- three silent blocks:
 - one enclosure-mounting plate with two silent blocks
 - one individual silent block
- fasteners for assembly and safety

The silent blocks isolate the enclosure from the wall to reduce the transmission of vibrations and improve sound quality.

X6i-onCW features four $\text{\O} 6.4 \text{ mm} / 0.25 \text{ in}$ slotted holes for vertical and horizontal adjustment during installation. Four flat M6 washers are provided for depth adjustment on uneven surfaces.



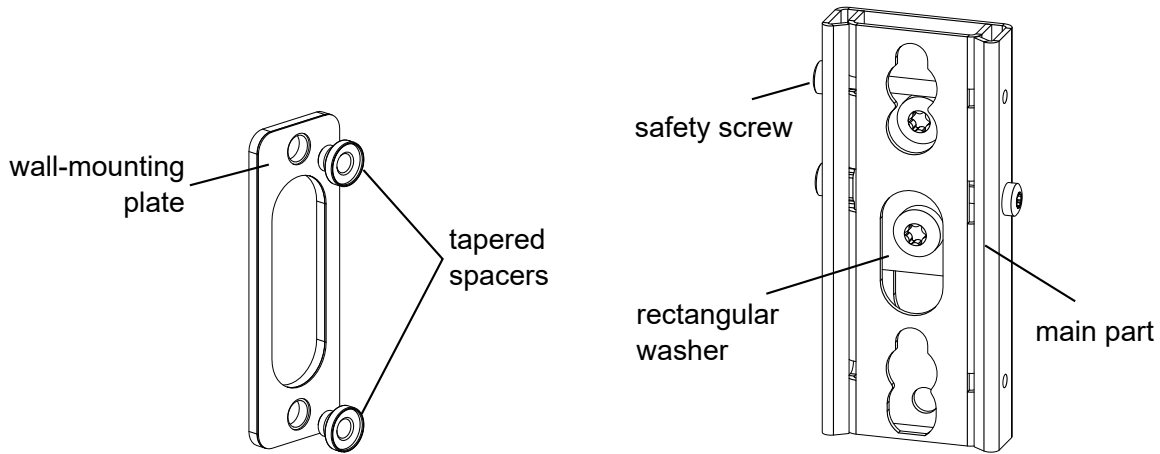
X6i-onCW screws and fasteners



WALL

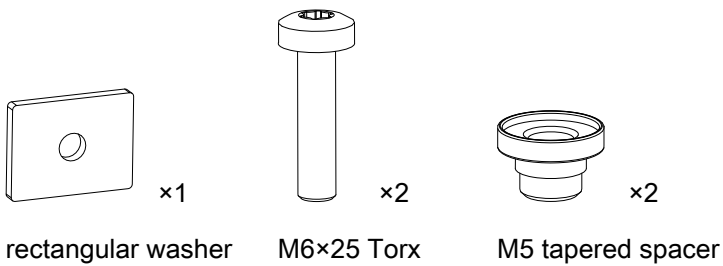
WALL is a rigging interface for mounting one X6i horizontally on a wall. It must be used in combination with [TILT-SUPPORT](#) (p.20). WALL is composed of:

- a main part for mounting on X6i
- a rectangular washer
- a wall-mounting plate
- fasteners for assembly and safety



To mount X6i vertically on a wall, use [WALLx2](#) (p.23) instead.

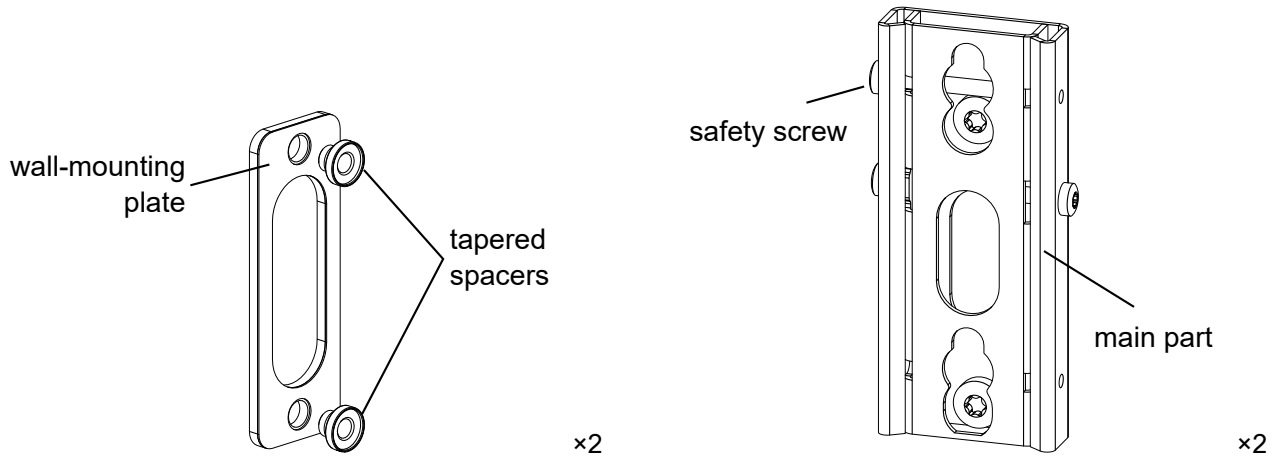
WALL screws and fasteners



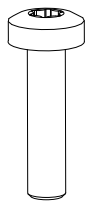
WALLx2

WALLx2 is a rigging interface for mounting one X6i vertically on a wall. WALLx2 is composed of two WALL (p.22), without rectangular washers:

- two main parts for mounting on X6i
- two wall-mounting plates
- fasteners for assembly and safety



WALLx2 screws and fasteners



x4

M6x25 Torx



x4

M5 tapered spacer

Elements for ceiling-mounting or truss-mounting



Risk of crushing injury

Ensure that the wall or ceiling can support the load of the product.

It is recommended to mount only on solid structures. If mounting on a hollow structure (such as a wall cavity), place anchoring points on the framework (wall studs, ceiling joists), or reinforce the mounting area.

Select screws and anchors applicable to the wall or ceiling properties and to the load of the product. Prevent screws from loosening over time, using for example thread locker or lock washers.

Refer to [APPENDIX A: Specifications for screws and anchors](#) (p.214).

VBAR

VBAR is a rigging bracket for mounting X6i vertically on the ceiling, or for flying X6i with a truss or a threaded rod in a suspended ceiling.

VBAR can be combined with TILT, TILT5, TILT15, or TILT40 to adjust the site angle when mounting X6i on the ceiling.

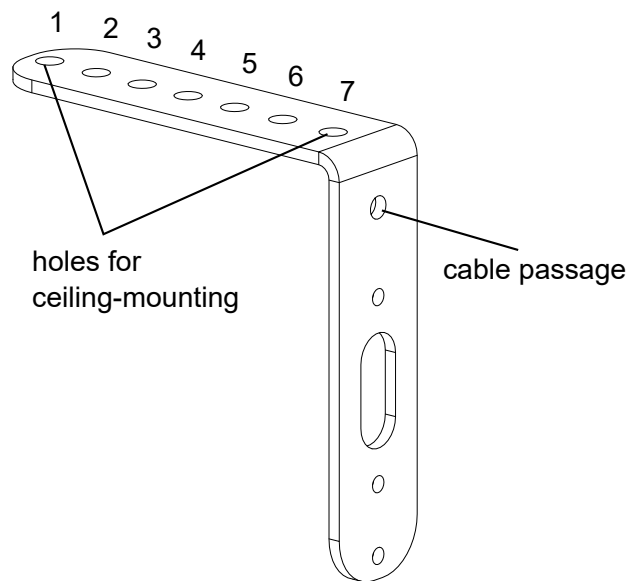
VBAR has seven \varnothing 10.4 mm / 0.41 in possible pickup points for site angle setting in flown configuration. When mounting on the ceiling, drive two screws in holes 1 and 7.



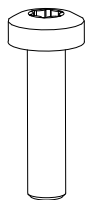
Ceiling-mounting holes

When ceiling-mounting with VBAR, always use holes 1 and 7 (at both ends) to ensure optimal support.

A \varnothing 9 mm / 0.35 in hole is available at the top of VBAR to run the speaker cable above X6i.



VBAR screws and fasteners



x2

M6×25 Torx



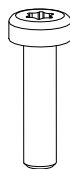
x2

flat washer \varnothing 6 mm



x2

M6 hex lock nut



x2

M5×20 Torx

x2

thick plain washer \varnothing 5 mm



x2

M5 hex locknut

X6i site angles when flown or truss-mounted with VBAR

hole N°	angle
1	18°
2	13°
3	7°
4	1°
5	-6°
6	-12°
7	-19°

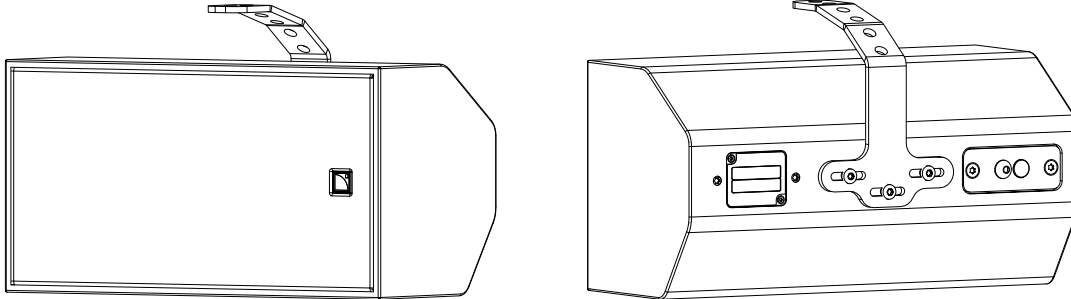
X6i-HBAR

X6i-HBAR is a rigging bracket for mounting X6i horizontally on the ceiling, or for flying X6i with a truss or a threaded rod in a suspended ceiling.

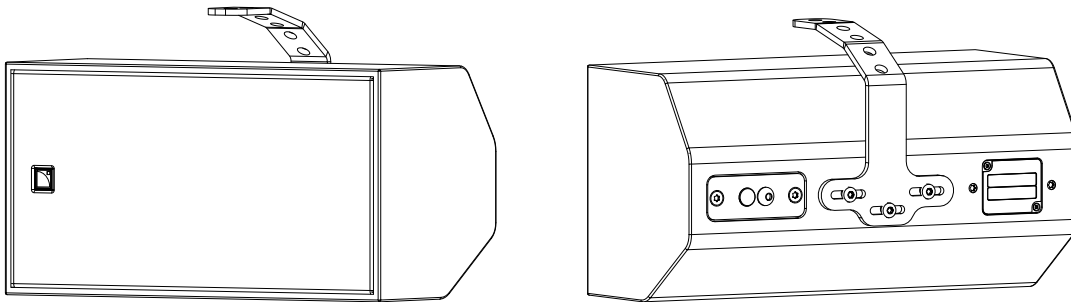
X6i-HBAR has six \varnothing 10.3 mm / 0.40 in possible pickup points for site angle setting in flown configuration. When mounting on the ceiling, use one pair of adjacent, coplanar holes depending on the chosen site angle.

X6i-HBAR can be mounted on a horizontal X6i turned either way:

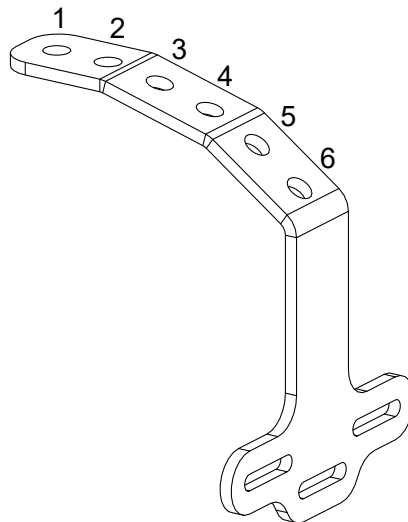
- with the connector plate on the right-hand side:



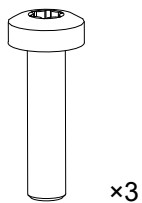
- with the connector plate on the left-hand side:



X6i-HBAR has three slotted holes for mounting on X6i to adjust the roll angle.



X6i-HBAR screws



M6x25 Torx

X6i site angles when flown or truss-mounted with X6i-HBAR

hole N°	angle	
	connector plate right	connector plate left
1	9°	11°
2	1°	
3	-10°	
4	-19°	
5	-31°	
6	-39°	-42°

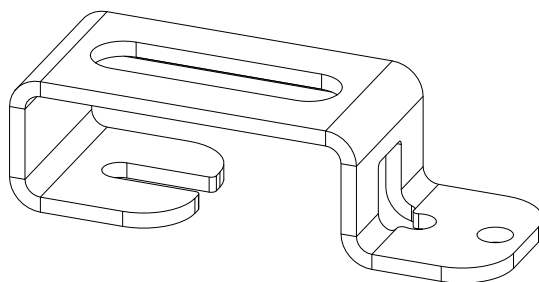
X6i site angles when ceiling-mounted with X6i-HBAR

holes N°	angle
1 + 2	0°
3 + 4	-15°
5 + 6	-35°

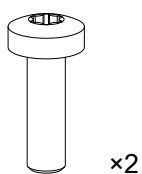
CEILING-PENDANT

CEILING-PENDANT is a rigging accessory for flying X6i in downward-facing position with a truss or a threaded rod in a suspended ceiling.

The slotted hole at the top has a diameter of Ø 12 mm / 0.47 in.



CEILING-PENDANT screws



M6x20 Torx

Elements for site or azimuth angle adjustment

Risk of crushing injury

Ensure that the wall or ceiling can support the load of the product.

It is recommended to mount only on solid structures. If mounting on a hollow structure (such as a wall cavity), place anchoring points on the framework (wall studs, ceiling joists), or reinforce the mounting area.

Select screws and anchors applicable to the wall or ceiling properties and to the load of the product. Prevent screws from loosening over time, using for example thread locker or lock washers.

Refer to [APPENDIX A: Specifications for screws and anchors](#) (p.214).

TILT5 / TILT15 / TILT40

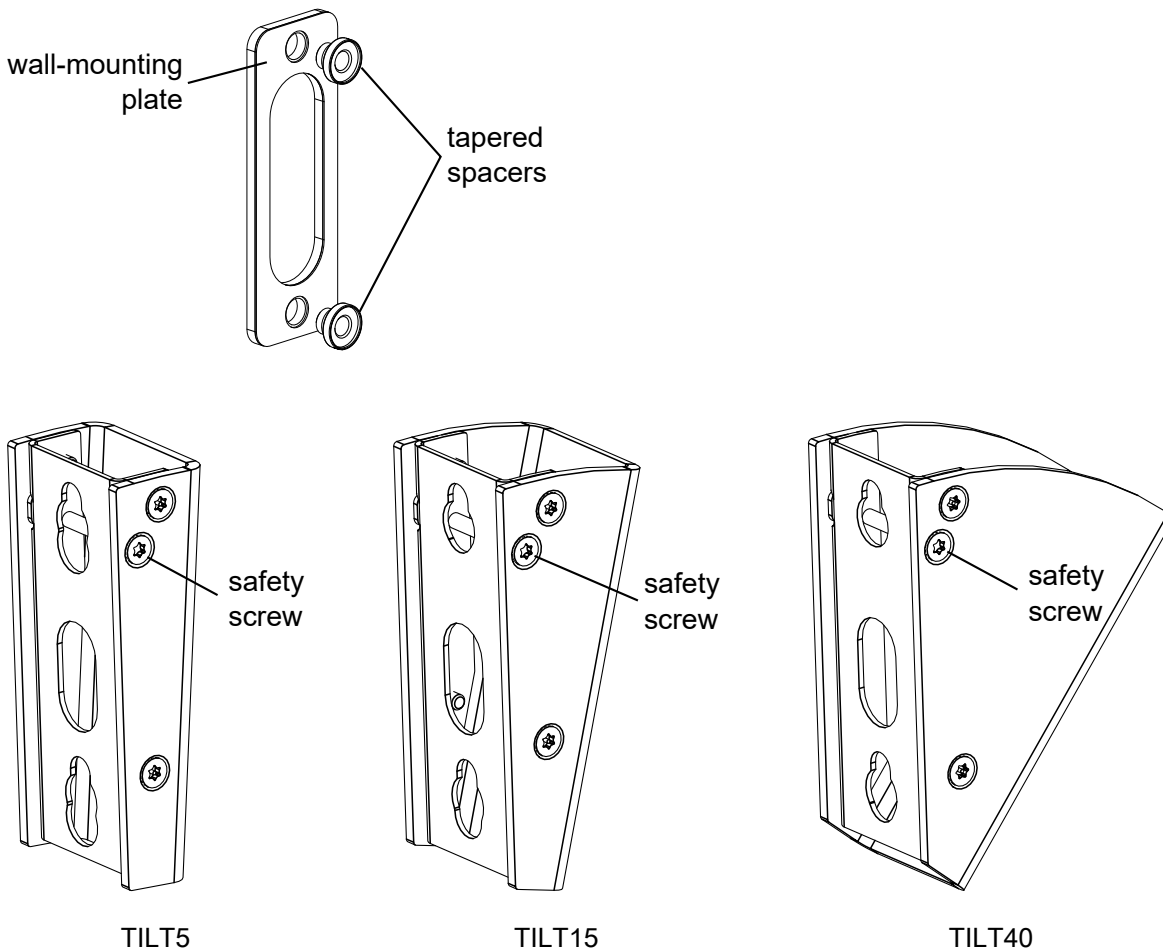
TILT5, TILT15, and TILT40 are rigging interfaces for mounting one X6i vertically or horizontally with a fixed site angle of 5°, 15°, or 40° respectively. They must be used in combination with [TILT-SUPPORT](#) (p.20) or [VBAR](#) (p.24). Optionally, TILT5, TILT15, or TILT40 can be combined with [PAN](#) (p.32) to mount X6i with site and azimuth angle.

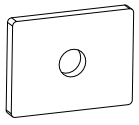
TILT5, TILT15, and TILT40 are composed of:

- a main part for mounting on X6i
- a wall-mounting plate
- a rectangular washer for horizontal configurations
- fasteners for assembly and safety

Risk of falling objects

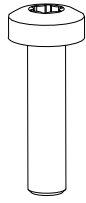
Do not use TILT, TILT5, TILT15, or TILT40 upside-down. These rigging accessories are designed for negative site angles only.



TILT5 / TILT15 / TILT40 screws and fasteners

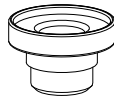
x1

rectangular washer



x2

M6x25 Torx



x2

M5 tapered spacer

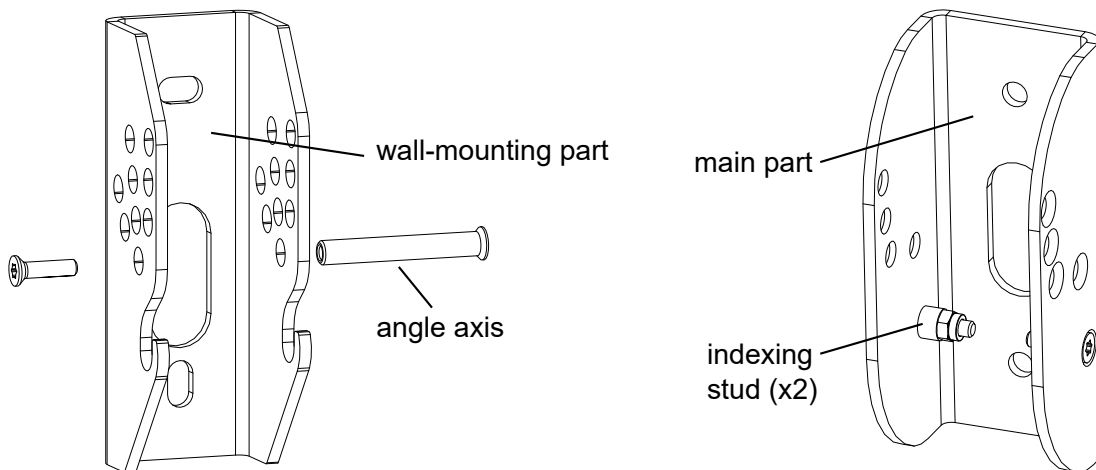
TILT

TILT is a rigging interface for mounting X6i vertically or horizontally with an adjustable site angle. It must be used in combination with **TILT-SUPPORT** (p.20) or **VBAR** (p.24). Optionally, TILT can be combined with **PAN** (p.32) to mount X6i with site and azimuth angle.

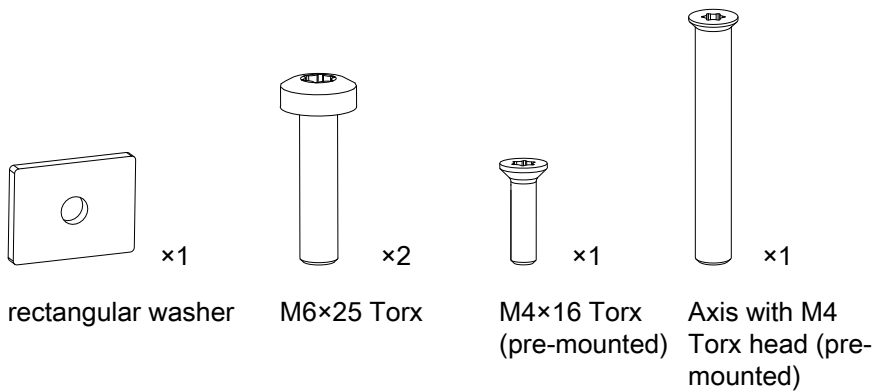
TILT is composed of:

- a main part for mounting on X6i
- a wall-mounting part
- a rectangular washer for horizontal configurations
- fasteners for assembly and safety

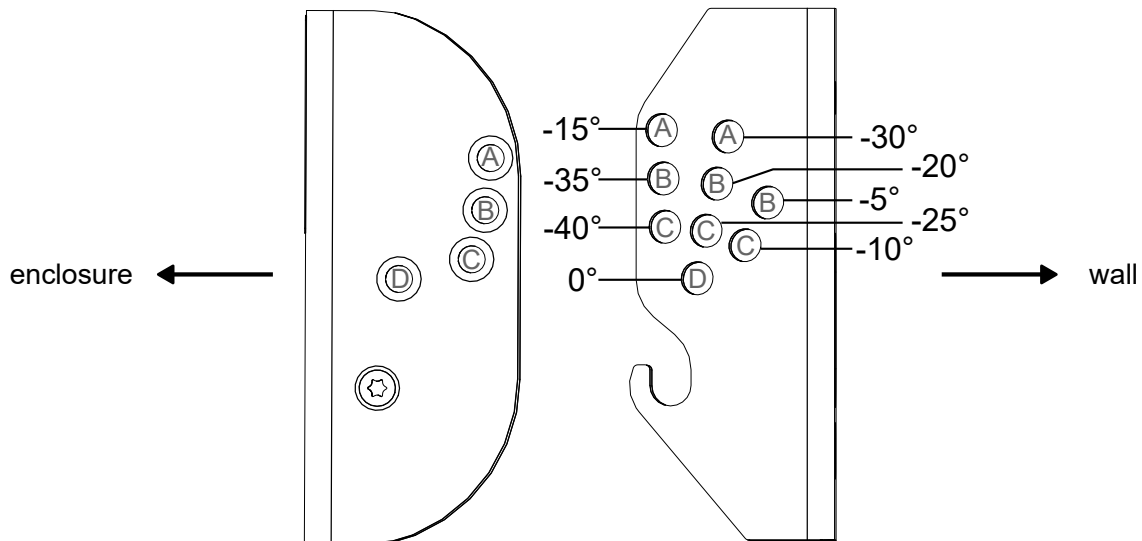
⚠ Risk of falling objects
Do not use TILT, TILT5, TILT15, or TILT40 upside-down. These rigging accessories are designed for negative site angles only.



TILT screws and fasteners



The enclosure site angle can be adjusted from 0° to -40° in 5° steps.



PAN

PAN is a rigging interface for mounting one X6i horizontally on a wall with adjustable azimuth angle. It must be used in combination with [TILT-SUPPORT](#) (p.20).

PAN can be combined with TILT, TILT5, TILT15, or TILT40 to mount X6i horizontally or vertically with site and azimuth angle.

The azimuth angle can be set between -45° and 45°.

PAN is composed of:

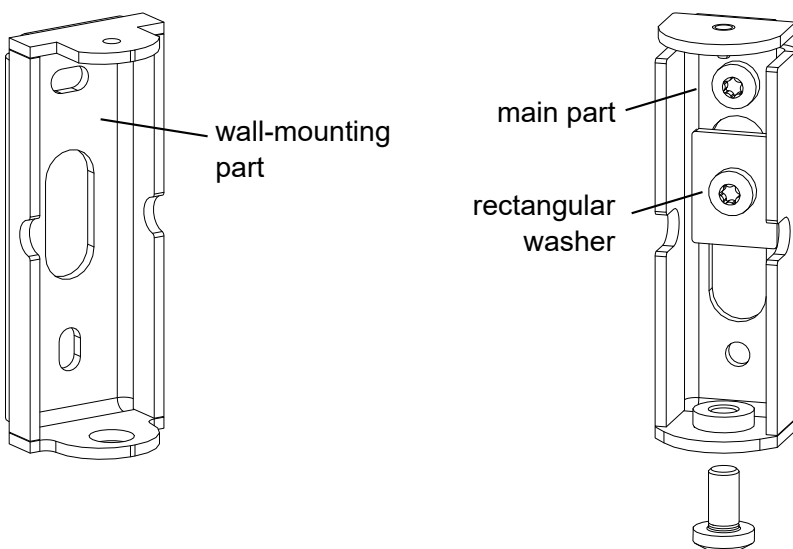
- a main part for mounting on X6i
- a wall-mounting part
- a rectangular washer for horizontal configurations
- fasteners for assembly and safety



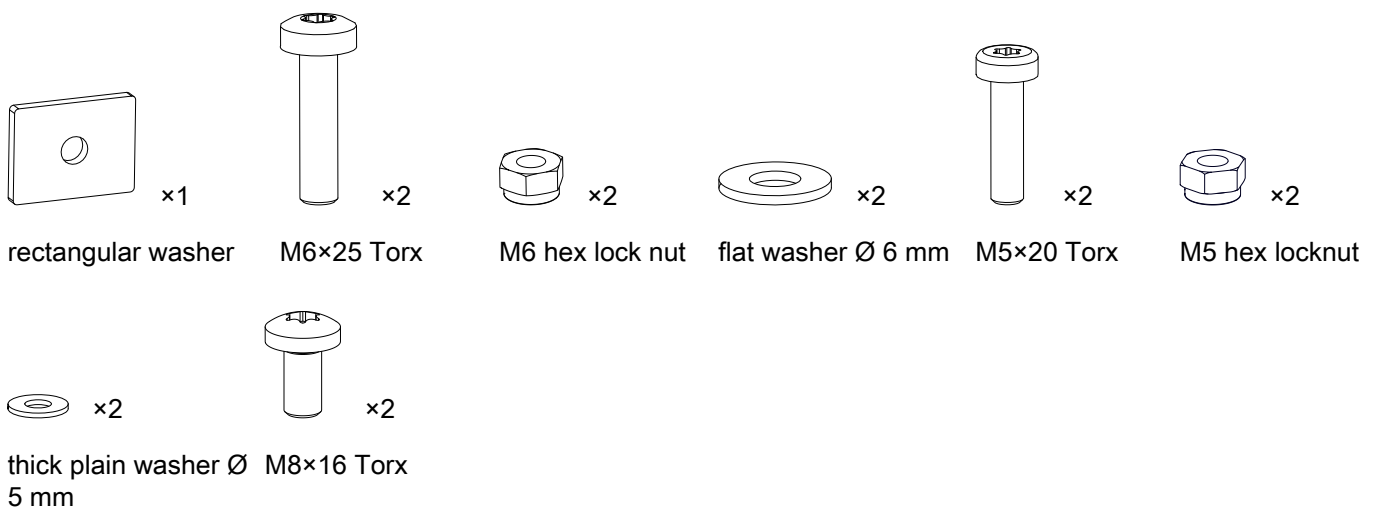
Risk of falling objects

Do not use PAN or PANx2 upside-down.

Do not swap the wall-mounting part(s) and the enclosure-mounting part(s).



PAN screws and fasteners



To mount X6i vertically on a wall with adjustable azimuth angle and without site angle setting, use [PANx2](#) (p.33) instead.

PANx2

PANx2 is a rigging interface for mounting one X6i vertically on a wall with adjustable azimuth angle. It is composed of two PAN (p.32), without the fasteners for combinations with TILT accessories or horizontal configurations:

- two main parts for mounting on X6i
- two wall-mounting parts
- fasteners for assembly and safety

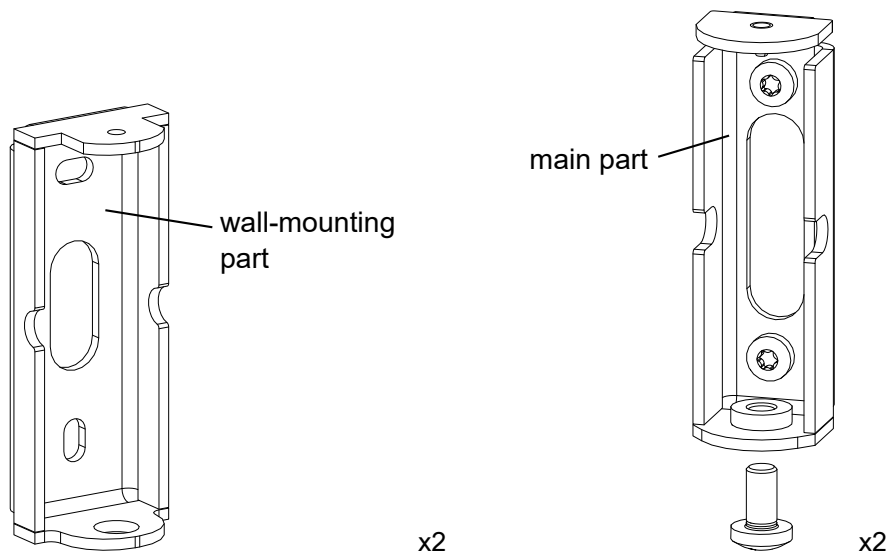
The azimuth angle can be set between -45° and 45°.



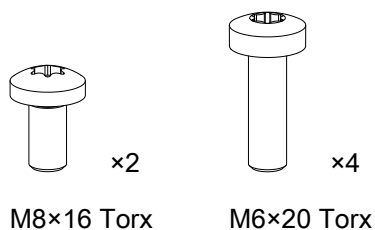
Risk of falling objects

Do not use PAN or PANx2 upside-down.

Do not swap the wall-mounting part(s) and the enclosure-mounting part(s).



PANx2 screws and fasteners

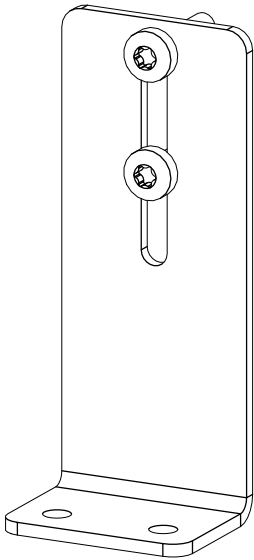


Elements for ground-mounting

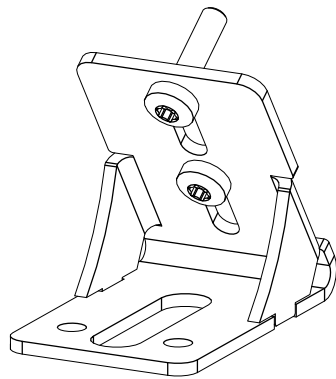
GROUND / GROUND35 / GROUND55

GROUND, GROUND35, and GROUND55 are accessories for securing X6i to the ground with a site angle of 0°, 35°, or 55° respectively.

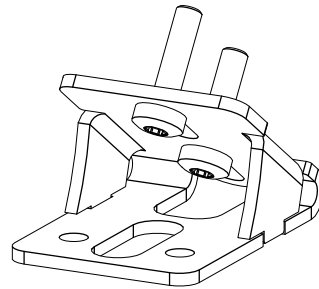
Two \varnothing 6.4 mm / 0.25 in holes are available for ground-mounting the enclosure.



GROUND

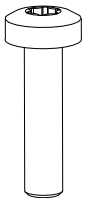


GROUND35



GROUND55

GROUND / GROUND35 / GROUND55 screws and fasteners



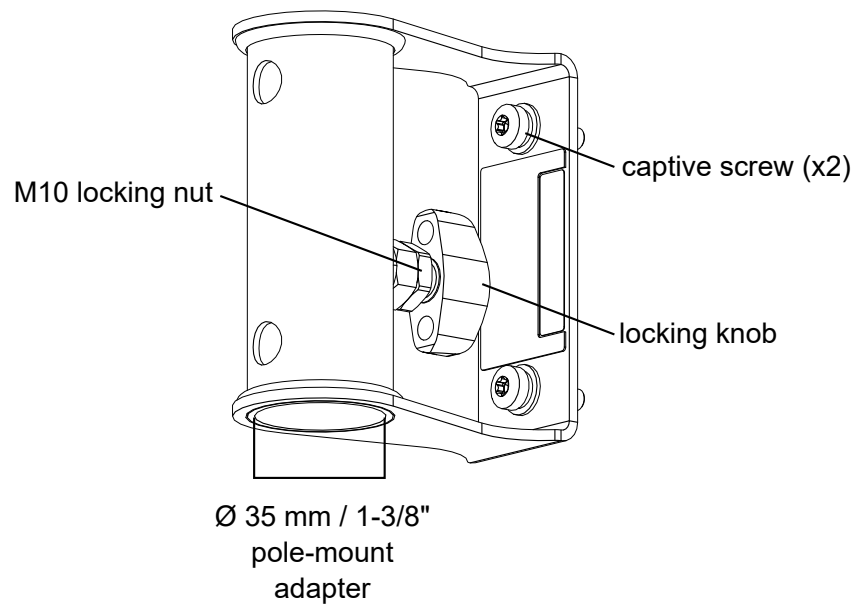
x2

M6x25 Torx

Elements for pole-mounting

POLE

POLE is a rigging accessory for mounting X6i on a \varnothing 35 mm (1-3/8") pole.



Mechanical safety

Flown configurations

The X6i rigging system complies with EN 62368-1: 2014 Audio/video, information and communication technology equipment — Part 1: Safety requirements.

The deployments described in this manual achieve a safety factor of 5.



Safe/maximum limit: 1

All the mechanical configurations described in this manual are destined to mount a single X6i.



Risk of injury or product damage

This manual describes all allowed mechanical configurations with X6i and its accessories.

Do not attempt to use these products outside of their intended use.



Mechanical configurations overview

For a detailed list of X6i mechanical configurations, refer to [X6i mechanical configurations overview](#) (p.46).



In this table, TILTxx designates the fixed angle accessories TILT5, TILT15, and TILT40.

X6i

configuration		deployment parameters			
		site angle			adjustable azimuth angle
mode	orientation	0° angle	adjustable angle	fixed angle	
wall-mounted	vertical	<ul style="list-style-type: none"> X6i-onCW* WALLx2 	TILT-SUPPORT + TILT	TILT-SUPPORT + TILTxx	<ul style="list-style-type: none"> PANx2 With site angle setting: TILT-SUPPORT + PAN + TILT / TILTxx
	horizontal	TILT-SUPPORT + WALL	TILT-SUPPORT + TILT	TILT-SUPPORT + TILTxx	<ul style="list-style-type: none"> TILT-SUPPORT + PAN With site angle setting: TILT-SUPPORT + PAN + TILT / TILTxx
ceiling-mounted	vertical	VBAR	VBAR + TILT	VBAR + TILTxx	–
	horizontal	X6i-HBAR		X6i-onCW*	–
truss-mounted / suspended by a threaded rod	vertical	VBAR		CEILING-PENDANT	–
	horizontal	X6i-HBAR			–

* with silent blocks

Other configurations

X6i

configuration		deployment parameters	
		site angle	
mode	orientation	0° angle	fixed angle
grounded	vertical	no rigging accessory	–
	horizontal	GROUND	GROUND55 (55°) / GROUND35 (35°)
pole-mounted	vertical	POLE	–

Assessing mechanical safety



Mechanical safety of the rigging system

Before any installation, always model the system in Soundvision and check the **Mechanical Data** section for any stress warning or stability warning.

In order to assess the actual safety of any array configuration before implementation, refer to the following warnings:



Rated working load limit (WLL) is not enough

The rated WLL is an indication of the element resistance to tensile stress. For complex mechanical systems such as loudspeaker arrays, WLLs cannot be used per se to determine the maximum number of enclosures within an array or to assess the safety of a specific array configuration.

Mechanical modeling with Soundvision

The working load applied to each linking point, along with the corresponding safety factor, will depend on numerous variables linked to the composition of the array (type and number of enclosures, splay angles) and the implementation of the flying or stacking structure (number and location of flying points, site angle). This cannot be determined without the complex mechanical modeling and calculation offered by Soundvision.

Assessing the safety with Soundvision

The overall safety factor of a specific mechanical configuration always corresponds to the lowest safety factor among all the linking points. Always model the system configuration with the Soundvision software and check the **Mechanical Data** section to identify the weakest link and its corresponding working load. By default, a stress warning will appear when the mechanical safety goes beyond the recommended safety level.

Safety of ground-stacked arrays in Soundvision

For ground-stacked arrays, a distinct stability warning is implemented in Soundvision. It indicates a tipping hazard when the array is not secured to the ground, stage or platform. It is the user's responsibility to secure the array and to ignore the warning.

Additional safety for flown arrays

When flying an array, use available holes to implement a secondary safety.

Considerations must be given to unusual conditions

Soundvision calculations are based on usual environmental conditions. A higher safety factor is recommended with factors such as extreme high or low temperatures, strong wind, prolonged exposition to salt water, etc. Always consult a rigging specialist to adopt safety practices adapted to such a situation.

Loudspeaker configurations

X6i point source

Deployed as a standalone point source, an X6i system operates over the nominal bandwidth of the X6i enclosure for short throw applications.

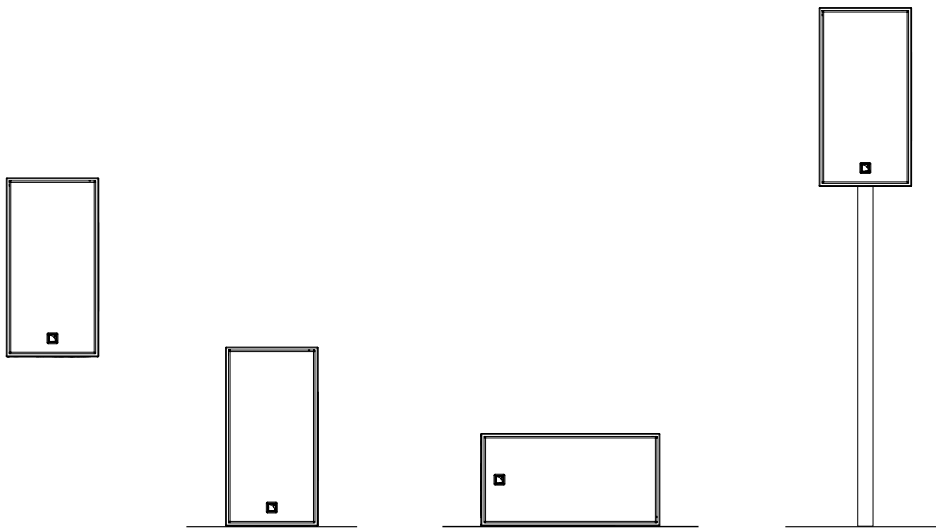
Two factory presets are available:

- The [X6i_50] preset extends the bandwidth in the low end, for full-range sound reproduction.
- The [X6i] preset offers a higher SPL output for vocal reinforcement or to be combined with a low-frequency element.

The X6i enclosure is driven by the LA2Xi / LA4X / LA7.16i / LA12X amplified controllers.



Reduced maximum SPL or drive capacity with LA2Xi: refer to the **LA2Xi owner's manual**.



Preset	[X6i_50]	[X6i]
Usable bandwidth (-10 dB)	54 Hz - 20 kHz	69 Hz - 20 kHz
Maximum SPL	117 dB	123 dB

X6i point source with low-frequency element

Deployed as a point source with SB6i(r) or SB10i(r) subwoofers, X6i system is extended in the low end and the LF contour is reinforced.

configuration	subwoofer upper frequency limit	presets	
		SB6i(r)	SB10i(r)
closely coupled	200 Hz	[SB6_200]	[SB10_200]
coupled	100 Hz	[SB6_100]	[SB10_100]
separated	60 Hz	[SB6_60]	[SB10_60]

X6i, SB6i(r), and SB10i(r) are driven by LA2Xi / LA4X / LA7.16i / LA12X.



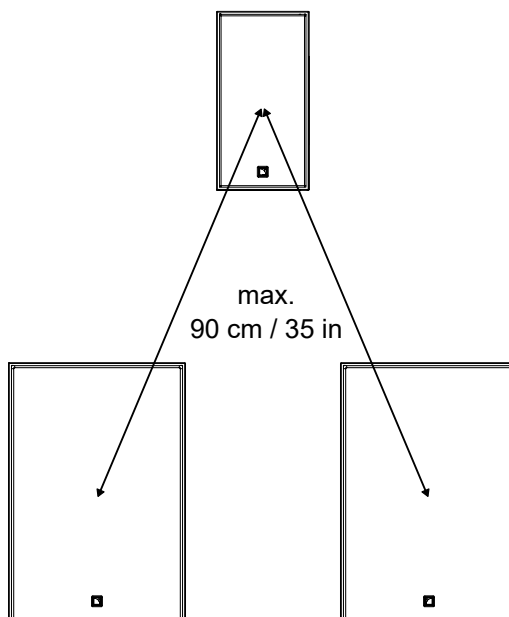
Reduced maximum SPL or drive capacity with LA2Xi: refer to the **LA2Xi owner's manual**.

X6i with SB6i(r)

Closely coupled

With SB6i(r) and the [SB6_200] preset, the bandwidth of the X6i system is extended down to 32 Hz and the system contour is reinforced.

The [X6i] preset is recommended for X6i in this configuration.



Enclosure	X6i	SB6i(r)
Preset	[X6i]	[SB6_200]
Recommended ratio	1 X6i : 2 SB6i with [X6i]	
Usable bandwidth (-10 dB)	32 Hz - 20 kHz	
System contour (peak low-end SPL)	+8 dB at 1 kHz with [X6i] (1:2)	



Contour value takes into account the effect of the wall and floor on the contour.



Grouping subwoofers



Place the subwoofer enclosures side by side. If not possible, the maximum distance between two adjacent acoustic centers must be 0.9 m if the upper frequency limit of the subwoofer system is at 200 Hz.



Delay values

Do not forget to add the pre-alignment and geometric delays depending on the configuration.

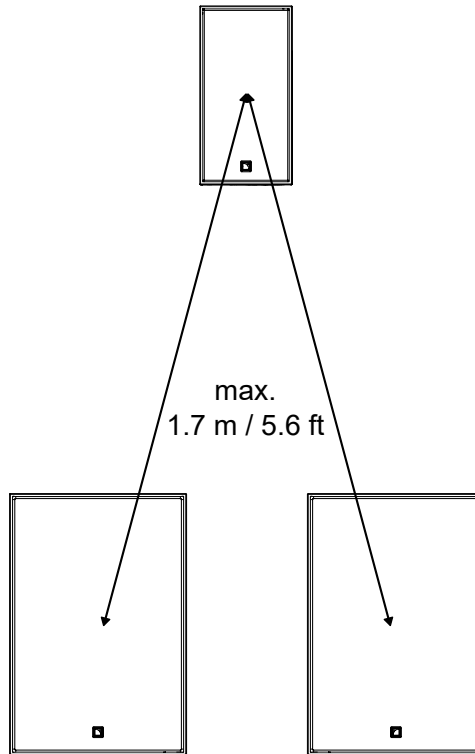
Pre-alignment delays

presets	pre-alignment delay values and polarity settings	
[X6i] + [SB6_200]	X6i = 0 ms 	SB6i = 0 ms 

Coupled

With SB6i(r) and the [SB6_100] preset, the bandwidth of the X6i system is extended down to 29 Hz and the system contour is reinforced.

The [X6i] preset is recommended for X6i in this configuration.



Enclosure	X6i	SB6i(r)
Preset	[X6i]	[SB6_100]
Recommended ratio	1 X6i : 2 SB6i(r) with [X6i]	
Usable bandwidth (-10 dB)	29 Hz - 20 kHz	
System contour (peak low-end SPL)	+5 dB at 1 kHz with [X6i] (1:2)	



Contour value takes into account the effect of the wall and floor on the contour.



Grouping subwoofers

Place the subwoofer enclosures side by side. If not possible, the maximum distance between two adjacent acoustic centers must be 1.7 m if the upper frequency limit of the subwoofer system is at 100 Hz.



Delay values

Do not forget to add the pre-alignment and geometric delays depending on the configuration.

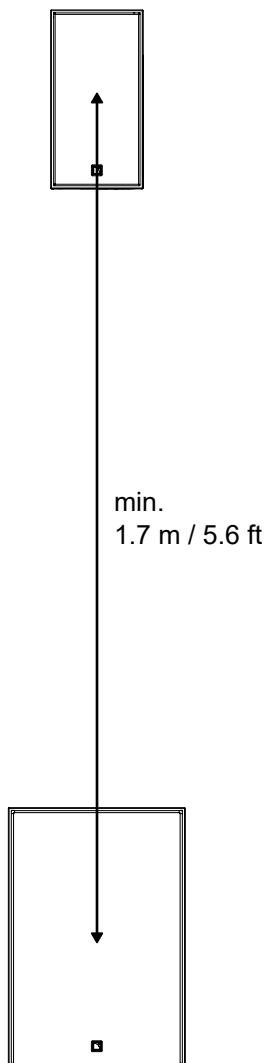
Pre-alignment delays

presets	pre-alignment delay values and polarity settings	
[X6i] + [SB6_100]	X6i = 0 ms <input style="float: right;" type="button" value="+"/>	SB6i = 1.2 ms <input style="float: right;" type="button" value="+"/>

Separated

With SB6i(r) and the [SB6_60] preset, the bandwidth of the X6i system is extended down to 29 Hz and the system contour is reinforced.

The [X6i_50] preset is recommended for X6i in this configuration.



Enclosure	X6i	SB6i(r)
Preset	[X6i_50]	[SB6_60]
Recommended ratio	1 X6i : 1 SB6i(r) with [X6i_50]	
Usable bandwidth (-10 dB)	29 Hz - 20 kHz	
System contour (peak low-end SPL)	+5 dB at 1 kHz with [X6i_50]	

i Contour value takes into account the effect of the wall and floor on the contour.

! **Delay values**
Do not forget to add the pre-alignment and geometric delays depending on the configuration.

Pre-alignment delays

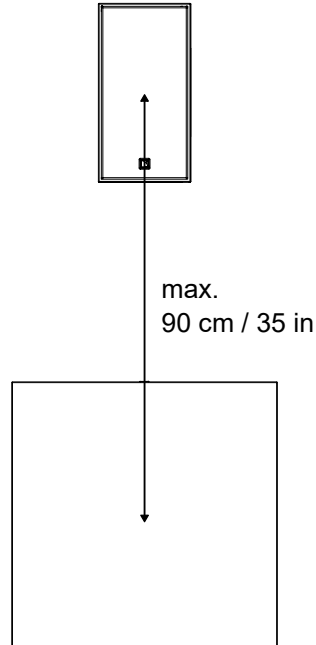
presets	pre-alignment delay values and polarity settings	
[X6i_50] + [SB6_60]	X6i = 0 ms <input type="button" value="+"/>	SB6i = 2 ms <input type="button" value="+"/>

X6i with SB10i(r)

Closely coupled

With SB10i(r) and the [SB10_200] preset, the bandwidth of the X6i system is extended down to 29 Hz and the system contour is reinforced.

The [X6i] preset is recommended for X6i in this configuration.



Enclosure	X6i	SB10i(r)
Preset	[X6i]	[SB10_200]
Recommended ratio	1 X6i : 1 SB10i(r)	
Usable bandwidth (-10 dB)	29 Hz - 20 kHz	
System contour (peak low-end SPL)	+12 dB at 1 kHz with [X6i]	



Contour value takes into account the effect of the wall and floor on the contour.



Delay values

Do not forget to add the pre-alignment and geometric delays depending on the configuration.

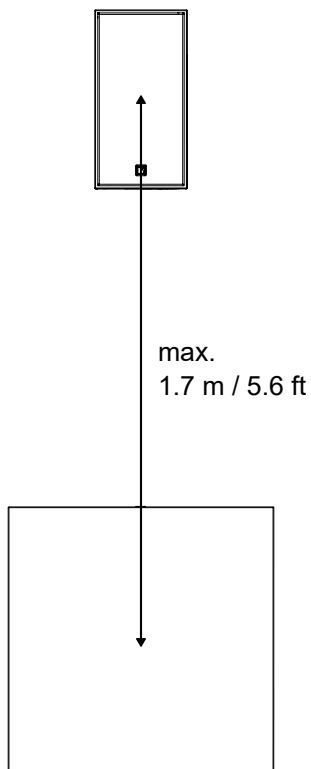
Pre-alignment delays

presets	pre-alignment delay values and polarity settings	
[X6i] + [SB10_200]	X6i = 1.4 ms <input style="background-color: #cccccc;" type="button" value="+"/>	SB10i = 0 ms <input style="background-color: #cc0000;" type="button" value="-"/>

Coupled

With SB10i(r) and the [SB10_100] preset, the bandwidth of the X6i system is extended down to 27 Hz and the system contour is reinforced.

The [X6i] preset is recommended for X6i in this configuration.



Enclosure	X6i	SB10i(r)
Preset	[X6i]	[SB10_100]
Recommended ratio	1 X6i : 1 SB10i(r)	
Usable bandwidth (-10 dB)	27 Hz - 20 kHz	
System contour (peak low-end SPL)	+8 dB at 1 kHz with [X6i]	

i Contour value takes into account the effect of the wall and floor on the contour.

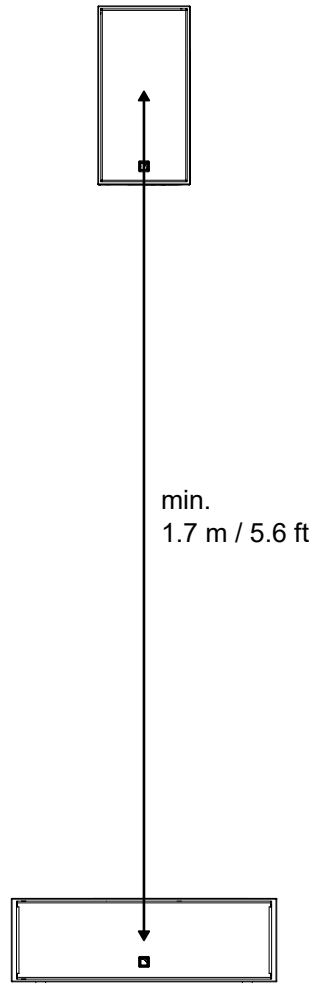
! **Delay values**
Do not forget to add the pre-alignment and geometric delays depending on the configuration.

i No pre-alignment delay values are required for this configuration.

Separated

With SB10i(r) and the [SB10_60] preset, the bandwidth of the X6i system is extended down to 25 Hz and the system contour is reinforced.

The [X6i_50] preset is recommended for X6i in this configuration.



Enclosure	X6i	SB10i(r)
Preset	[X6i_50]	[SB10_60]
Recommended ratio	1 X6i : 1 SB10i(r)	
Usable bandwidth (-10 dB)	27 Hz - 20 kHz	
System contour (peak low-end SPL)	+11 dB at 1 kHz with [X6i_50]	

i Contour value takes into account the effect of the wall and floor on the contour.

! **Delay values**
Do not forget to add the pre-alignment and geometric delays depending on the configuration.

Pre-alignment delays

presets	pre-alignment delay values and polarity settings	
[X6i_50] + [SB10_60]	X6i = 0 ms +	SB10i = 6.8 ms -

X6i stage monitor

Deployed as a stage monitor, an X6i system operates over the nominal bandwidth of the X6i enclosure.

The [X6i_MO] preset delivers a reference frequency response in stage monitoring applications.

The X6i enclosure is driven by the LA2Xi / LA4X / LA7.16i / LA12X amplified controllers.



Preset	[X6i_MO]
Usable bandwidth (-10 dB)	65 Hz - 20 kHz

Low-latency preset

A low-latency preset is available for the X6i enclosure used as a monitor ([X6i_MO]). It reduces latency from 3.84 ms down to 1.18 ms (LA7.16i) and 0.84 ms (LA2Xi / LA4X / LA12X).

To combine the monitor with a subwoofer:

- on 4-channel amplified controllers, create a custom low-latency preset
- on 16-channel amplified controllers, select the low-latency (*_MO) preset for the subwoofer

Refer to the **LA Network Manager Help** for more information.

Paired X6i monitors with LFC

The Low Frequency Contour (LFC) tool implemented in LA Network Manager can compensate for coupling effects between closely operating monitors. LFC allows to adjust the frequency response curve to obtain the desired low frequency contour.

For paired X6i monitors, enter the following parameters to obtain the reference response curve of a single enclosure:

	LF Contour	
FREQ/RATIO	180	N/A
GAIN	-3.0	

For more information about LFC, refer to the **LA Network Manager Help** (section: Group Control Panel) and to the **Array Morphing** white paper, available on www.l-acoustics.com.

Rigging procedures

X6i mechanical configurations overview

Use the following tables to choose the appropriate mechanical configuration based on the deployment parameters. Each configuration links to the corresponding procedure.

⚠ Risk of injury or product damage

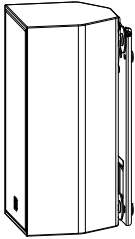
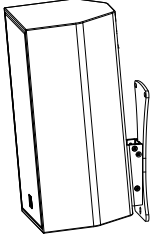
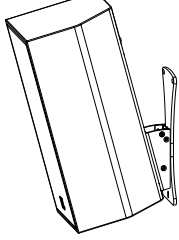
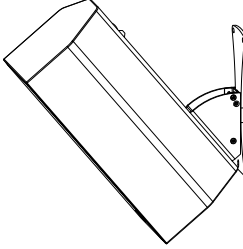
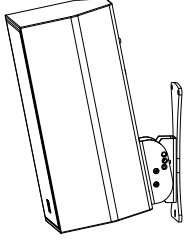
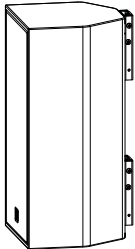
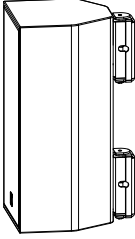

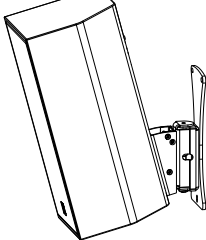
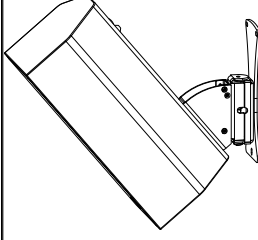
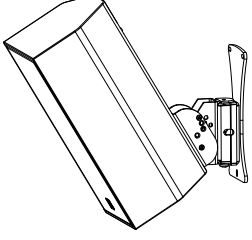
This manual describes all allowed mechanical configurations with X6i and its accessories. Do not attempt to use these products outside of their intended use.

i Deployment parameter definitions

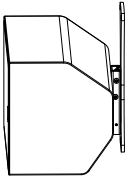
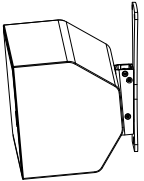
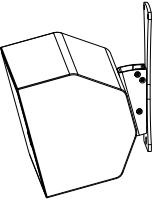
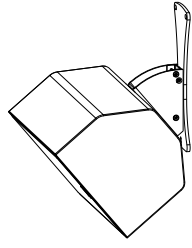
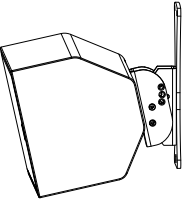
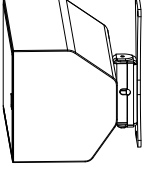
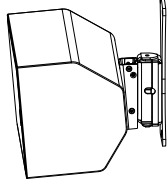
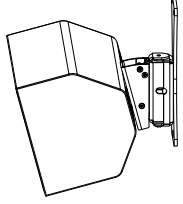
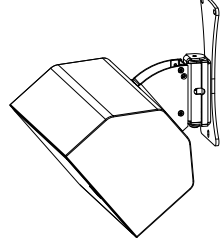
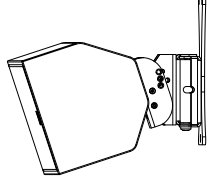
Site angle ("tilt"): Physical deployment parameter that refers to the position of the source as the elevation angle in the vertical dimension.

Azimuth angle ("pan"): Physical deployment parameter that refers to the position of the source as the off-axis angle in the horizontal dimension.


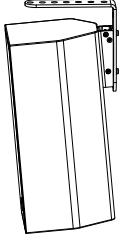
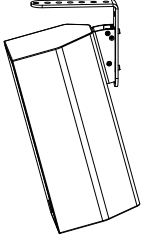
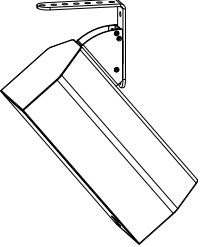
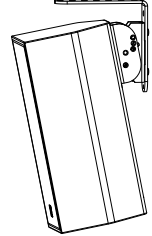
X6i wall-mounted vertically

with pan?	site angle				
	0°	-5°	-15°	-40°	0° to -40°
no	<p>X6i-onCW (p.50)</p> 	<p>TILT-SUPPORT + TILT5 (p.60)</p> 	<p>TILT-SUPPORT + TILT15 (p.60)</p> 	<p>TILT-SUPPORT + TILT40 (p.60)</p> 	<p>TILT-SUPPORT + TILT (p.66)</p> 
	<p>WALLx2 (p.55)</p> 				
yes	<p>PANx2 (p.72)</p> 	<p>TILT-SUPPORT + PAN + TILT5 (p.77)</p> 	<p>TILT-SUPPORT + PAN + TILT15 (p.77)</p> 	<p>TILT-SUPPORT + PAN + TILT40 (p.77)</p> 	<p>TILT-SUPPORT + PAN + TILT (p.84)</p> 

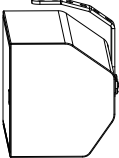
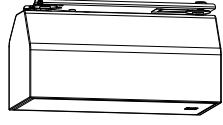
X6i wall-mounted horizontally

with pan?	site angle				
	0°	-5°	-15°	-40°	0° to -40°
no	<p>TILT-SUPPORT + WALL (p.92)</p> 	<p>TILT-SUPPORT + TILT5 (p.97)</p> 	<p>TILT-SUPPORT + TILT15 (p.97)</p> 	<p>TILT-SUPPORT + TILT40 (p.97)</p> 	<p>TILT-SUPPORT + TILT (p.102)</p> 
yes	<p>TILT-SUPPORT + PAN (p.109)</p> 	<p>TILT-SUPPORT + PAN + TILT5 (p.114)</p> 	<p>TILT-SUPPORT + PAN + TILT15 (p.114)</p> 	<p>TILT-SUPPORT + PAN + TILT40 (p.114)</p> 	<p>TILT-SUPPORT + PAN + TILT (p.122)</p> 

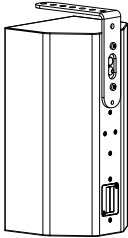
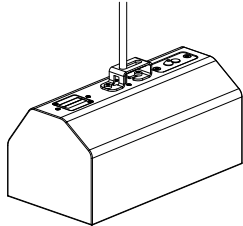
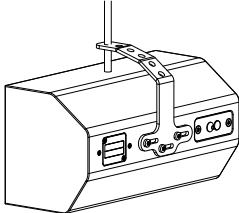
X6i ceiling-mounted vertically

site angle				
0°	-5°	-15°	-40°	0° to -40°
<p>VBAR (p.131)</p> 	<p>VBAR + TILT5 (p.138)</p> 	<p>VBAR + TILT15 (p.138)</p> 	<p>VBAR + TILT40 (p.138)</p> 	<p>VBAR + TILT (p.143)</p> 

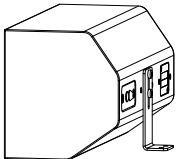
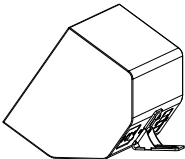
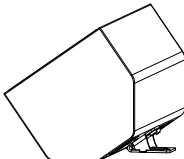
X6i ceiling-mounted horizontally

site angle	
0° to -35°	90° (downward-facing)
<p>X6i-HBAR (p.148)</p> 	<p>X6i-onCW (p.156)</p> 

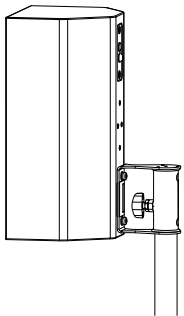
X6i truss-mounted or suspended by a threaded rod

orientation	site angle	
	18° to -19°	90° (downward-facing)
Vertical	<p>VBAR (p.131)</p> 	<p>CEILING-PENDANT (p.161)</p> 
Horizontal	<p>9° to -42°</p>	
	<p>X6i-HBAR (p.148)</p> 	

X6i ground-stacked

orientation	site angle		
	0°	35°	55°
Vertical	no rigging accessory	-	
Horizontal	<p>GROUND (p.163)</p> 	<p>GROUND35 (p.163)</p> 	<p>GROUND55 (p.163)</p> 

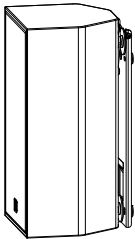

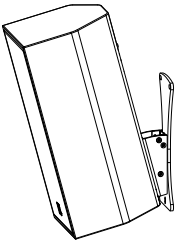
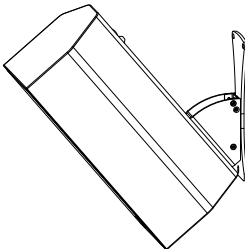
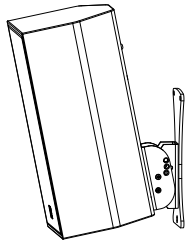
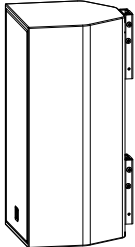
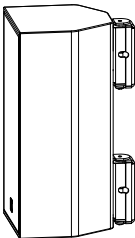
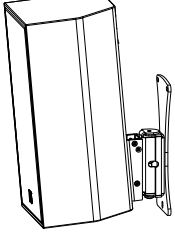
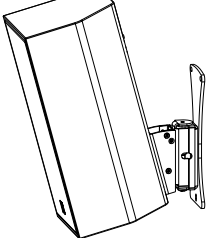
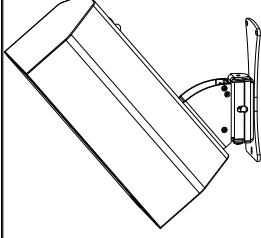
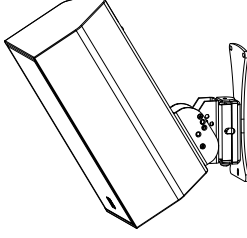
X6i pole-mounted

orientation	site angle
	0°
Vertical	<p>POLE (p.168)</p> 

Wall-mounting

Wall-mounting X6i vertically

Overview

with pan?	site angle				
	0°	-5°	-15°	-40°	0° to -40°
no	<p>X6i-onCW (p.50)</p> 	<p>TILT-SUPPORT + TILT5 (p.60)</p> 	<p>TILT-SUPPORT + TILT15 (p.60)</p> 	<p>TILT-SUPPORT + TILT40 (p.60)</p> 	<p>TILT-SUPPORT + TILT (p.66)</p> 
	<p>WALLx2 (p.55)</p> 				
yes	<p>PANx2 (p.72)</p> 	<p>TILT-SUPPORT + PAN + TILT5 (p.77)</p> 	<p>TILT-SUPPORT + PAN + TILT15 (p.77)</p> 	<p>TILT-SUPPORT + PAN + TILT40 (p.77)</p> 	<p>TILT-SUPPORT + PAN + TILT (p.84)</p> 

Wall-mounting X6i vertically with X6i-onCW

Type of deployment	wall-mounting
Rigging accessories	X6i-onCW
Additional material	4 compatible screws and anchors
Tools	torque screwdriver
	T20 Torx bit
	T30 Torx bit
Min. number of operators	1

! Secondary safety for flown, wall-mounted, or ceiling-mounted enclosures
 Use one insert at the back of the enclosure to implement a secondary safety.

! Risk of crushing injury
 Ensure that the wall or ceiling can support the load of the product.
 It is recommended to mount only on solid structures. If mounting on a hollow structure (such as a wall cavity), place anchoring points on the framework (wall studs, ceiling joists), or reinforce the mounting area.
 Select screws and anchors applicable to the wall or ceiling properties and to the load of the product. Prevent screws from loosening over time, using for example thread locker or lock washers.

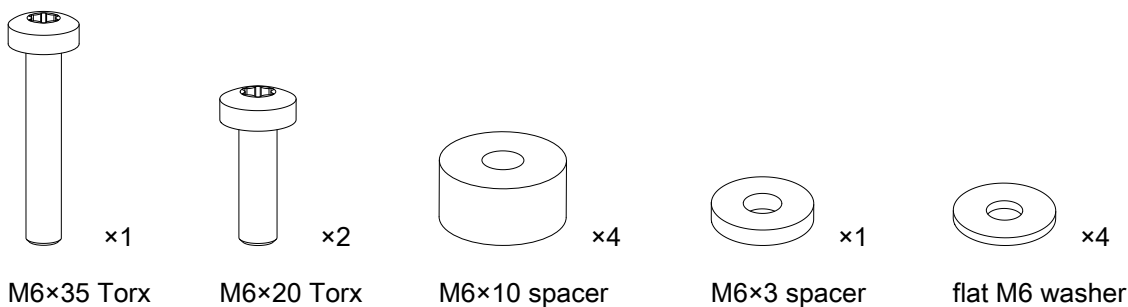
Specifications for screws and anchors

deployment	accessory	ultimate tensile load per screw (daN)	ultimate shear load per screw (daN)	screws quantity	mounting hole size	specific constraints
wall-mounting	X6i-onCW	4	3	4	Ø 6.4 mm / 0.25 in (slotted)	total thickness with washers: 13.10 mm / 0.51 in

! SPCON cannot be used in this configuration.

Screws and fasteners

from X6i-onCW



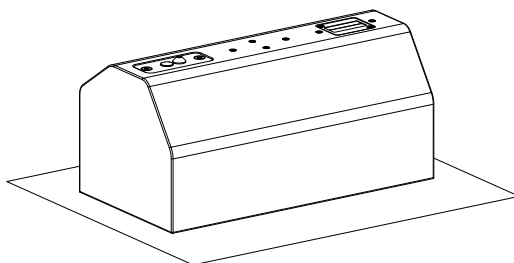
Assembly

About this task

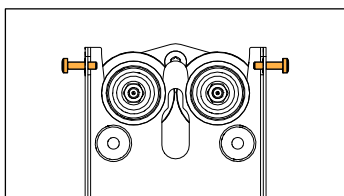
! For this configuration, the speaker cable must be run inside the wall or ceiling.

Prerequisite

Place X6i on its front face on a clean flat surface.



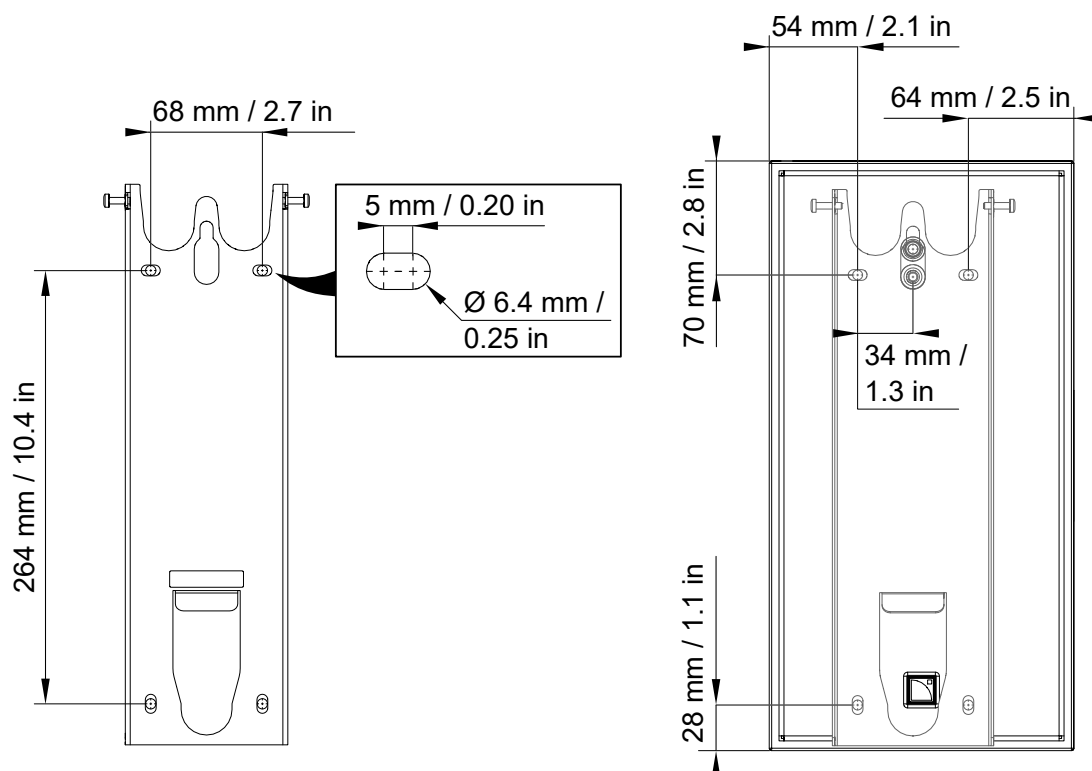
Make sure that the X6i-onCW safety screws are present and loosened.



Procedure

! Make sure to leave enough space between the walls and the sides of the rigging element to access the screw(s) when the enclosure is mounted.

1. Drill holes in the wall for the anchors and for the cable exit(s).

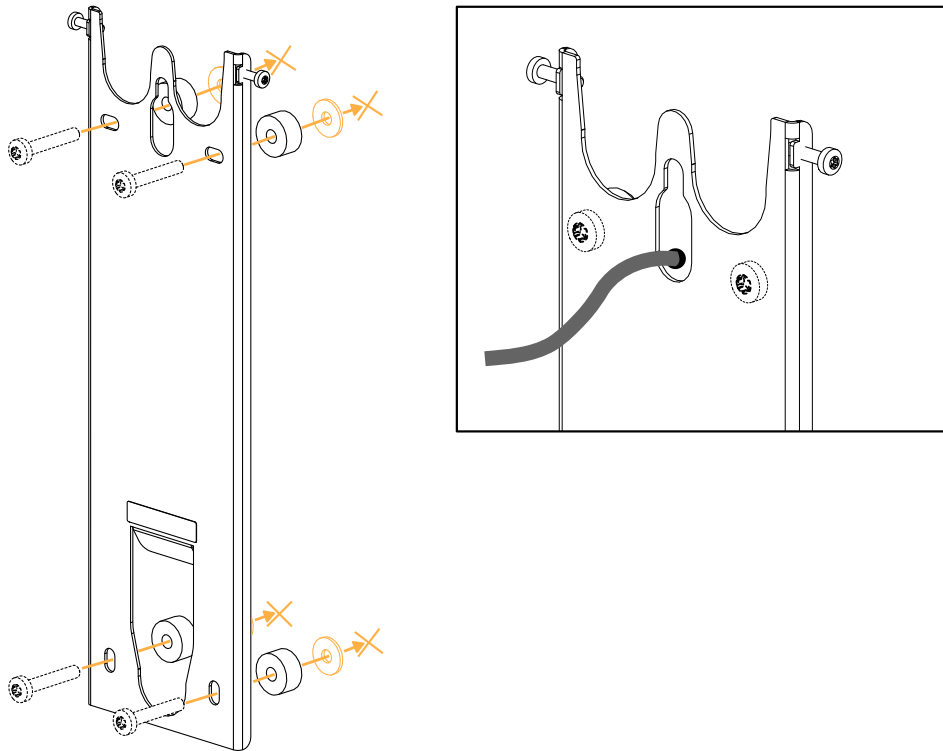


2. Run the speaker cable inside the wall or ceiling.

3. Secure the surface-mounting plate to the wall, using the four M6×10 spacers.

If the surface is uneven, adjust with the flat M6 washers.

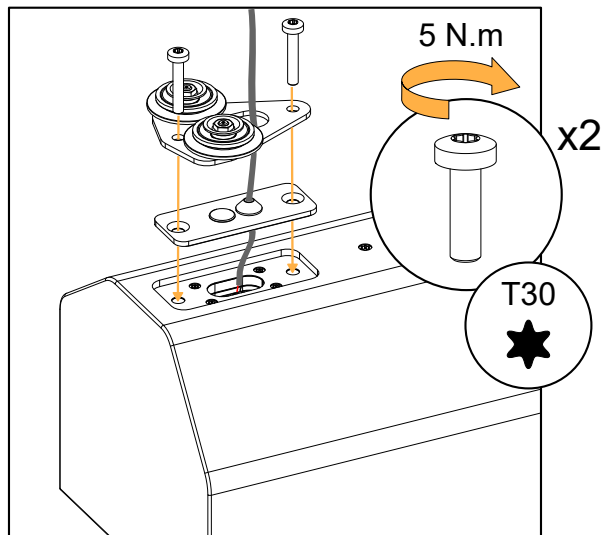
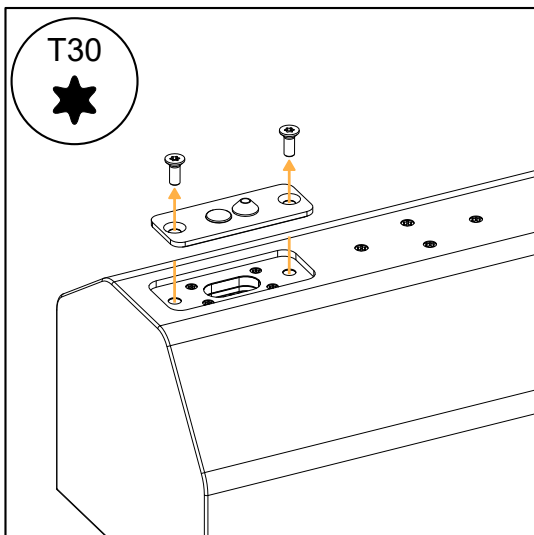
Run the cable through the top hole of the surface-mounting plate.



4. Secure the two top silent blocks to X6i:

- a) Remove the connector sealing plate (if present) or the placeholder screws.
- b) Run the cable through the enclosure-mounting plate and through the connector sealing plate.
- c) Connect the cable to the X6i terminal block. Refer to [Cabling X6i](#) (p.172).
- d) Secure the enclosure-mounting plate and the connector sealing plate to X6i.

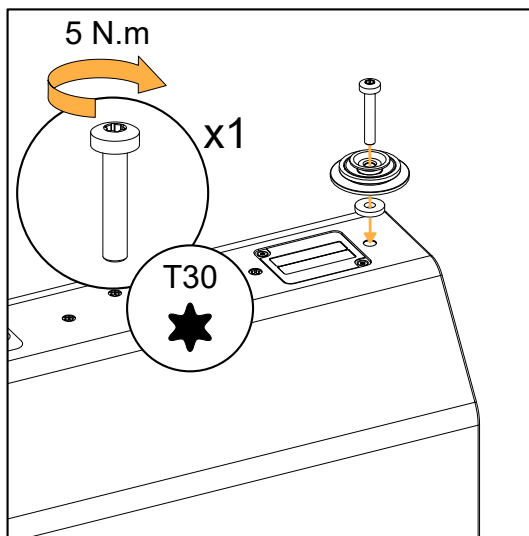
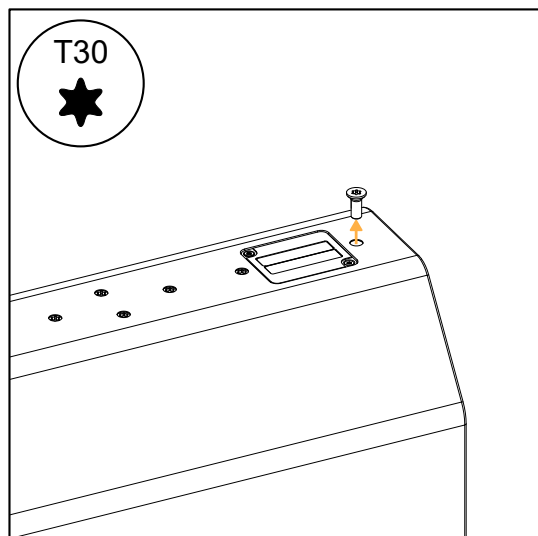
Use the two M6×20 Torx screws.



5. Secure the bottom silent block to X6i:

- a) Remove the placeholder screw at the bottom of X6i.
- b) Secure the silent block and the M6×3 spacer at the bottom of the enclosure.

Use the M6×30 Torx screw.

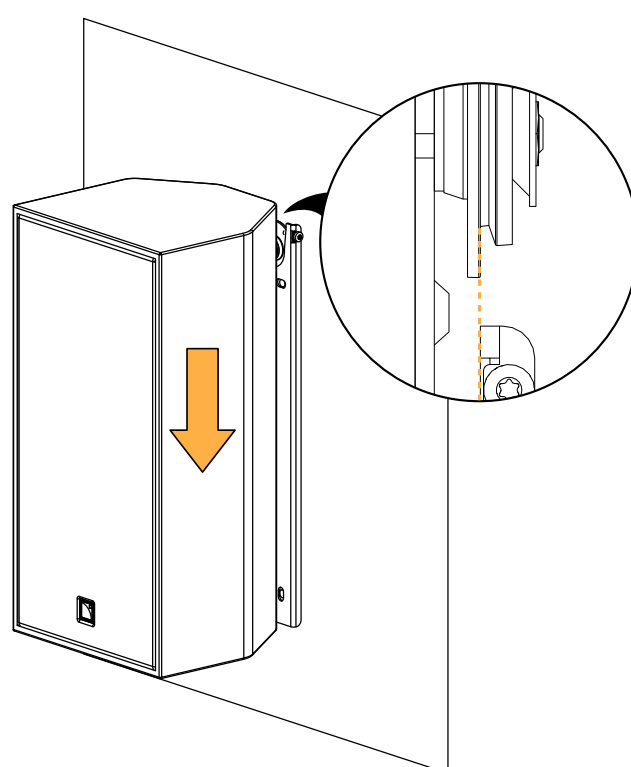
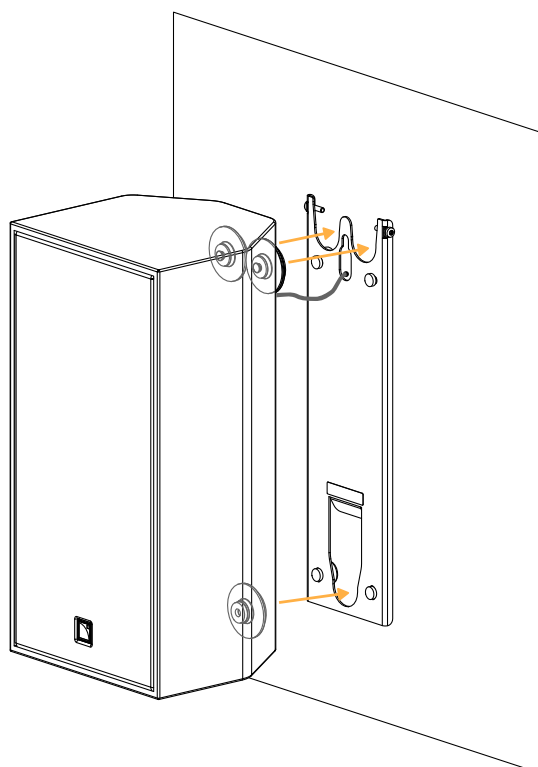


Risk of crushing injury

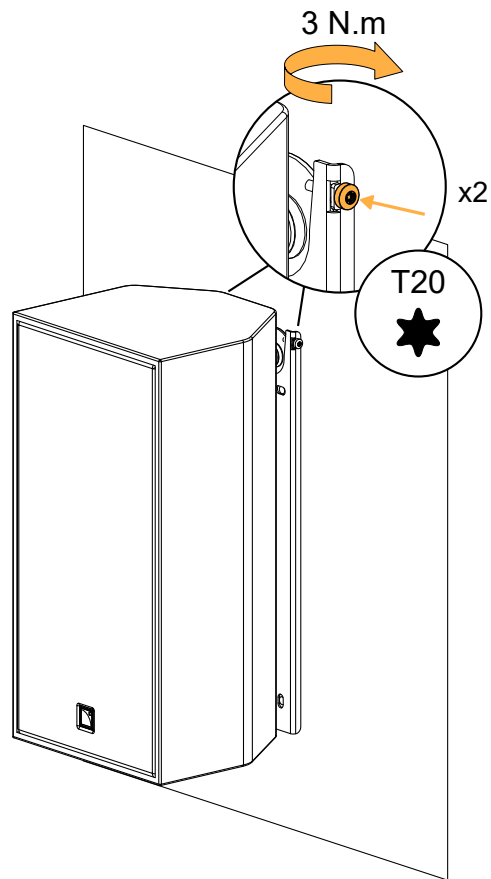
This step requires two operators.

6. Mount X6i on the wall:

- a) Align the silent blocks with the surface-mounting plate cutouts.
- b) Push the assembly towards the bottom of X6i.



7. Tighten the safety screws on both sides and make sure the assembly is stable.



Wall-mounting X6i vertically with WALLx2

Type of deployment	wall-mounting
Rigging accessories	WALLx2
Additional material	4 compatible screws and anchors
Tools	torque screwdriver
	T20 Torx bit
	T30 Torx bit
Min. number of operators	1



Secondary safety for flown, wall-mounted, or ceiling-mounted enclosures

Use one insert at the back of the enclosure to implement a secondary safety.



Risk of crushing injury

Ensure that the wall or ceiling can support the load of the product.

It is recommended to mount only on solid structures. If mounting on a hollow structure (such as a wall cavity), place anchoring points on the framework (wall studs, ceiling joists), or reinforce the mounting area.

Select screws and anchors applicable to the wall or ceiling properties and to the load of the product. Prevent screws from loosening over time, using for example thread locker or lock washers.

Specifications for screws and anchors

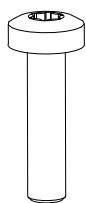
deployment	accessory	ultimate tensile load per screw (daN)	ultimate shear load per screw (daN)	screws quantity	mounting hole size	specific constraints
wall-mounting	WALLx2	4	3	4	Ø 5.2 mm / 0.20 in	maximum screw head size: Ø 11 mm / 0.43 in



SPCON cannot be used in this configuration.

Screws and fasteners

from WALLx2



x4

M6×25 Torx



x4

M5 tapered spacer

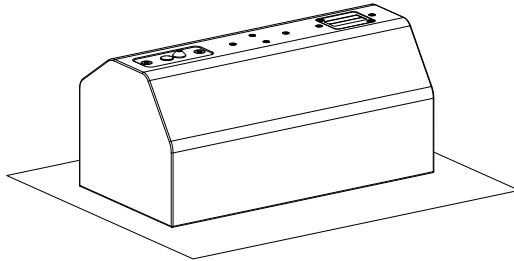
Assembly

About this task

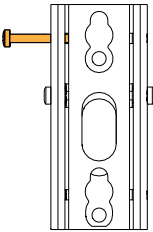
! For this configuration, the speaker cable must be run inside the wall.

Prerequisite

Place X6i on its front face on a clean flat surface.



Make sure that the WALLx2 safety screws are present and loosened.

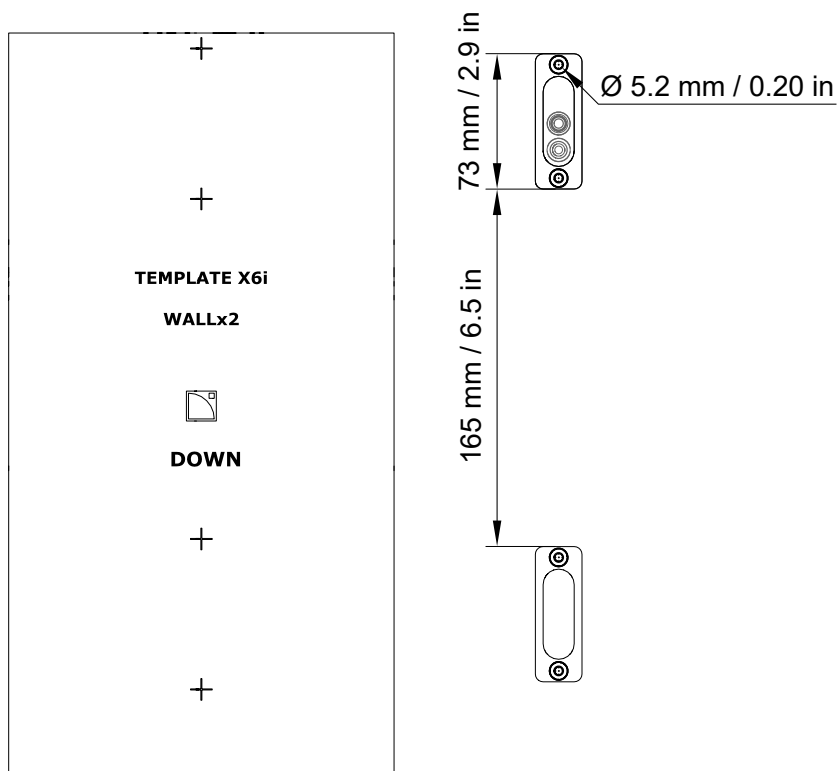


Procedure

! Make sure to leave enough space between the walls and the sides of the rigging element to access the screw(s) when the enclosure is mounted.

1. Drill holes in the wall for the anchors and for the cable exit.

Use the provided drilling template.

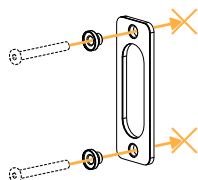
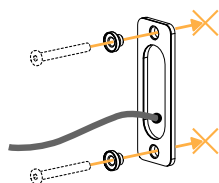


2. Run the speaker cable inside the wall.

3. Secure the two wall-mounting plates to the wall with the four tapered spacers.

The gaskets are facing away from the wall.

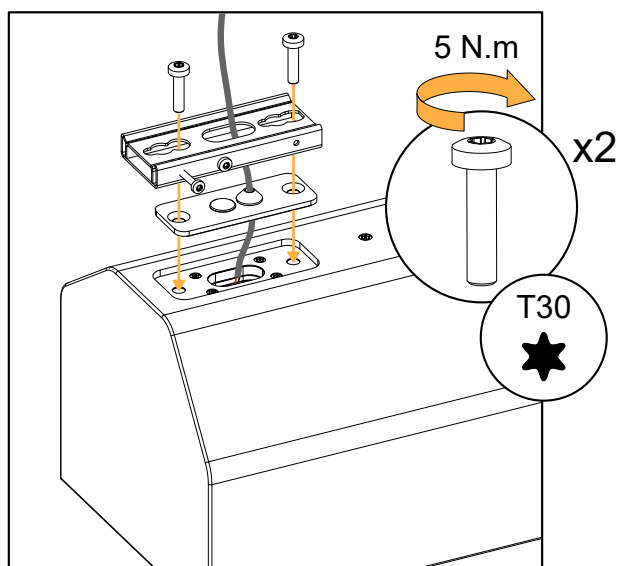
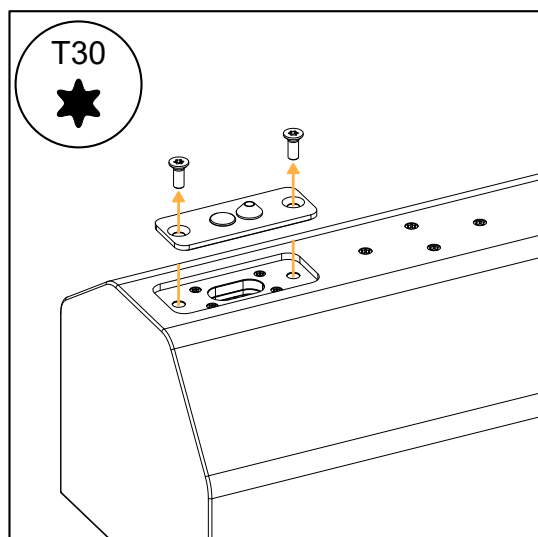
Run the speaker cable through the top wall-mounting plate.



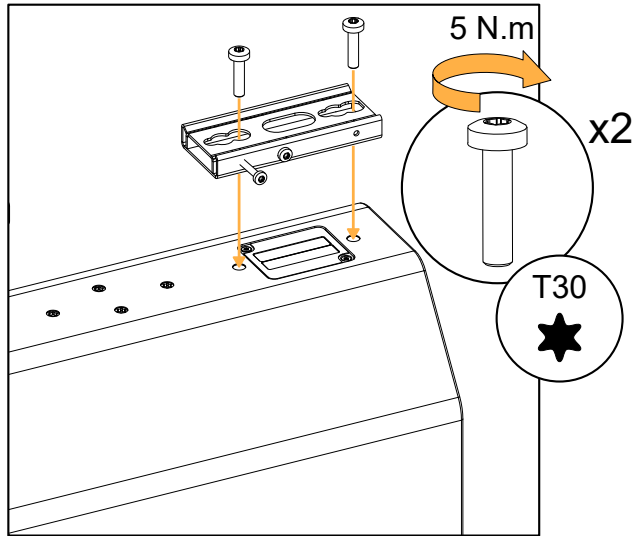
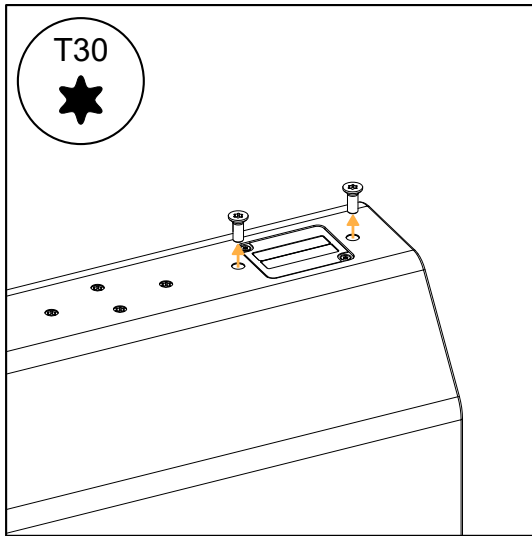
4. Secure the top WALLx2 part to X6i:

- Remove the connector sealing plate (if present) or the placeholder screws.
- Run the cable through the WALLx2 part and through the connector sealing plate.
- Connect the speaker cable to the X6i terminal block. Refer to [Cabling X6i](#) (p.172).
- Secure the WALLx2 part and the connector sealing plate to X6i.

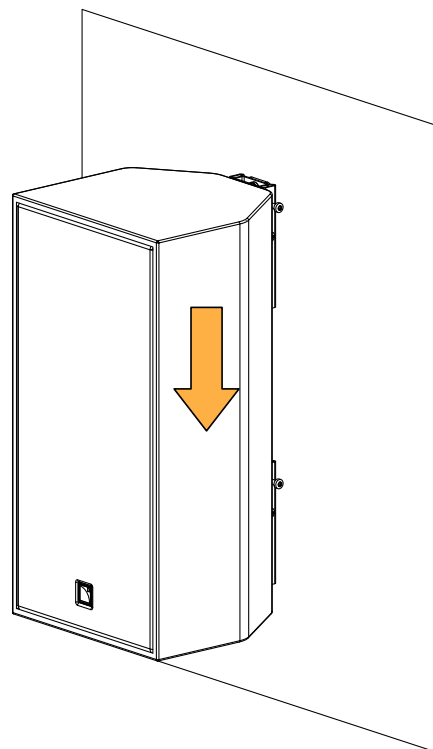
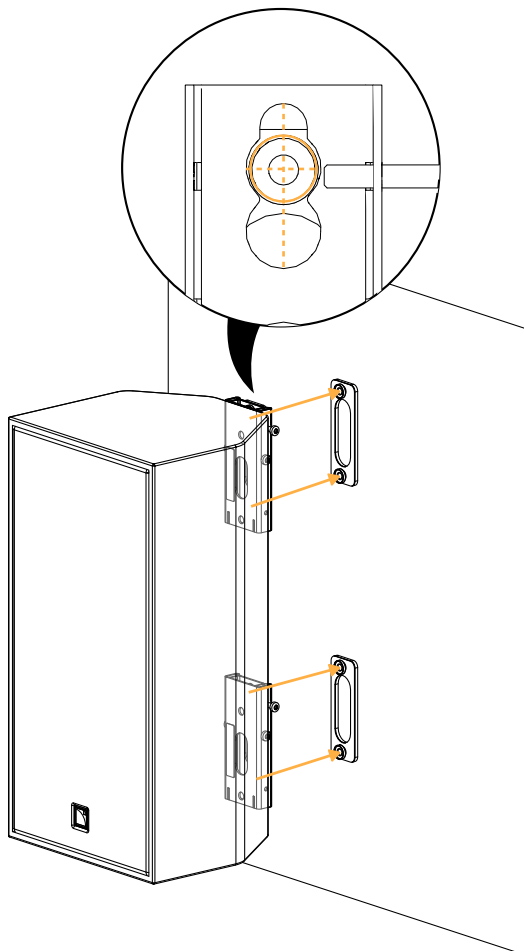
Use two M6×25 Torx screws.



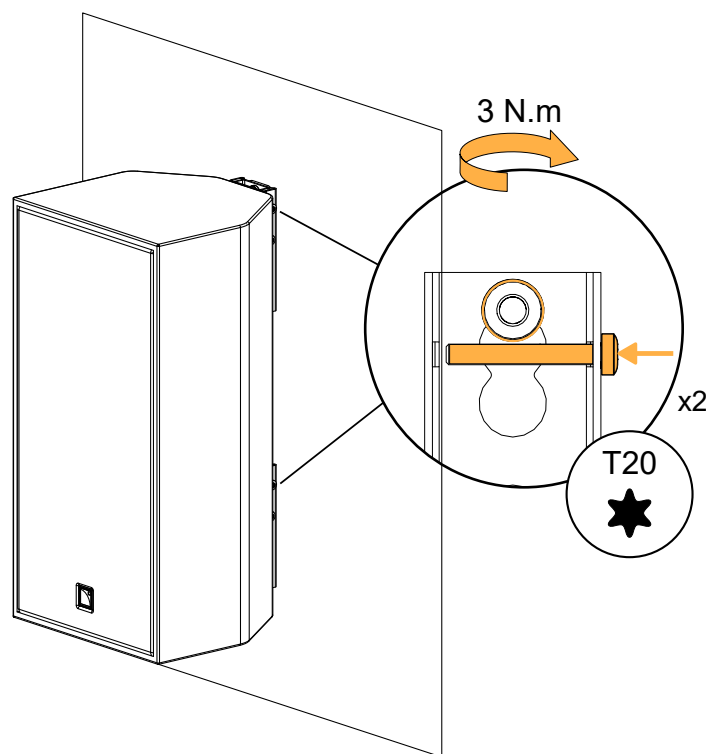
5. Secure the bottom WALLx2 part to X6i:
- a) Remove the two bottom placeholder screws.
 - b) Secure the WALLx2 part to X6i.
- Use two M6×25 Torx screws.



6. Mount X6i on the wall-mounting plates:
- a) Align the midpoints of the WALLx2 rear cutouts with the tapered spacers.
 - b) Push X6i downwards.



7. Tighten the two safety screws and make sure the assembly is stable.



Wall-mounting X6i vertically with TILT5/TILT15/TILT40

Type of deployment	wall-mounting
Rigging accessories	TILT-SUPPORT
	TILT5/TILT15/TILT40
Additional material	3 compatible screws and anchors
Tools	torque screwdriver
	screwdriver extension or angled screwdriver
	T20 Torx bit
	T30 Torx bit
	8 mm wrench or 8 mm hex socket
Min. number of operators	1

**Secondary safety for flown, wall-mounted, or ceiling-mounted enclosures**

Use one insert at the back of the enclosure to implement a secondary safety.

**Risk of crushing injury**

Ensure that the wall or ceiling can support the load of the product.

It is recommended to mount only on solid structures. If mounting on a hollow structure (such as a wall cavity), place anchoring points on the framework (wall studs, ceiling joists), or reinforce the mounting area.

Select screws and anchors applicable to the wall or ceiling properties and to the load of the product. Prevent screws from loosening over time, using for example thread locker or lock washers.

Specifications for screws and anchors

deployment	accessory	ultimate tensile load per screw (daN)	ultimate shear load per screw (daN)	screws quantity	mounting hole size	specific constraints
wall-mounting	TILT-SUPPORT + any accessory	6	6	3	Ø 6.4 mm / 0.25 in (slotted)	–

**Risk of falling objects**

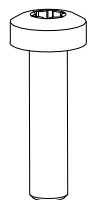
Do not use TILT, TILT5, TILT15, or TILT40 upside-down. These rigging accessories are designed for negative site angles only.

Screws and fasteners**from TILT-SUPPORT**

x2

M5 hex locknut

from TILT5/TILT15/TILT40



x2

M6x25 Torx



x2

M5 tapered spacer

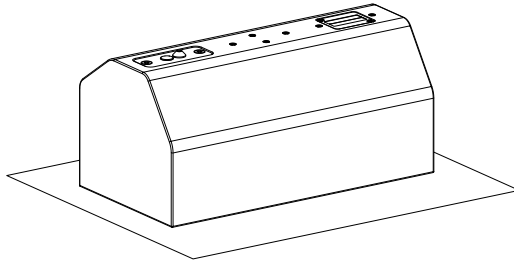
Assembly

About this task

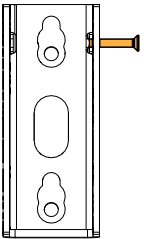
i In this procedure, TILTxx designates the fixed angle accessories TILT5, TILT15, and TILT40.

Prerequisite

Place X6i on its front face on a clean flat surface.



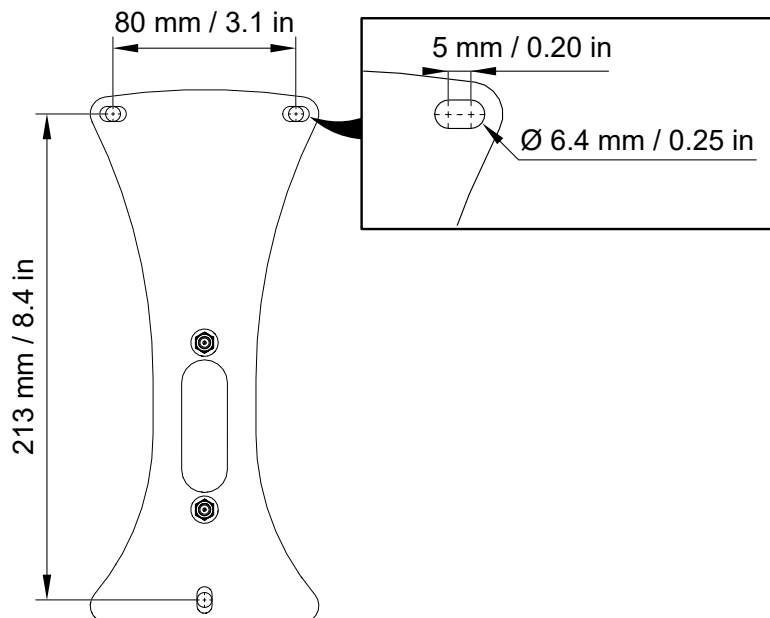
Make sure that the TILTxx safety screw is present and loosened.



Procedure

! Make sure to leave enough space between the walls and the sides of the rigging element to access the screw(s) when the enclosure is mounted.

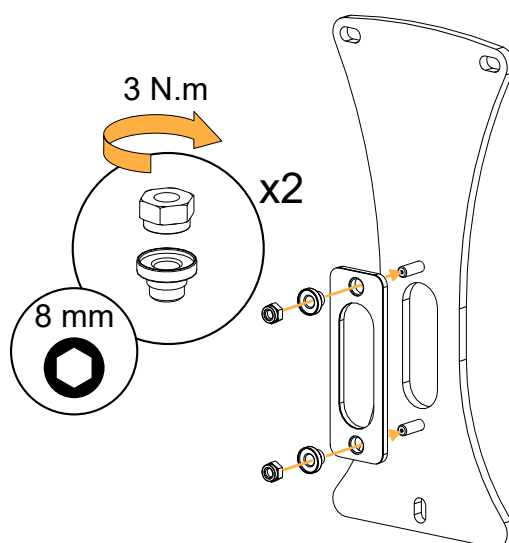
1. Drill holes in the wall for TILT-SUPPORT.



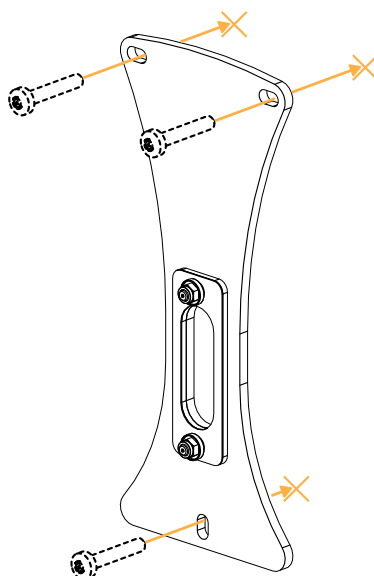
2. Assemble the wall-mounting plate and tapered spacers with TILT-SUPPORT.

Use the two M5 nuts.

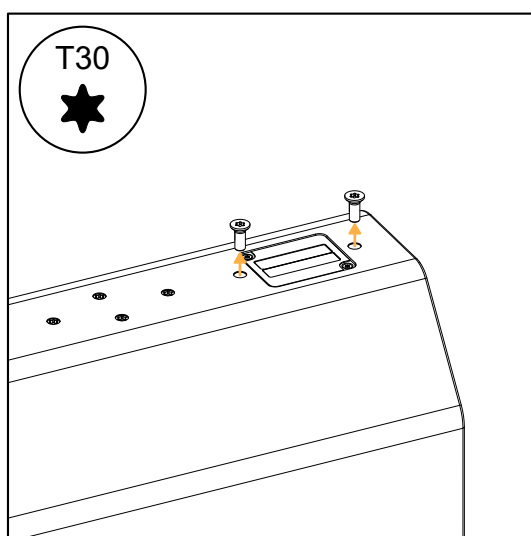
The wall-mounting plate gasket is facing away from TILT-SUPPORT.



3. Secure TILT-SUPPORT and the wall-mounting plate to the wall.



4. Remove the two placeholder screws at the bottom of X6i.

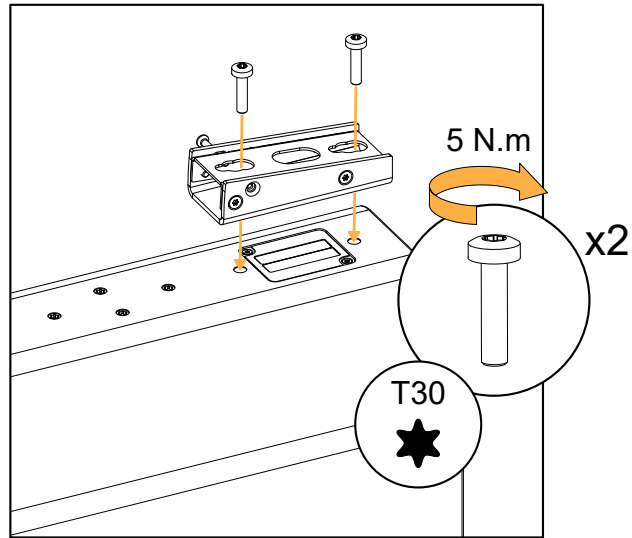


5. Secure TILTxx to X6i.

Use the two M6×25 Torx screws.



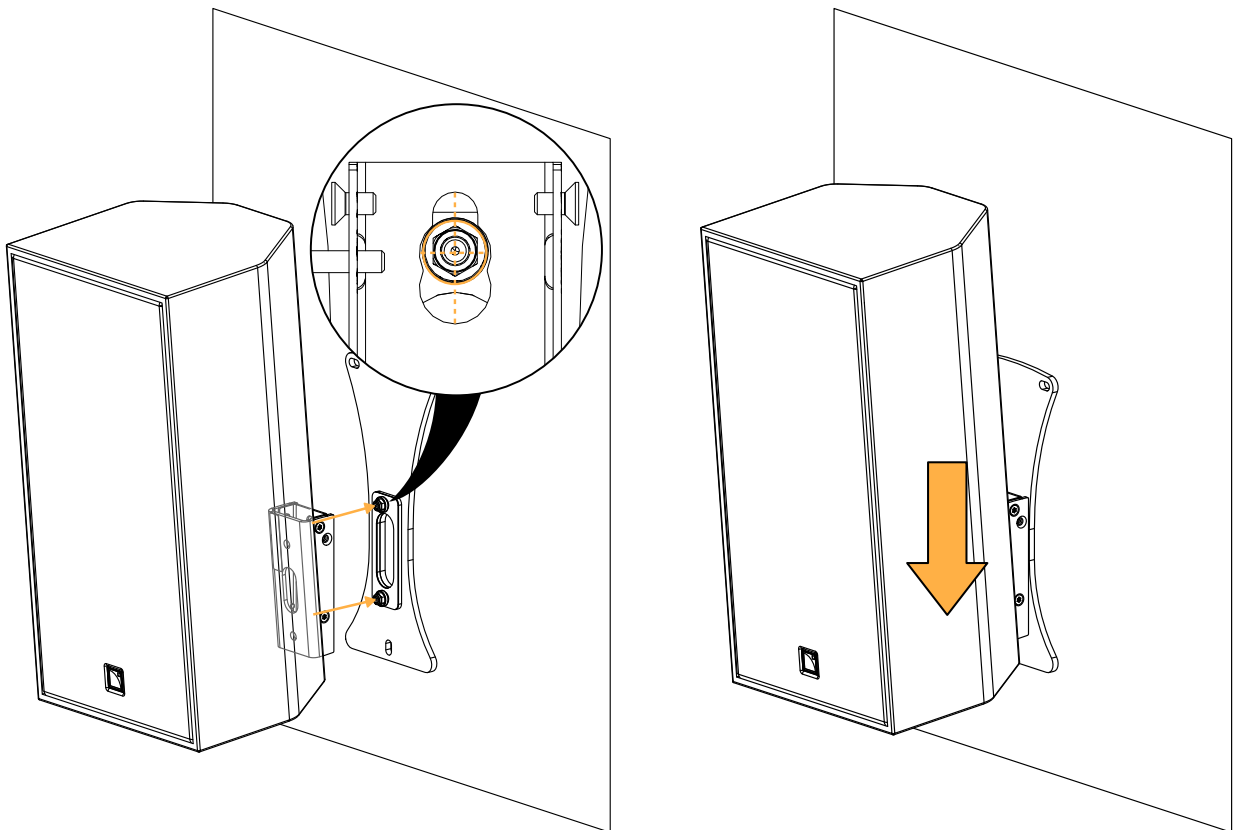
If the shank of the screwdriver collides with TILT40, use a screwdriver extension or an angled screwdriver to drive the screws.



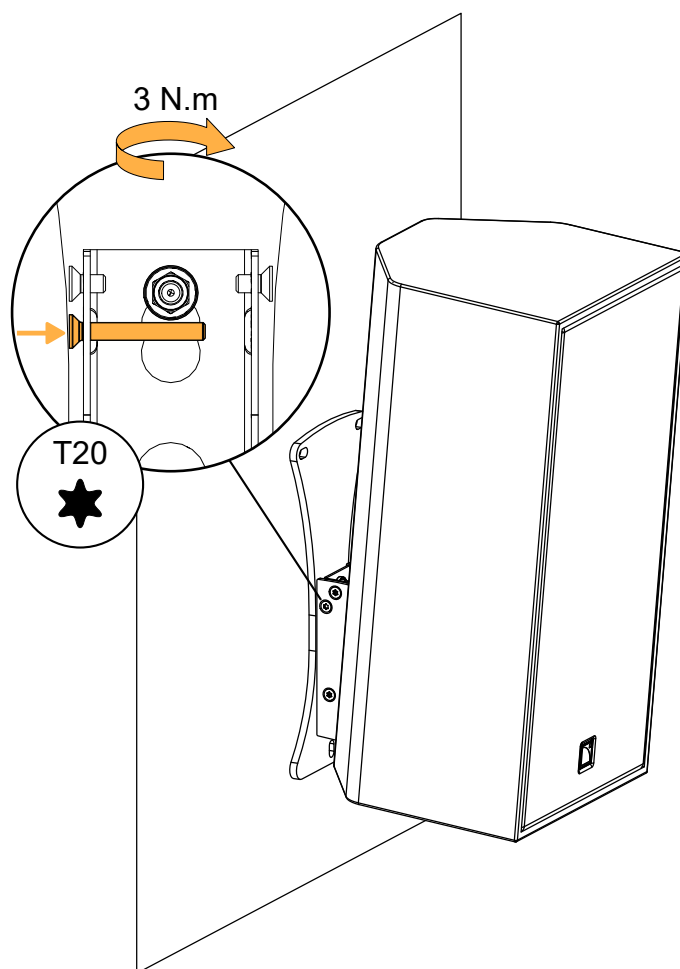
6. Prepare the cabling. Refer to [Cabling X6i](#) (p.172).

7. Mount X6i on the wall-mounting plate:

- a) Align the midpoints of the TILTxx rear cutouts with the tapered spacers.
- b) Push the assembly downwards.



8. Tighten the safety screw and make sure the assembly is stable.

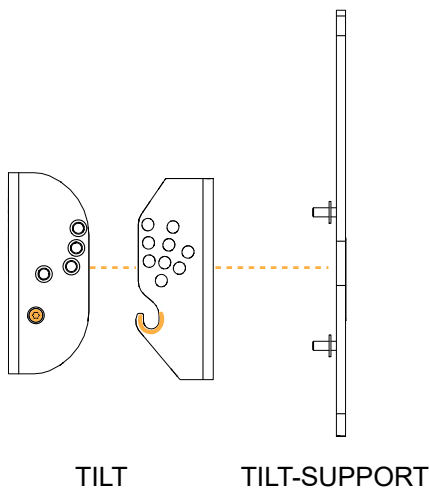


Wall-mounting X6i vertically with TILT

Type of deployment	wall-mounting
Rigging accessories	TILT-SUPPORT
	TILT
Additional material	3 compatible screws and anchors
Tools	torque screwdriver
	2 × T20 Torx bit
	T30 Torx bit
	8 mm wrench or 8 mm hex socket
Min. number of operators	2

Assembly overview

Pay attention to the position of the accessory parts throughout the procedure.



Secondary safety for flown, wall-mounted, or ceiling-mounted enclosures

Use one insert at the back of the enclosure to implement a secondary safety.

Risk of crushing injury

Ensure that the wall or ceiling can support the load of the product.

It is recommended to mount only on solid structures. If mounting on a hollow structure (such as a wall cavity), place anchoring points on the framework (wall studs, ceiling joists), or reinforce the mounting area.

Select screws and anchors applicable to the wall or ceiling properties and to the load of the product. Prevent screws from loosening over time, using for example thread locker or lock washers.

Specifications for screws and anchors

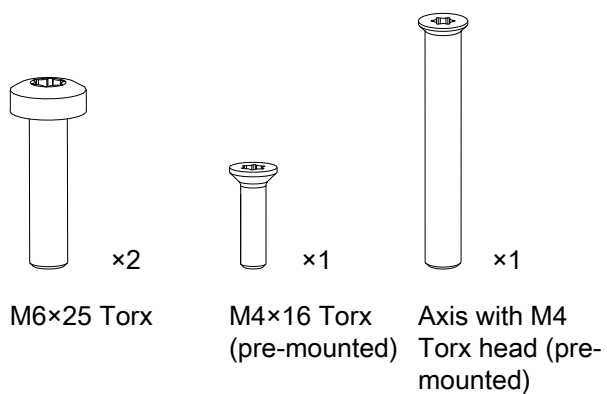
deployment	accessory	ultimate tensile load per screw (daN)	ultimate shear load per screw (daN)	screws quantity	mounting hole size	specific constraints
wall-mounting	TILT-SUPPORT + any accessory	6	6	3	Ø 6.4 mm / 0.25 in (slotted)	–

Risk of falling objects

Do not use TILT, TILT5, TILT15, or TILT40 upside-down. These rigging accessories are designed for negative site angles only.

Screws and fasteners**from TILT-SUPPORT**

M5 hex locknut thick plain washer Ø
5 mm

from TILT

M6×25 Torx

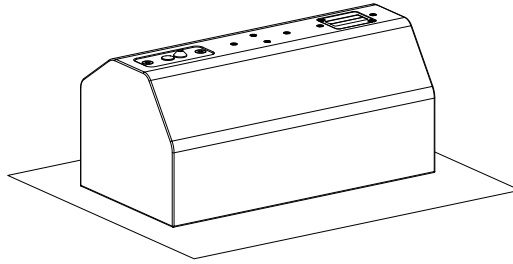
M4×16 Torx
(pre-mounted)

Axis with M4
Torx head (pre-
mounted)

Assembly

Prerequisite

Place X6i on its front face on a clean flat surface.

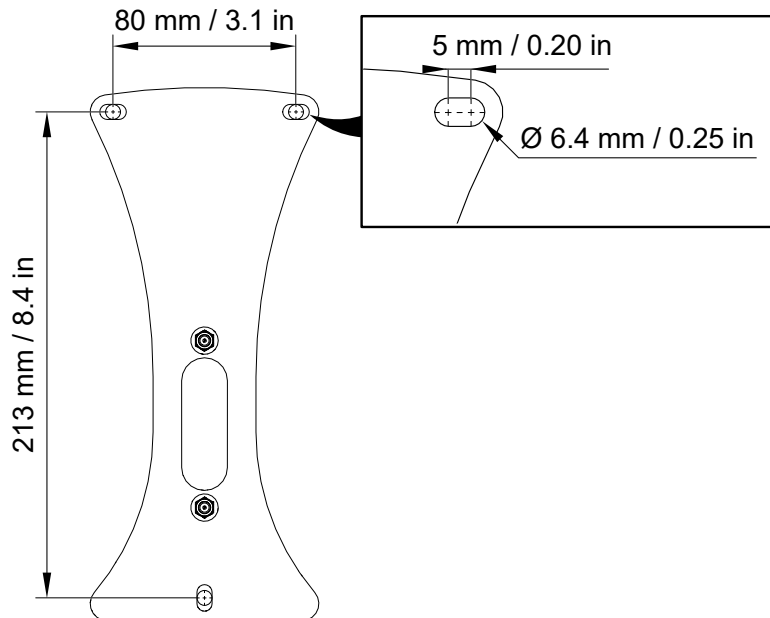


Procedure

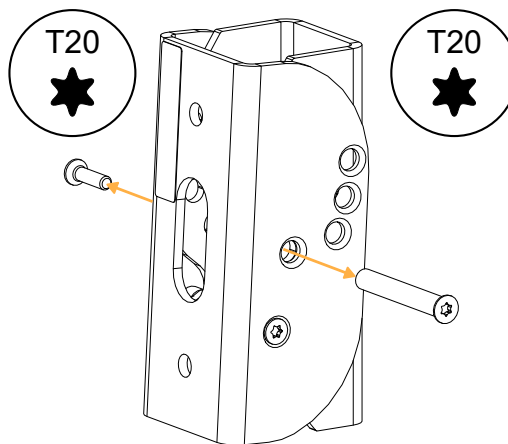


Make sure to leave enough space between the walls and the sides of the rigging element to access the screw(s) when the enclosure is mounted.

1. Drill holes in the wall for TILT-SUPPORT.

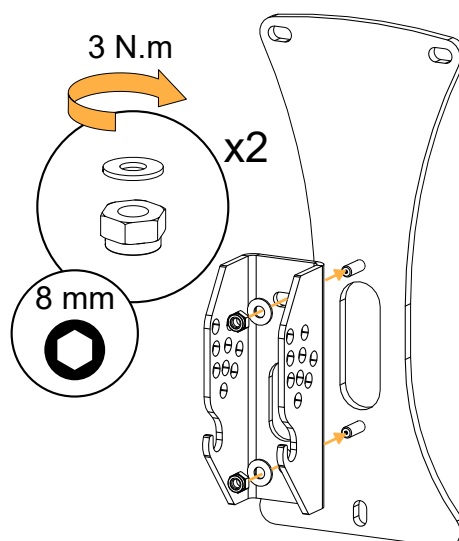
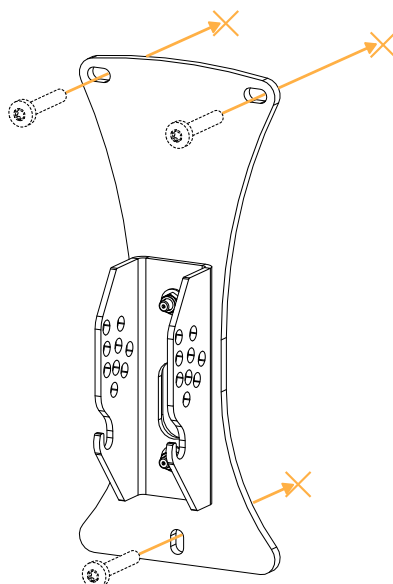


2. Disassemble the two TILT parts.



3. Assemble the TILT wall-mounting part with TILT-SUPPORT.

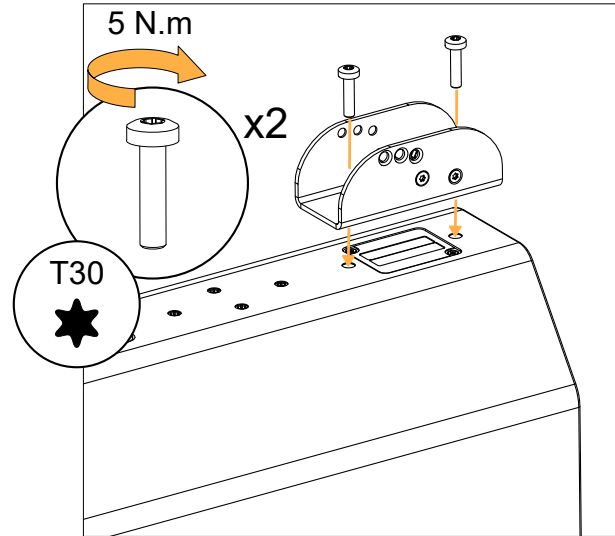
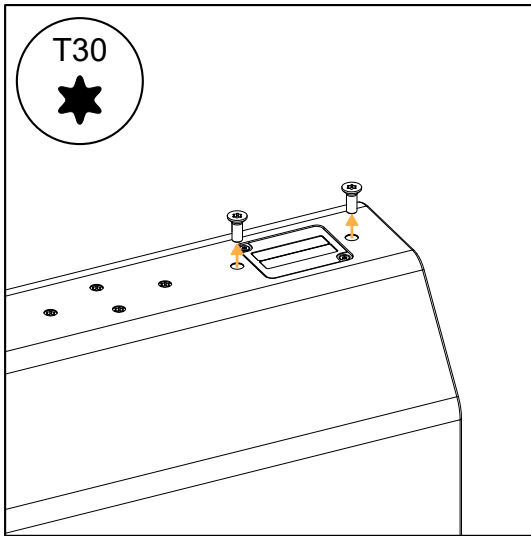
Use the two M5 nuts and washers.

**4. Secure TILT-SUPPORT and TILT to the wall.**

5. Secure TILT to X6i:

- a) Remove the two placeholder screws at the bottom of X6i.
- b) Secure the TILT enclosure-mounting part to X6i.

Use the two M6×25 Torx screws.



6. Prepare the cabling. Refer to [Cabling X6i](#) (p.172).



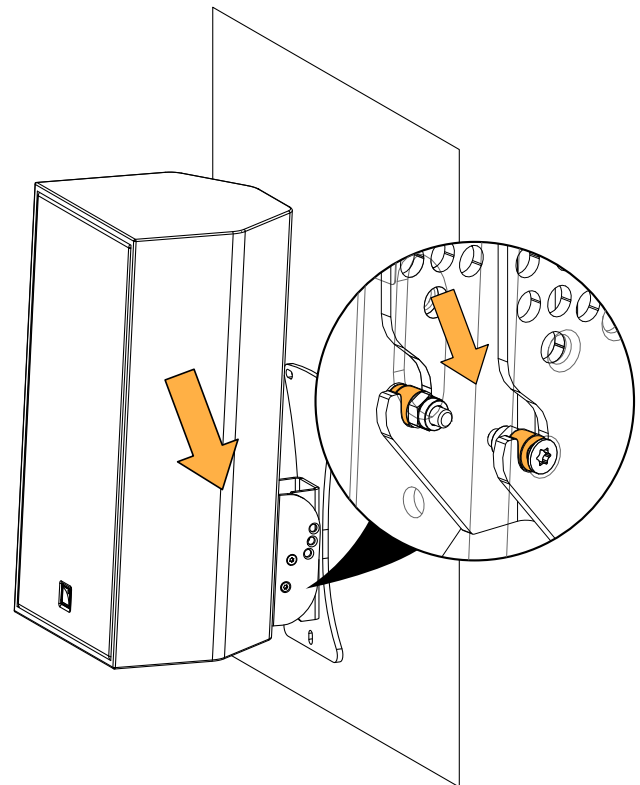
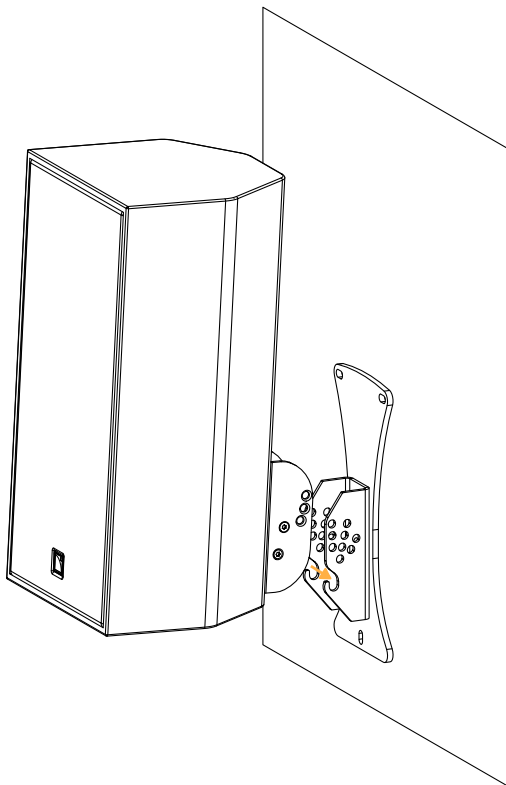
Risk of pinching fingers

Hold X6i from underneath when assembling the two TILT parts.

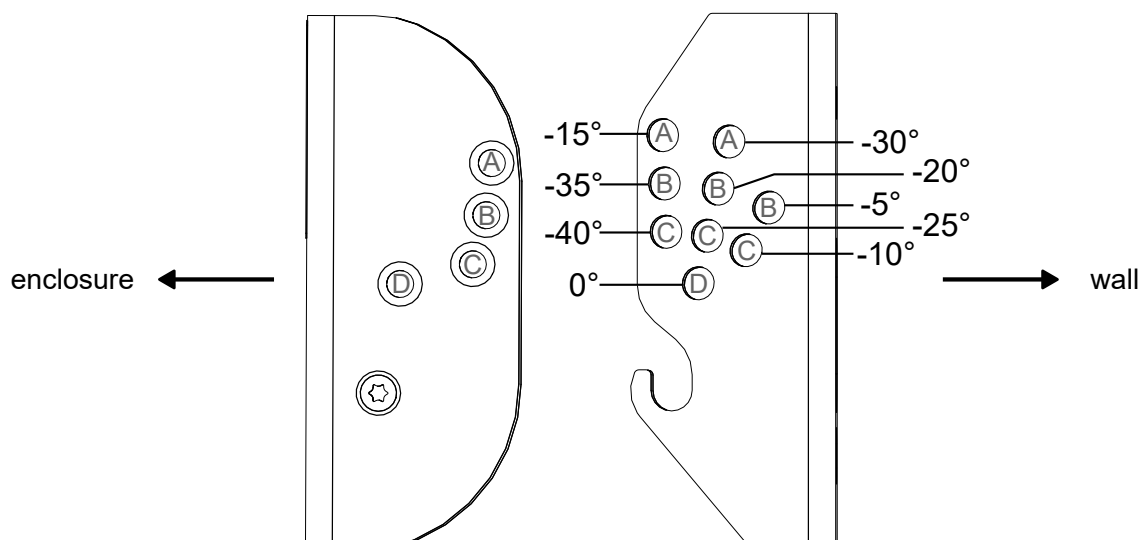
7. Mount X6i on the wall:

- a) Assemble the two TILT parts by fitting the indexing studs into the hooks.

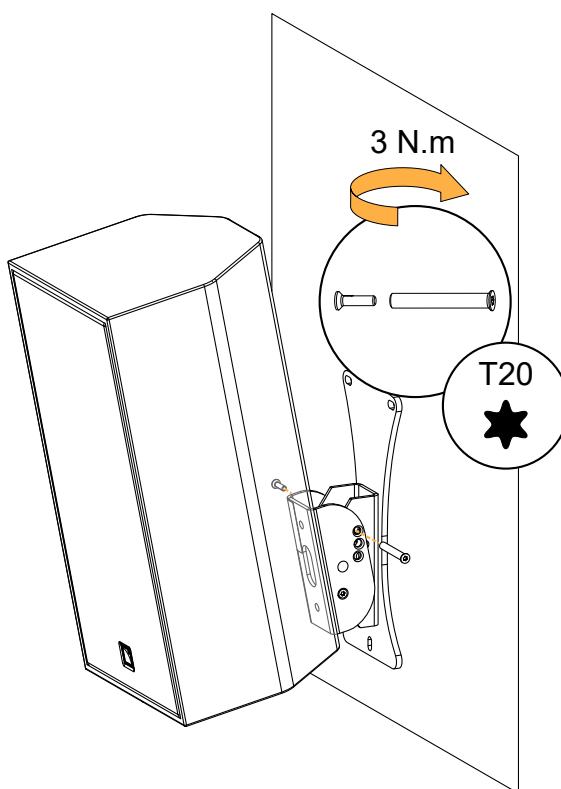
Make sure that the studs are pushed all the way into the hooks.



b) Rotate the assembly to select the site angle.



c) Drive the axis through the holes and secure it with the M4×16 Torx screw.
Make sure that the assembly is stable.



Wall-mounting X6i vertically with PANx2

Type of deployment	wall-mounting
Rigging accessories	PANx2
Additional material	4 compatible screws and anchors
Tools	torque screwdriver
	T30 Torx bit
	T40 Torx bit
Min. number of operators	1

! Secondary safety for flown, wall-mounted, or ceiling-mounted enclosures
Use one insert at the back of the enclosure to implement a secondary safety.

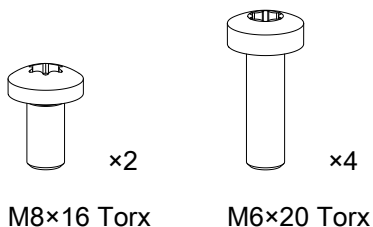
! Risk of crushing injury
Ensure that the wall or ceiling can support the load of the product.
It is recommended to mount only on solid structures. If mounting on a hollow structure (such as a wall cavity), place anchoring points on the framework (wall studs, ceiling joists), or reinforce the mounting area.
Select screws and anchors applicable to the wall or ceiling properties and to the load of the product. Prevent screws from loosening over time, using for example thread locker or lock washers.

Specifications for screws and anchors

deployment	accessory	ultimate tensile load per screw (daN)	ultimate shear load per screw (daN)	screws quantity	mounting hole size	specific constraints
wall-mounting	PANx2	4	3	4	Ø 6.4 mm / 0.25 in (slotted)	–

! Risk of falling objects
Do not use PAN or PANx2 upside-down.
Do not swap the wall-mounting part(s) and the enclosure-mounting part(s).

! SPCON cannot be used in this configuration.

Screws and fasteners*from PANx2*

Assembly

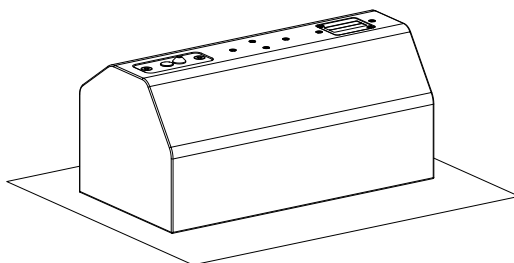
About this task



For this configuration, the speaker cable must be run inside the wall.

Prerequisite

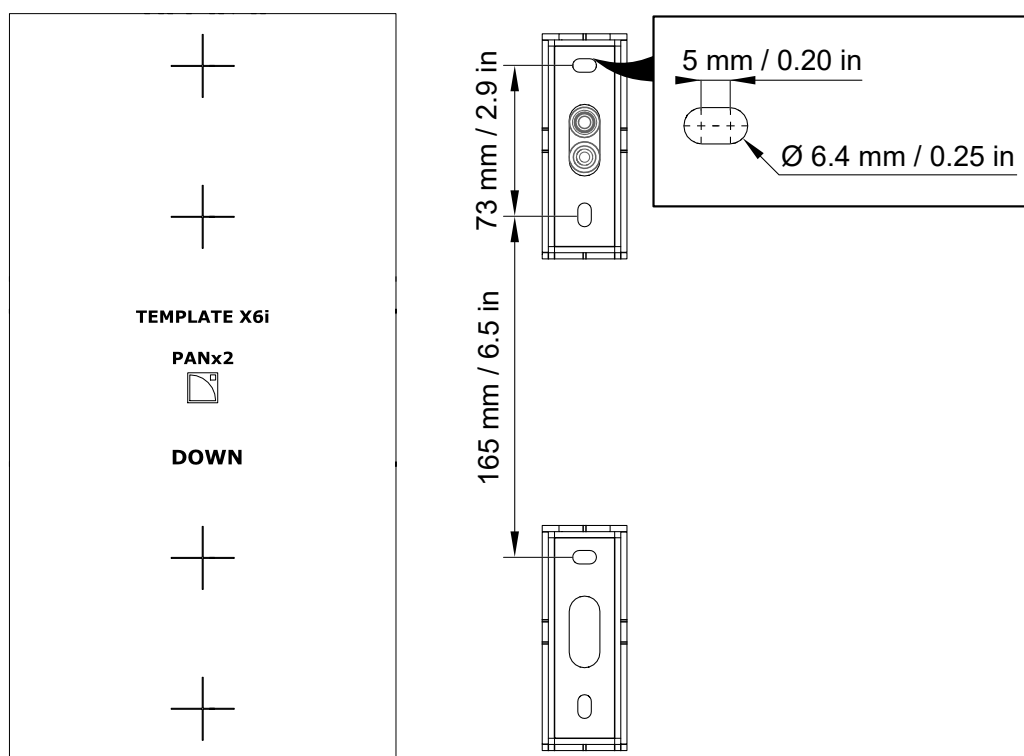
Place X6i on its front face on a clean flat surface.



Procedure

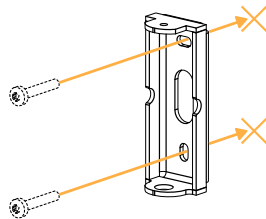
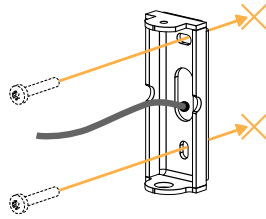
1. Drill holes in the wall for the anchors and for the cable exit.

Use the provided drilling template.



2. Run the speaker cable inside the wall.

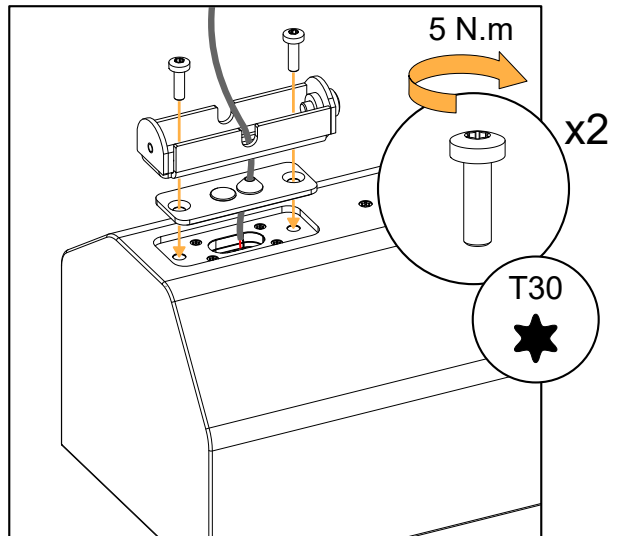
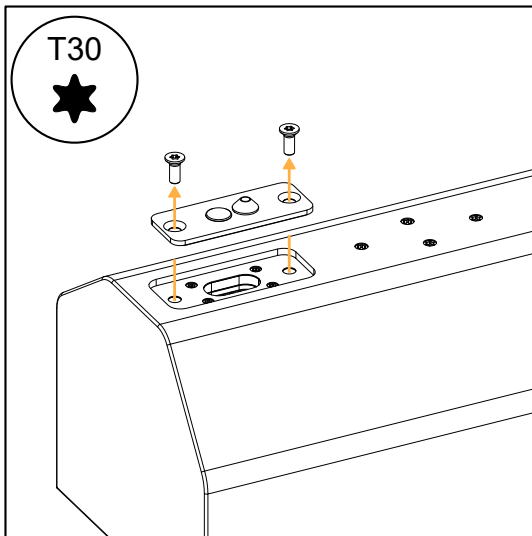
3. Secure the two PANx2 wall-mounting parts to the wall.



4. Secure the top PANx2 part to X6i:

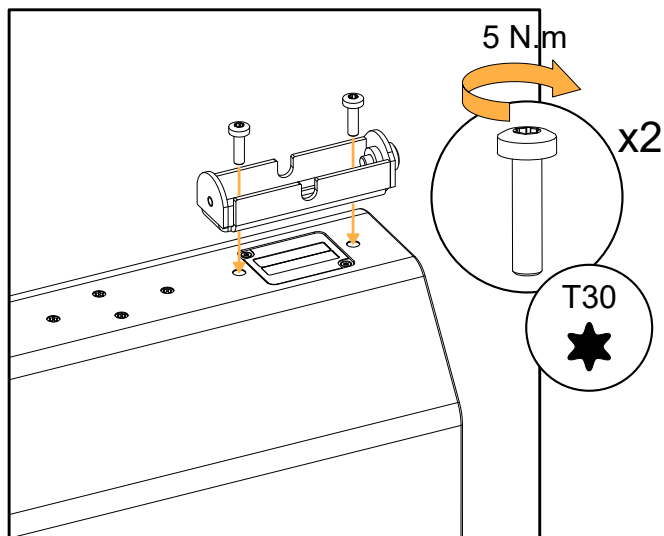
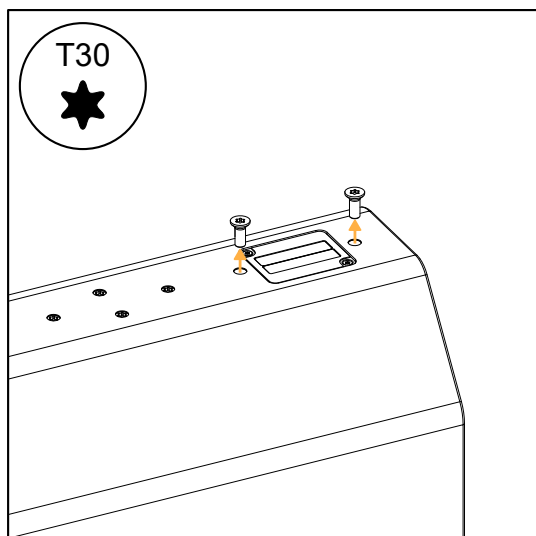
- a) Remove the connector sealing plate.
- b) Run the cable through the PANx2 part and through the connector sealing plate.
- c) Connect the cable to the X6i terminal block. Refer to [Cabling X6i](#) (p.172).
- d) Secure the PANx2 part and the connector sealing plate to X6i.

Use two M6×20 Torx screws.



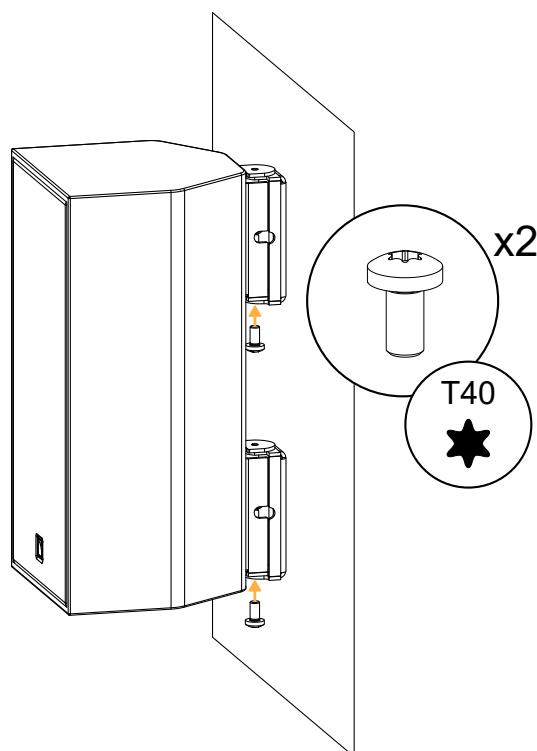
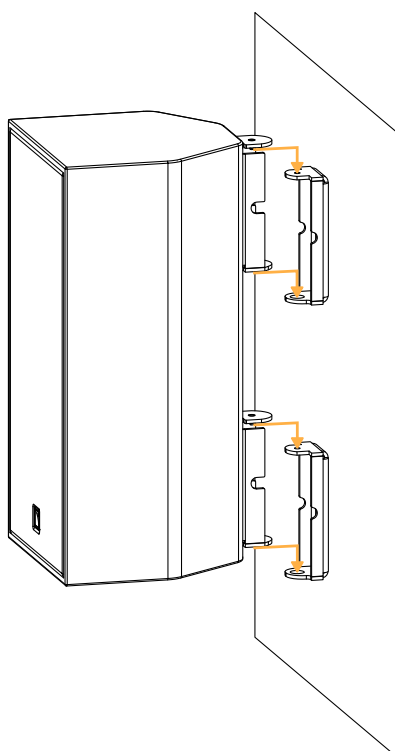
5. Secure the bottom PANx2 part to X6i:
 - a) Remove the two bottom placeholder screws.
 - b) Secure the PANx2 part to X6i.

Use two M6×20 Torx screws.

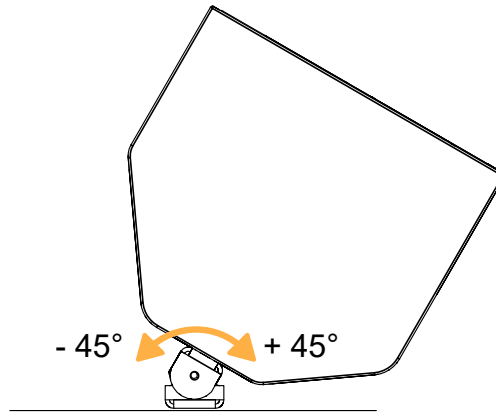


6. Mount the assembly on the wall-mounting parts:
 - a) Align the pins with the top holes and push the assembly downwards.
 - b) Drive the two M8×16 Torx screws from underneath the PANx2 parts.

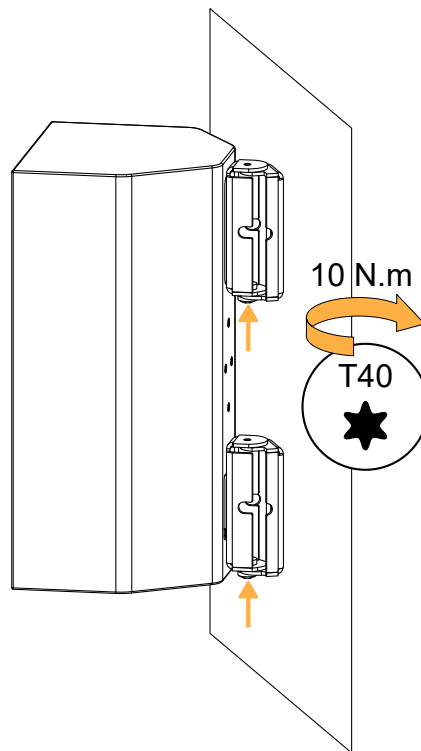
! Do not fully tighten the screws.



7. Rotate X6i to adjust the azimuth angle from -45° to $+45^{\circ}$.



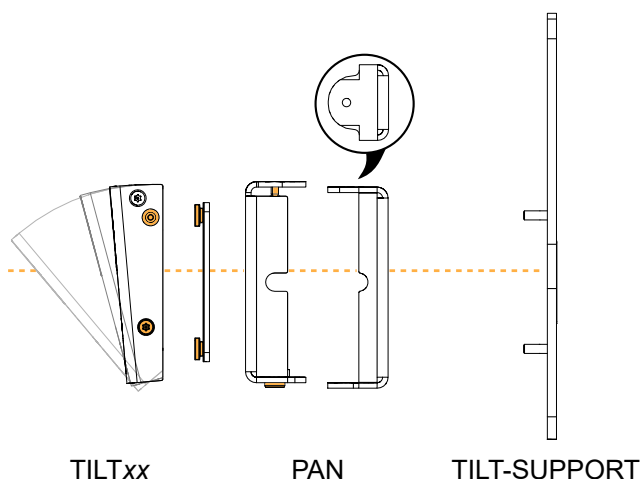
8. Tighten the two M8×16 Torx screws. Apply a torque of 10 N.m.
Make sure the assembly is stable.



Wall-mounting X6i vertically with PAN and TILT5/TILT15/TILT40

Type of deployment	wall-mounting
Rigging accessories	TILT-SUPPORT
	PAN
	TILT5/TILT15/TILT40
Additional material	3 compatible screws and anchors
Tools	torque screwdriver
	T20 Torx bit
	T25 Torx bit
	T30 Torx bit
	T40 Torx bit
	8 mm wrench or 8 mm hex socket
Min. number of operators	1

⚠ Assembly overview
Pay attention to the position of the accessory parts throughout the procedure.



⚠ Secondary safety for flown, wall-mounted, or ceiling-mounted enclosures
Use one insert at the back of the enclosure to implement a secondary safety.

⚠ Risk of crushing injury
Ensure that the wall or ceiling can support the load of the product.
It is recommended to mount only on solid structures. If mounting on a hollow structure (such as a wall cavity), place anchoring points on the framework (wall studs, ceiling joists), or reinforce the mounting area.
Select screws and anchors applicable to the wall or ceiling properties and to the load of the product. Prevent screws from loosening over time, using for example thread locker or lock washers.

Specifications for screws and anchors

deployment	accessory	ultimate tensile load per screw (daN)	ultimate shear load per screw (daN)	screws quantity	mounting hole size	specific constraints
wall-mounting	TILT-SUPPORT + any accessory	6	6	3	Ø 6.4 mm / 0.25 in (slotted)	–



Risk of falling objects

Do not use PAN or PANx2 upside-down.

Do not swap the wall-mounting part(s) and the enclosure-mounting part(s).



Risk of falling objects

Do not use TILT, TILT5, TILT15, or TILT40 upside-down. These rigging accessories are designed for negative site angles only.

Screws and fasteners

from TILT-SUPPORT



x2

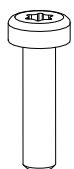


x2

M5 hex locknut

thick plain washer Ø
5 mm

from PAN



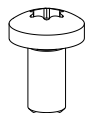
x2



x2



x2



x2

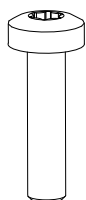
M5x20 Torx

M5 hex locknut

thick plain washer Ø
5 mm

M8x16 Torx

from TILT5/TILT15/TILT40



x2



x2

M6x25 Torx

M5 tapered spacer

Assembly

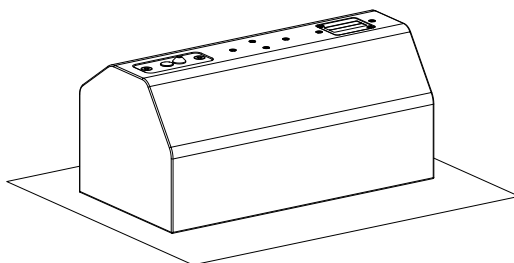
About this task



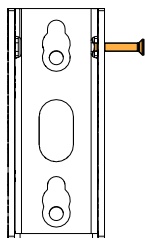
In this procedure, TILTxx designates the fixed angle accessories TILT5, TILT15, and TILT40.

Prerequisite

Place X6i on its front face on a clean flat surface.



Make sure that the TILTxx safety screw is present and loosened.

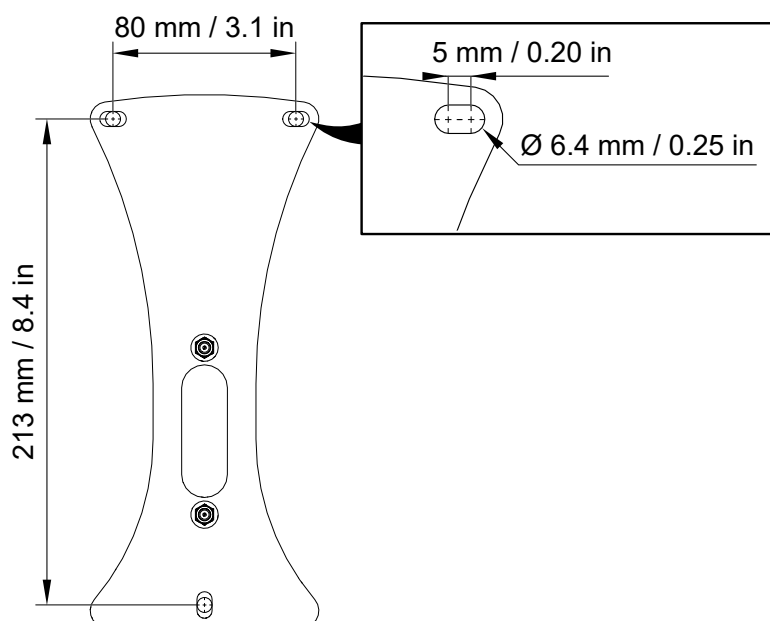


Procedure



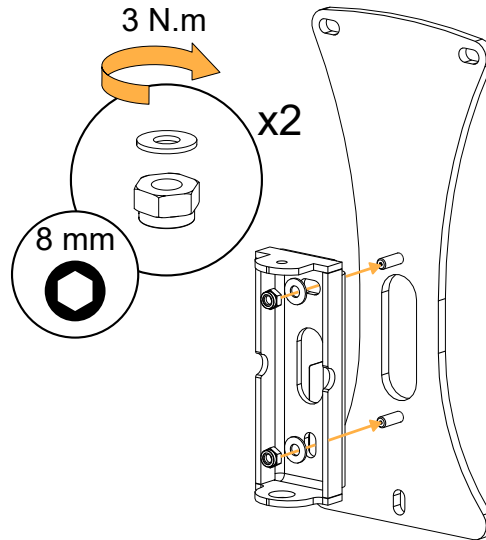
Make sure to leave enough space between the walls and the sides of the rigging element to access the screw(s) when the enclosure is mounted.

1. Drill holes in the wall for TILT-SUPPORT.

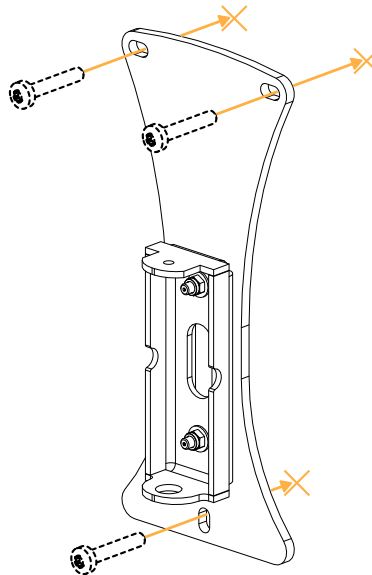


2. Assemble the PAN wall-mounting part with TILT-SUPPORT.

Use the two M5 nuts and washers.



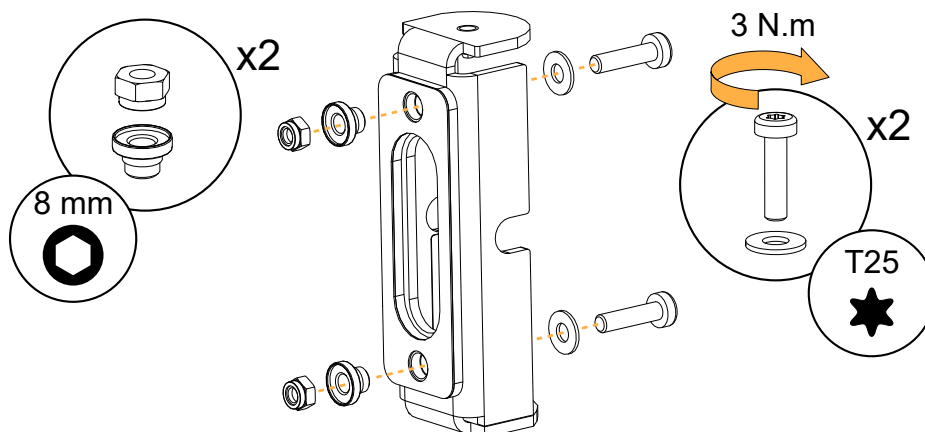
3. Secure TILT-SUPPORT and PAN to the wall.



4. Assemble the wall-mounting plate and tapered spacers with PAN.

Use two M5×20 Torx screws, two M5 washers, and two M5 nuts.

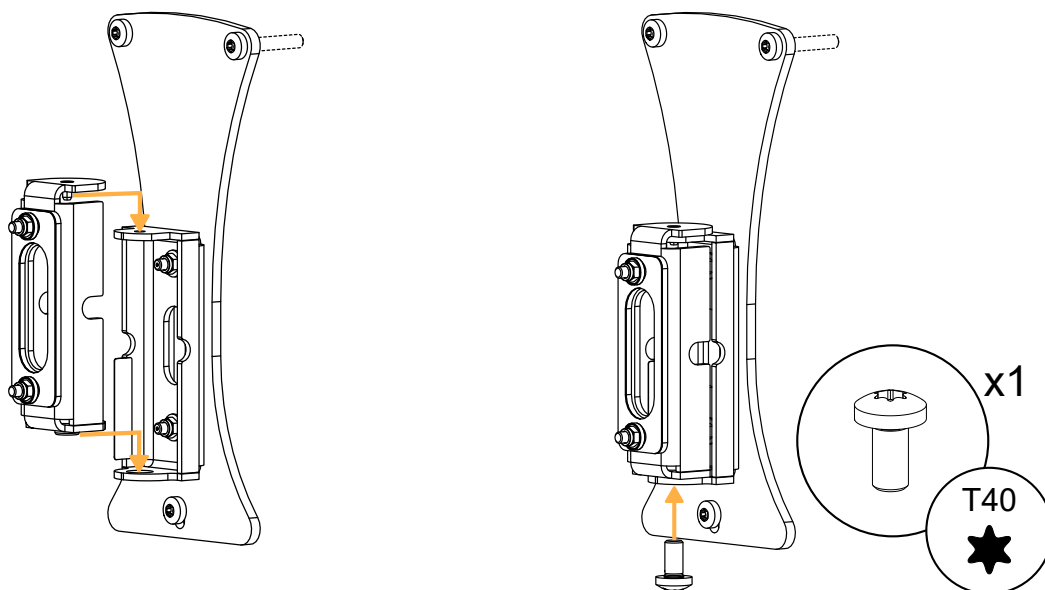
The wall-mounting plate gasket is facing away from PAN.



5. Mount the assembly on the PAN wall-mounting part:

- a) Align the pin with the top hole and push the assembly downwards.
- b) Drive the M8×16 Torx screw from underneath PAN.

! Do not fully tighten the screw.

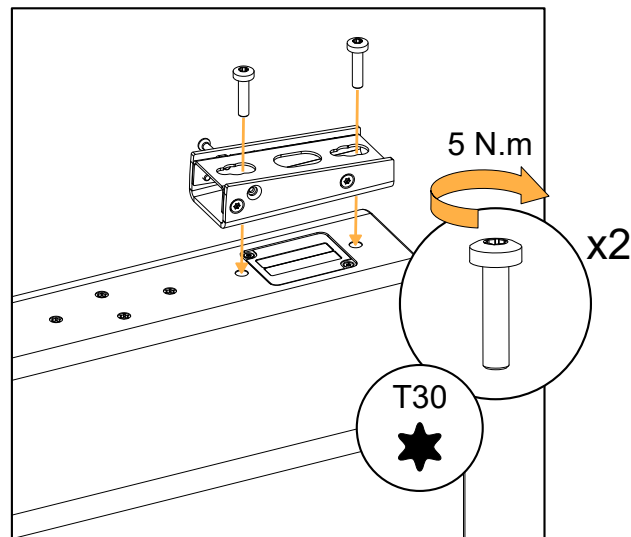
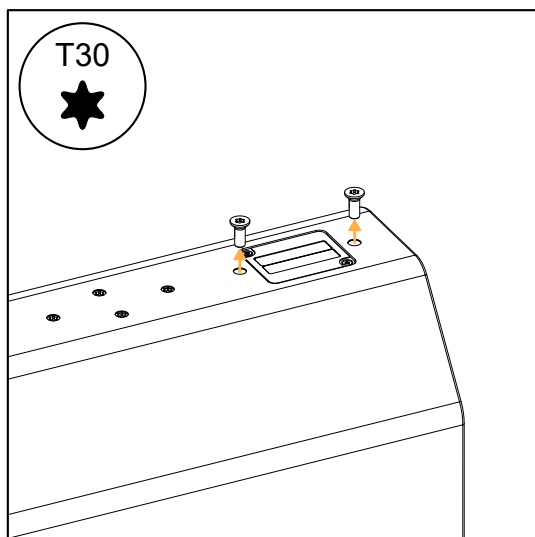


6. Secure TILTxx to X6i:

- a) Remove the two placeholder screws at the bottom of X6i.
- b) Secure TILTxx to X6i.

Use the two M6×25 Torx screws.

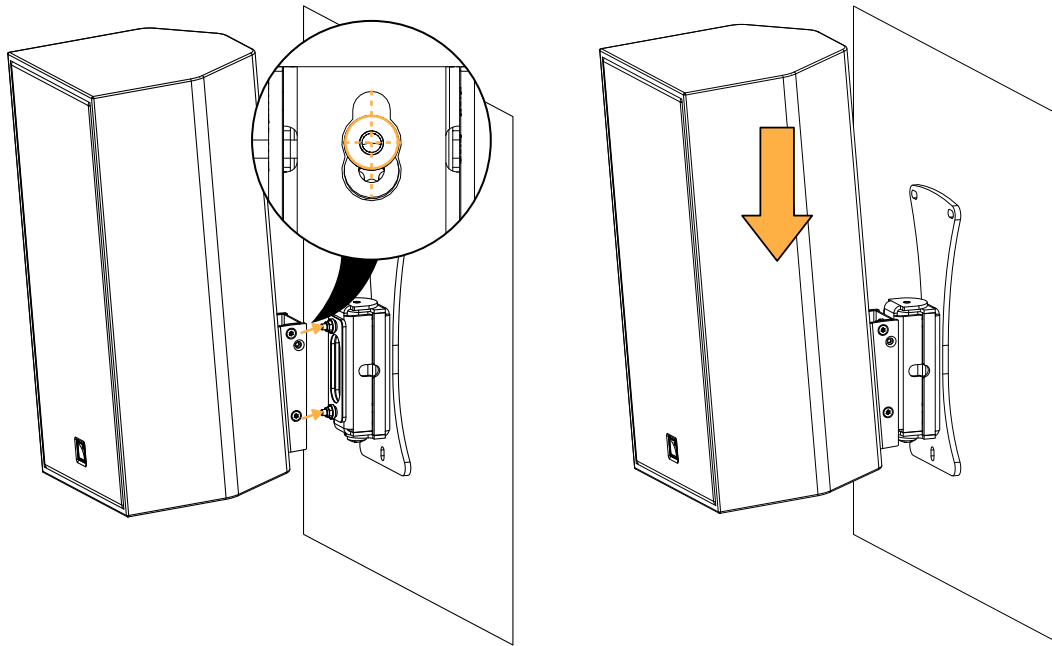
i If the shank of the screwdriver collides with TILT40, use a screwdriver extension or an angled screwdriver to drive the screws.



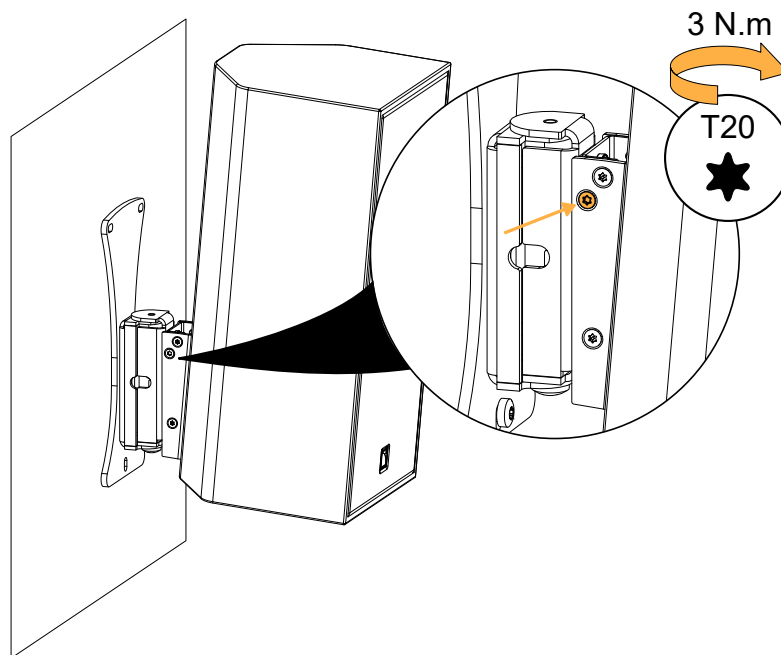
7. Prepare the cabling. Refer to [Cabling X6i](#) (p.172).

8. Mount X6i on PAN:

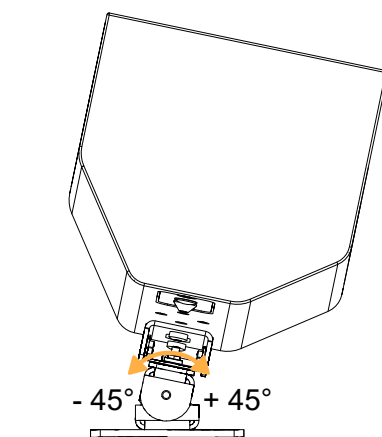
- a) Align the midpoints of the TILTxx rear cutouts with the tapered spacers.
- b) Push the assembly downwards.



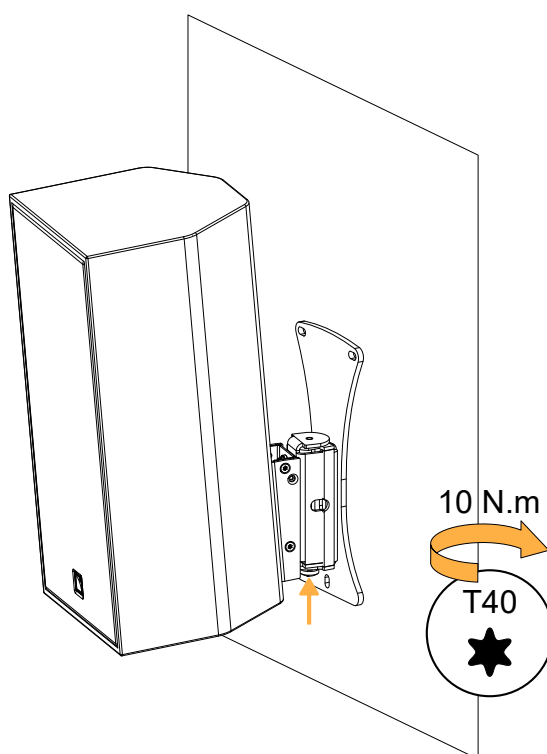
9. Tighten the safety screw on TILTxx.



10. Rotate the assembly to adjust the azimuth angle from -45° to $+45^{\circ}$.



11. Tighten the M8×16 Torx screw. Apply a torque of 10 N.m.
Make sure the assembly is stable.

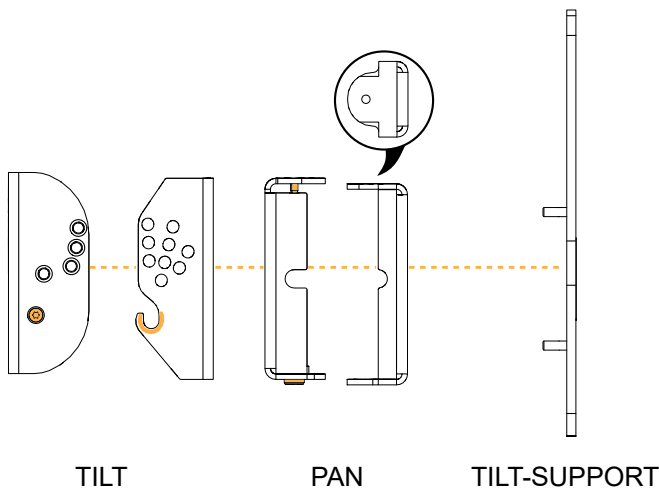


Wall-mounting X6i vertically with PAN and TILT

Type of deployment	wall-mounting
Rigging accessories	TILT-SUPPORT
	PAN
	TILT
Additional material	3 compatible screws and anchors
Tools	torque screwdriver
	T20 Torx bit
	T30 Torx bit
	T40 Torx bit
	T20 screwdriver
	8 mm wrench or 8 mm hex socket
	10 mm wrench or 10 mm hex socket
Min. number of operators	2

Assembly overview

Pay attention to the position of the accessory parts throughout the procedure.



Secondary safety for flown, wall-mounted, or ceiling-mounted enclosures

Use one insert at the back of the enclosure to implement a secondary safety.

Risk of crushing injury



Ensure that the wall or ceiling can support the load of the product.

It is recommended to mount only on solid structures. If mounting on a hollow structure (such as a wall cavity), place anchoring points on the framework (wall studs, ceiling joists), or reinforce the mounting area.

Select screws and anchors applicable to the wall or ceiling properties and to the load of the product. Prevent screws from loosening over time, using for example thread locker or lock washers.

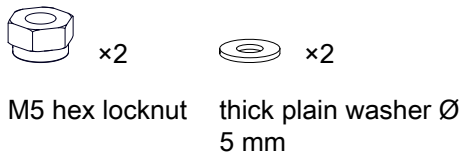
Specifications for screws and anchors

deployment	accessory	ultimate tensile load per screw (daN)	ultimate shear load per screw (daN)	screws quantity	mounting hole size	specific constraints
wall-mounting	TILT-SUPPORT + any accessory	6	6	3	Ø 6.4 mm / 0.25 in (slotted)	–

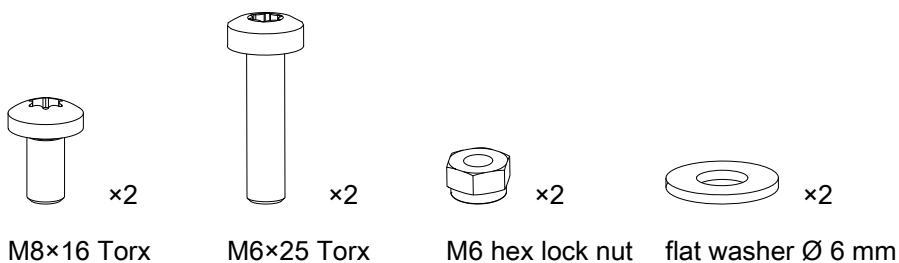
-  **Risk of falling objects**
Do not use PAN or PANx2 upside-down.
Do not swap the wall-mounting part(s) and the enclosure-mounting part(s).
-  **Risk of falling objects**
Do not use TILT, TILT5, TILT15, or TILT40 upside-down. These rigging accessories are designed for negative site angles only.

Screws and fasteners

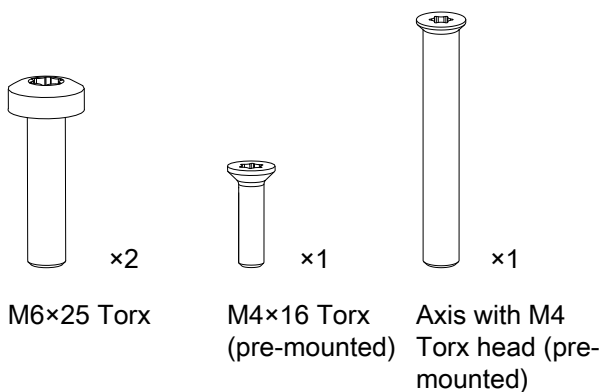
from TILT-SUPPORT



from PAN



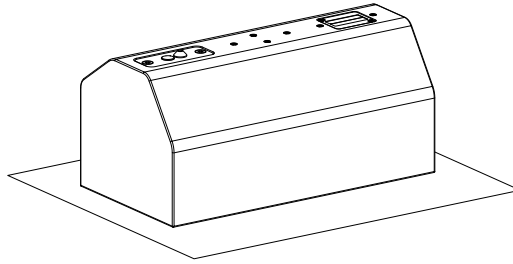
from TILT



Assembly

Prerequisite

Place X6i on its front face on a clean flat surface.

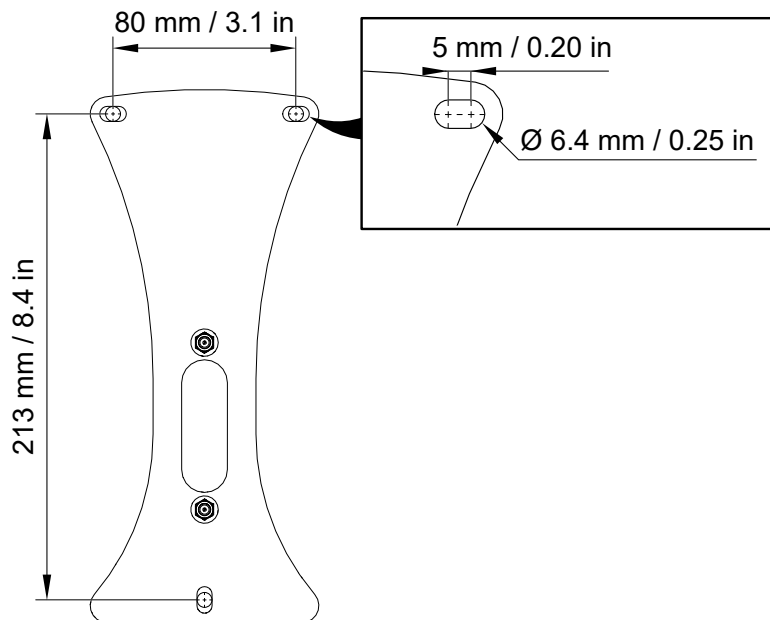


Procedure



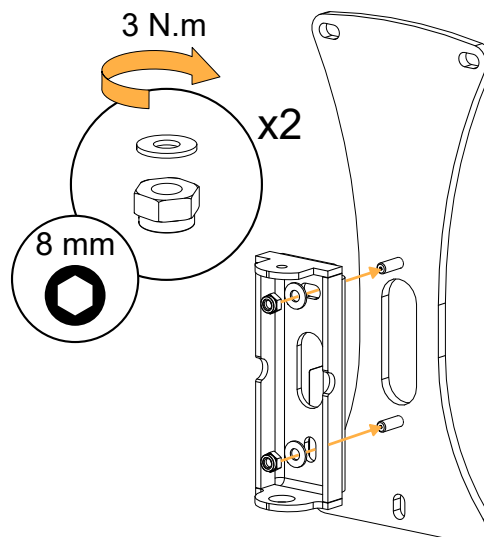
Make sure to leave enough space between the walls and the sides of the rigging element to access the screw(s) when the enclosure is mounted.

1. Drill holes in the wall for TILT-SUPPORT.

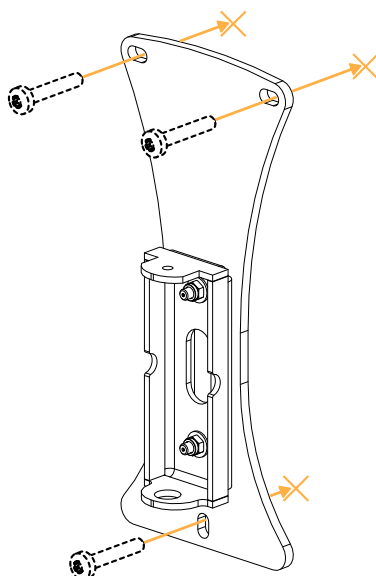


2. Assemble the PAN wall-mounting part with TILT-SUPPORT.

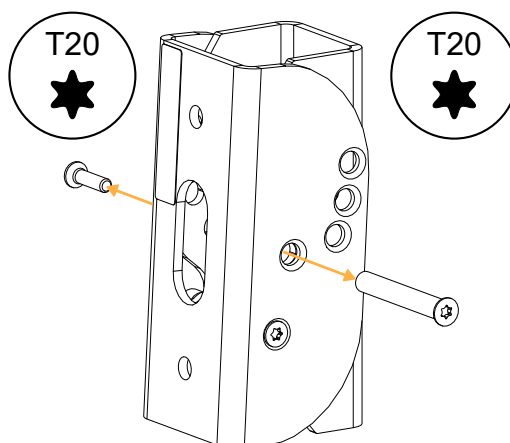
Use the two M5 nuts and washers.



3. Secure TILT-SUPPORT and PAN to the wall.

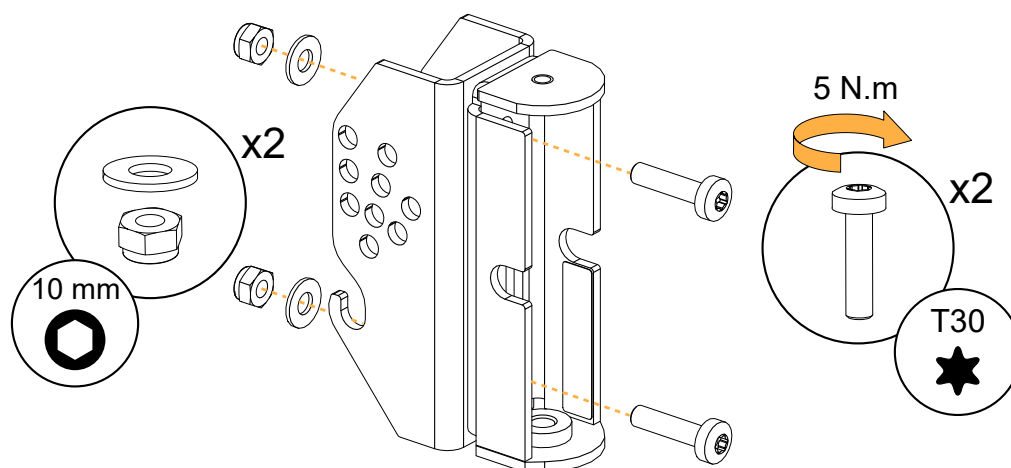


4. Disassemble the two TILT parts.



5. Assemble the PAN enclosure-mounting part with the TILT wall-mounting part.

Use the two M6×25 Torx screws, M6 nuts and washers.

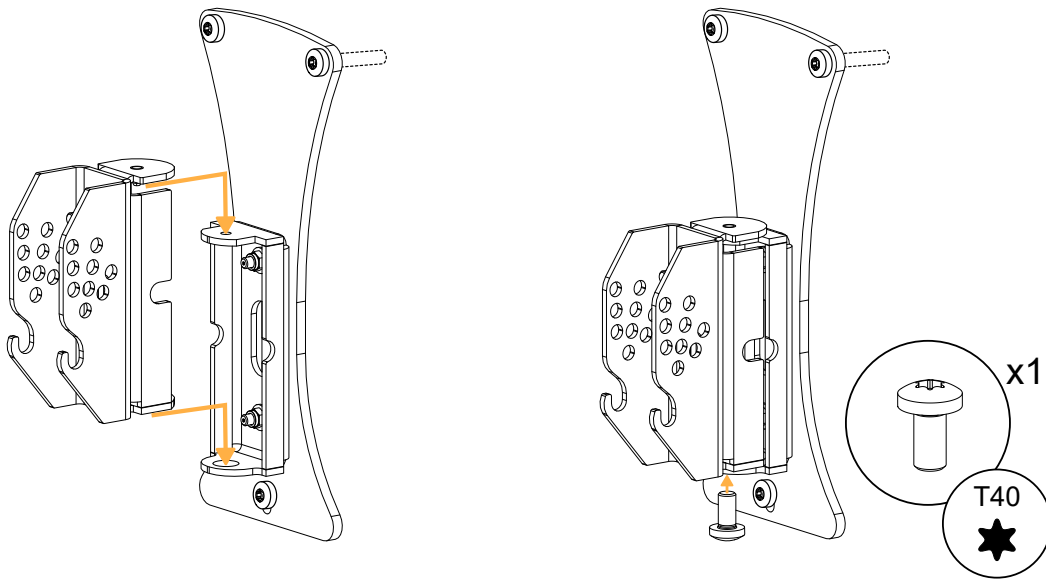


6. Mount the assembly on the PAN wall-mounting part:

- a) Align the pin with the top hole and push the assembly downwards.
- b) Drive the M8×16 Torx screw from underneath PAN.



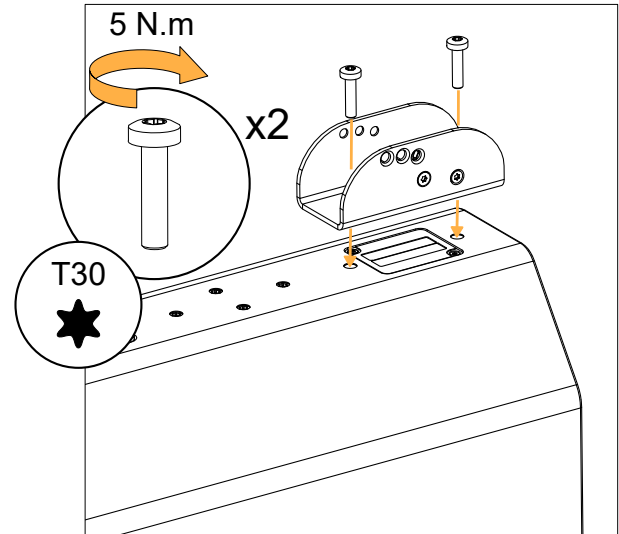
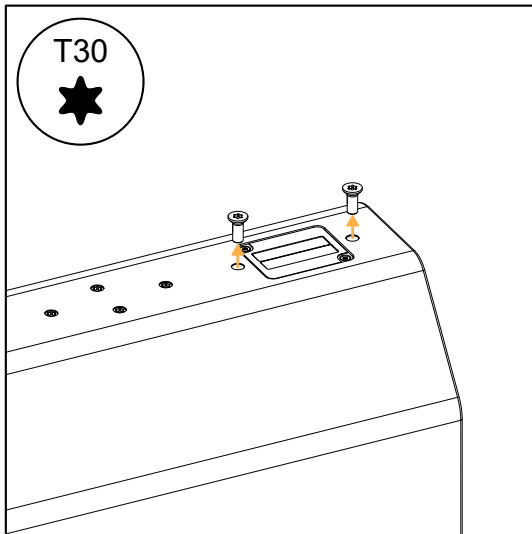
Do not fully tighten the screw.



7. Secure TILT to X6i:

- a) Remove the two placeholder screws at the bottom of X6i.
- b) Secure the TILT enclosure-mounting part to X6i.

Use the two M6×25 Torx screws.

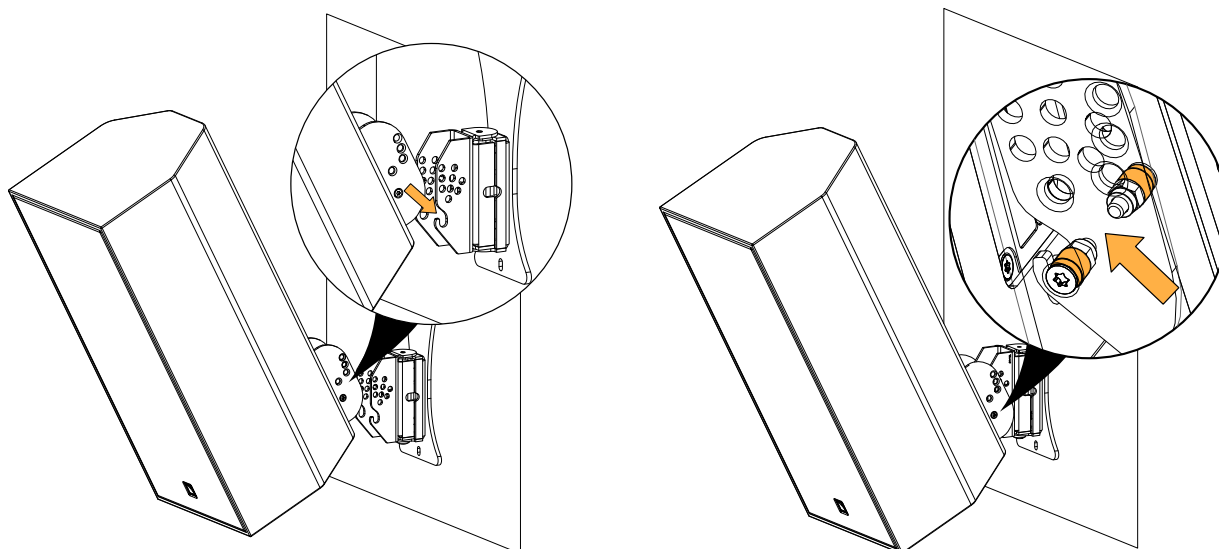


8. Prepare the cabling. Refer to [Cabling X6i](#) (p.172).

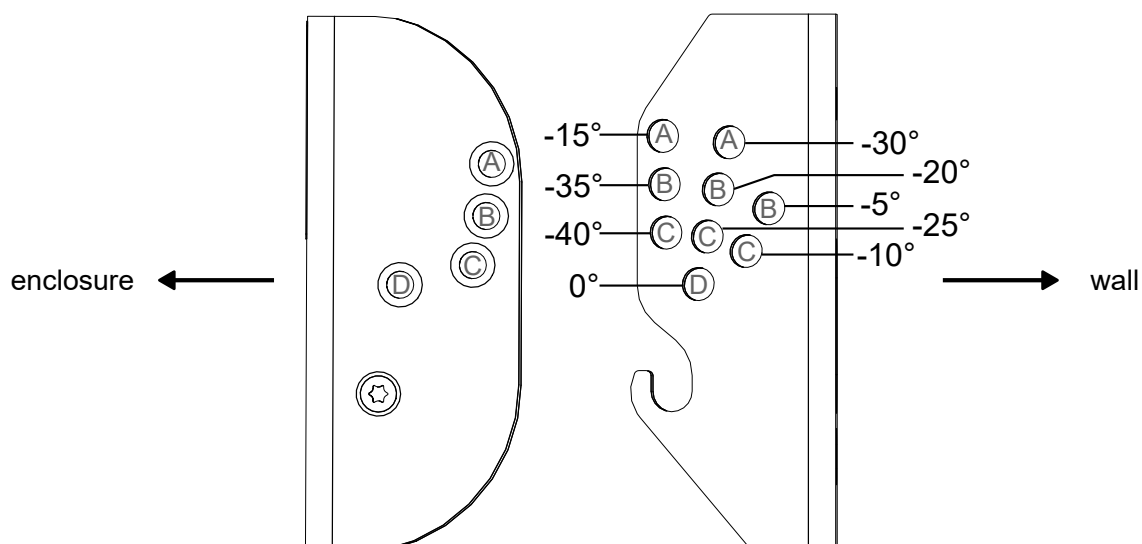
9. Mount X6i on the PAN and TILT assembly:

a) Assemble the two TILT parts by fitting the indexing studs into the hooks.

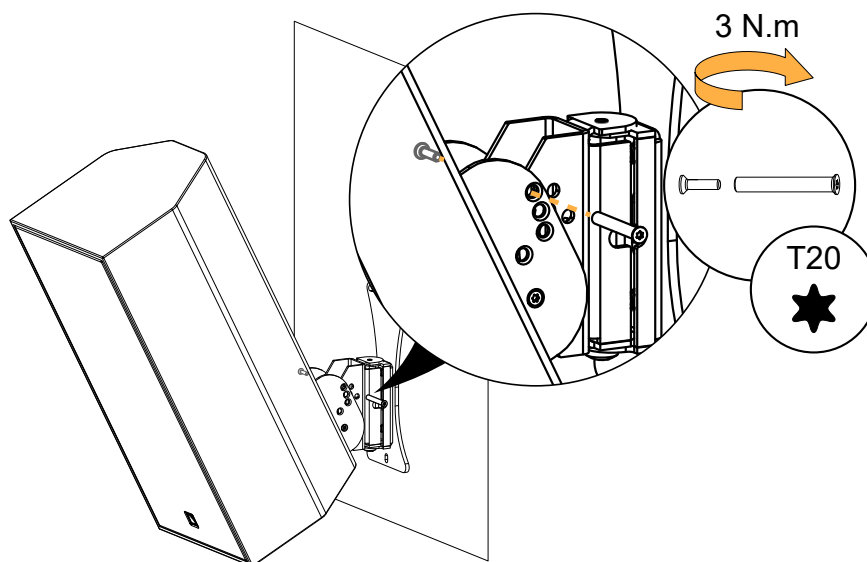
Make sure the studs are pushed all the way into the hooks.



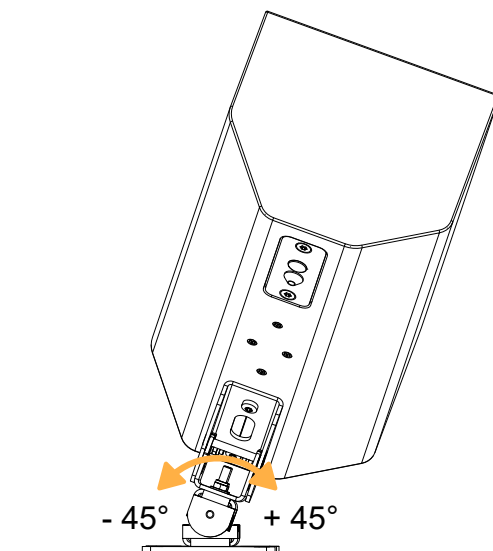
b) Rotate the assembly to select the site angle.



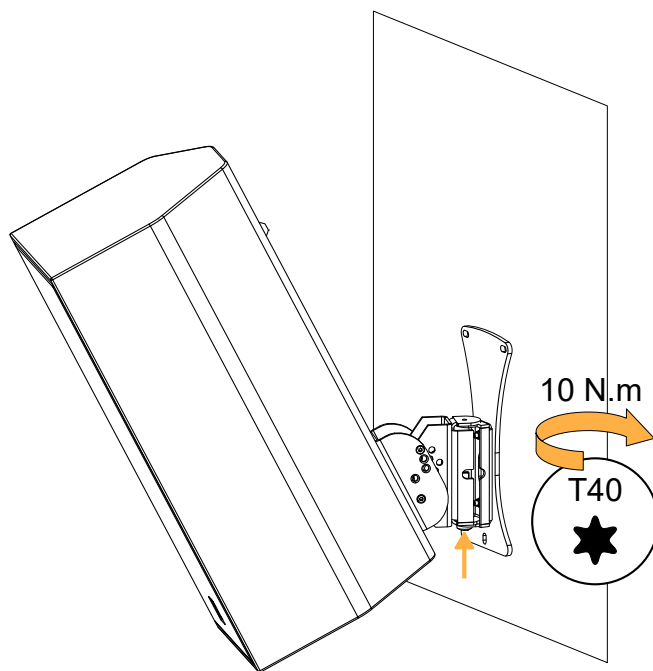
c) Drive the axis through the holes and secure it with the M4×16 Torx screw.



10. Rotate X6i to adjust the azimuth angle from -45° to $+45^{\circ}$.

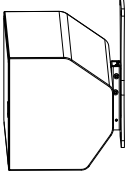
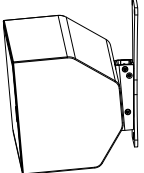
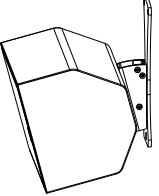
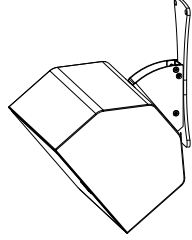
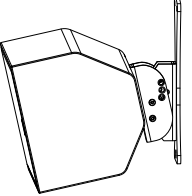
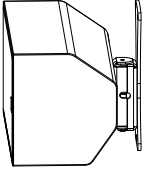
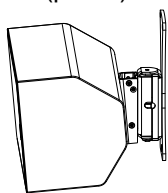
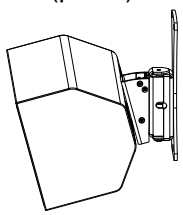
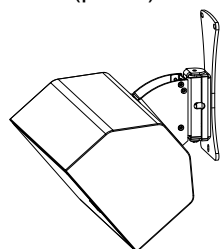
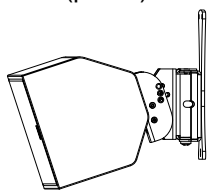


11. Tighten the M8×16 Torx screw. Apply a torque of 10 N.m.
Make sure the assembly is stable.



Wall-mounting X6i horizontally

Overview

with pan?	site angle				
	0°	-5°	-15°	-40°	0° to -40°
no	<p>TILT-SUPPORT + WALL (p.92)</p> 	<p>TILT-SUPPORT + TILT5 (p.97)</p> 	<p>TILT-SUPPORT + TILT15 (p.97)</p> 	<p>TILT-SUPPORT + TILT40 (p.97)</p> 	<p>TILT-SUPPORT + TILT (p.102)</p> 
yes	<p>TILT-SUPPORT + PAN (p.109)</p> 	<p>TILT-SUPPORT + PAN + TILT5 (p.114)</p> 	<p>TILT-SUPPORT + PAN + TILT15 (p.114)</p> 	<p>TILT-SUPPORT + PAN + TILT40 (p.114)</p> 	<p>TILT-SUPPORT + PAN + TILT (p.122)</p> 

Wall-mounting X6i horizontally with WALL

Type of deployment	wall-mounting
Rigging accessories	TILT-SUPPORT
	WALL
Additional material	3 compatible screws and anchors
Tools	torque screwdriver
	T20 Torx bit
	T30 Torx bit
	8 mm wrench or 8 mm hex socket
Min. number of operators	1

**Secondary safety for flown, wall-mounted, or ceiling-mounted enclosures**

Use one insert at the back of the enclosure to implement a secondary safety.

**Risk of crushing injury**

Ensure that the wall or ceiling can support the load of the product.

It is recommended to mount only on solid structures. If mounting on a hollow structure (such as a wall cavity), place anchoring points on the framework (wall studs, ceiling joists), or reinforce the mounting area.

Select screws and anchors applicable to the wall or ceiling properties and to the load of the product. Prevent screws from loosening over time, using for example thread locker or lock washers.

Specifications for screws and anchors

deployment	accessory	ultimate tensile load per screw (daN)	ultimate shear load per screw (daN)	screws quantity	mounting hole size	specific constraints
wall-mounting	TILT-SUPPORT + any accessory	6	6	3	Ø 6.4 mm / 0.25 in (slotted)	–

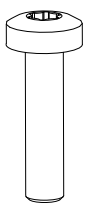
Screws and fasteners**from TILT-SUPPORT**

x2



x2

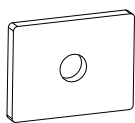
M5 hex locknut

thick plain washer Ø
5 mm**from WALL**

x2



x2



x1

M6×25 Torx

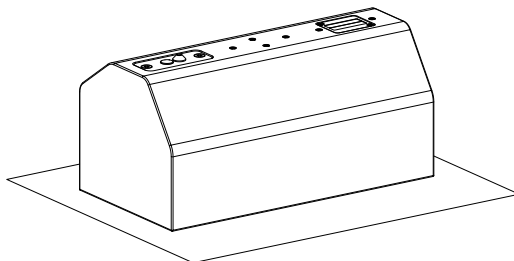
M5 tapered spacer

rectangular washer

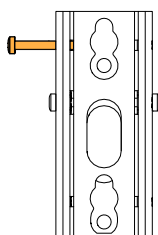
Assembly

Prerequisite

Place X6i on its front face on a clean flat surface.



Make sure that the WALL safety screw is present and loosened.

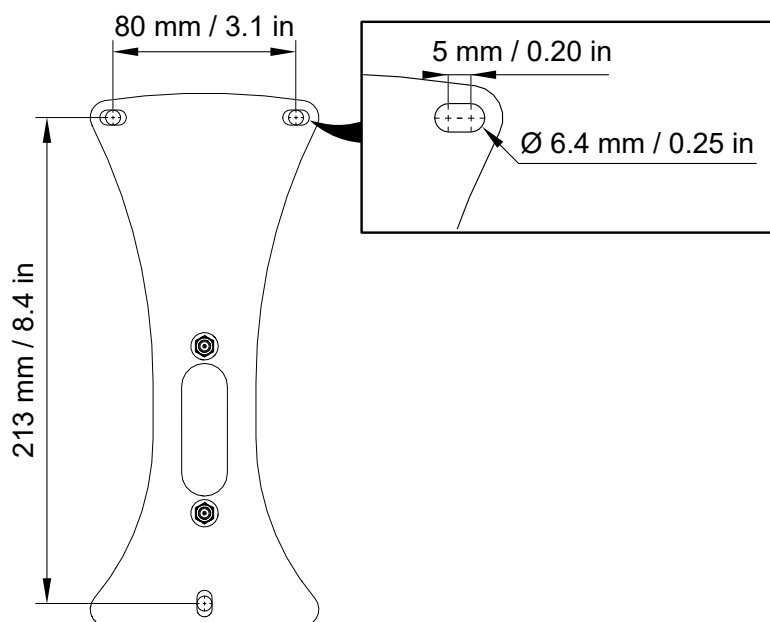


Procedure



Make sure to leave enough space between the walls and the sides of the rigging element to access the screw(s) when the enclosure is mounted.

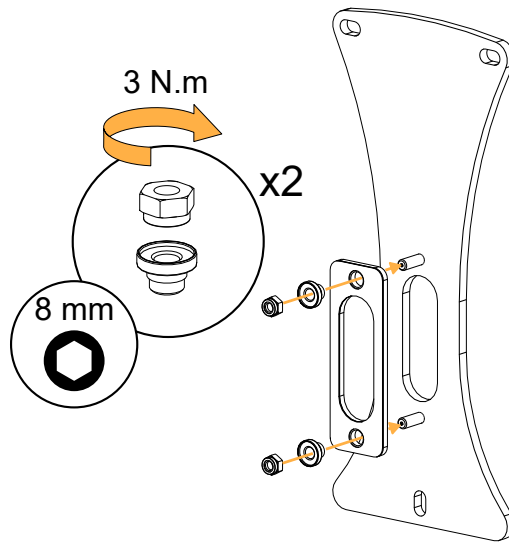
1. Drill holes in the wall for TILT-SUPPORT.



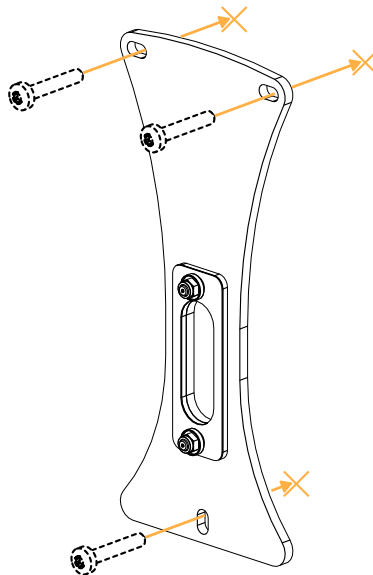
2. Assemble the wall-mounting plate and tapered spacers with TILT-SUPPORT.

Use the two M5 nuts.

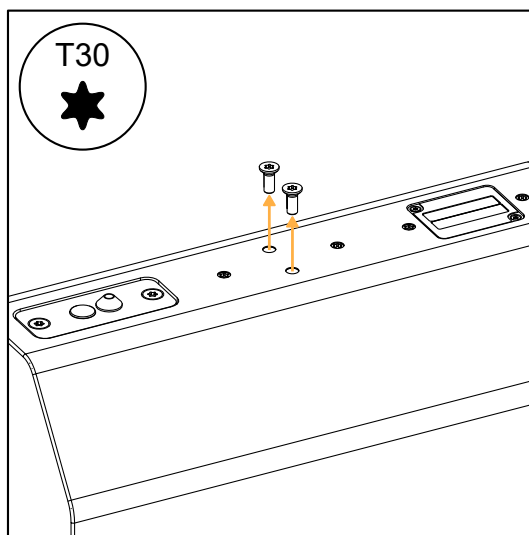
The wall-mounting plate gasket is facing away from TILT-SUPPORT.



3. Secure TILT-SUPPORT and the wall-mounting plate to the wall.



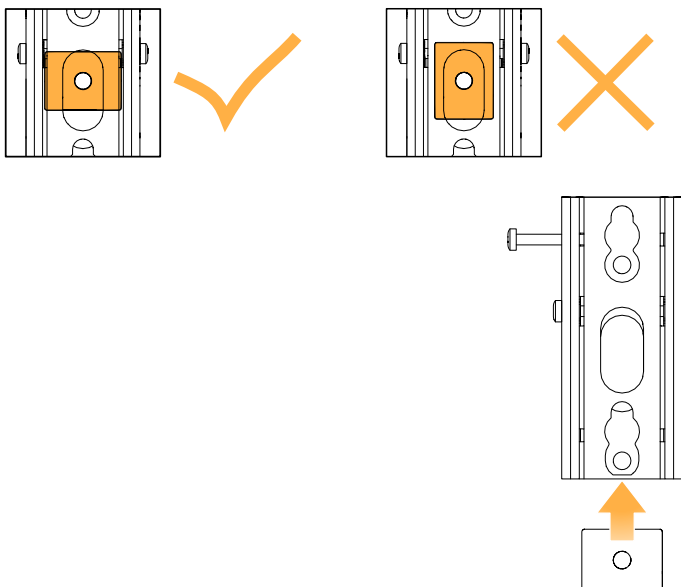
4. Remove the two placeholder screws in the middle of X6i.



5. Insert the rectangular washer into WALL.



Make sure the rectangular washer is in the correct position.



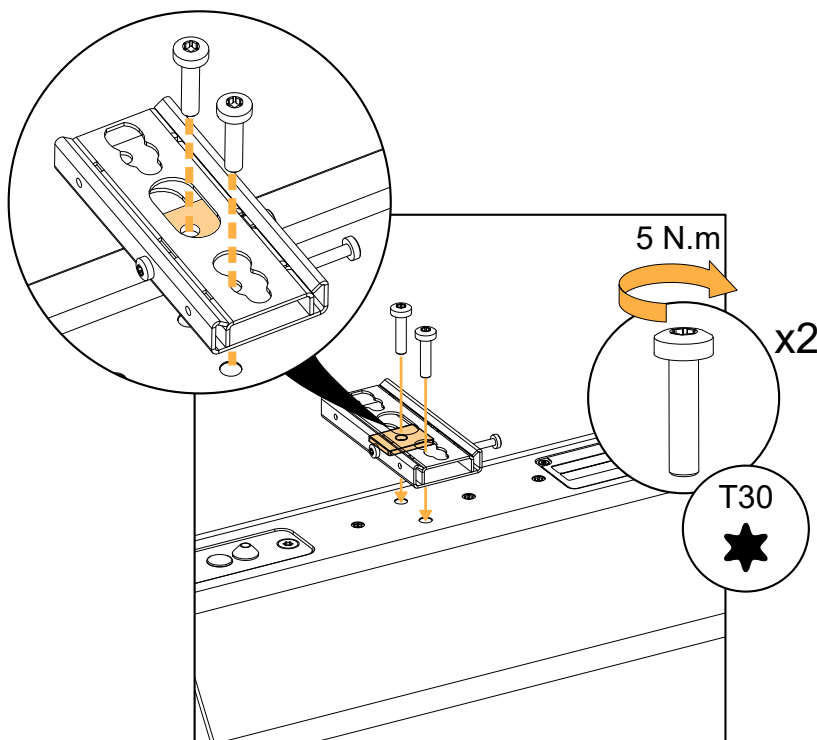
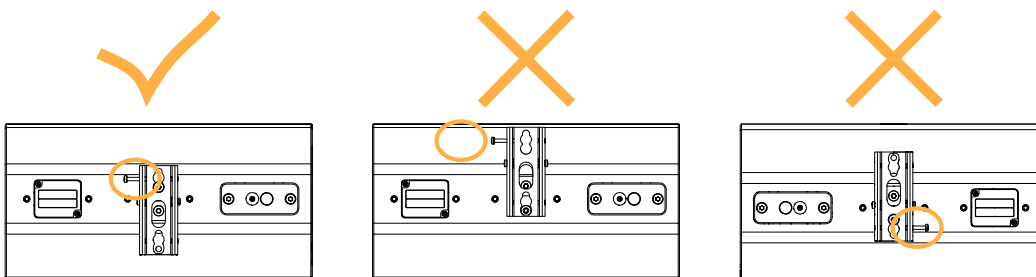
6. Secure WALL to X6i.

Use the two M6×25 Torx screws.



Align the top and the middle hole (formed by the washer) from the rigging accessory with the top and bottom hole on X6i, respectively.

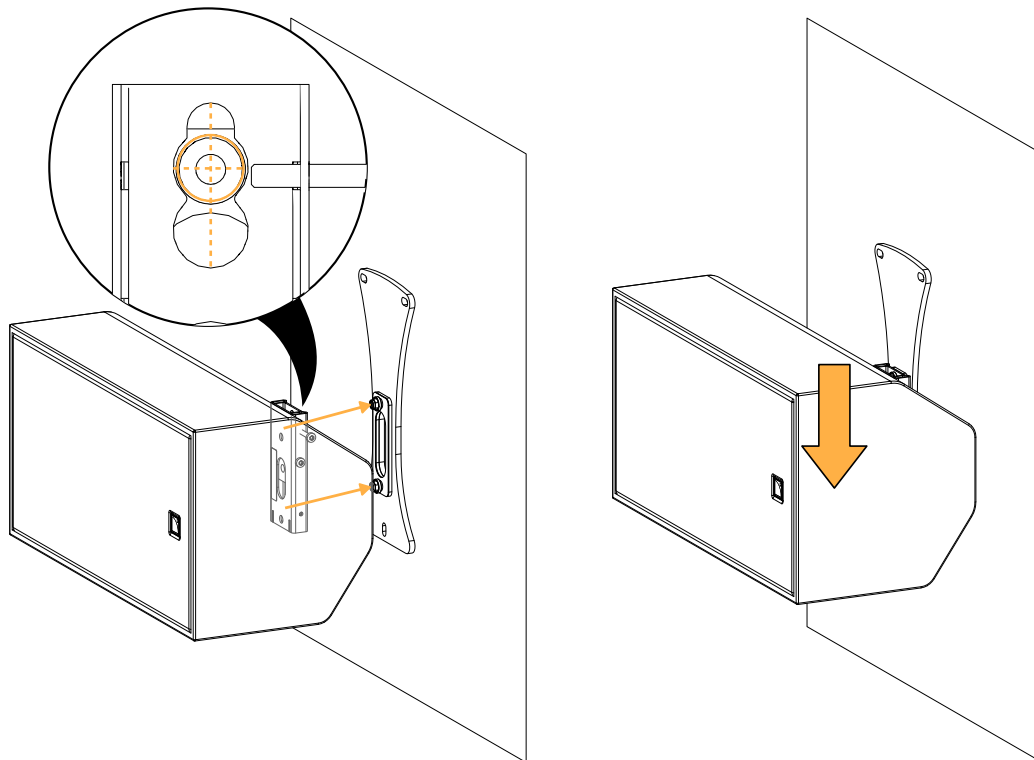
Make sure that the safety screw is at the top when the enclosure is mounted in its final position.



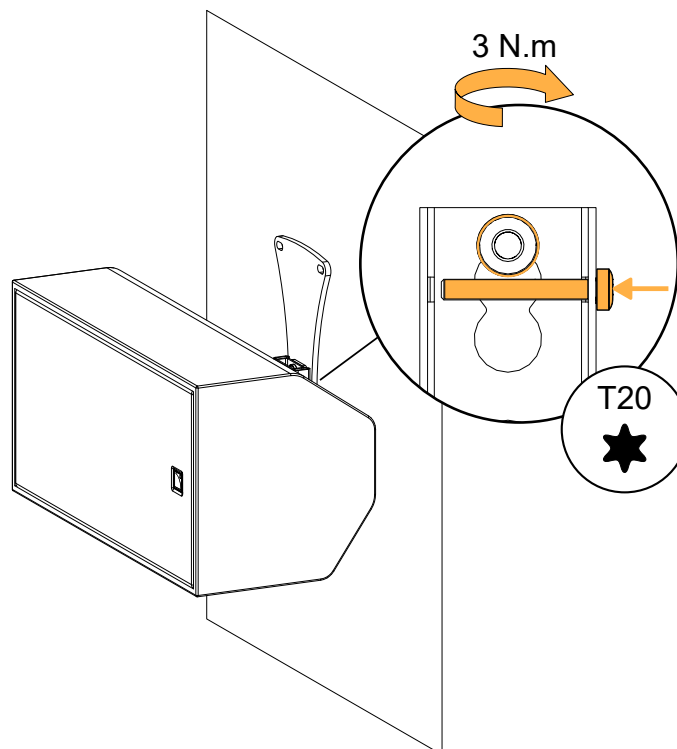
7. Prepare the cabling. Refer to [Cabling X6i](#) (p.172).

8. Mount the assembly on the wall-mounting plate:

- a) Align the midpoints of the WALL rear cutouts with the tapered spacers.
- b) Push the assembly downwards.



9. Tighten the safety screw and make sure the assembly is stable.



Wall-mounting X6i horizontally with TILT5/TILT15/TILT40

Type of deployment	wall-mounting
Rigging accessories	TILT-SUPPORT
	TILT5/TILT15/TILT40
Additional material	3 compatible screws and anchors
Tools	torque screwdriver
	screwdriver extension or angled screwdriver
	T30 Torx bit
	8 mm wrench or 8 mm hex socket
Min. number of operators	1

⚠ Secondary safety for flown, wall-mounted, or ceiling-mounted enclosures

Use one insert at the back of the enclosure to implement a secondary safety.

⚠ Risk of crushing injury

Ensure that the wall or ceiling can support the load of the product.

It is recommended to mount only on solid structures. If mounting on a hollow structure (such as a wall cavity), place anchoring points on the framework (wall studs, ceiling joists), or reinforce the mounting area.

Select screws and anchors applicable to the wall or ceiling properties and to the load of the product. Prevent screws from loosening over time, using for example thread locker or lock washers.

Specifications for screws and anchors

deployment	accessory	ultimate tensile load per screw (daN)	ultimate shear load per screw (daN)	screws quantity	mounting hole size	specific constraints
wall-mounting	TILT-SUPPORT + any accessory	6	6	3	Ø 6.4 mm / 0.25 in (slotted)	–

⚠ Risk of falling objects

Do not use TILT, TILT5, TILT15, or TILT40 upside-down. These rigging accessories are designed for negative site angles only.

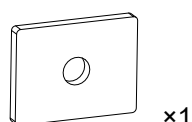
Screws and fasteners

from TILT-SUPPORT

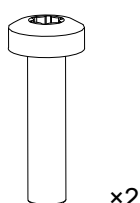


M5 hex locknut

from TILT5/TILT15/TILT40



rectangular washer



M6x25 Torx



M5 tapered spacer

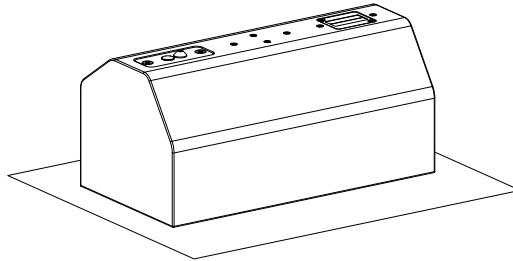
Assembly

About this task

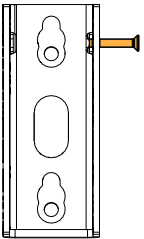
i In this procedure, TILTxx designates the fixed angle accessories TILT5, TILT15, and TILT40.

Prerequisite

Place X6i on its front face on a clean flat surface.



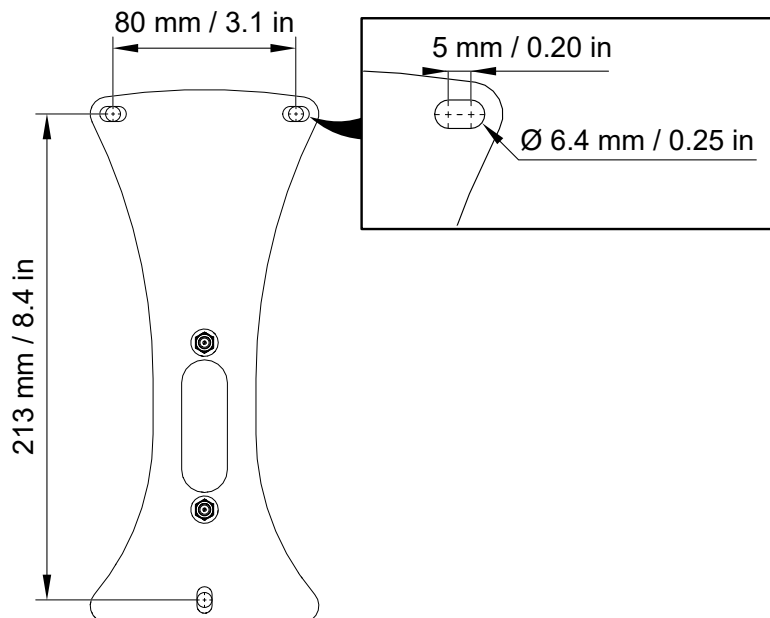
Make sure that the TILTxx safety screw is present and loosened.



Procedure

! Make sure to leave enough space between the walls and the sides of the rigging element to access the screw(s) when the enclosure is mounted.

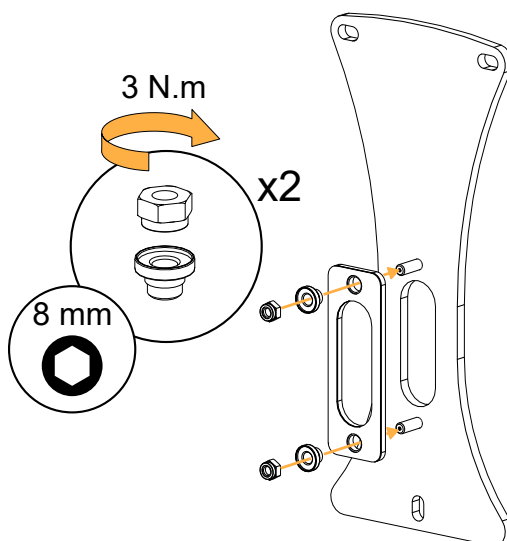
1. Drill holes in the wall for TILT-SUPPORT.



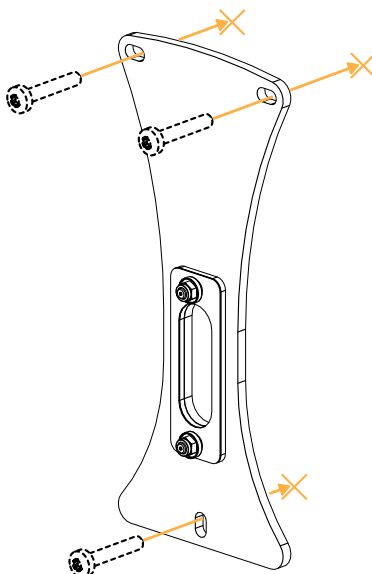
2. Assemble the wall-mounting plate and tapered spacers with TILT-SUPPORT.

Use the two M5 nuts.

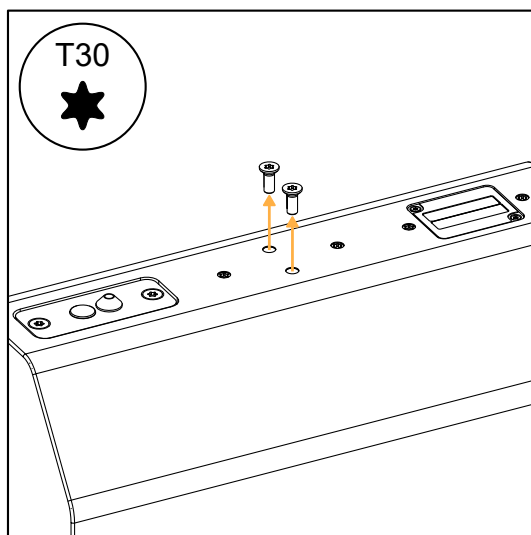
The wall-mounting plate gasket is facing away from TILT-SUPPORT.



3. Secure TILT-SUPPORT and the wall-mounting plate to the wall.



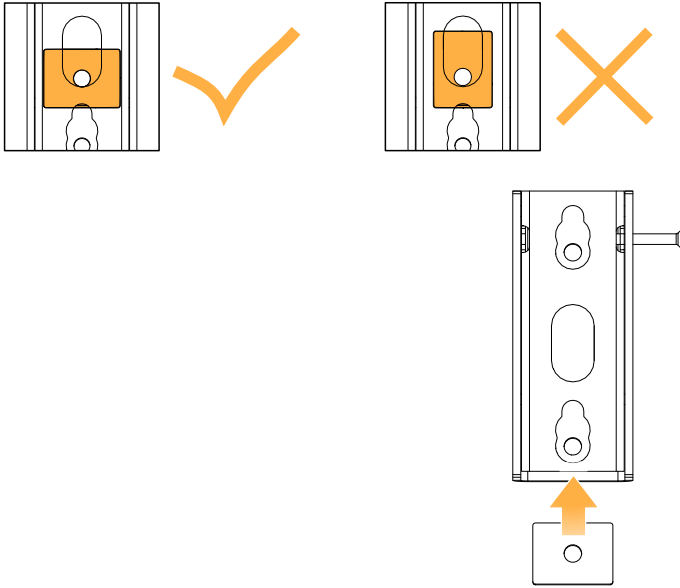
4. Remove the two placeholder screws in the middle of X6i.



5. Insert the rectangular washer into TILTxx.



Make sure the rectangular washer is in the correct position.



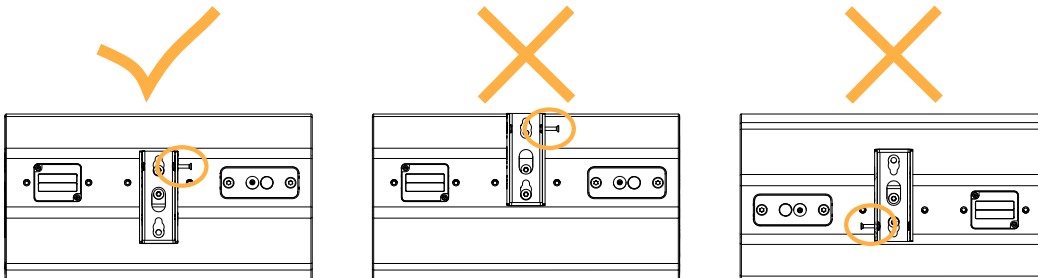
6. Secure TILTxx to X6i.

Use the two M6×25 Torx screws.

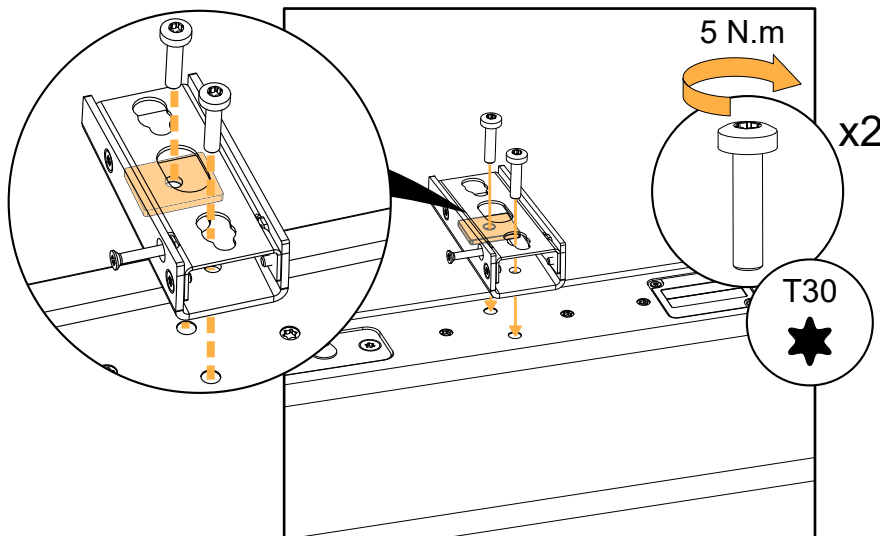


Align the top and the middle hole (formed by the washer) from the rigging accessory with the top and bottom hole on X6i, respectively.

Make sure that the safety screw is at the top when the enclosure is mounted in its final position.

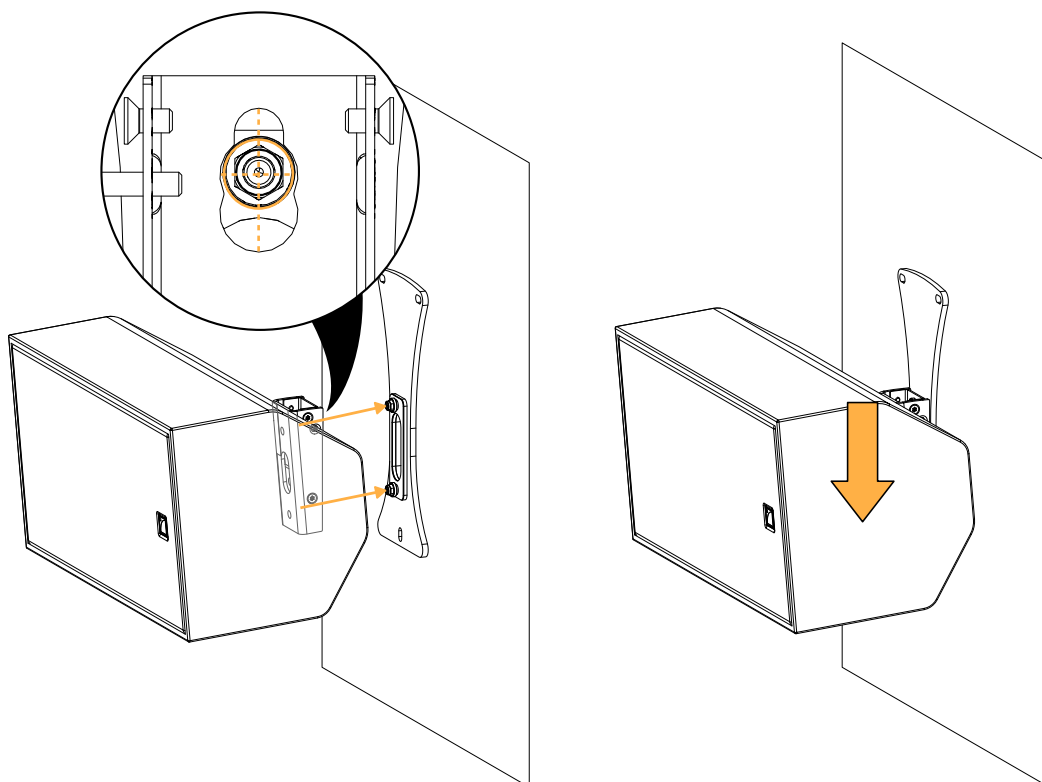


If the shank of the screwdriver collides with TILT40, use a screwdriver extension or an angled screwdriver to drive the screws.

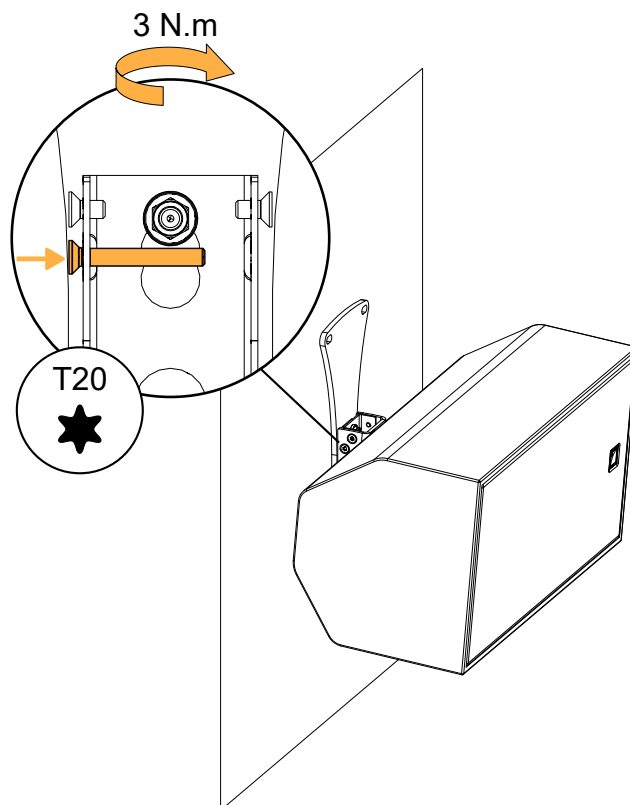


7. Prepare the cabling. Refer to [Cabling X6i](#) (p.172).

8. Mount the assembly on the wall-mounting plate:
- Align the TILTxx holes with the tapered spacers.
 - Push the assembly downwards.



9. Tighten the safety screw.
Make sure the assembly is stable.

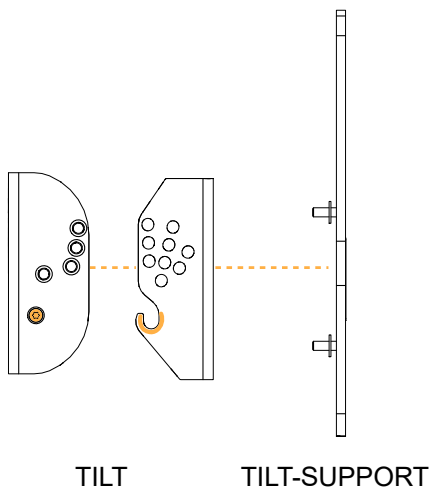


Wall-mounting X6i horizontally with TILT

Type of deployment	wall-mounting
Rigging accessories	TILT-SUPPORT
	TILT
Additional material	3 compatible screws and anchors
Tools	torque screwdriver
	T20 Torx bit
	T30 Torx bit
	8 mm wrench or 8 mm hex socket
Min. number of operators	1

! Assembly overview

Pay attention to the position of the accessory parts throughout the procedure.



! Secondary safety for flown, wall-mounted, or ceiling-mounted enclosures

Use one insert at the back of the enclosure to implement a secondary safety.

! Risk of crushing injury

Ensure that the wall or ceiling can support the load of the product.

It is recommended to mount only on solid structures. If mounting on a hollow structure (such as a wall cavity), place anchoring points on the framework (wall studs, ceiling joists), or reinforce the mounting area.

Select screws and anchors applicable to the wall or ceiling properties and to the load of the product. Prevent screws from loosening over time, using for example thread locker or lock washers.

Specifications for screws and anchors

deployment	accessory	ultimate tensile load per screw (daN)	ultimate shear load per screw (daN)	screws quantity	mounting hole size	specific constraints
wall-mounting	TILT-SUPPORT + any accessory	6	6	3	Ø 6.4 mm / 0.25 in (slotted)	–

! Risk of falling objects

Do not use TILT, TILT5, TILT15, or TILT40 upside-down. These rigging accessories are designed for negative site angles only.

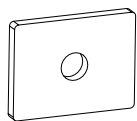
Screws and fasteners**from TILT-SUPPORT**

x2



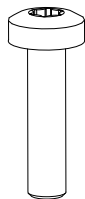
x2

M5 hex locknut

thick plain washer Ø
5 mm**from TILT**

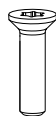
x1

rectangular washer



x2

M6x25 Torx



x1

M4x16 Torx
(pre-mounted)

x1

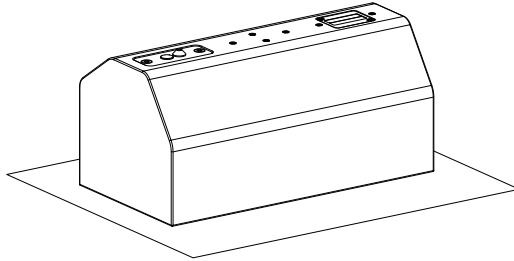
Axis with M4
Torx head (pre-
mounted)

Assembly

About this task

Prerequisite

Place X6i on its front face on a clean flat surface.

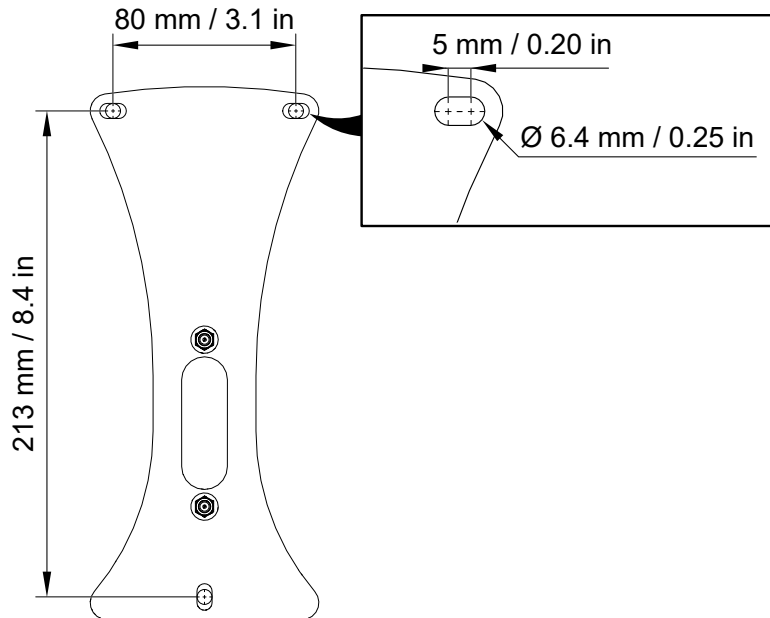


Procedure

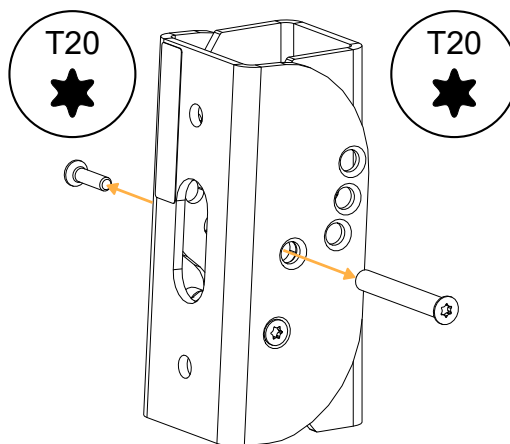


Make sure to leave enough space between the walls and the sides of the rigging element to access the screw(s) when the enclosure is mounted.

1. Drill holes in the wall for TILT-SUPPORT.

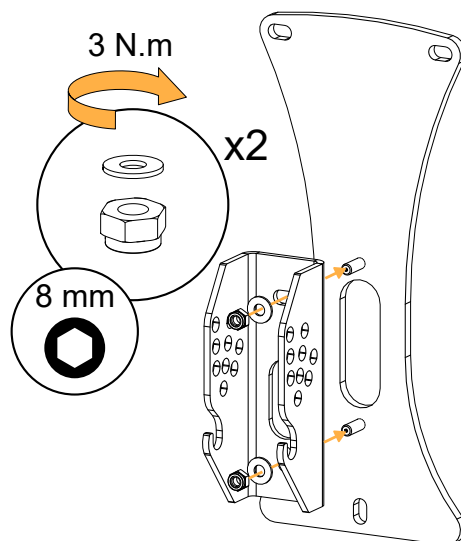
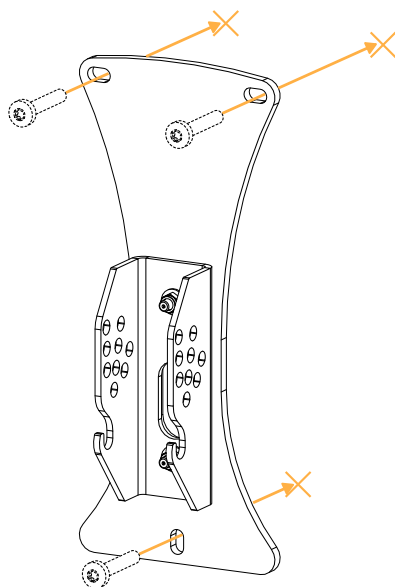


2. Disassemble the two TILT parts.



3. Assemble the TILT wall-mounting part with TILT-SUPPORT.

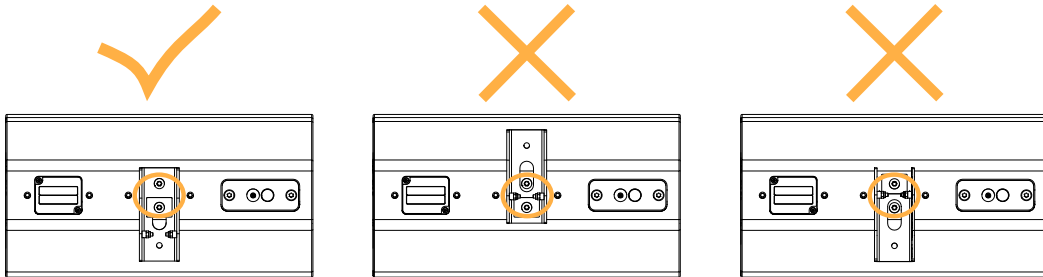
Use the two M5 nuts and washers.

**4. Secure TILT-SUPPORT and TILT to the wall.**

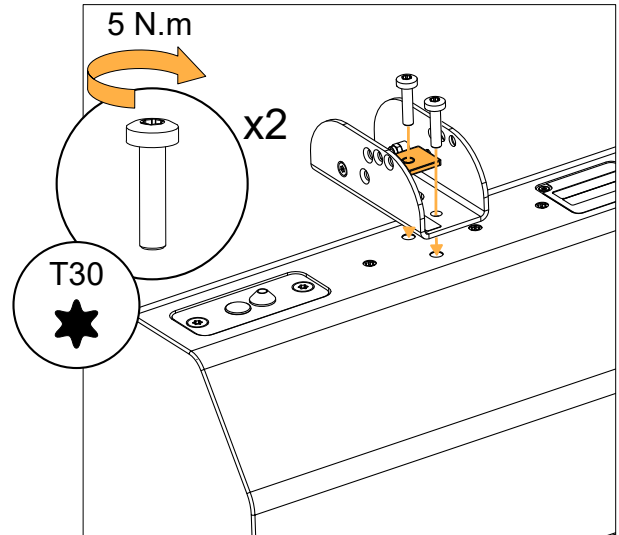
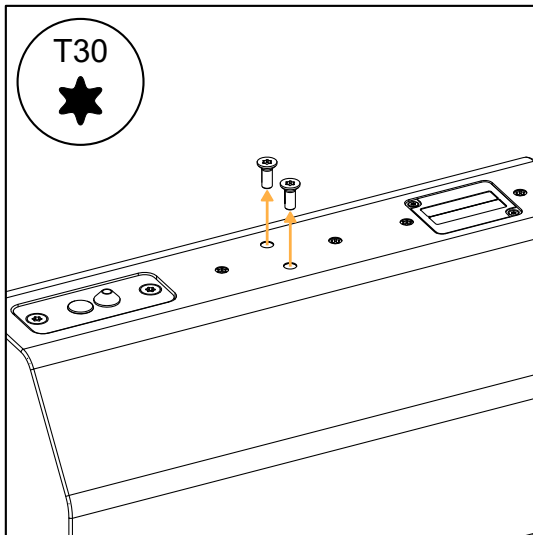
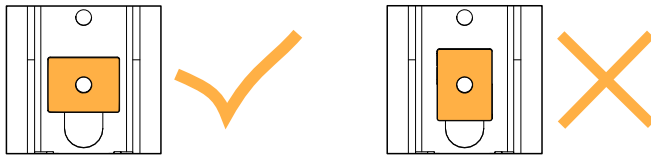
5. Secure TILT to X6i:

- a) Remove the two placeholder screws in the middle of X6i.
 - b) Secure the TILT enclosure-mounting part with the rectangular washer to X6i.
- Use the two M6×25 Torx screws.

! Align the top and the middle hole (formed by the washer) from the rigging accessory with the top and bottom hole on X6i, respectively.



! Make sure the rectangular washer is in the correct position.



6. Prepare the cabling. Refer to [Cabling X6i](#) (p.172).

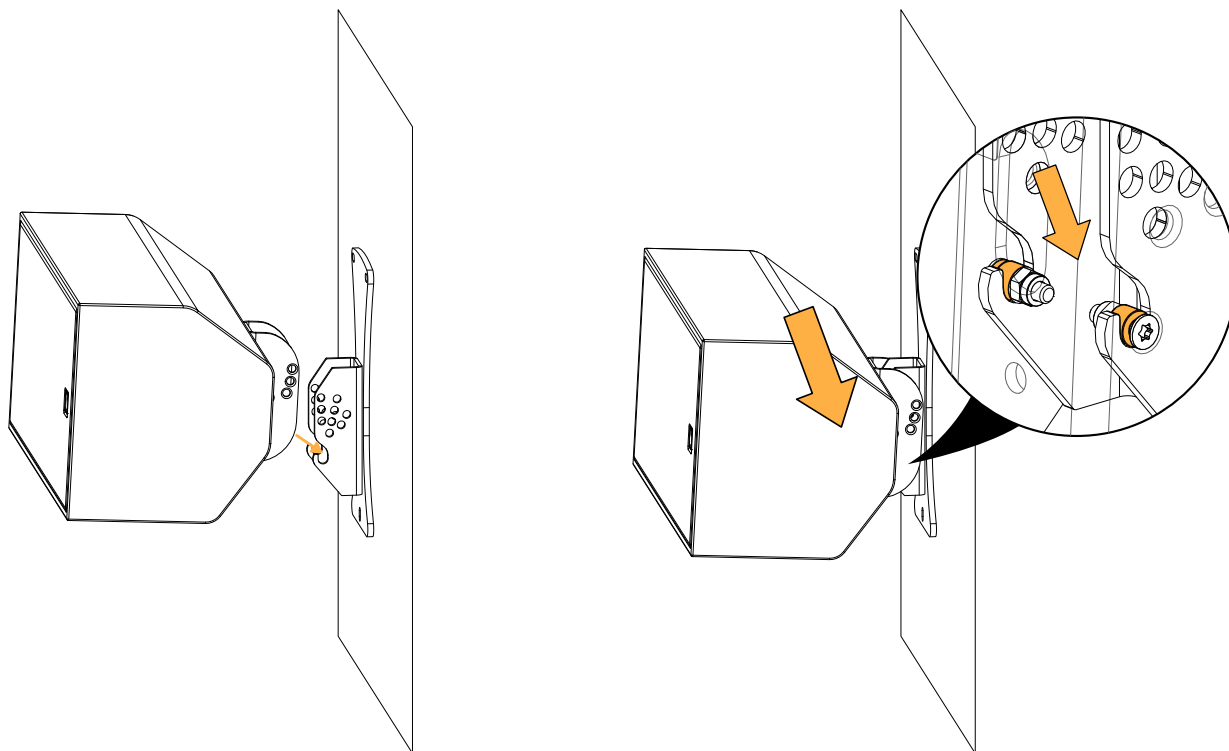


Risk of pinching fingers

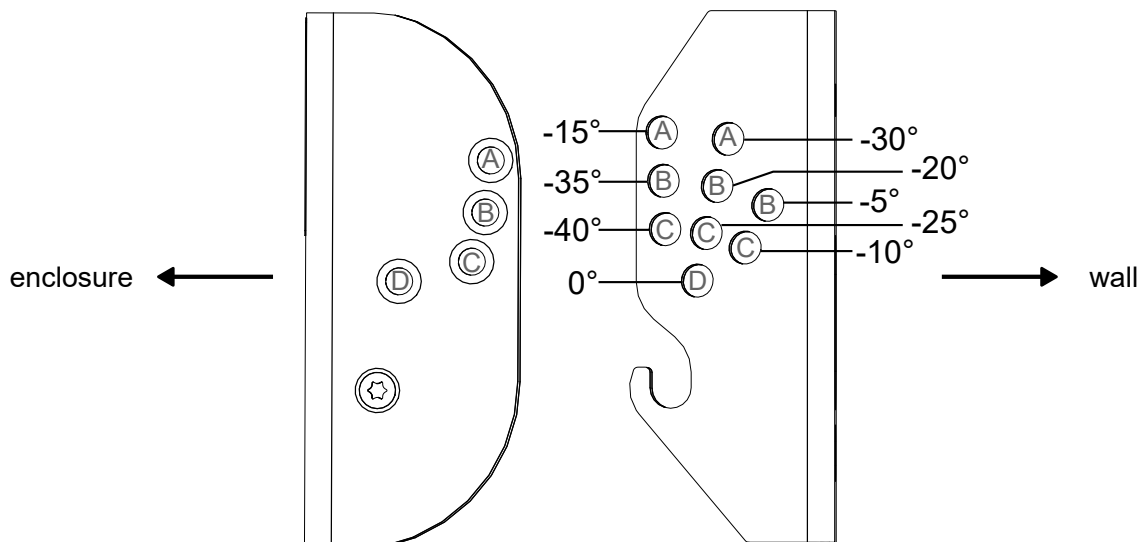
Hold X6i from underneath when assembling the two TILT parts.

7. Mount X6i on the wall:

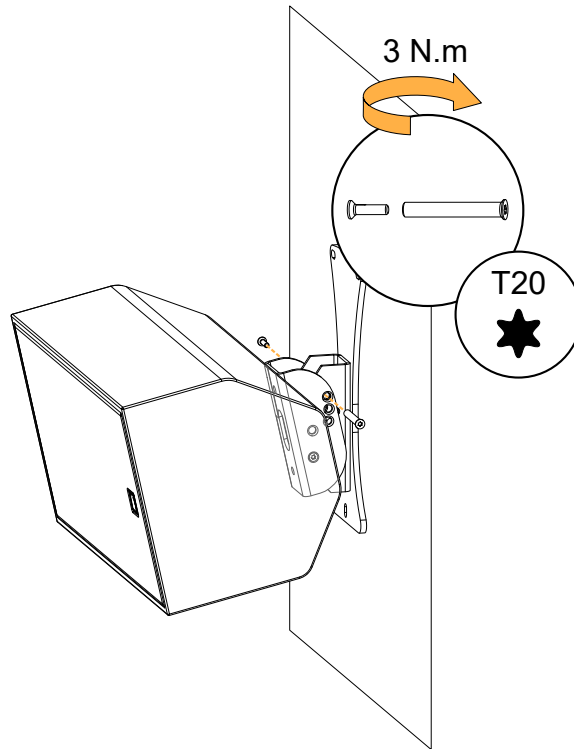
- a) Assemble the two TILT parts by fitting the indexing studs into the hooks. Make sure the studs are pushed all the way into the hooks.



- b) Rotate the assembly to select the site angle.



- c) Drive the axis through the holes and secure it with the M4×16 Torx screw.
Make sure the assembly is stable.

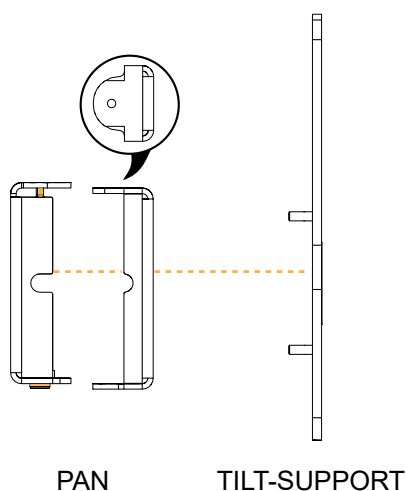


Wall-mounting X6i horizontally with PAN

Type of deployment	wall-mounting
Rigging accessories	TILT-SUPPORT
	PAN
Additional material	3 compatible screws and anchors
Tools	torque screwdriver
	T30 Torx bit
	T40 Torx bit
	8 mm wrench or 8 mm hex socket
Min. number of operators	1

Assembly overview

Pay attention to the position of the accessory parts throughout the procedure.



Secondary safety for flown, wall-mounted, or ceiling-mounted enclosures

Use one insert at the back of the enclosure to implement a secondary safety.

Risk of crushing injury

Ensure that the wall or ceiling can support the load of the product.

It is recommended to mount only on solid structures. If mounting on a hollow structure (such as a wall cavity), place anchoring points on the framework (wall studs, ceiling joists), or reinforce the mounting area.

Select screws and anchors applicable to the wall or ceiling properties and to the load of the product. Prevent screws from loosening over time, using for example thread locker or lock washers.

Specifications for screws and anchors

deployment	accessory	ultimate tensile load per screw (daN)	ultimate shear load per screw (daN)	screws quantity	mounting hole size	specific constraints
wall-mounting	TILT-SUPPORT + any accessory	6	6	3	Ø 6.4 mm / 0.25 in (slotted)	–

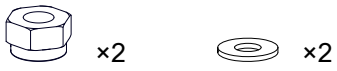
Risk of falling objects

Do not use PAN or PANx2 upside-down.

Do not swap the wall-mounting part(s) and the enclosure-mounting part(s).

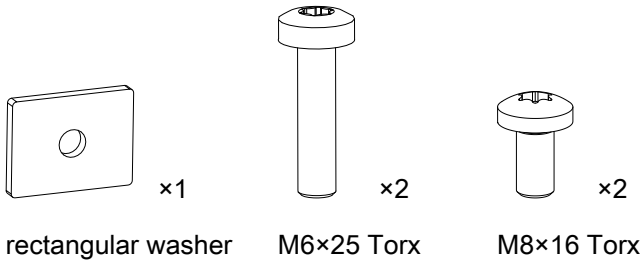
Screws and fasteners

from TILT-SUPPORT



M5 hex locknut thick plain washer Ø
5 mm

from PAN

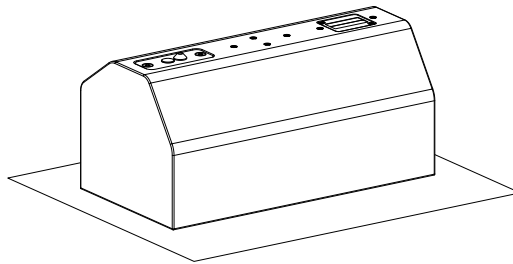


rectangular washer M6×25 Torx M8×16 Torx

Assembly

Prerequisite

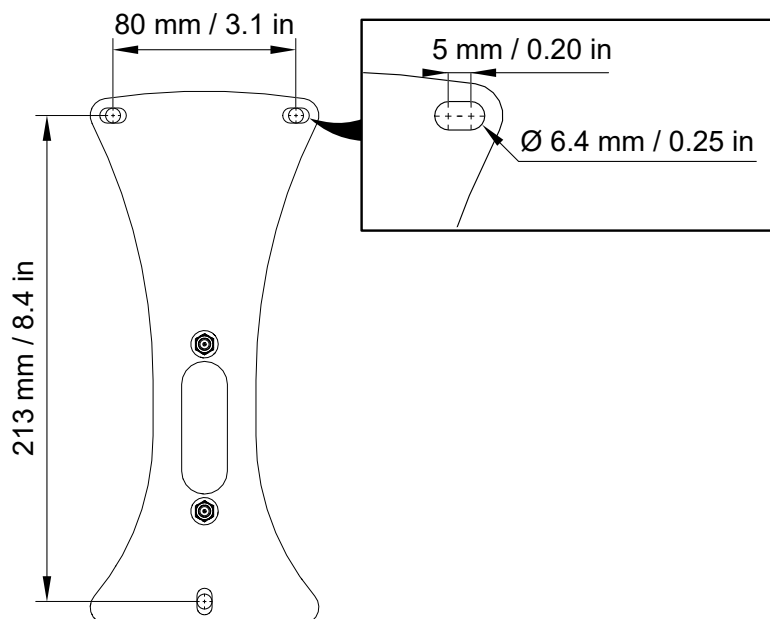
Place X6i on its front face on a clean flat surface.



Procedure

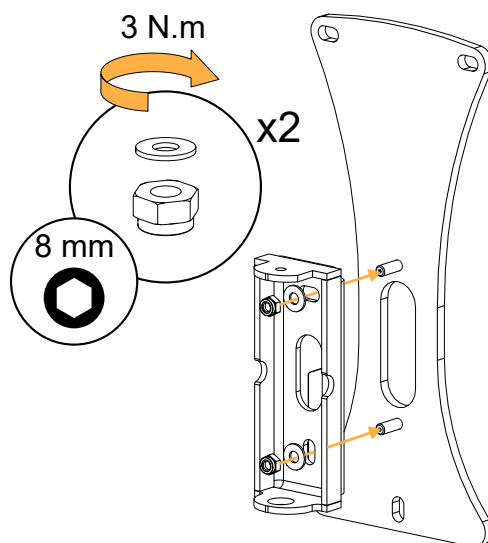
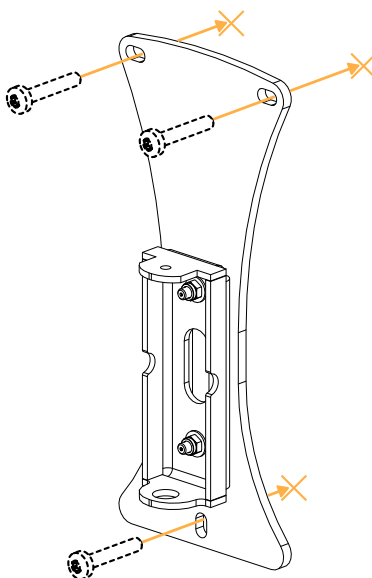
! Make sure to leave enough space between the walls and the sides of the rigging element to access the screw(s) when the enclosure is mounted.

1. Drill holes in the wall for TILT-SUPPORT.



2. Assemble the PAN wall-mounting part with TILT-SUPPORT.

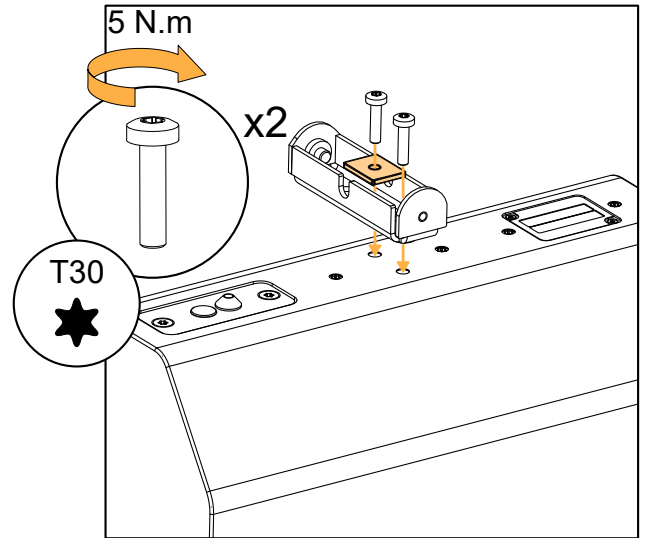
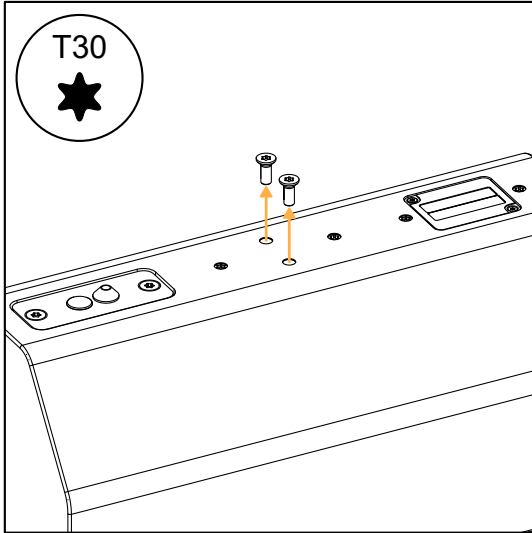
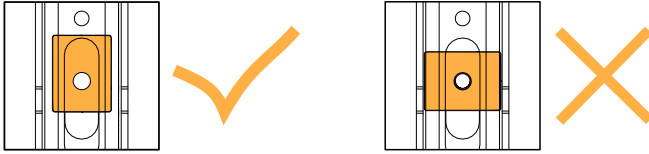
Use the two M5 nuts and washers.

**3. Secure TILT-SUPPORT and PAN to the wall.**

4. Secure PAN to X6i:

- a) Remove the two placeholder screws in the middle of X6i.
 - b) Secure the PAN enclosure-mounting part with the rectangular washer to X6i.
- Use the two M6×25 Torx screws.

! Make sure the rectangular washer is in the correct position.

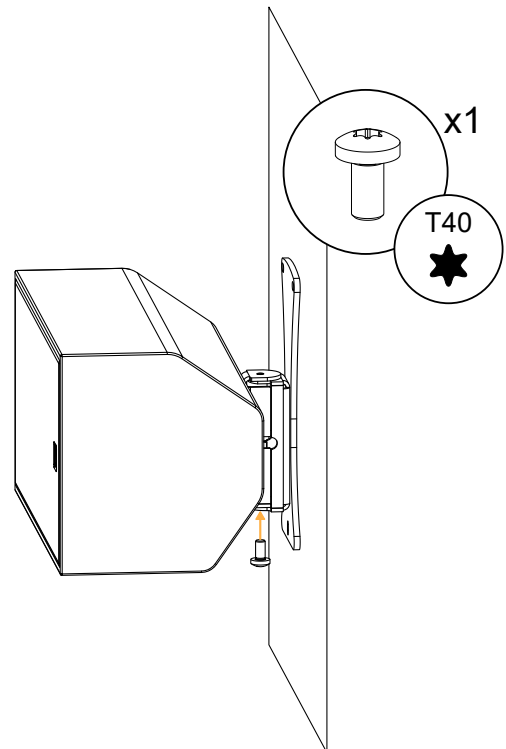
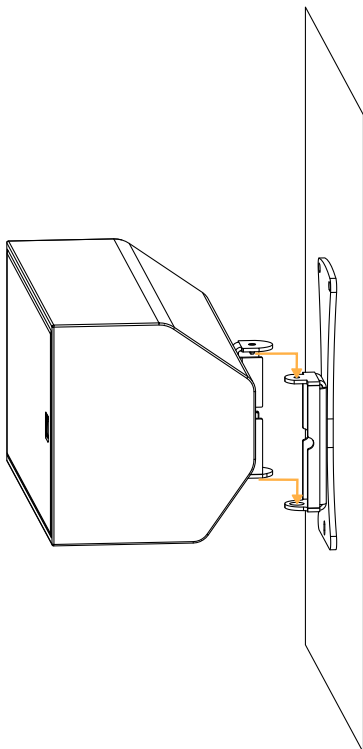


5. Prepare the cabling. Refer to [Cabling X6i](#) (p.172).

6. Mount the assembly on the PAN wall-mounting part:

- a) Align the pin with the top hole and push the assembly downwards.
- b) Drive the M8×16 Torx screw from underneath PAN.

! Do not fully tighten the screw.

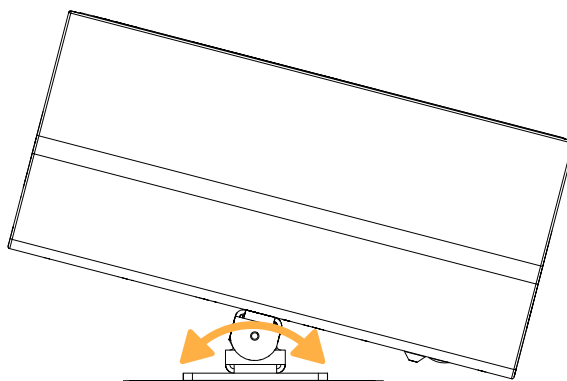


7. Rotate the assembly to adjust the azimuth angle.



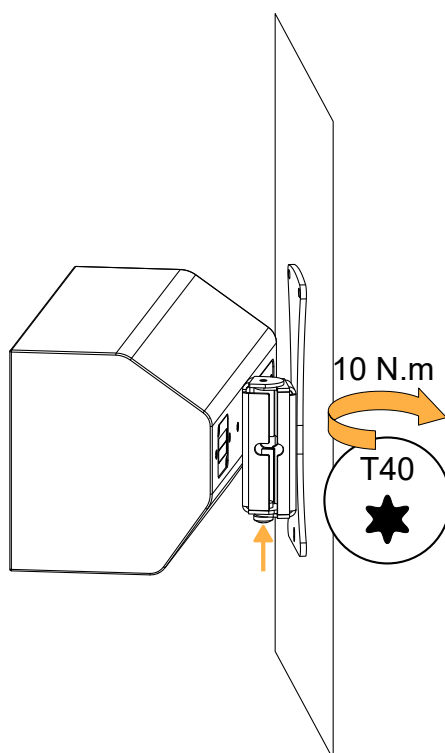
Azimuth angle in horizontal orientation

When X6i is mounted horizontally with PAN against a wall, an azimuth angle of $+12^{\circ}/-12^{\circ}$ can be reached. Use a wedge or mount on a narrow wall to increase the azimuth angle, up to $+45^{\circ}/-45^{\circ}$.



8. Tighten the M8 screw. Apply a torque of 10 N.m.

Make sure the assembly is stable.

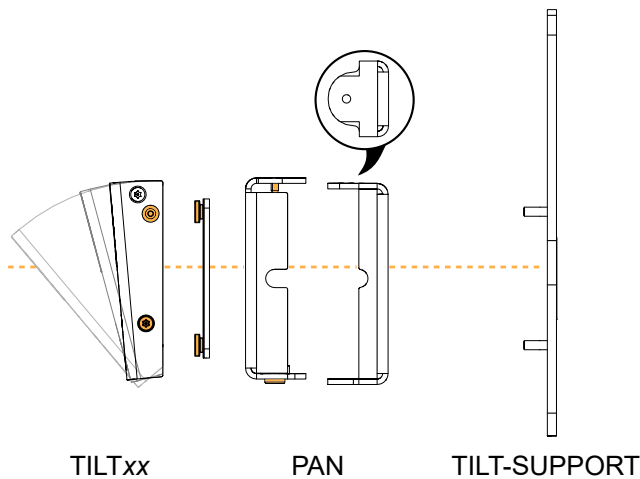


Wall-mounting X6i horizontally with PAN and TILT5/TILT15/TILT40

Type of deployment	wall-mounting
Rigging accessories	TILT-SUPPORT
	PAN
	TILT5/TILT15/TILT40
Additional material	3 compatible screws and anchors
Tools	torque screwdriver
	T25 Torx bit
	T30 Torx bit
	T40 Torx bit
	8 mm wrench or 8 mm hex socket
Min. number of operators	1

⚠ Assembly overview

Pay attention to the position of the accessory parts throughout the procedure.



⚠ Secondary safety for flown, wall-mounted, or ceiling-mounted enclosures

Use one insert at the back of the enclosure to implement a secondary safety.

⚠ Risk of crushing injury

Ensure that the wall or ceiling can support the load of the product.

It is recommended to mount only on solid structures. If mounting on a hollow structure (such as a wall cavity), place anchoring points on the framework (wall studs, ceiling joists), or reinforce the mounting area.

Select screws and anchors applicable to the wall or ceiling properties and to the load of the product. Prevent screws from loosening over time, using for example thread locker or lock washers.

Specifications for screws and anchors

deployment	accessory	ultimate tensile load per screw (daN)	ultimate shear load per screw (daN)	screws quantity	mounting hole size	specific constraints
wall-mounting	TILT-SUPPORT + any accessory	6	6	3	Ø 6.4 mm / 0.25 in (slotted)	–

⚠ Risk of falling objects

Do not use PAN or PANx2 upside-down.

Do not swap the wall-mounting part(s) and the enclosure-mounting part(s).

⚠ Risk of falling objects
Do not use TILT, TILT5, TILT15, or TILT40 upside-down. These rigging accessories are designed for negative site angles only.

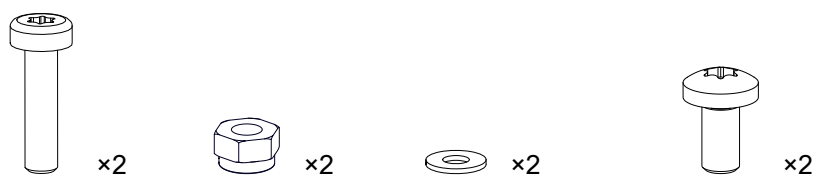
Screws and fasteners

from TILT-SUPPORT



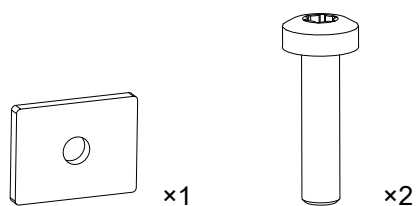
M5 hex locknut thick plain washer Ø
5 mm

from PAN



M5×20 Torx M5 hex locknut thick plain washer Ø M8×16 Torx
5 mm

from TILT5/TILT15/TILT40



rectangular washer M6×25 Torx

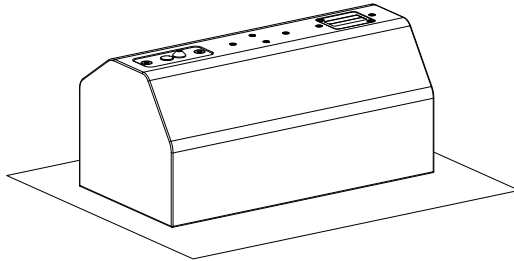
Assembly

About this task

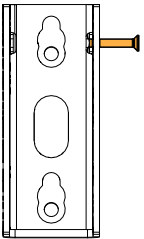
i In this procedure, TILTxx designates the fixed angle accessories TILT5, TILT15, and TILT40.

Prerequisite

Place X6i on its front face on a clean flat surface.



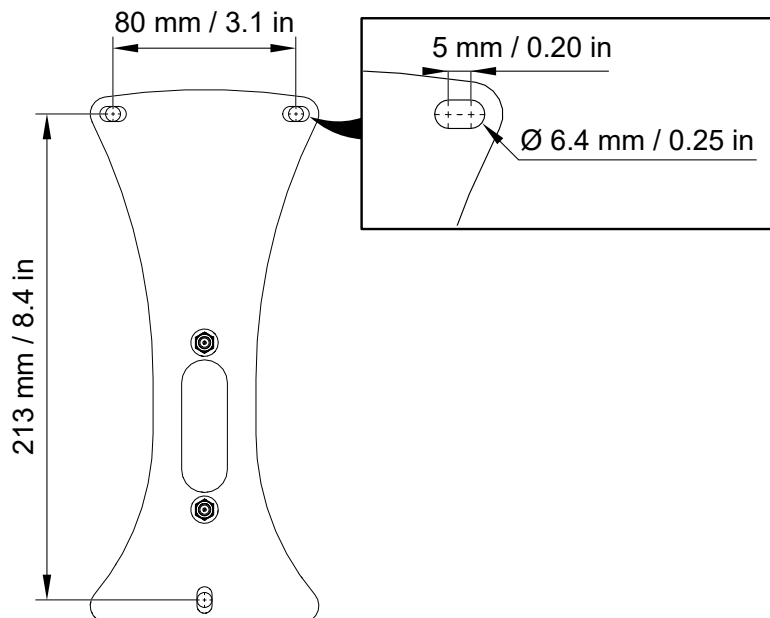
Make sure that the TILTxx safety screw is present and loosened.



Procedure

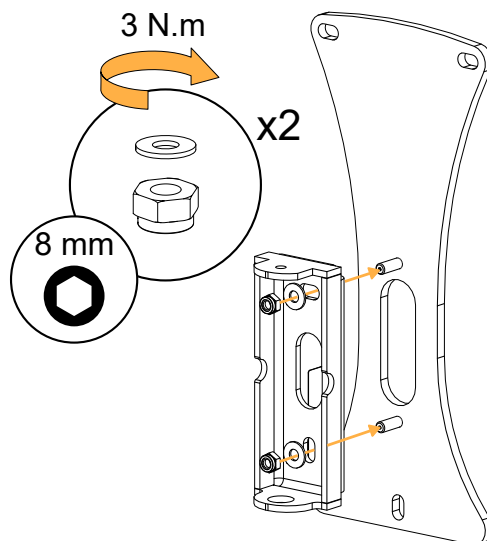
! Make sure to leave enough space between the walls and the sides of the rigging element to access the screw(s) when the enclosure is mounted.

1. Drill holes in the wall for TILT-SUPPORT.

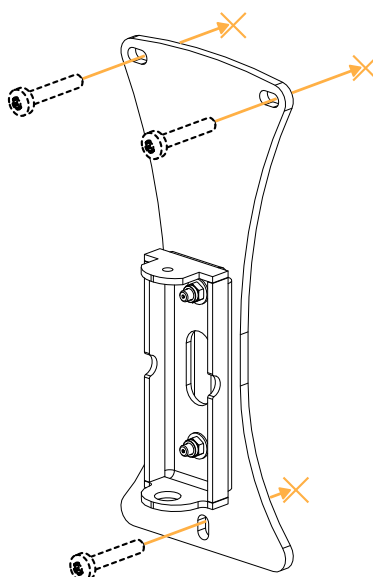


2. Assemble the PAN wall-mounting part with TILT-SUPPORT.

Use the two M5 nuts and washers.



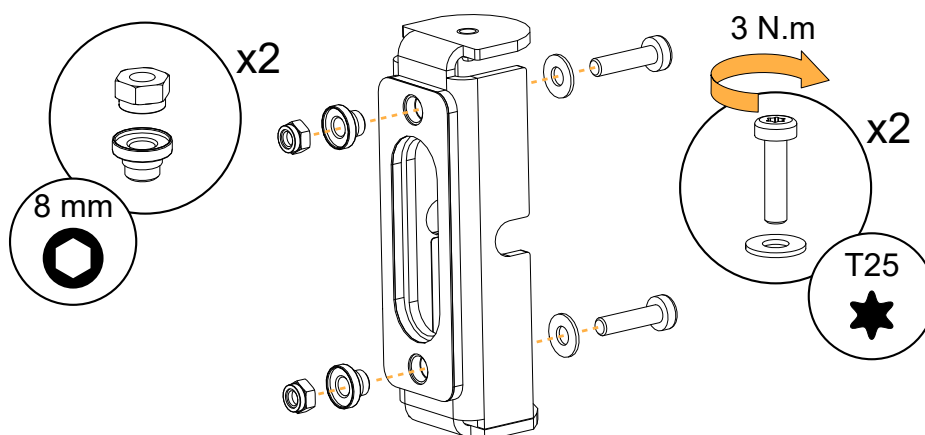
3. Secure TILT-SUPPORT and PAN to the wall.



4. Assemble the wall-mounting plate and tapered spacers with PAN.


Use two M5×20 Torx screws, two M5 washers, and two M5 nuts.

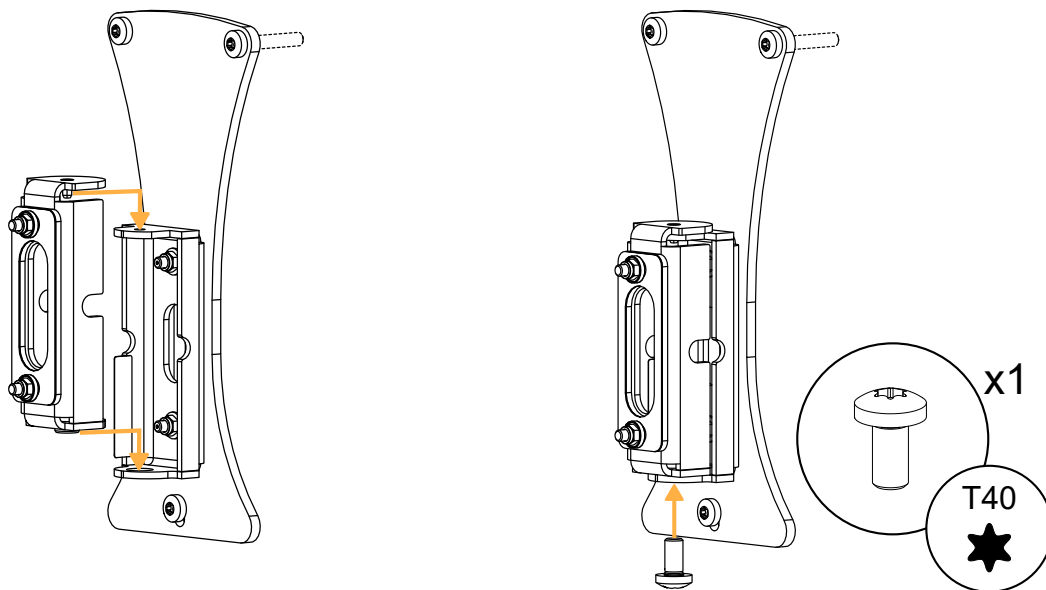
The wall-mounting plate gasket is facing away from PAN.



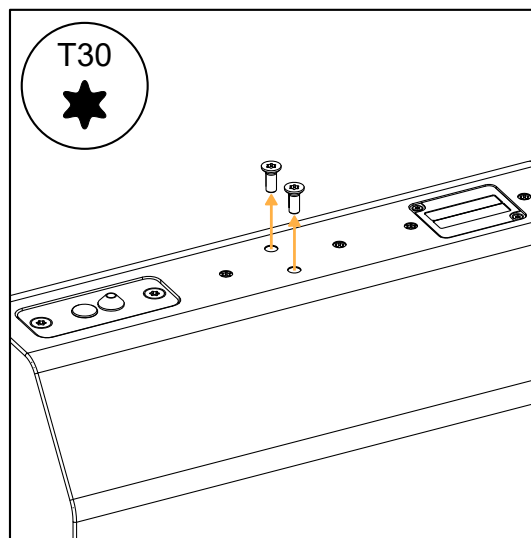
5. Mount the assembly on the PAN wall-mounting part:

- a) Align the pin with the top hole and push the assembly downwards.
- b) Drive the M8×16 Torx screw from underneath PAN.

 Do not fully tighten the screw.



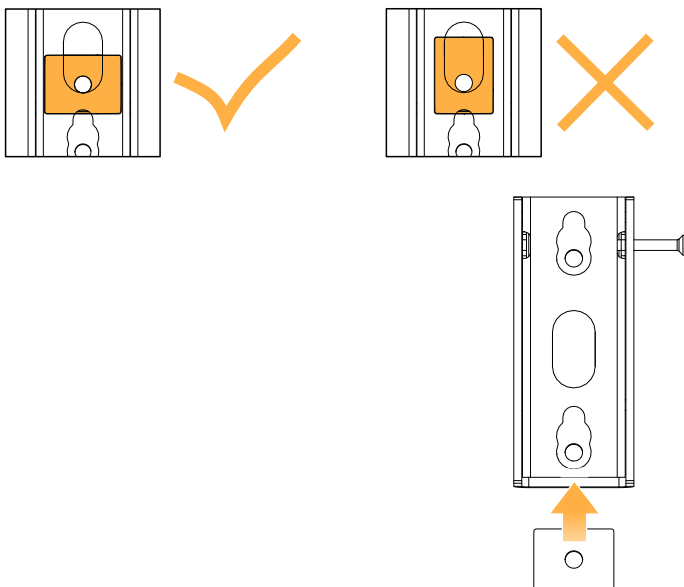
6. Remove the two placeholder screws in the middle of X6i.



7. Insert the rectangular washer into TILTxx.



Make sure the rectangular washer is in the correct position.



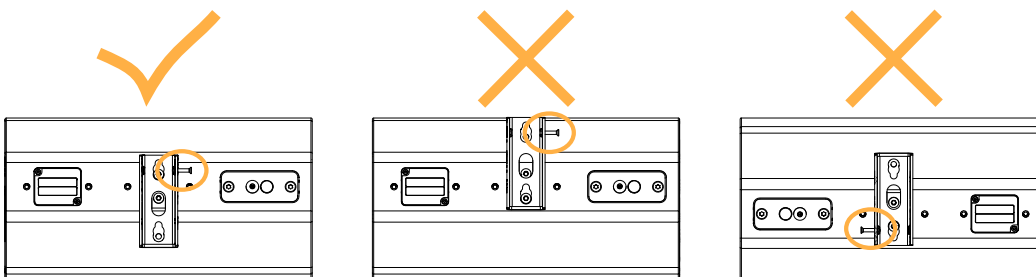
8. Secure TILTxx to X6i.

Use the two M6×25 Torx screws.

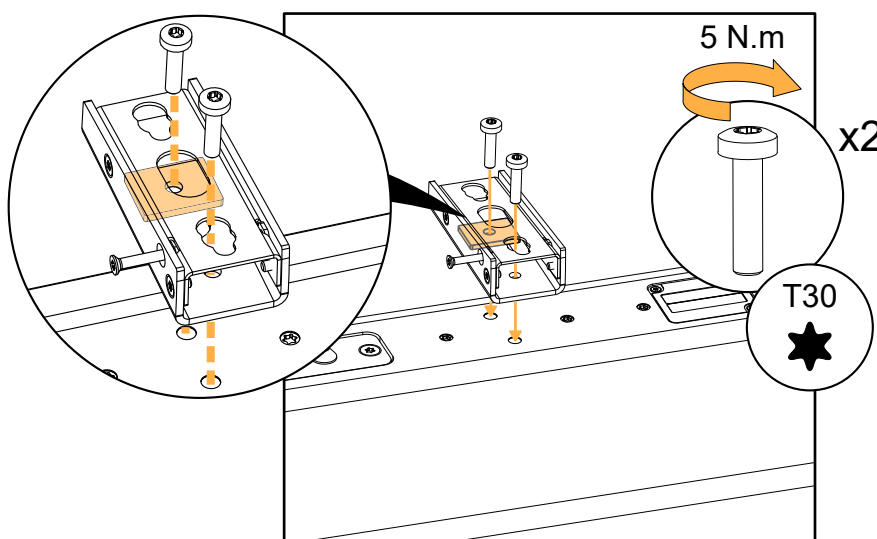


Align the top and the middle hole (formed by the washer) from the rigging accessory with the top and bottom hole on X6i, respectively.

Make sure that the safety screw is at the top when the enclosure is mounted in its final position.



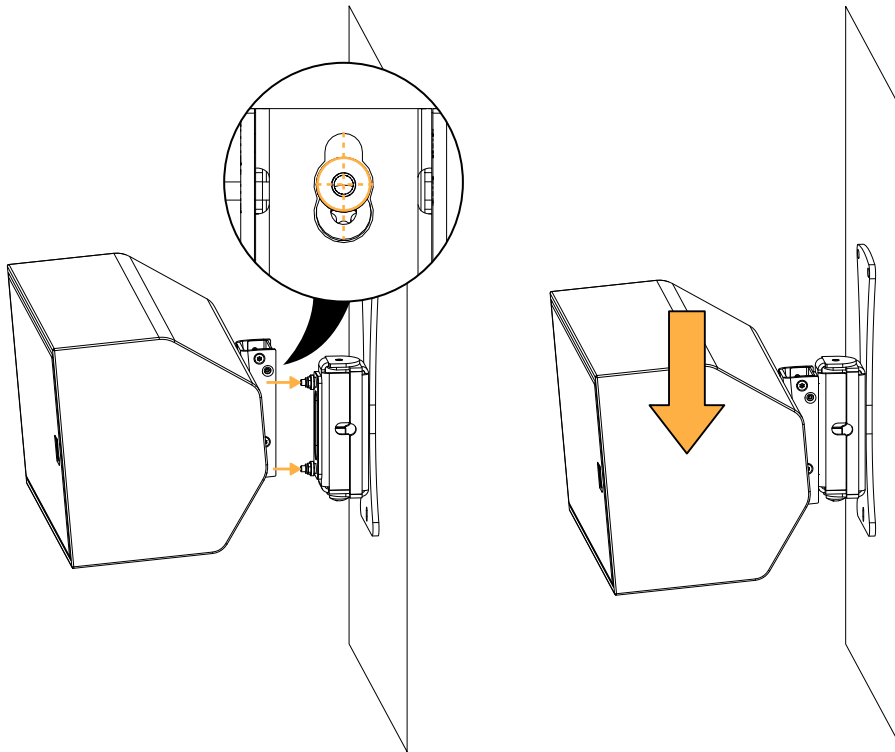
If the shank of the screwdriver collides with TILT40, use a screwdriver extension or an angled screwdriver to drive the screws.



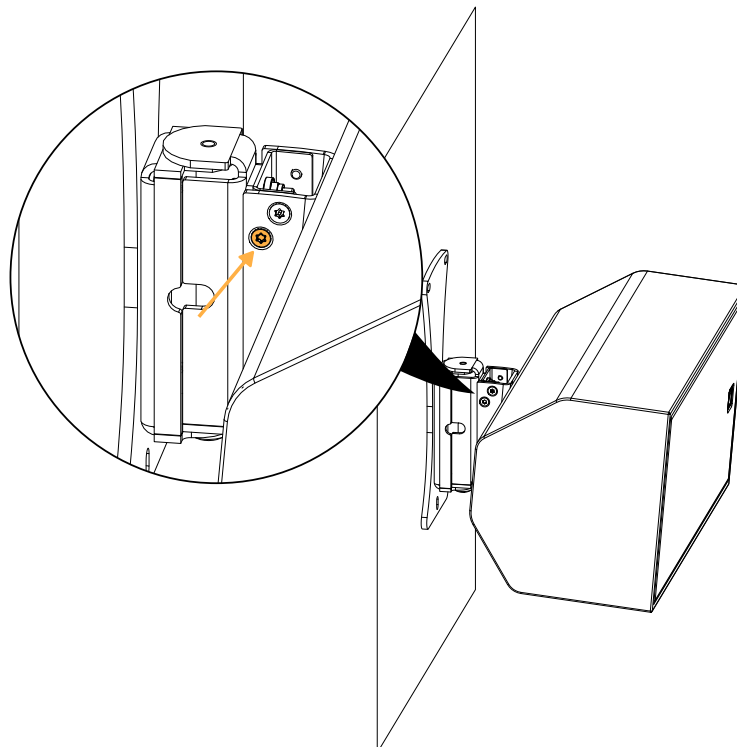
9. Prepare the cabling. Refer to [Cabling X6i](#) (p.172).

10. Mount X6i on PAN:

- a) Align the midpoints of the TILTxx rear cutouts with the tapered spacers.
- b) Push the assembly downwards.



11. Tighten the safety screw on TILTxx.

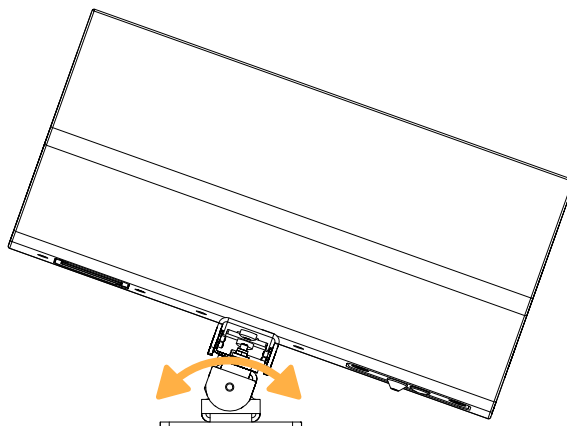


12. Rotate the assembly to adjust the azimuth angle.



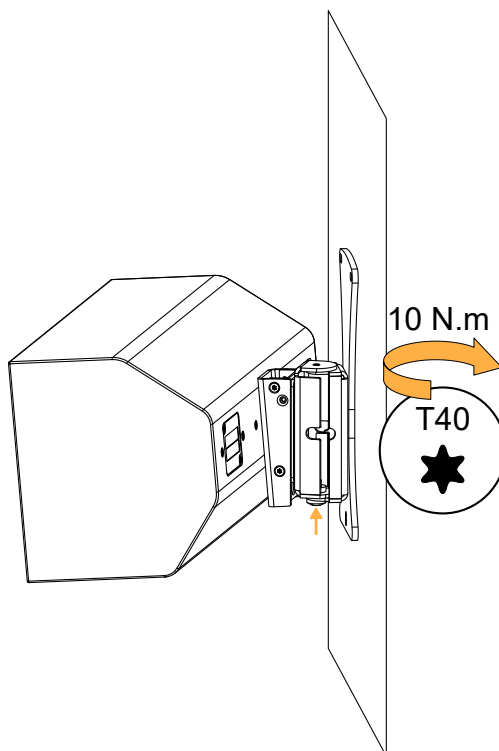
Azimuth angle in horizontal orientation

When X6i is mounted horizontally with PAN against a wall, an azimuth angle of $+12^{\circ}/-12^{\circ}$ can be reached. Use a wedge or mount on a narrow wall to increase the azimuth angle, up to $+45^{\circ}/-45^{\circ}$.



13. Tighten the M8×16 Torx screw. Apply a torque of 10 N.m.

Make sure the assembly is stable.

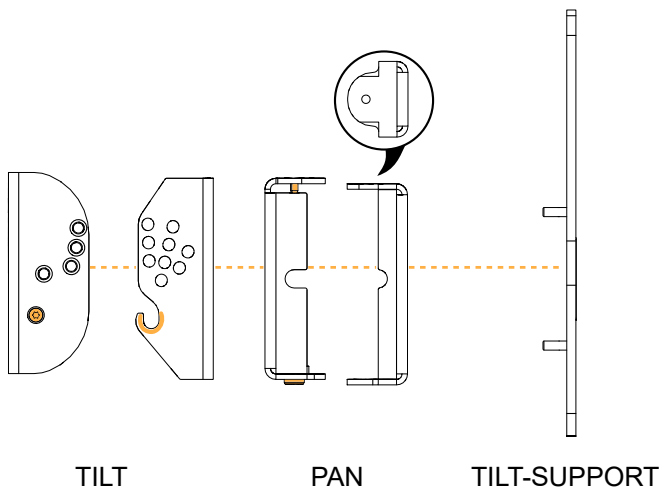


Wall-mounting X6i horizontally with PAN and TILT

Type of deployment	wall-mounting
Rigging accessories	TILT-SUPPORT
	PAN
	TILT
Additional material	3 compatible screws and anchors
Tools	torque screwdriver
	T20 Torx bit
	T30 Torx bit
	T40 Torx bit
	T20 screwdriver
	8 mm wrench or 8 mm hex socket
	10 mm wrench or 10 mm hex socket
Min. number of operators	1

⚠ Assembly overview

Pay attention to the position of the accessory parts throughout the procedure.



⚠ Secondary safety for flown, wall-mounted, or ceiling-mounted enclosures

Use one insert at the back of the enclosure to implement a secondary safety.

⚠ Risk of crushing injury

Ensure that the wall or ceiling can support the load of the product.

It is recommended to mount only on solid structures. If mounting on a hollow structure (such as a wall cavity), place anchoring points on the framework (wall studs, ceiling joists), or reinforce the mounting area.

Select screws and anchors applicable to the wall or ceiling properties and to the load of the product. Prevent screws from loosening over time, using for example thread locker or lock washers.

Specifications for screws and anchors

deployment	accessory	ultimate tensile load per screw (daN)	ultimate shear load per screw (daN)	screws quantity	mounting hole size	specific constraints
wall-mounting	TILT-SUPPORT + any accessory	6	6	3	Ø 6.4 mm / 0.25 in (slotted)	–



Risk of falling objects

Do not use PAN or PANx2 upside-down.

Do not swap the wall-mounting part(s) and the enclosure-mounting part(s).



Risk of falling objects

Do not use TILT, TILT5, TILT15, or TILT40 upside-down. These rigging accessories are designed for negative site angles only.

Screws and fasteners

from TILT-SUPPORT



x2

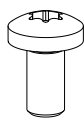


x2

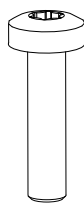
M5 hex locknut

thick plain washer Ø
5 mm

from PAN



x2



x2



x2



x2

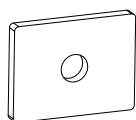
M8x16 Torx

M6x25 Torx

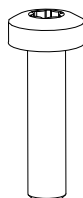
M6 hex lock nut

flat washer Ø 6 mm

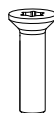
from TILT



x1



x2



x1



x1

rectangular washer

M6x25 Torx

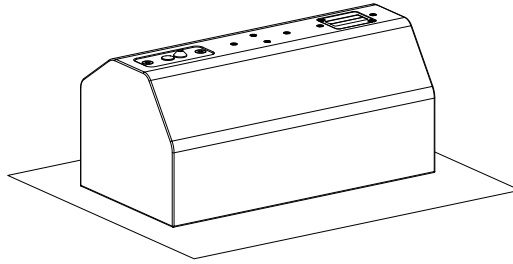
M4x16 Torx
(pre-mounted)

Axis with M4
Torx head (pre-
mounted)

Assembly

Prerequisite

Place X6i on its front face on a clean flat surface.

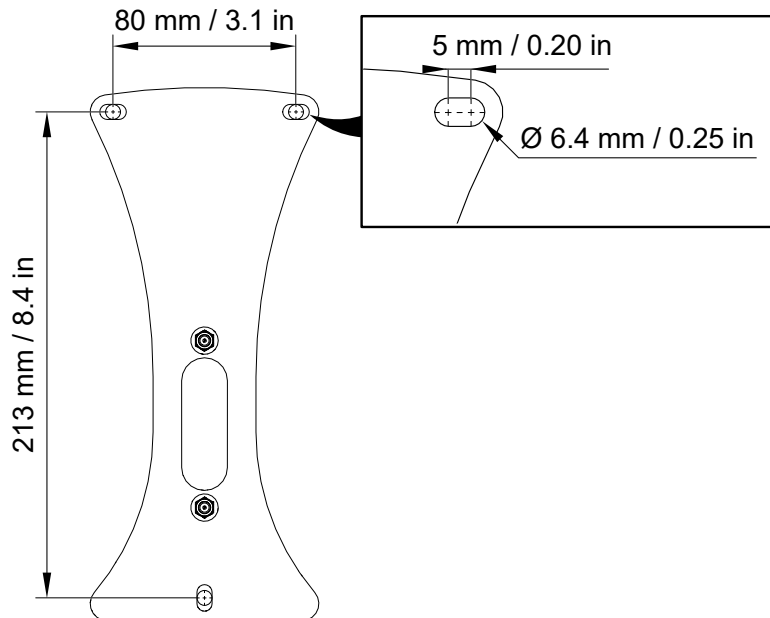


Procedure



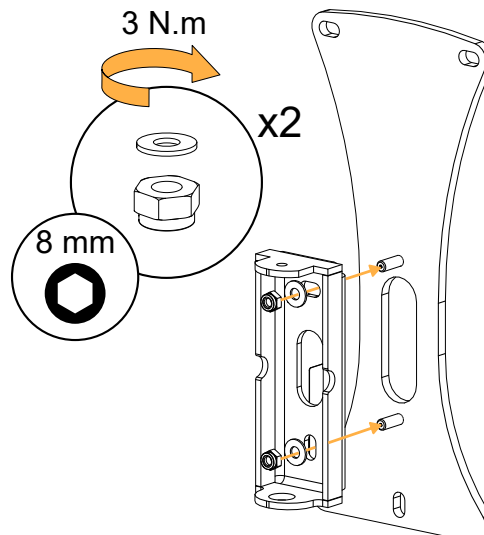
Make sure to leave enough space between the walls and the sides of the rigging element to access the screw(s) when the enclosure is mounted.

1. Drill holes in the wall for TILT-SUPPORT.

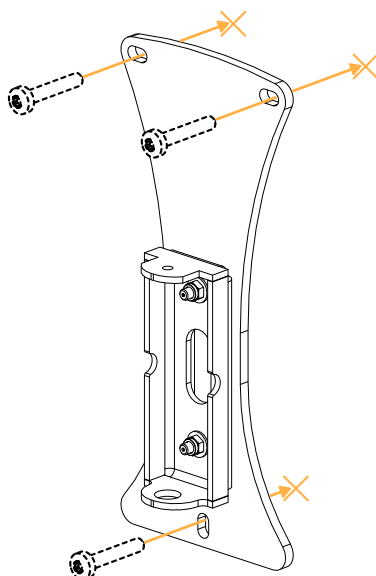


2. Assemble the PAN wall-mounting part with TILT-SUPPORT.

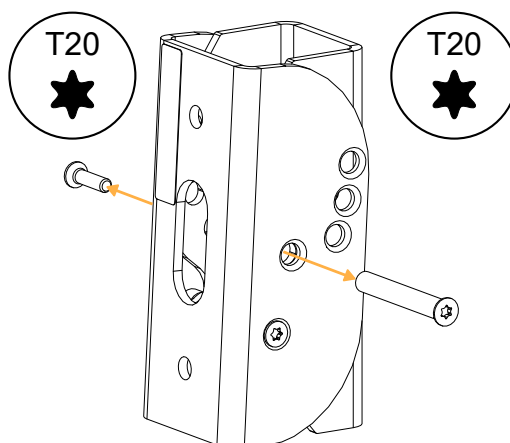
Use the two M5 nuts and washers.



3. Secure TILT-SUPPORT and PAN to the wall.

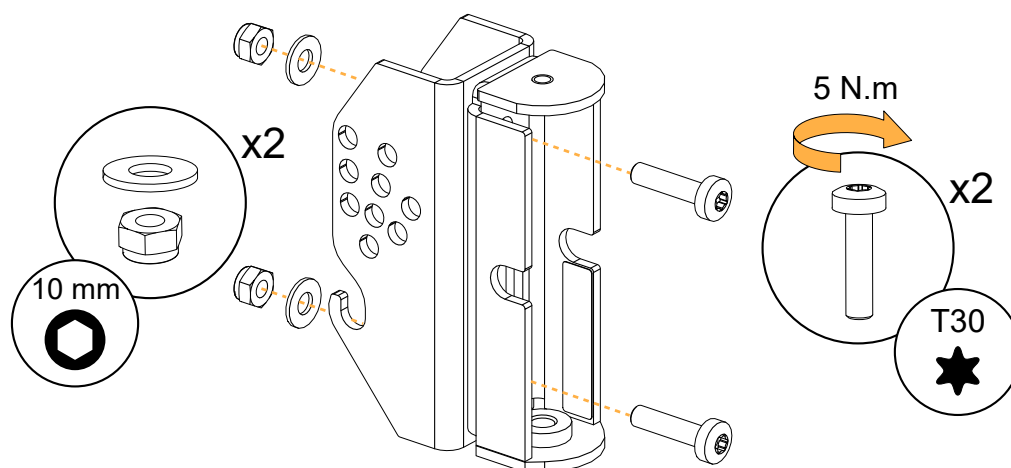


4. Disassemble the two TILT parts.



5. Assemble the PAN enclosure-mounting part with the TILT wall-mounting part.

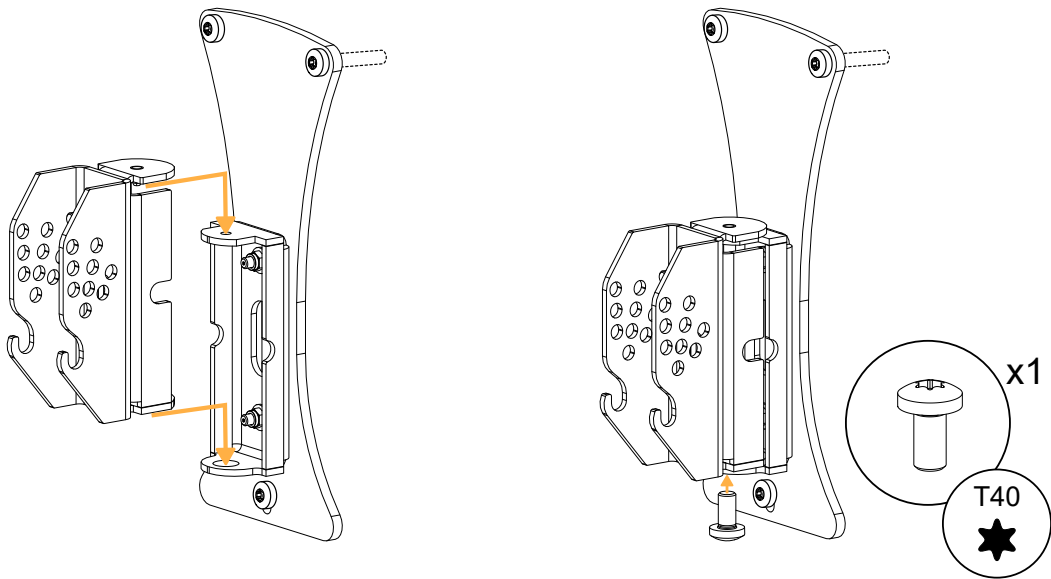
Use the two M6×25 Torx screws, M6 nuts and washers.



6. Mount the assembly on the PAN wall-mounting part:

- a) Align the pin with the top hole and push the assembly downwards.
- b) Drive the M8×16 Torx screw from underneath PAN.

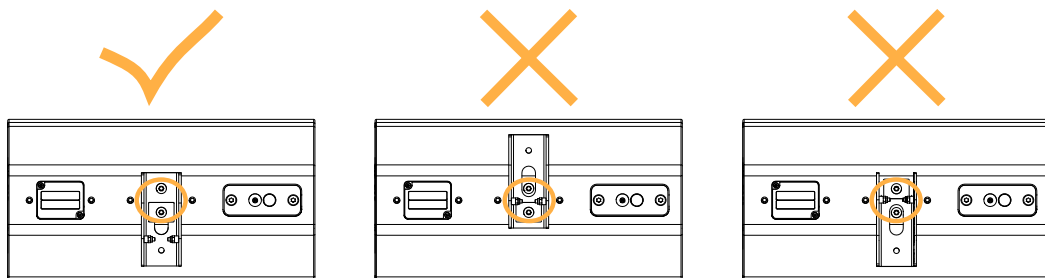
! Do not fully tighten the screw.



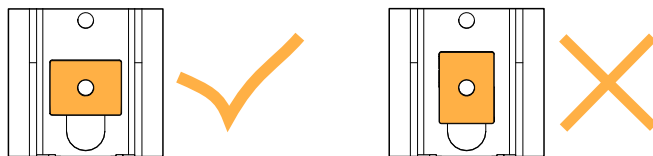
7. Secure TILT to X6i:

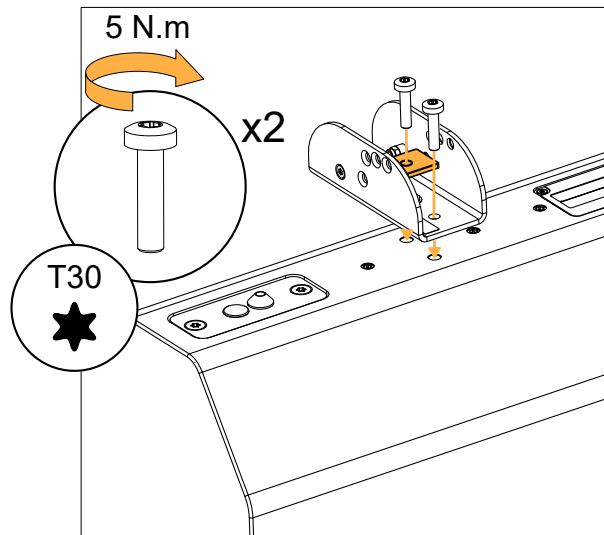
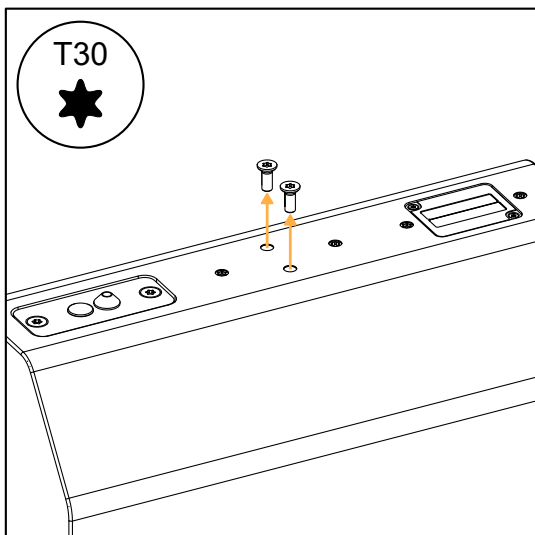
- a) Remove the two placeholder screws in the middle of X6i.
 - b) Secure the TILT enclosure-mounting part with the rectangular washer to X6i.
- Use the two M6×25 Torx screws.

! Align the top and the middle hole (formed by the washer) from the rigging accessory with the top and bottom hole on X6i, respectively.



! Make sure the rectangular washer is in the correct position.

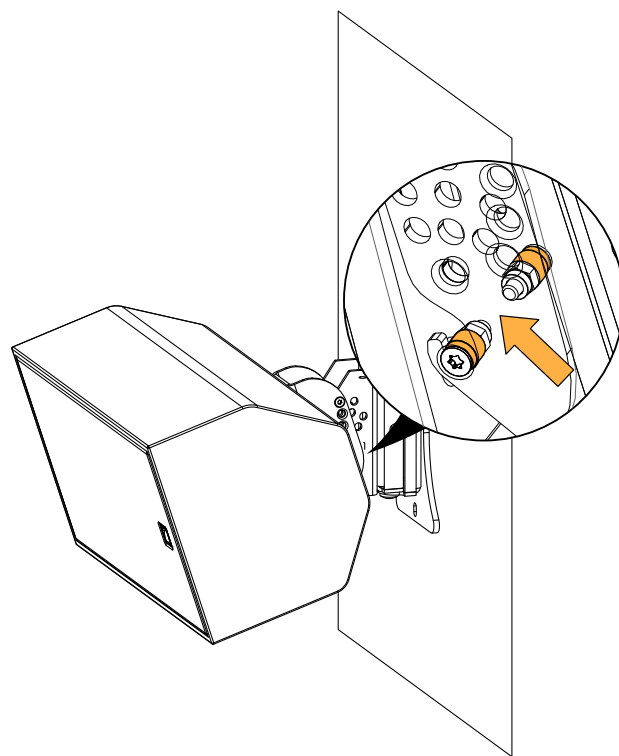
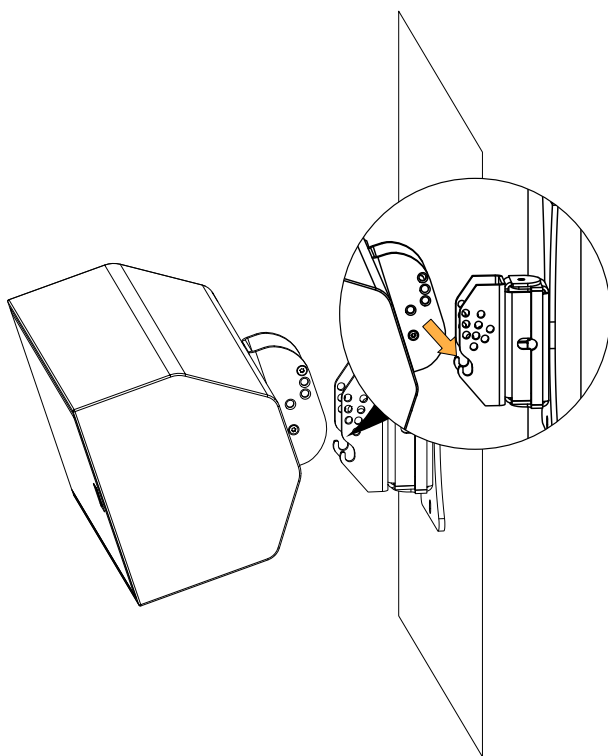




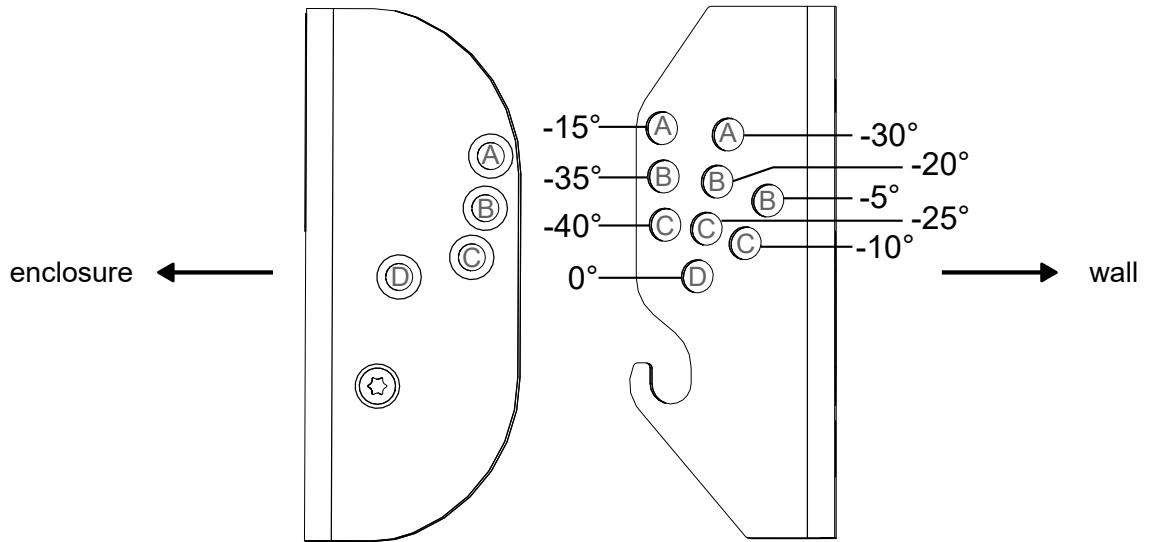
8. Prepare the cabling. Refer to [Cabling X6i](#) (p.172).

9. Mount X6i on the PAN and TILT assembly:

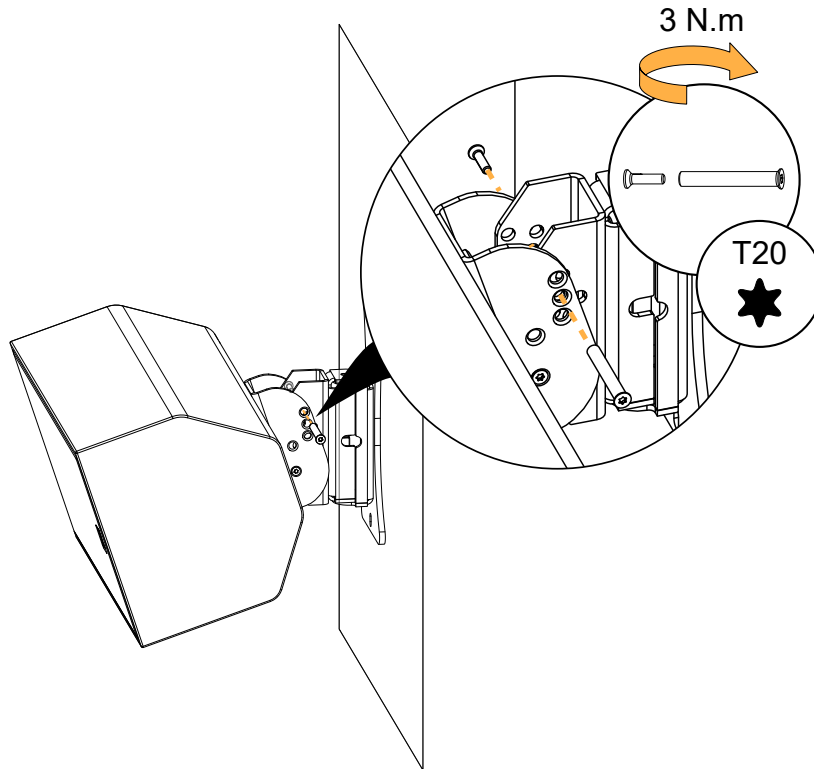
- a) Assemble the two TILT parts by fitting the indexing studs into the hooks.
Make sure the studs are pushed all the way into the hooks.



b) Rotate the assembly to select the site angle.



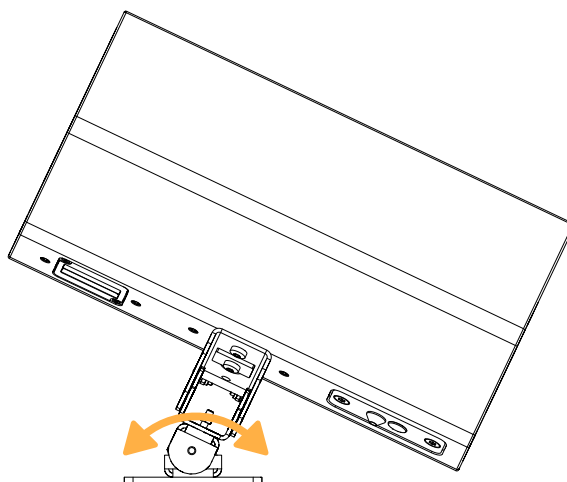
c) Drive the axis through the holes and secure it with the M4×16 Torx screw.



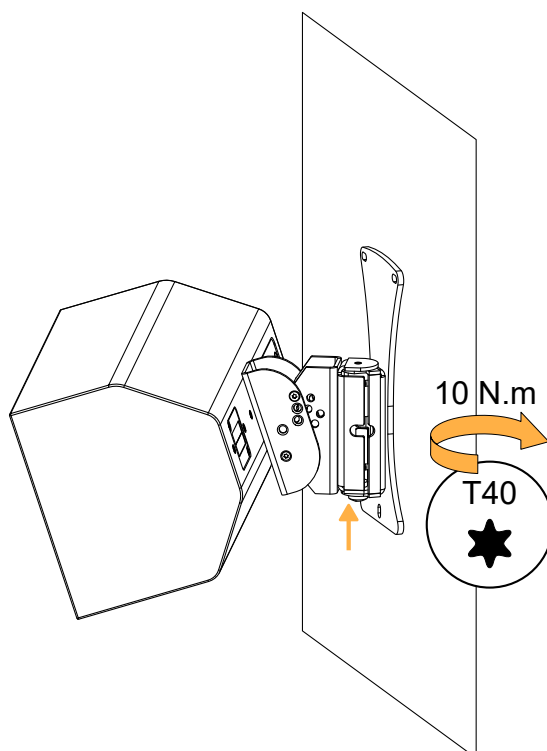
10. Rotate the assembly to adjust the azimuth angle.

i **Azimuth angle in horizontal orientation**

When X6i is mounted horizontally with PAN against a wall, an azimuth angle of $+12^{\circ}/-12^{\circ}$ can be reached. Use a wedge or mount on a narrow wall to increase the azimuth angle, up to $+45^{\circ}/-45^{\circ}$.



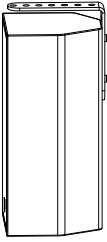
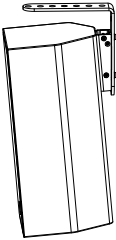
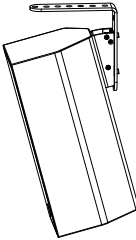
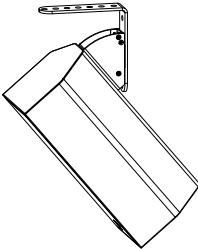
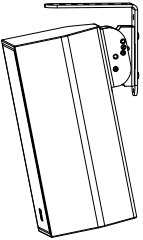
11. Tighten the M8×16 Torx screw. Apply a torque of 10 N.m.
Make sure the assembly is stable.



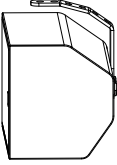
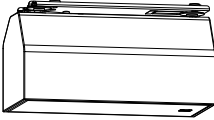
Ceiling-mounting or truss-mounting

Overview

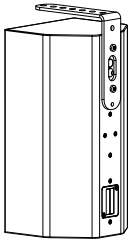
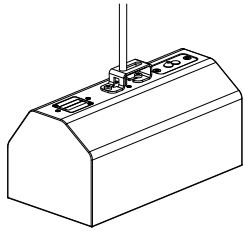
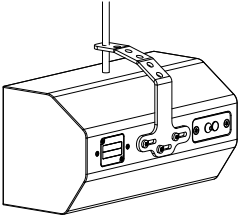
X6i ceiling-mounted vertically

site angle				
0°	-5°	-15°	-40°	0° to -40°
VBAR (p.131) 	VBAR + TILT5 (p.138) 	VBAR + TILT15 (p.138) 	VBAR + TILT40 (p.138) 	VBAR + TILT (p.143) 

X6i ceiling-mounted horizontally

site angle	
0° to -35°	90° (downward-facing)
X6i-HBAR (p.148) 	X6i-onCW (p.156) 

X6i truss-mounted or suspended by a threaded rod

orientation	site angle	
	18° to -19°	90° (downward-facing)
Vertical	VBAR (p.131) 	CEILING-PENDANT (p.161) 
Horizontal	9° to -42° X6i-HBAR (p.148) 	

Vertically

Ceiling-mounting or flying X6i vertically with VBAR

Type of deployment	ceiling-mounting or truss-mounting
Rigging accessories	VBAR
Additional material	2 compatible screws and anchors, or
	1 max. Ø10 mm / 0.39 in truss clamp, or
	1 max. Ø10 mm / 0.39 in threaded rod, with corresponding nuts and washers
Tools	torque screwdriver
	T30 Torx bit
Min. number of operators	2

Secondary safety for flown, wall-mounted, or ceiling-mounted enclosures

Use one insert at the back of the enclosure to implement a secondary safety.

Risk of crushing injury


Ensure that the wall or ceiling can support the load of the product.

It is recommended to mount only on solid structures. If mounting on a hollow structure (such as a wall cavity), place anchoring points on the framework (wall studs, ceiling joists), or reinforce the mounting area.

Select screws and anchors applicable to the wall or ceiling properties and to the load of the product. Prevent screws from loosening over time, using for example thread locker or lock washers.

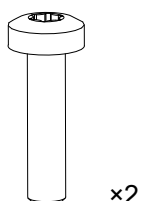
Specifications for screws and anchors

deployment	accessory	ultimate tensile load per screw (daN)	ultimate shear load per screw (daN)	screws quantity	mounting hole size	specific constraints
ceiling-mounting	VBAR + optional TILT or TILTxx	9	–	2	Ø 10.4 mm / 0.41 in	use the holes 1 and 7 (at both ends)

 SPCON cannot be used in this configuration.

Screws and fasteners

from VBAR



M6×25 Torx

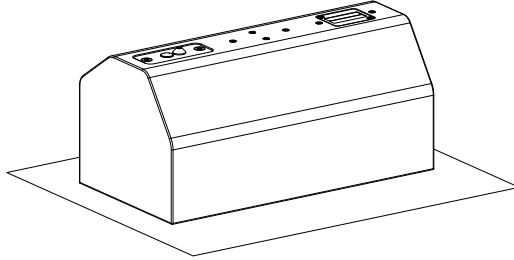
Ceiling-mounting X6i with VBAR

About this task

! For this configuration, the speaker cable must be run inside the ceiling.

Prerequisite

Place X6i on its front face on a clean flat surface.



Procedure



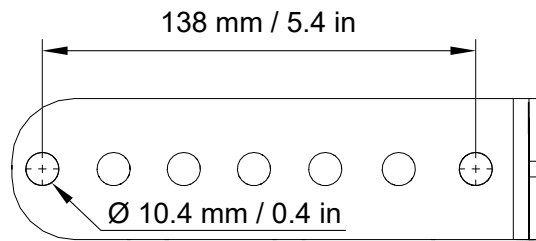
Ceiling-mounting holes

When ceiling-mounting with VBAR, always use holes 1 and 7 (at both ends) to ensure optimal support.

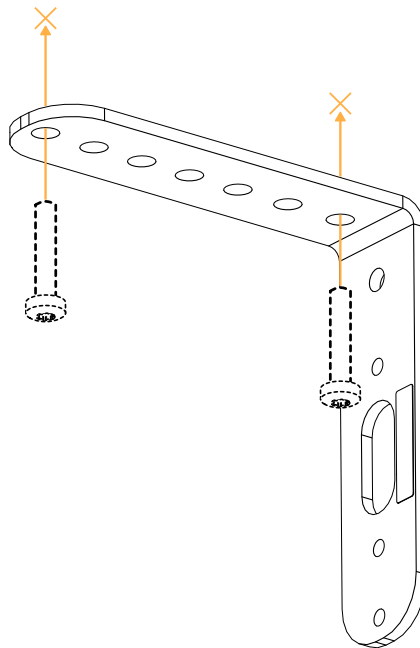


Make sure to leave enough space between the walls, the sides, and the rear of the rigging element to access the screw(s) when the enclosure is mounted.

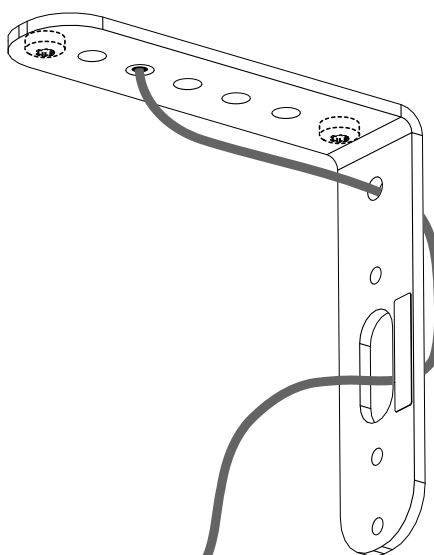
1. Drill holes in the ceiling for VBAR.



2. Secure VBAR to the ceiling.

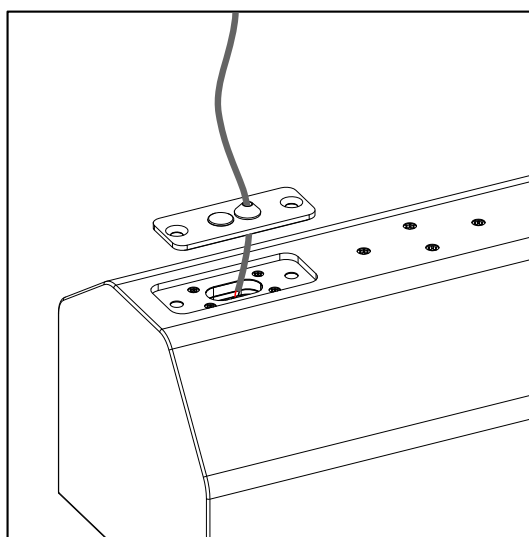
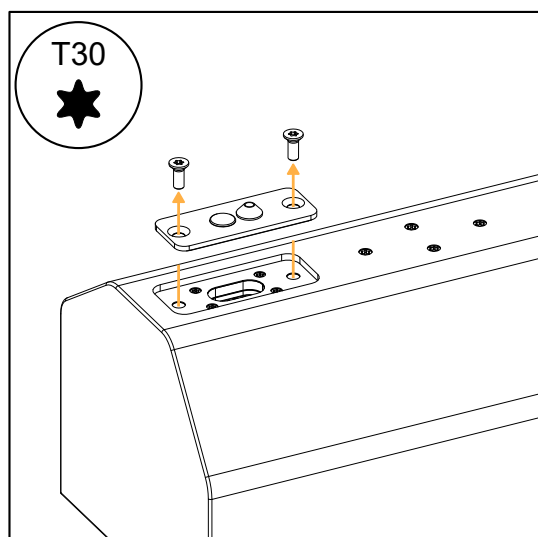


3. Run the speaker cable through VBAR.



4. Prepare X6i cabling:

- a) Remove the connector sealing plate.
- b) Run the cable through the connector sealing plate.
- c) Connect the cable to the X6i terminal block. Refer to [Cabling X6i](#) (p.172).





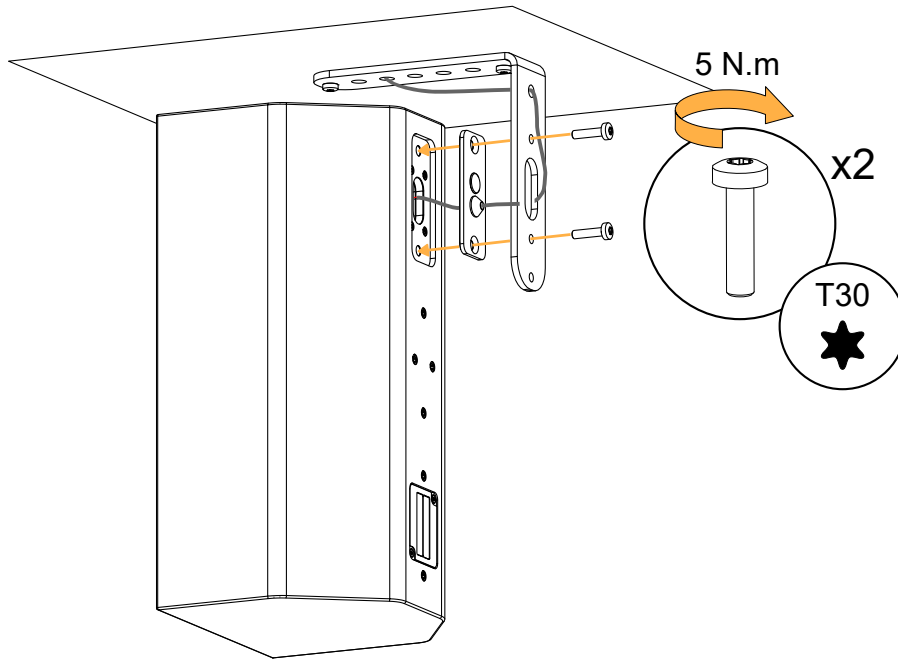
Risk of crushing injury

This step requires two operators.

5. Hold the connector sealing plate against the connector and secure X6i to VBAR.

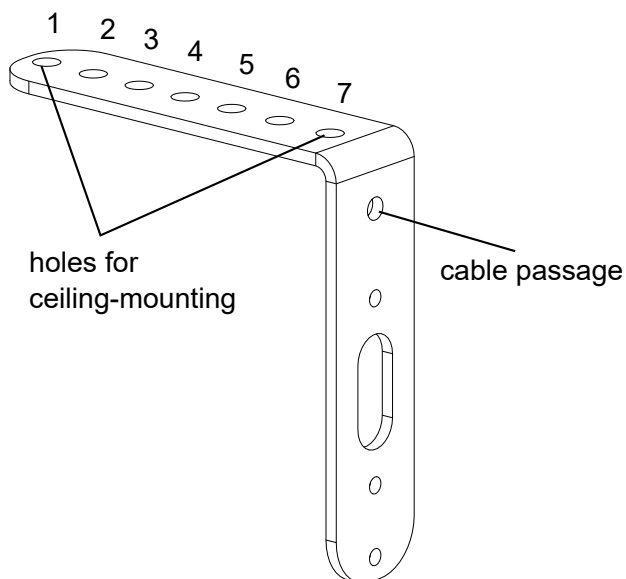
Use two M6×25 Torx screws.

Make sure the assembly is stable.



Flying X6i with VBAR

About this task

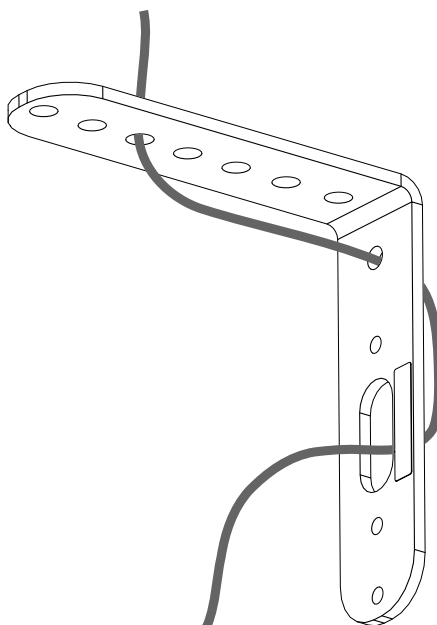


X6i site angles when flown or truss-mounted with VBAR

hole N ^o	angle
1	18°
2	13°
3	7°
4	1°
5	-6°
6	-12°
7	-19°

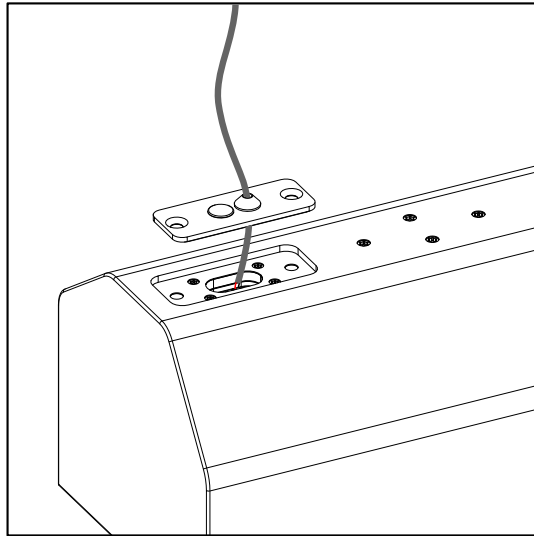
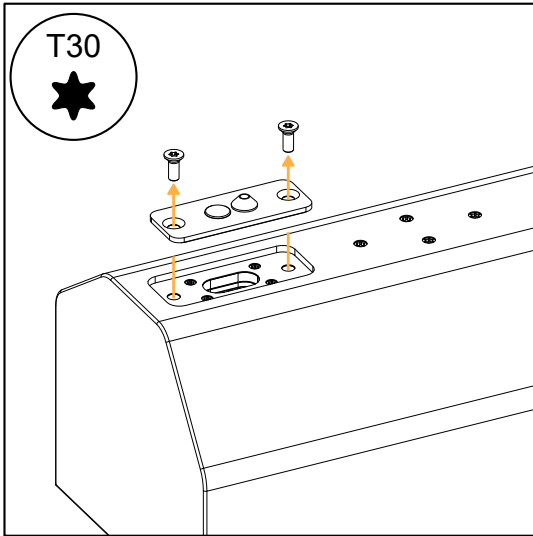
Procedure

1. Run the speaker cable through VBAR.

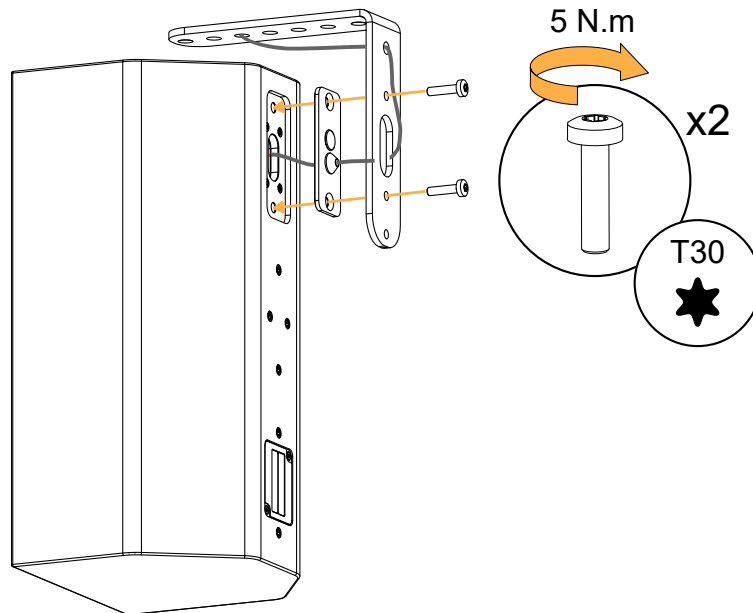


2. Prepare X6i cabling:

- a) Remove the connector sealing plate.
- b) Run the cable through the connector sealing plate.
- c) Connect the cable to the X6i terminal block. Refer to [Cabling X6i](#) (p.172).



- 3. Hold the connector plate and position X6i upright.
- 4. Secure VBAR and the connector sealing plate to X6i.

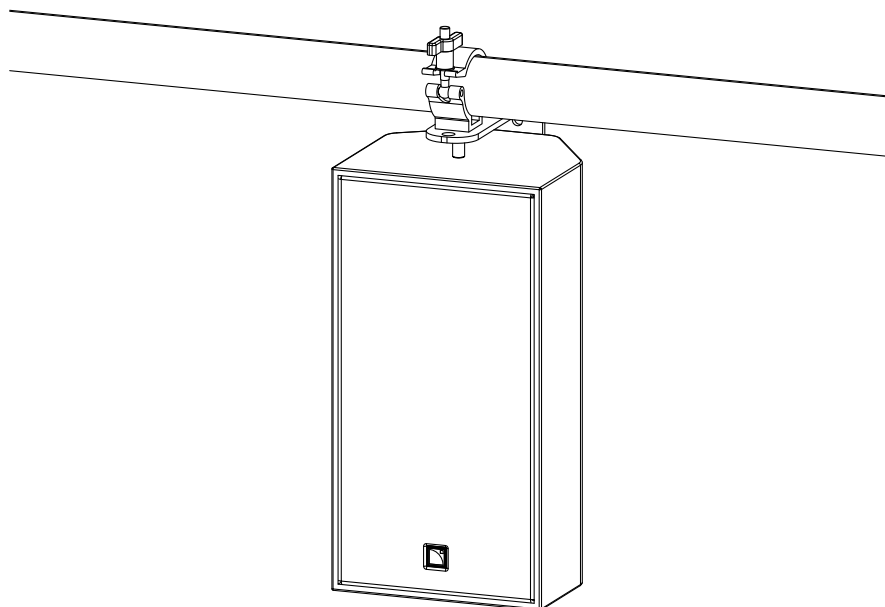


**Risk of crushing injury**

This step requires two operators.

5. Choose the pickup point and secure X6i to a truss clamp or a threaded rod (maximum $\varnothing 10$ mm / 0.39 in) using nuts.

Make sure the assembly is stable.

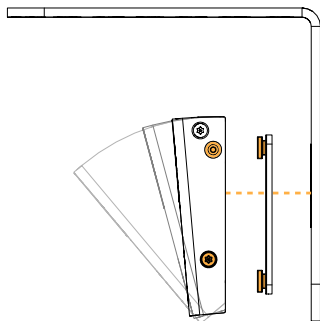


6. Fly X6i at desired height.

Ceiling-mounting X6i vertically with VBAR and TILT5/TILT15/TILT40

Type of deployment	ceiling-mounting
Rigging accessories	VBAR
	TILT5/TILT15/TILT40
Additional material	2 compatible screws and anchors
Tools	torque screwdriver
	T20 Torx bit
	T25 Torx bit
	T30 Torx bit
	8 mm wrench or 8 mm hex socket
Min. number of operators	2

! Assembly overview
Pay attention to the position of the accessory parts throughout the procedure.



TILTxx VBAR

! Secondary safety for flown, wall-mounted, or ceiling-mounted enclosures
Use one insert at the back of the enclosure to implement a secondary safety.

! Risk of crushing injury
Ensure that the wall or ceiling can support the load of the product.
It is recommended to mount only on solid structures. If mounting on a hollow structure (such as a wall cavity), place anchoring points on the framework (wall studs, ceiling joists), or reinforce the mounting area.
Select screws and anchors applicable to the wall or ceiling properties and to the load of the product. Prevent screws from loosening over time, using for example thread locker or lock washers.

Specifications for screws and anchors

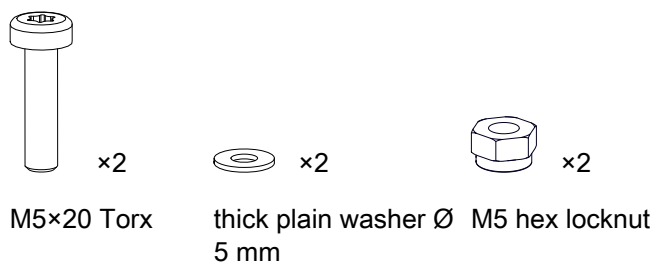
deployment	accessory	ultimate tensile load per screw (daN)	ultimate shear load per screw (daN)	screws quantity	mounting hole size	specific constraints
ceiling-mounting	VBAR + optional TILT or TILTxx	9	–	2	Ø 10.4 mm / 0.41 in	use the holes 1 and 7 (at both ends)

! Risk of falling objects
Do not use TILT, TILT5, TILT15, or TILT40 upside-down. These rigging accessories are designed for negative site angles only.

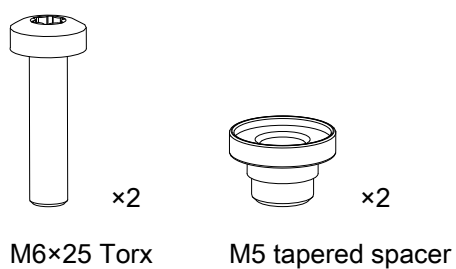
! Ceiling-mounting holes
When ceiling-mounting with VBAR, always use holes 1 and 7 (at both ends) to ensure optimal support.

Screws and fasteners

from VBAR



from TILT5/TILT15/TILT40



Assembly

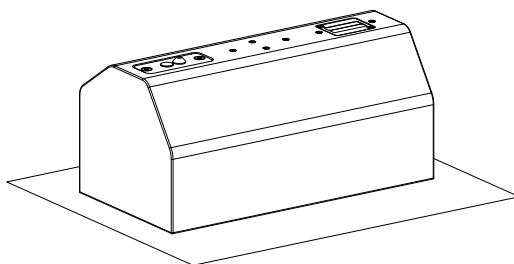
About this task



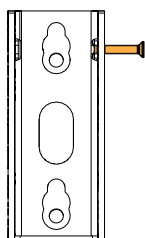
In this procedure, TILTxx designates the fixed angle accessories TILT5, TILT15, and TILT40.

Prerequisite

Place X6i on its front face on a clean flat surface.



Make sure that the TILTxx safety screw is present and loosened.



Procedure



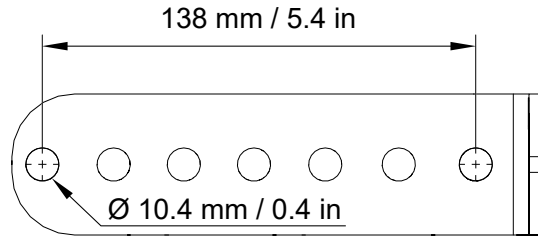
Ceiling-mounting holes

When ceiling-mounting with VBAR, always use holes 1 and 7 (at both ends) to ensure optimal support.

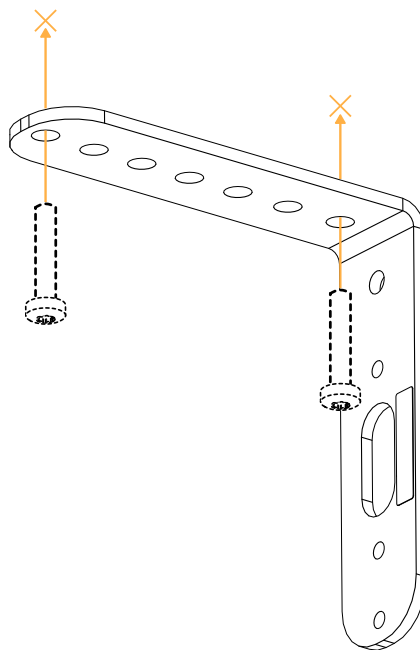


Make sure to leave enough space between the walls, the sides, and the rear of the rigging element to access the screw(s) when the enclosure is mounted.

1. Drill holes in the ceiling for VBAR.



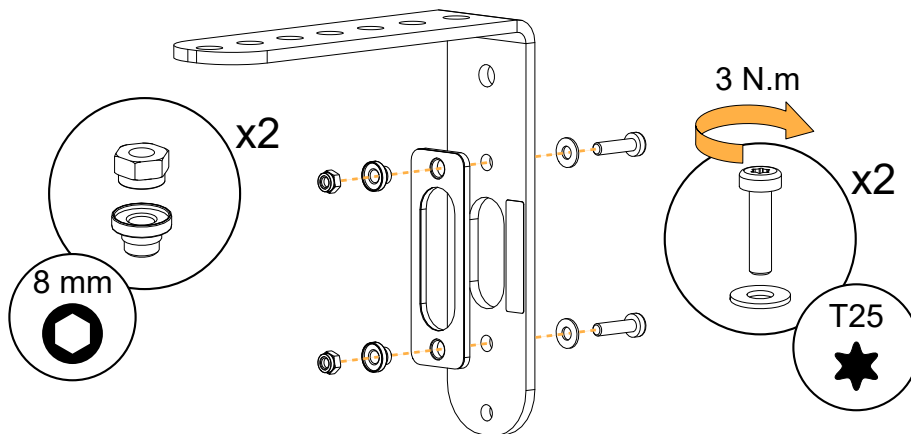
2. Secure VBAR to the ceiling.



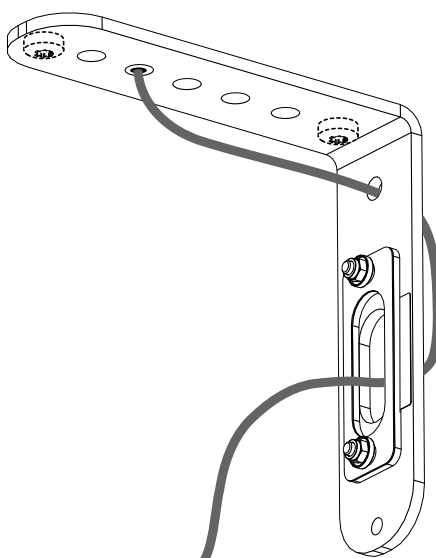
3. Assemble the wall-mounting plate and tapered spacers with VBAR.

Use two M5×20 Torx, two M5 washers, and two M5 nuts.

The wall-mounting plate gasket is facing away from VBAR.



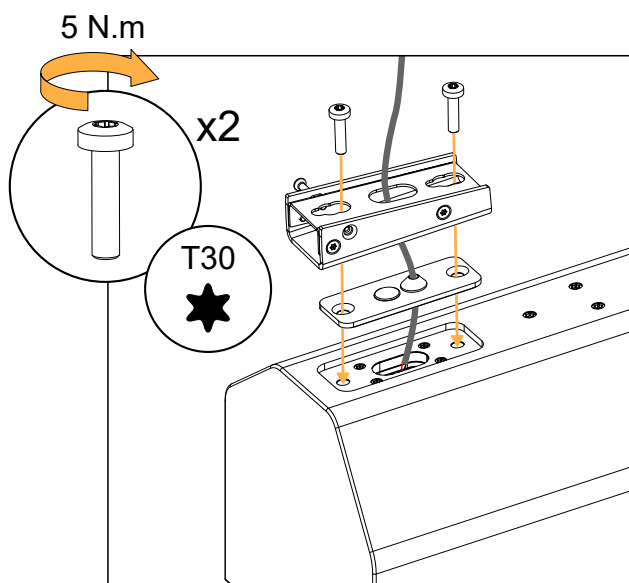
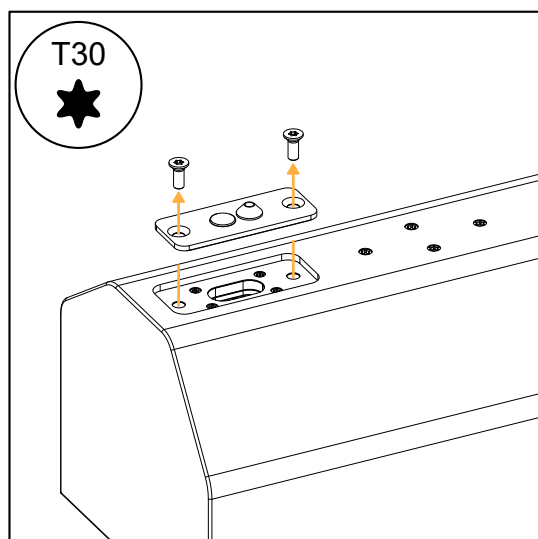
4. Run the speaker cable through VBAR.



5. Secure TILTxx to X6i:

- Remove the connector sealing plate (if present) or the placeholder screws.
- Run the cable through TILTxx and through the connector sealing plate.
- Connect the speaker cable to the X6i terminal block. Refer to [Cabling X6i](#) (p.172).
- Secure TILTxx and the connector sealing plate to X6i.

Use two M6×25 Torx screws.

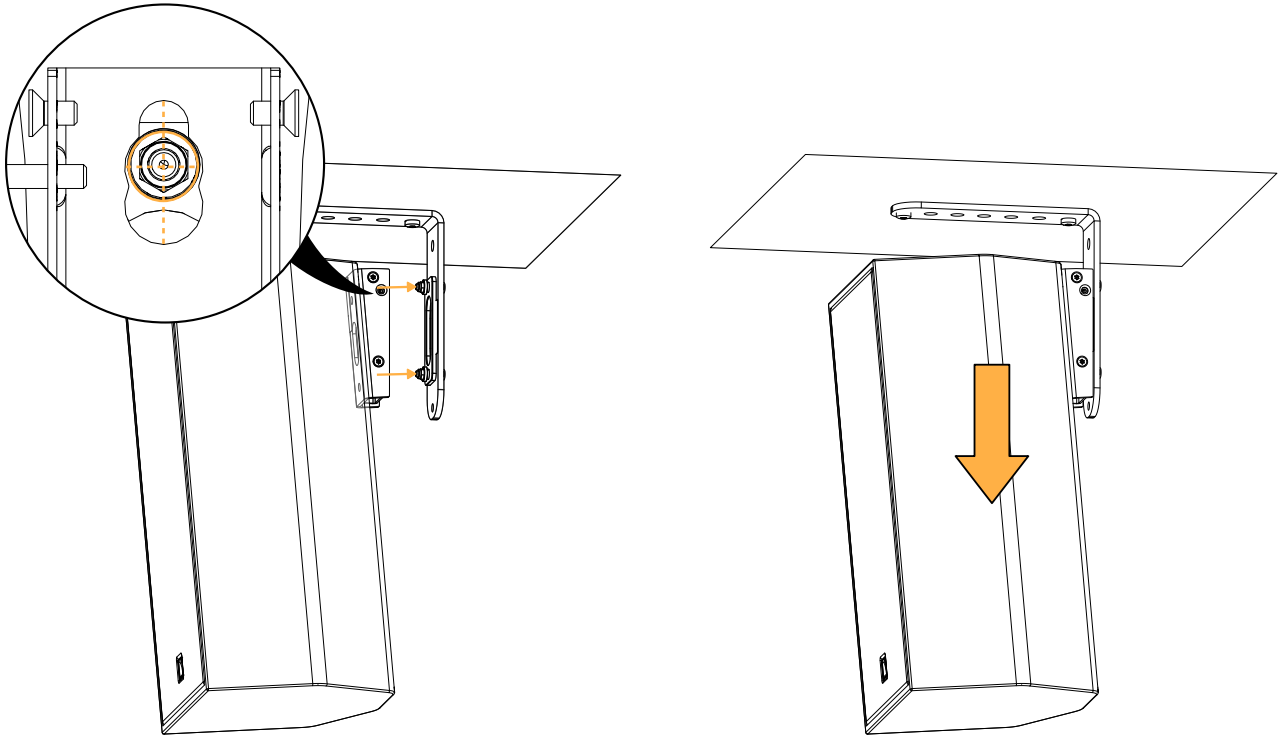




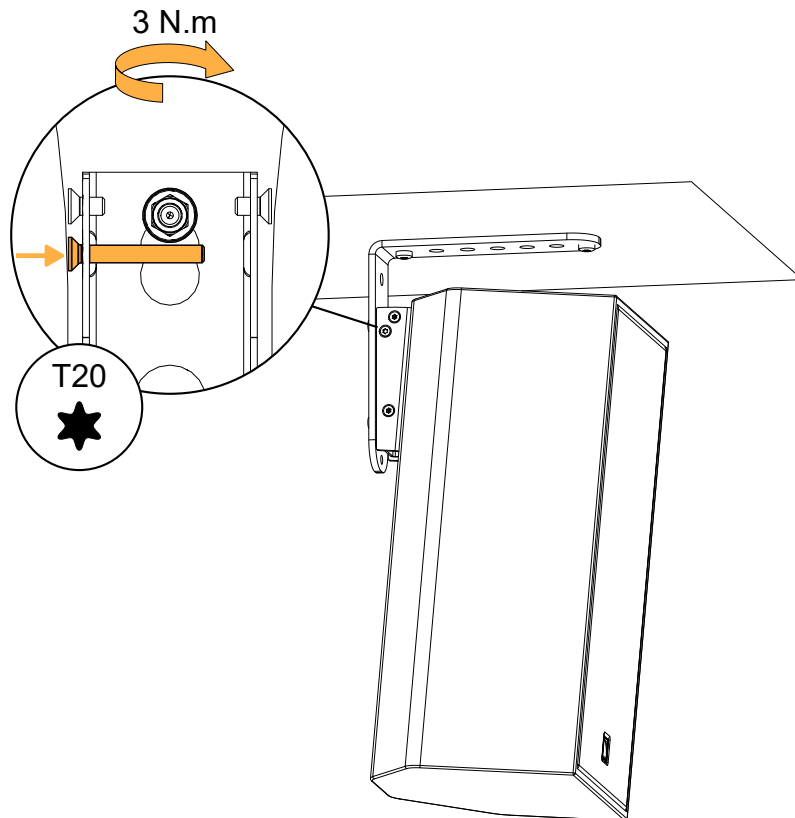
Risk of crushing injury

This step requires two operators.

6. Mount X6i on VBAR:
 - a) Align the midpoints of the TILTxx rear cutouts with the tapered spacers.
 - b) Push the assembly downwards.



7. Tighten the safety screw and make sure the assembly is stable.

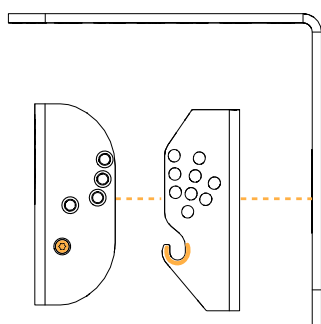


Ceiling-mounting X6i vertically with VBAR and TILT

Type of deployment	ceiling-mounting
Rigging accessories	VBAR
	TILT
Additional material	2 compatible screws and anchors
Tools	torque screwdriver
	T20 Torx bit
	T30 Torx bit
	T40 Torx bit
	T20 screwdriver
	10 mm wrench or 10 mm hex socket
Min. number of operators	2

Assembly overview

Pay attention to the position of the accessory parts throughout the procedure.



TILT VBAR

Secondary safety for flown, wall-mounted, or ceiling-mounted enclosures

Use one insert at the back of the enclosure to implement a secondary safety.

Risk of crushing injury

Ensure that the wall or ceiling can support the load of the product.

It is recommended to mount only on solid structures. If mounting on a hollow structure (such as a wall cavity), place anchoring points on the framework (wall studs, ceiling joists), or reinforce the mounting area.

Select screws and anchors applicable to the wall or ceiling properties and to the load of the product. Prevent screws from loosening over time, using for example thread locker or lock washers.

Specifications for screws and anchors

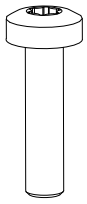
deployment	accessory	ultimate tensile load per screw (daN)	ultimate shear load per screw (daN)	screws quantity	mounting hole size	specific constraints
ceiling-mounting	VBAR + optional TILT or TILTxx	9	–	2	Ø 10.4 mm / 0.41 in	use the holes 1 and 7 (at both ends)

Risk of falling objects

Do not use TILT, TILT5, TILT15, or TILT40 upside-down. These rigging accessories are designed for negative site angles only.

Screws and fasteners

from VBAR



x2

M6x25 Torx



x2

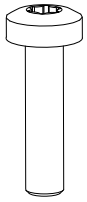
flat washer Ø 6 mm



x2

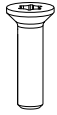
M6 hex lock nut

from TILT



x2

M6x25 Torx



x1

M4x16 Torx
(pre-mounted)



x1

Axis with M4
Torx head (pre-
mounted)

Assembly

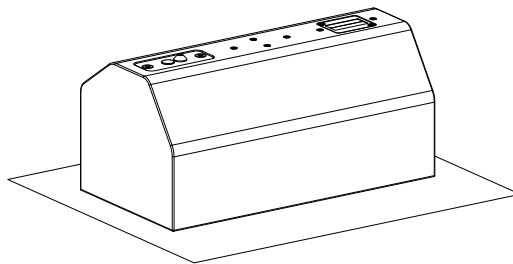
About this task



In this procedure, TILTxx designates the fixed angle accessories TILT5, TILT15, and TILT40.

Prerequisite

Place X6i on its front face on a clean flat surface.



Procedure



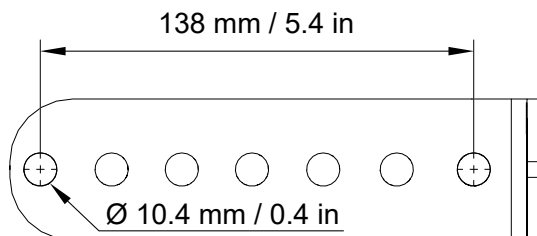
Ceiling-mounting holes

When ceiling-mounting with VBAR, always use holes 1 and 7 (at both ends) to ensure optimal support.



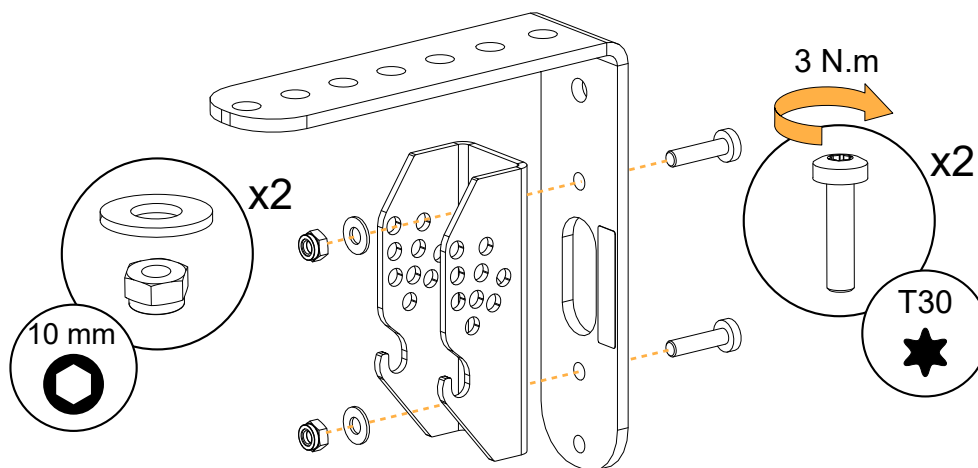
Make sure to leave enough space between the walls, the sides, and the rear of the rigging element to access the screw(s) when the enclosure is mounted.

1. Drill holes in the ceiling for VBAR.

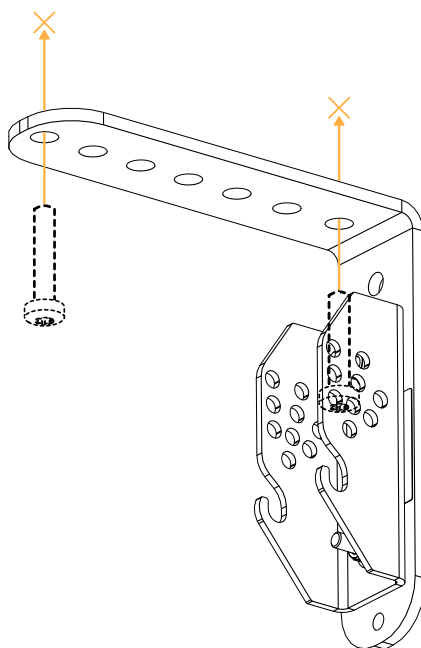


2. Assemble the TILT wall-mounting part with VBAR.

Use two M6×25 Torx, two M6 nuts and two M6 washers.



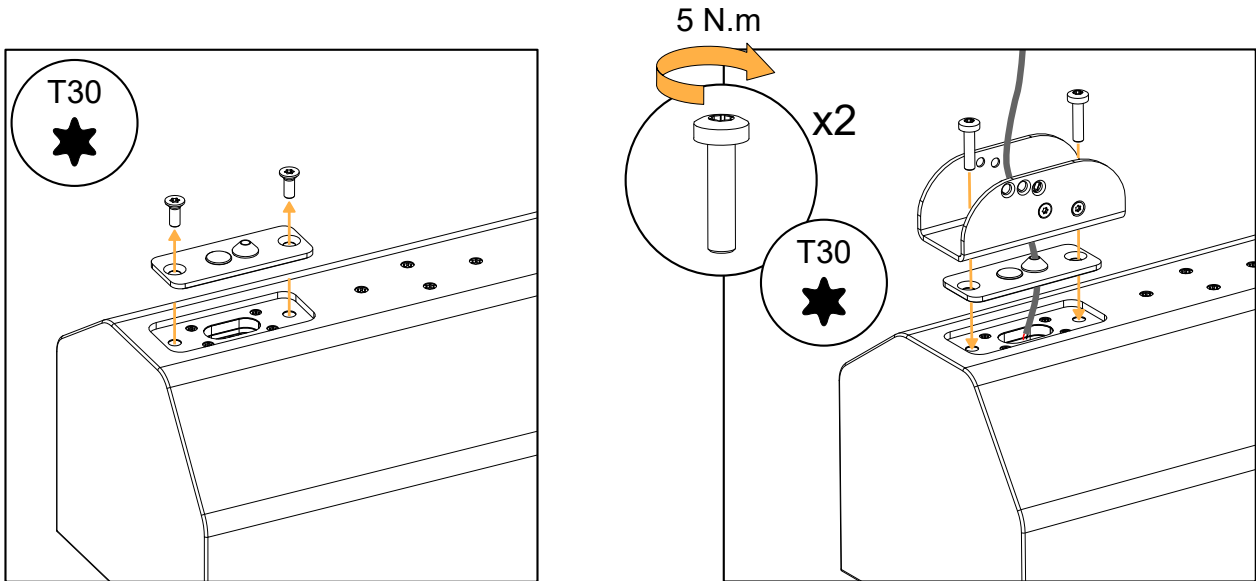
3. Secure VBAR to the ceiling.



4. Secure TILT to X6i:

- a) Remove the connector sealing plate (if present) or the placeholder screws.
- b) Run the cable through TILT and through the connector sealing plate.
- c) Connect the speaker cable to the X6i terminal block. Refer to [Cabling X6i](#) (p.172).
- d) Secure the TILT enclosure-mounting part and the connector sealing plate to X6i.

Use the two M6×25 Torx screws.



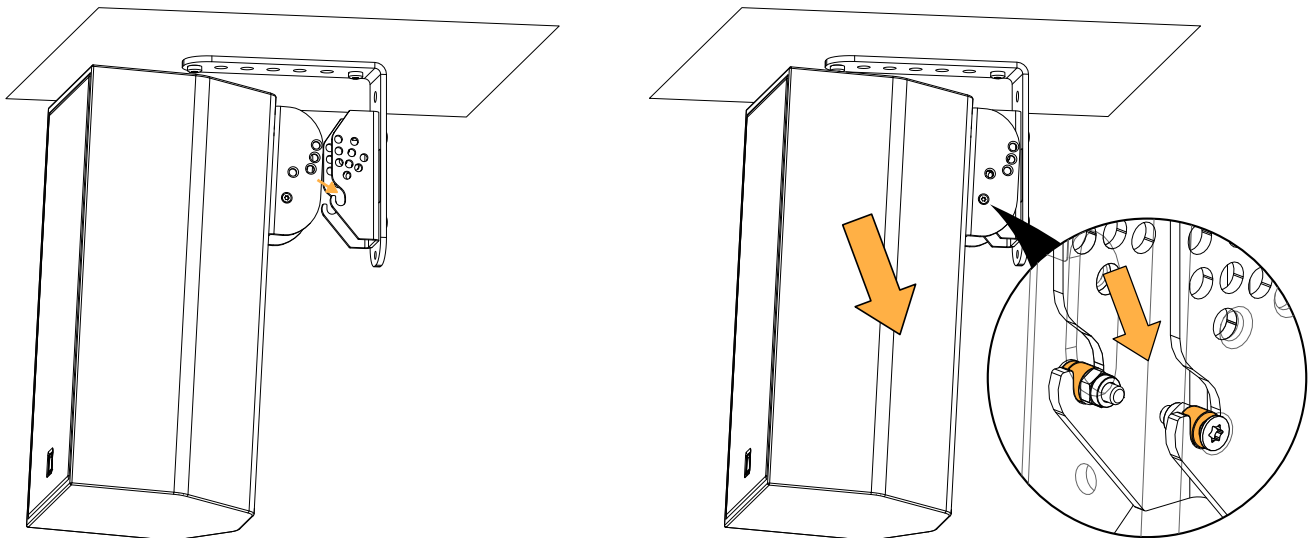
Risk of crushing injury

This step requires two operators.

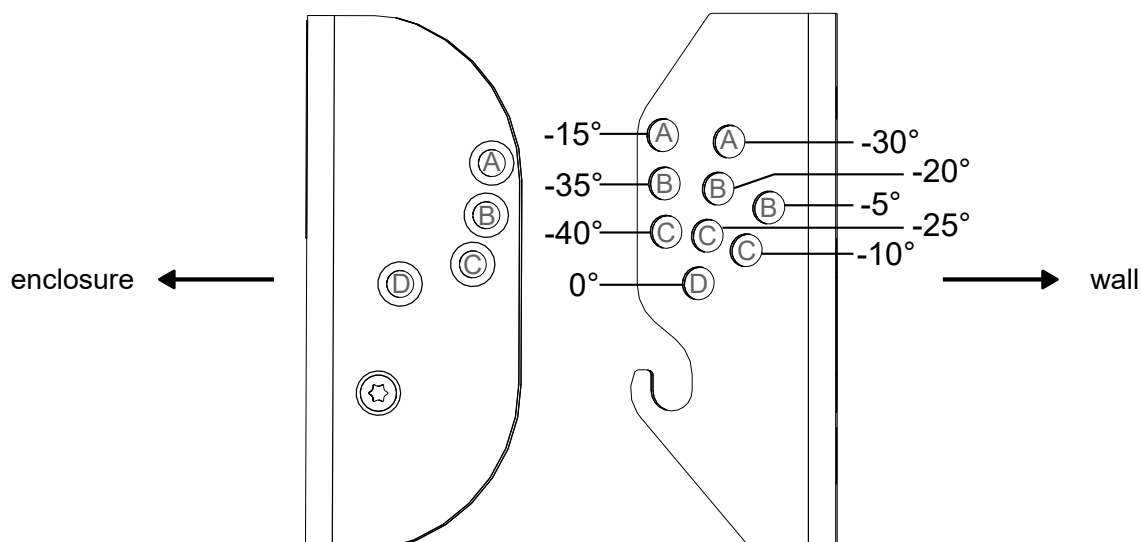
5. Mount X6i on VBAR.

- a) Assemble the two TILT parts by fitting the indexing studs into the hooks.

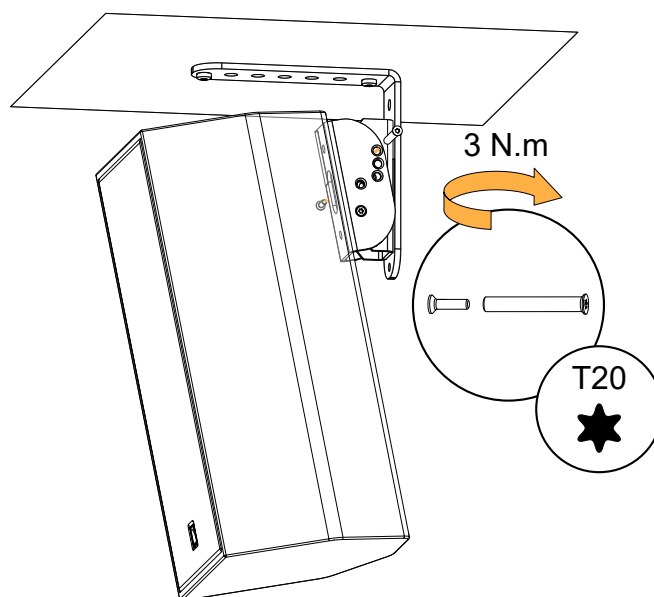
Make sure that the studs are pushed all the way into the hooks.



b) Rotate the assembly to select the site angle.



c) Drive the axis through the holes and secure it with the M4×16 Torx screw.
Make sure that the assembly is stable.



Horizontally

Ceiling-mounting or truss-mounting X6i horizontally with X6i-HBAR

Type of deployment	ceiling-mounting or truss-mounting
Rigging accessories	X6i-HBAR
Additional material	2 compatible screws and anchors, or
	1 max. Ø10 mm / 0.39 in truss clamp, or
	1 max. Ø10 mm / 0.39 in threaded rod, with corresponding nuts and washers
Tools	torque screwdriver
	T30 Torx bit
	level
Min. number of operators	2

! Secondary safety
Use available holes on the rigging accessories to implement a secondary safety.

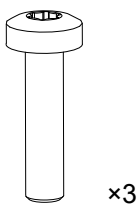
! Risk of crushing injury
Ensure that the wall or ceiling can support the load of the product.
It is recommended to mount only on solid structures. If mounting on a hollow structure (such as a wall cavity), place anchoring points on the framework (wall studs, ceiling joists), or reinforce the mounting area.
Select screws and anchors applicable to the wall or ceiling properties and to the load of the product. Prevent screws from loosening over time, using for example thread locker or lock washers.

Specifications for screws and anchors

deployment	accessory	ultimate tensile load per screw (daN)	ultimate shear load per screw (daN)	screws quantity	mounting hole size	specific constraints
ceiling-mounting	X6i-HBAR	9	–	2	Ø 10.3 mm / 0.40 in	use two adjacent, coplanar holes distance between centers: 23 mm / 0.90 in

Screws and fasteners

from X6i-HBAR



M6×25 Torx

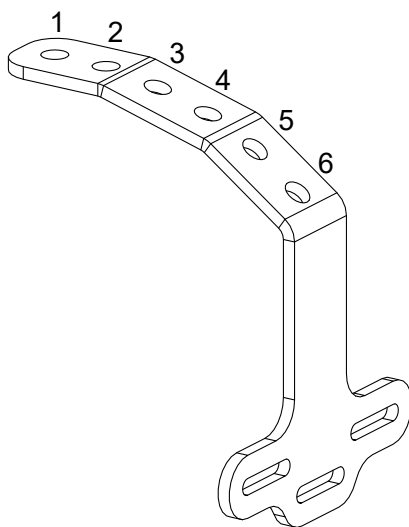
Ceiling-mounting X6i horizontally with X6i-HBAR

About this task

! For this configuration, the speaker cable must be run inside the ceiling.

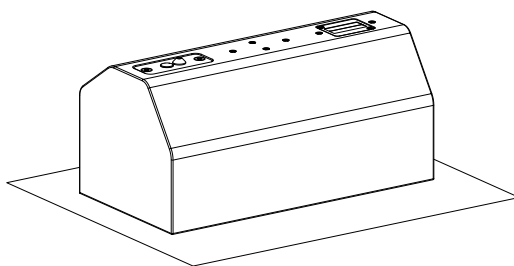
X6i site angles when ceiling-mounted with X6i-HBAR

holes N°	angle
1 + 2	0°
3 + 4	-15°
5 + 6	-35°



Prerequisite

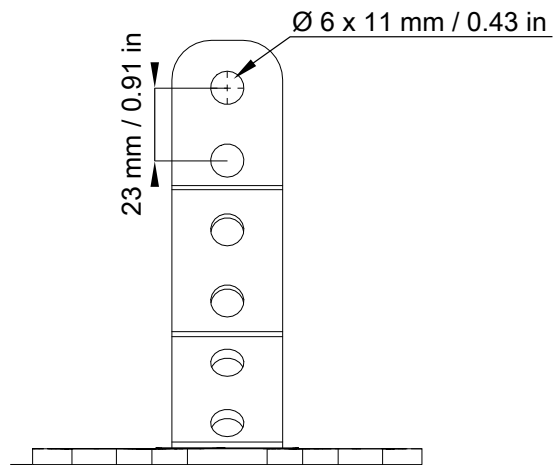
Place X6i on its front face on a clean flat surface.



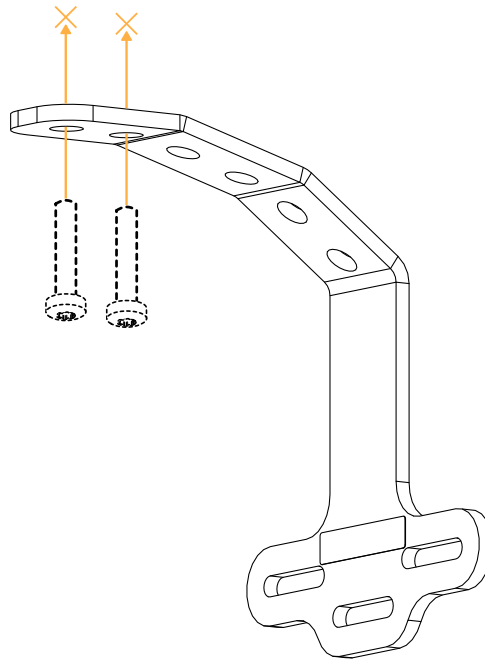
Procedure**Ceiling-mounting holes**

When ceiling-mounting with X6i-HBAR, use one pair of adjacent, coplanar holes depending on the chosen site angle.

1. Drill holes in the ceiling for X6i-HBAR.



2. Secure X6i-HBAR to the ceiling.



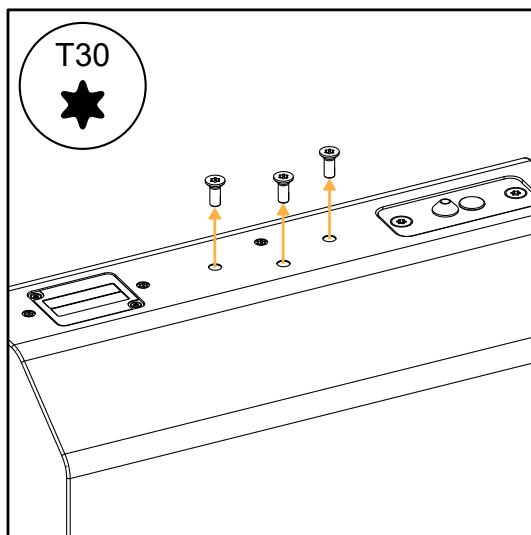
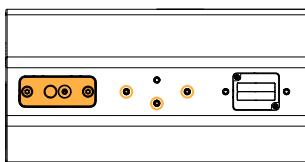
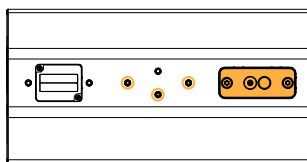
3. Remove the three placeholder screws in the middle of X6i.



X6i-HBAR can be mounted on a horizontal X6i turned either way:

with the connector plate on the right-hand side

with the connector plate on the left-hand side



Risk of crushing injury

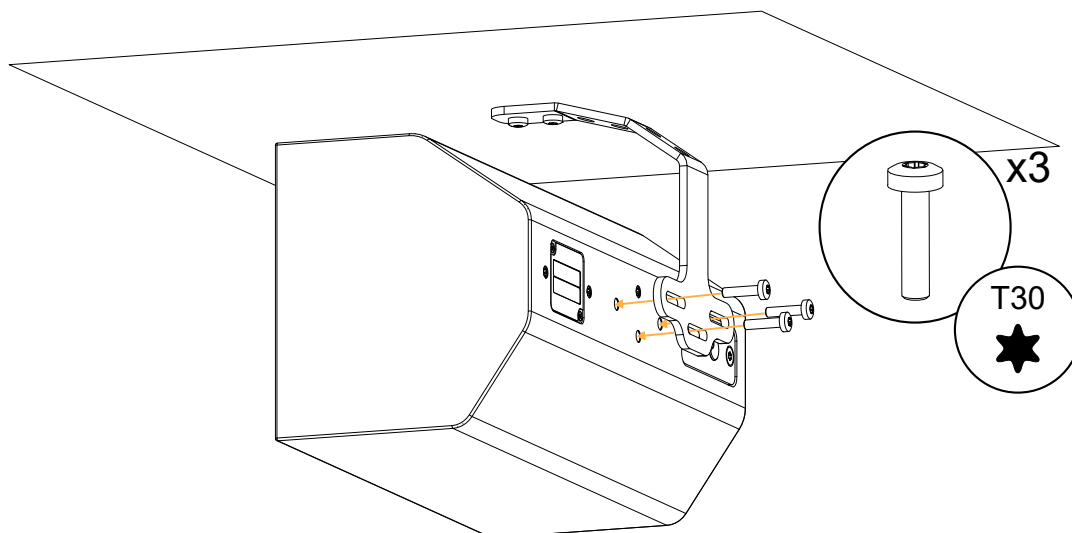
This step requires two operators.



Do not fully tighten the screws.

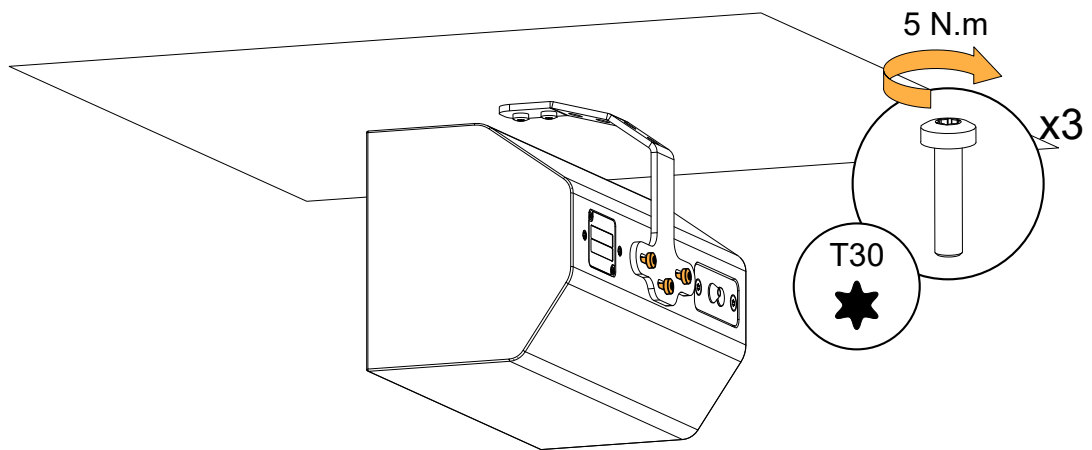
4. Mount X6i on X6i-HBAR.

Use three M6×25 Torx screws.



5. Tighten the screws.

Make sure the assembly is stable.



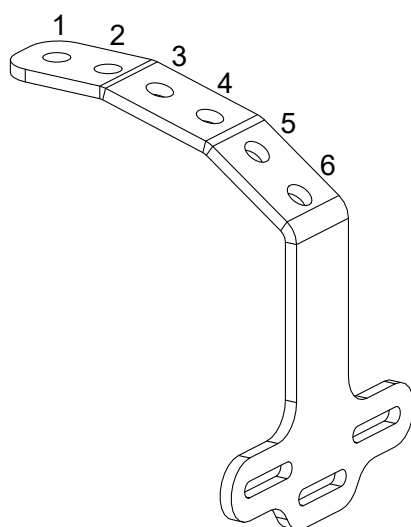
6. Prepare X6i cabling. Refer to [Cabling X6i](#) (p.172).

Flying X6i with X6i-HBAR

About this task

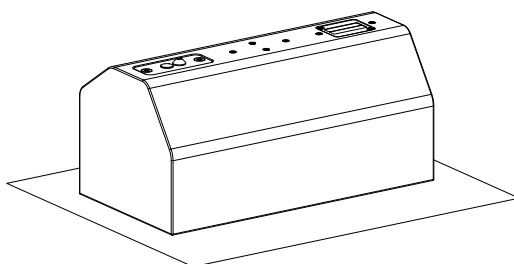
X6i site angles when flown or truss-mounted with X6i-HBAR

hole N°	angle	
	connector plate right	connector plate left
1	9°	11°
2	1°	
3	-10°	
4	-19°	
5	-31°	
6	-39°	-42°



Prerequisite

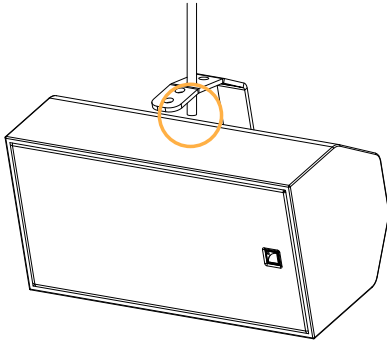
Place X6i on its front face on a clean flat surface.



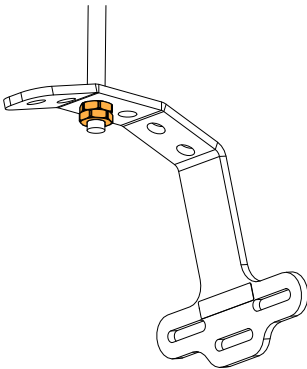
Procedure



Adjust the threaded rod length to avoid any collision with the enclosure.



1. Choose the pickup point and secure X6i-HBAR to a truss clamp or to a threaded rod (maximum Ø 10 mm / 0.39 in) using nuts.

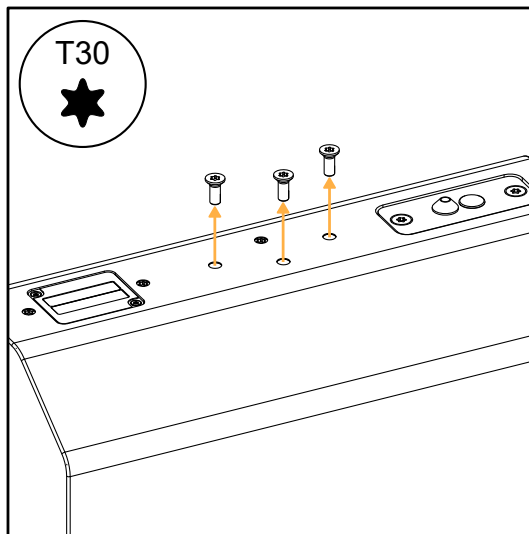
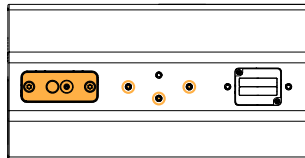
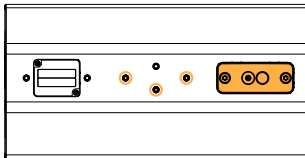


2. Remove the three placeholder screws in the middle of X6i.



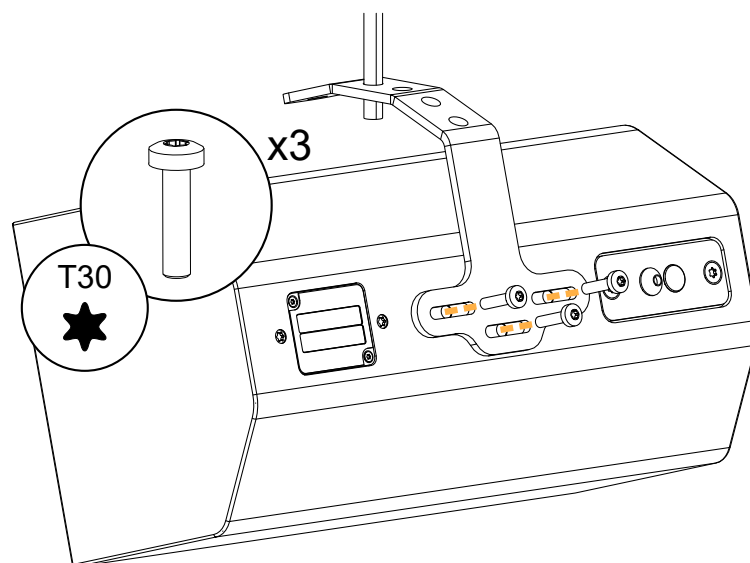
X6i-HBAR can be mounted on a horizontal X6i turned either way:

- with the connector plate on the right-hand side
- with the connector plate on the left-hand side

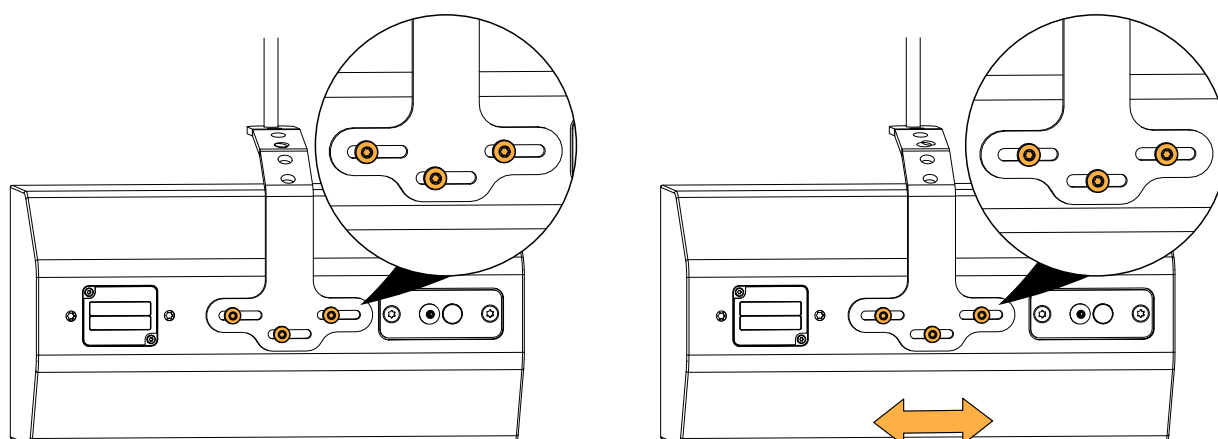


! Do not fully tighten the screws.

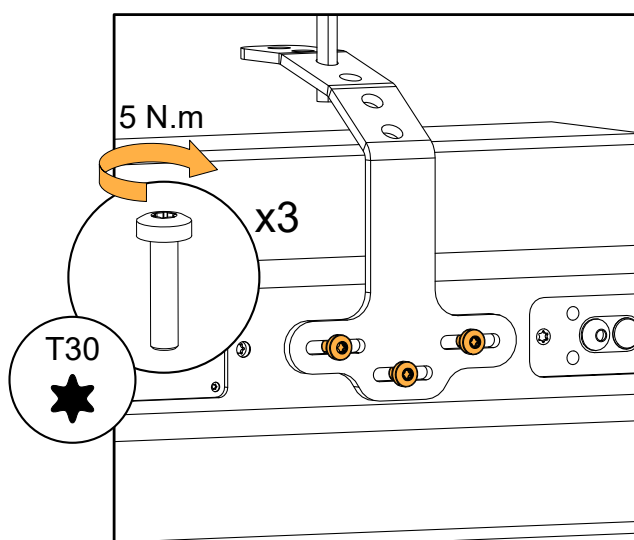
3. Mount X6i on X6i-HBAR.
Use three M6×25 Torx screws.



4. Adjust the roll angle.



5. Tighten the screws.



6. Prepare the cabling. Refer to [Cabling X6i](#) (p.172).

Downward-facing

Ceiling-mounting X6i with X6i-onCW

Type of deployment	ceiling-mounting
Rigging accessories	X6i-onCW
Additional material	4 compatible screws and anchors
Tools	torque screwdriver
	T20 Torx bit
	T30 Torx bit
Min. number of operators	2

Secondary safety for flown, wall-mounted, or ceiling-mounted enclosures

Use one insert at the back of the enclosure to implement a secondary safety.

Risk of crushing injury


Ensure that the wall or ceiling can support the load of the product.

It is recommended to mount only on solid structures. If mounting on a hollow structure (such as a wall cavity), place anchoring points on the framework (wall studs, ceiling joists), or reinforce the mounting area.

Select screws and anchors applicable to the wall or ceiling properties and to the load of the product. Prevent screws from loosening over time, using for example thread locker or lock washers.

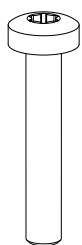
Specifications for screws and anchors

deployment	accessory	ultimate tensile load per screw (daN)	ultimate shear load per screw (daN)	screws quantity	mounting hole size	specific constraints
ceiling-mounting	X6i-onCW	4	–	4	Ø 6.4 mm / 0.25 in	total thickness with washers: 13.10 mm / 0.51 in

 SPCON cannot be used in this configuration.

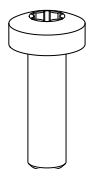
Screws and fasteners

from X6i-onCW



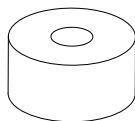
x1

M6×35 Torx



x2

M6×20 Torx



x4

M6×10 spacer



x1

M6×3 spacer



x4

flat M6 washer

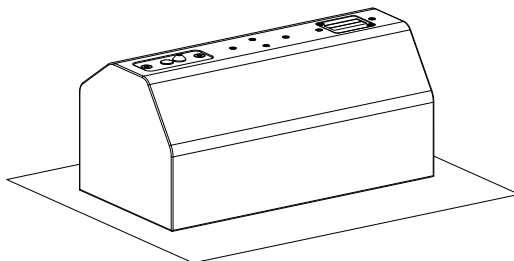
Assembly

About this task

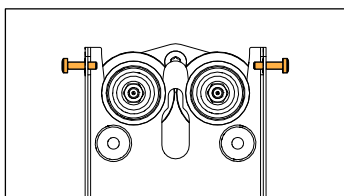
! For this configuration, the speaker cable must be run inside the wall or ceiling.

Prerequisite

Place X6i on its front face on a clean flat surface.



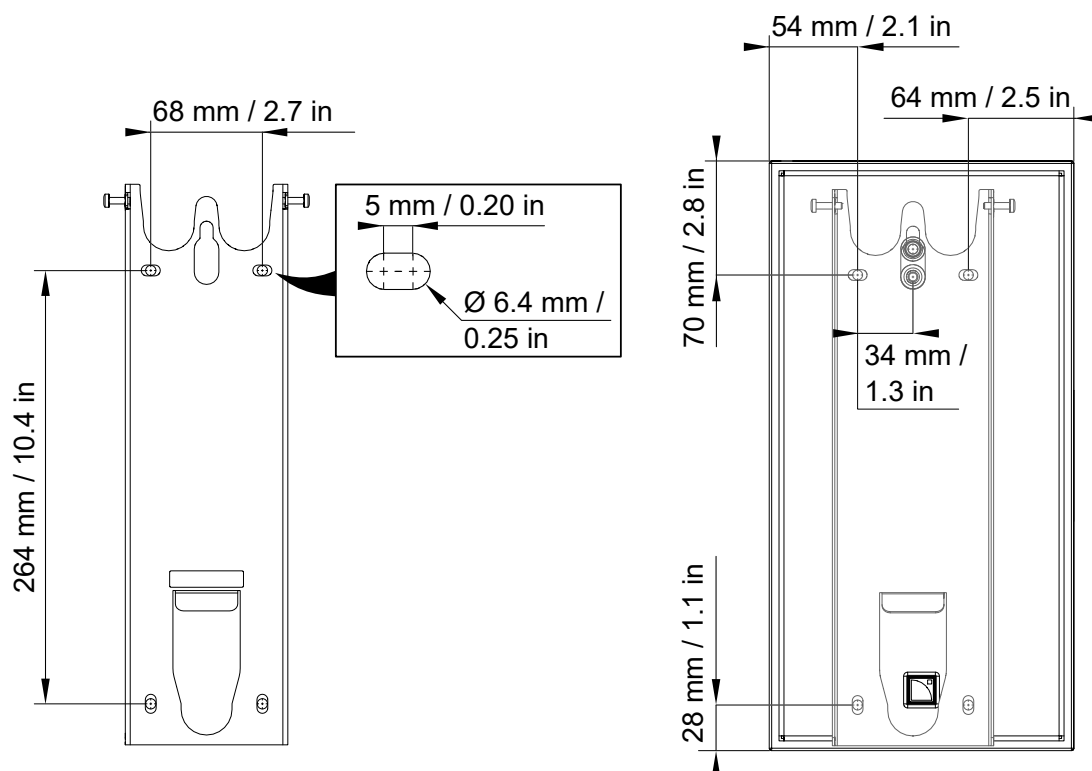
Make sure that the X6i-onCW safety screws are present and loosened.



Procedure

! Make sure to leave enough space between the walls and the sides of the rigging element to access the screw(s) when the enclosure is mounted.

1. Drill holes in the ceiling for the anchors and for the cable exit(s).

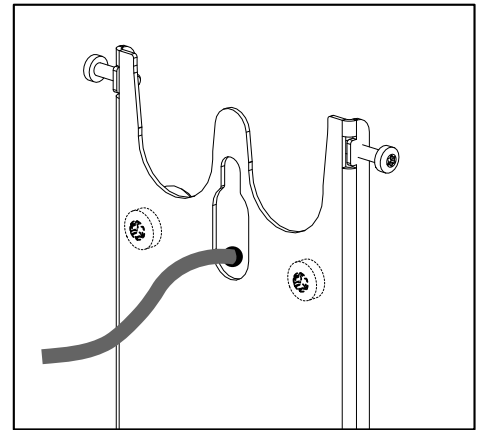
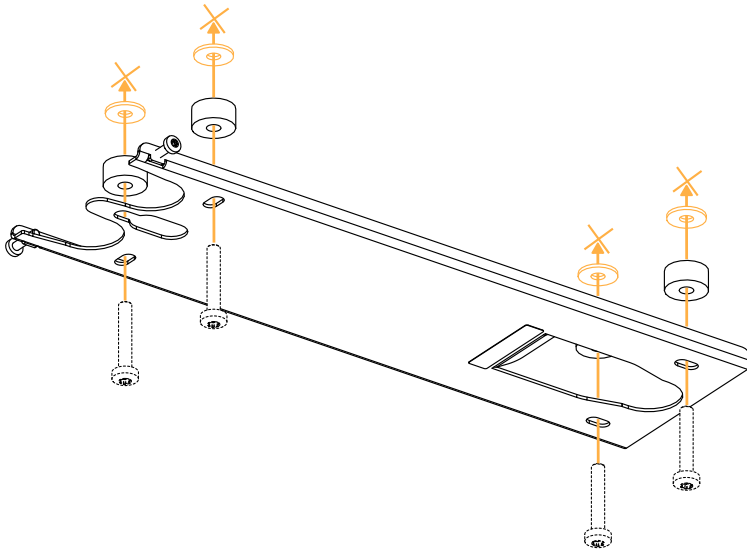


2. Run the speaker cable inside the ceiling.

3. Secure the surface-mounting plate to the ceiling, using the four M6×10 spacers.

If the surface is uneven, adjust with the flat M6 washers.

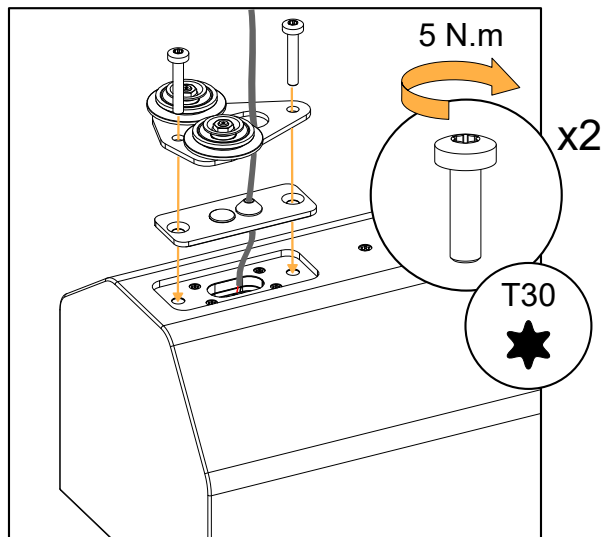
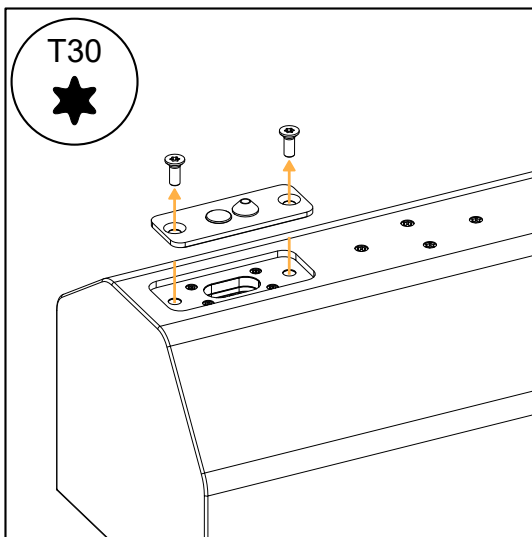
Run the cable through the top hole of the surface-mounting plate.



4. Secure the two top silent blocks to X6i:

- a) Remove the connector sealing plate (if present) or the placeholder screws.
- b) Run the cable through the enclosure-mounting plate and through the connector sealing plate.
- c) Connect the cable to the X6i terminal block. Refer to [Cabling X6i](#) (p.172).
- d) Secure the enclosure-mounting plate and the connector sealing plate to X6i.

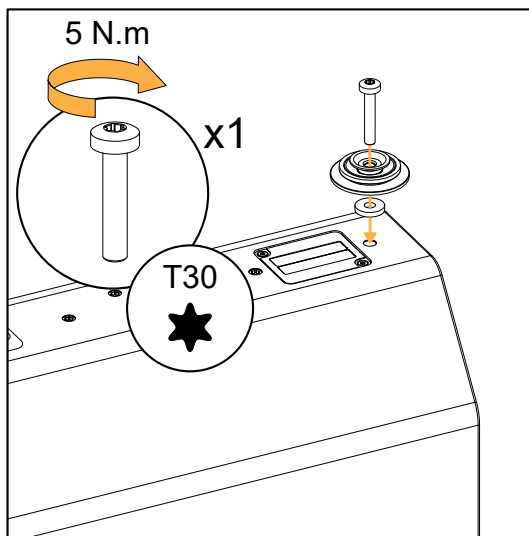
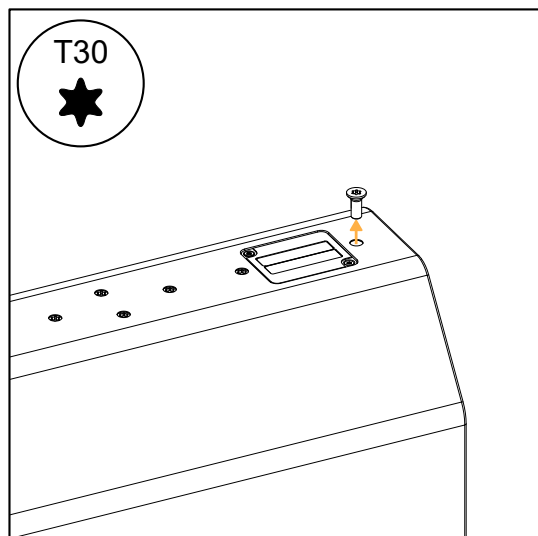
Use the two M6×20 Torx screws.



5. Secure the bottom silent block to X6i:

- a) Remove the placeholder screw at the bottom of X6i.
- b) Secure the silent block and the M6×3 spacer at the bottom of the enclosure.

Use the M6×30 Torx screw.

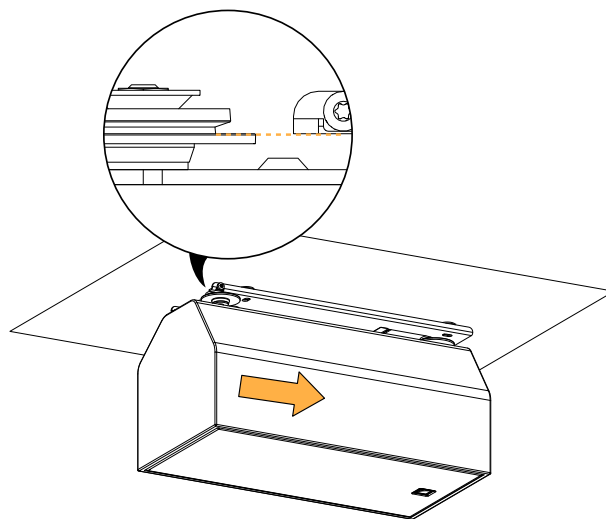
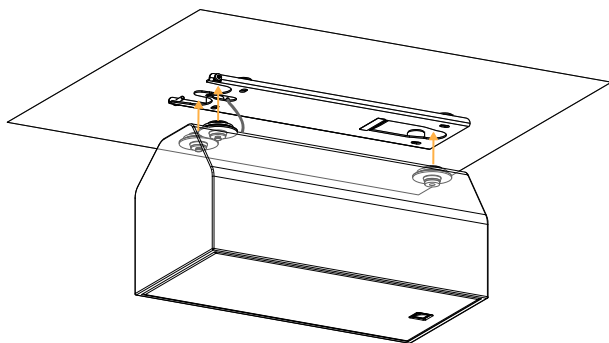


Risk of crushing injury

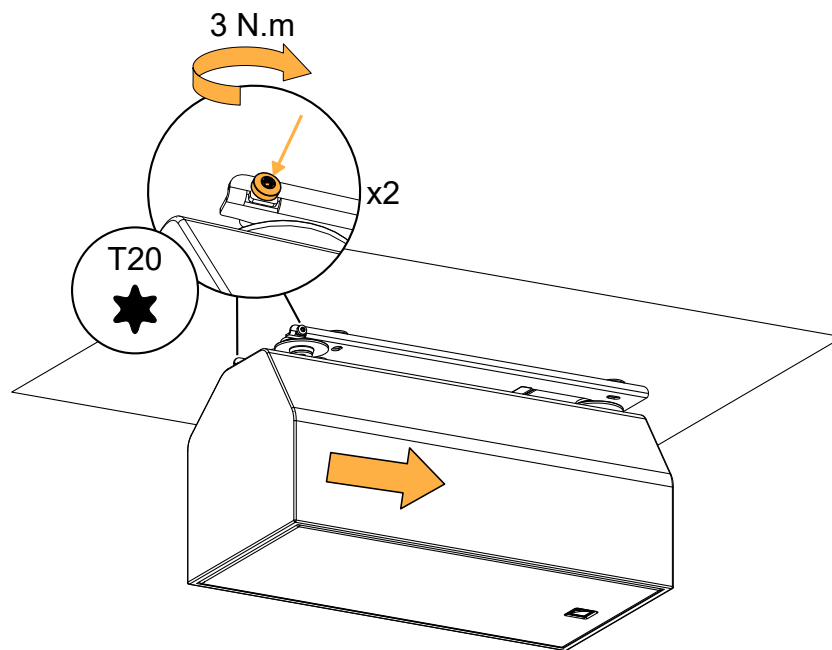
This step requires two operators.

6. Mount X6i on the ceiling:

- a) Align the silent blocks with the surface-mounting plate cutouts.
- b) Push the assembly towards the bottom of X6i.



7. Tighten the safety screws on both sides and make sure the assembly is stable.



Flying X6i with CEILING-PENDANT

Type of deployment	truss-mounting
Rigging accessories	CEILING-PENDANT
Additional material	1 max. Ø 12 mm / 0.47 in truss clamp, or
	1 max. Ø 12 mm / 0.47 in threaded rod, with corresponding nuts and washers
Tools	torque screwdriver
	T30 Torx bit
Min. number of operators	2

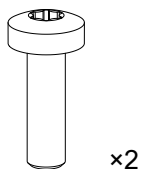


Secondary safety for flown, wall-mounted, or ceiling-mounted enclosures

Use one insert at the back of the enclosure to implement a secondary safety.

Screws and fasteners

from CEILING-PENDANT



x2

M6x20 Torx

Assembly

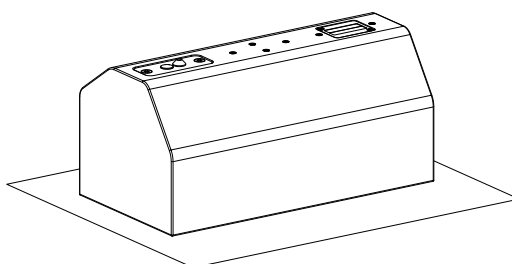
About this task



For this configuration, the speaker cable must be run inside the ceiling.

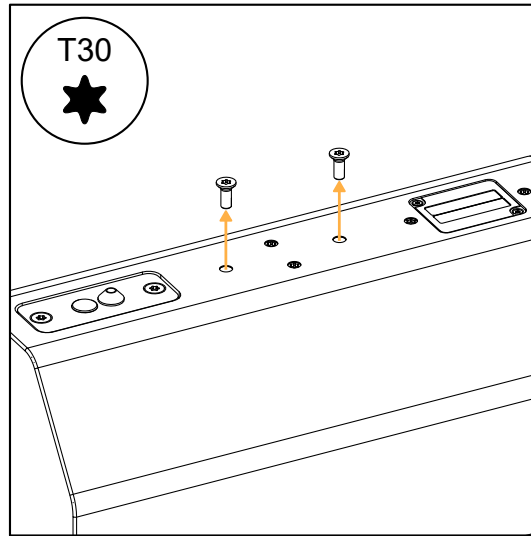
Prerequisite

Place X6i on its front face on a clean flat surface.

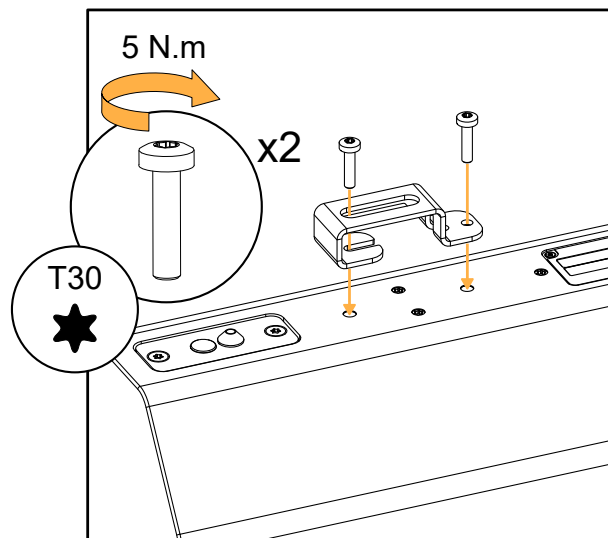


Procedure

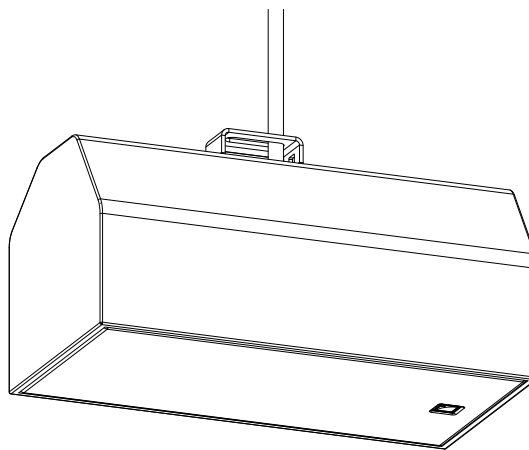
1. Remove the two placeholder screws in the middle of X6i.



2. Secure CEILING-PENDANT to X6i.
Use two M6×25 Torx screws.



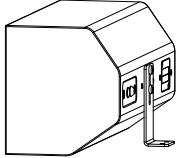
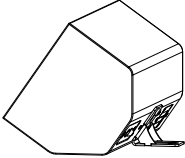
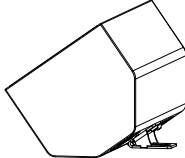
3. Fly X6i with a truss clamp or a threaded rod (maximum \varnothing 12 mm / 0.47 in).
Make sure the assembly is stable.



4. Prepare the cabling. Refer to [Cabling X6i](#) (p.172).

Ground-mounting

Overview

orientation	site angle		
	0°	35°	55°
Vertical	no rigging accessory	–	
Horizontal	GROUND (p.163) 	GROUND35 (p.163) 	GROUND55 (p.163) 

Ground-mounting X6i horizontally with GROUND / GROUND55 / GROUND35

Type of deployment	ground-stacking
Rigging accessories	GROUND / GROUND55 / GROUND35
Additional material	2 compatible screws and anchors
Tools	torque screwdriver
	T30 Torx bit
	screwdriver extension
Min. number of operators	1



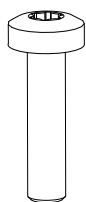
SPCON cannot be used in this configuration.

Specifications for screws and anchors

deployment	accessory	ultimate tensile load per screw (daN)	ultimate shear load per screw (daN)	screws quantity	mounting hole size	specific constraints
ground-mounting	GROUND / GROUND35 / GROUND55	–	–	2	Ø 6.4 mm / 0.25 in	–

Screws and fasteners

from GROUND / GROUND55 / GROUND35



x2

M6x25 Torx

Assembly

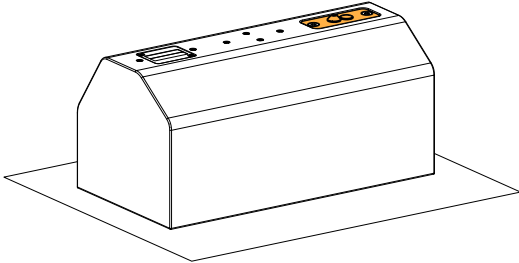
About this task

i In this procedure, GROUNDxx designates the ground-mounting accessories GROUND55, GROUND35, and GROUND.

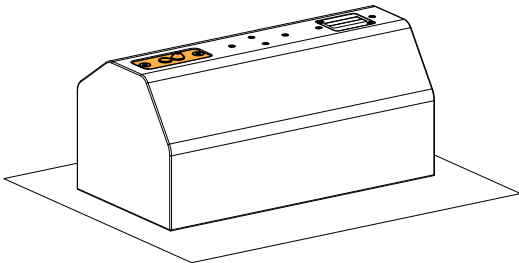
Prerequisite

Place X6i on its front face on a clean surface:

- For GROUND55 (55° site angle): with the connector plate on the right.

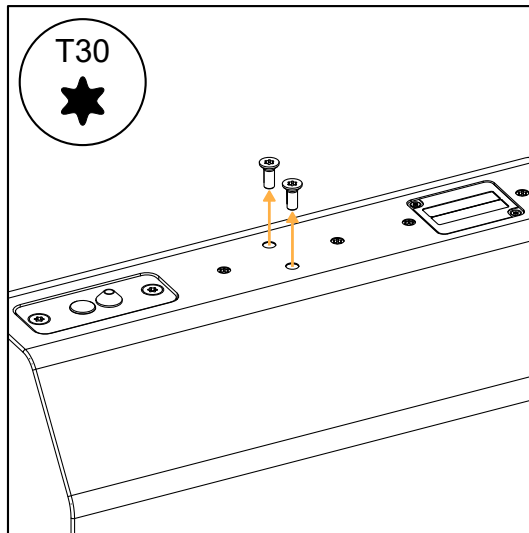


- For GROUND35 (35° site angle) and GROUND (0° site angle) : with the connector plate on the left.



Procedure

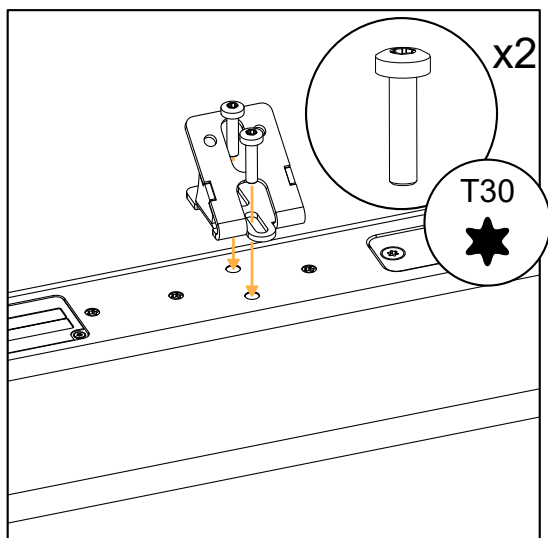
1. Remove the two placeholder screws in the middle of X6i.



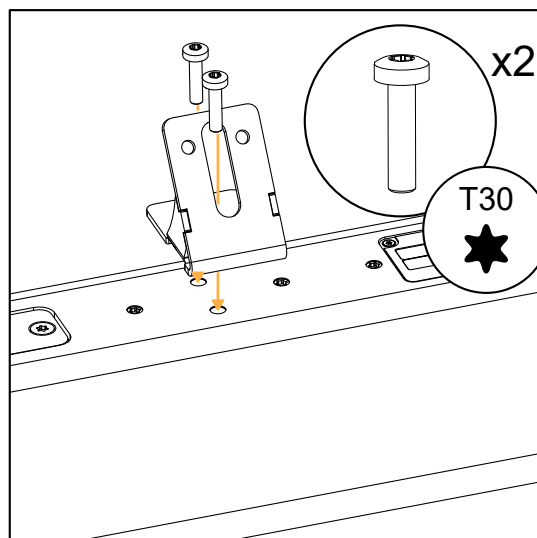
! Do not fully tighten the screws.

2. Mount GROUNDxx on X6i.

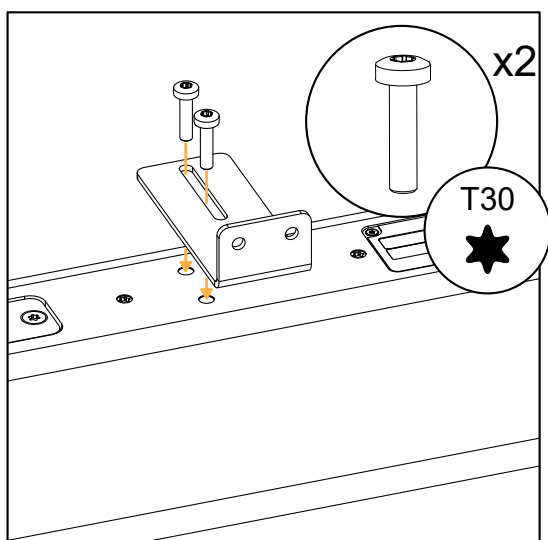
Use two M6×25 Torx screws.



GROUND55



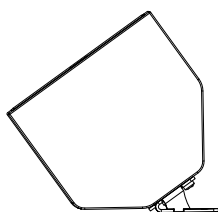
GROUND35



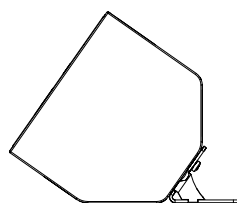
GROUND

3. Place X6i in monitor position, with GROUNDxx resting on the ground.

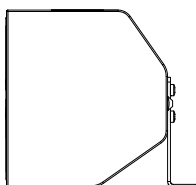
Make sure that GROUNDxx is aligned with the cabinet. Make adjustments if necessary.



GROUND55



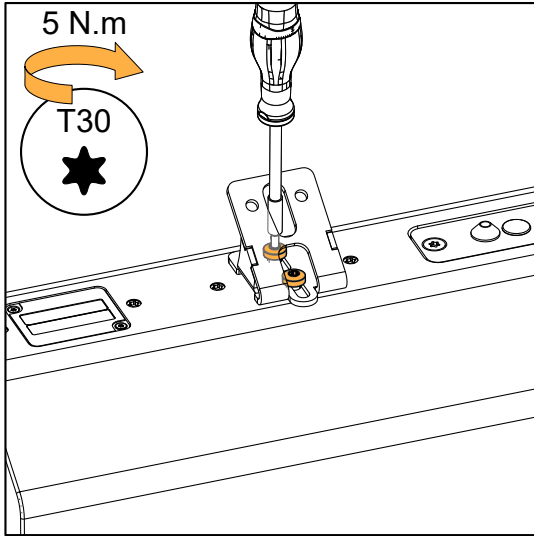
GROUND35



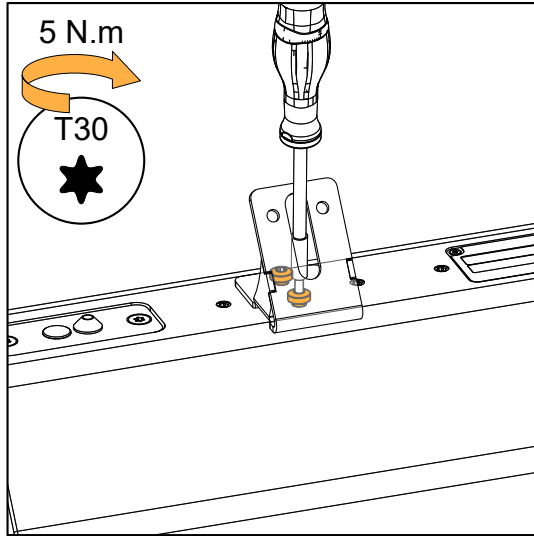
GROUND

4. Place X6i on its front face and tighten the screws.

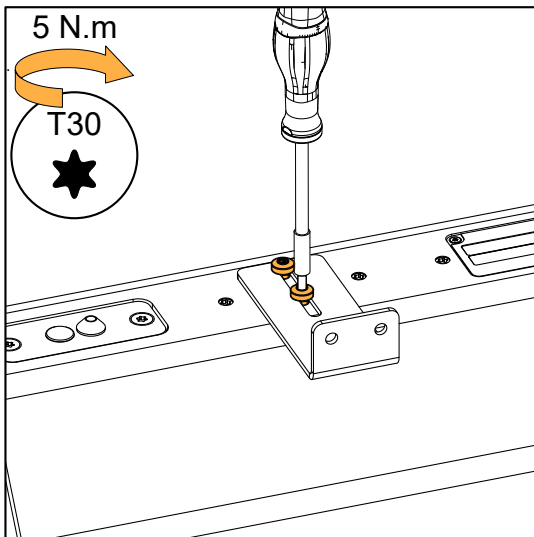
Use a screwdriver extension.



GROUND55



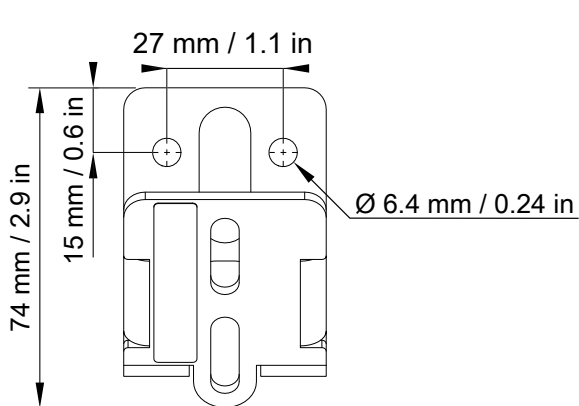
GROUND35



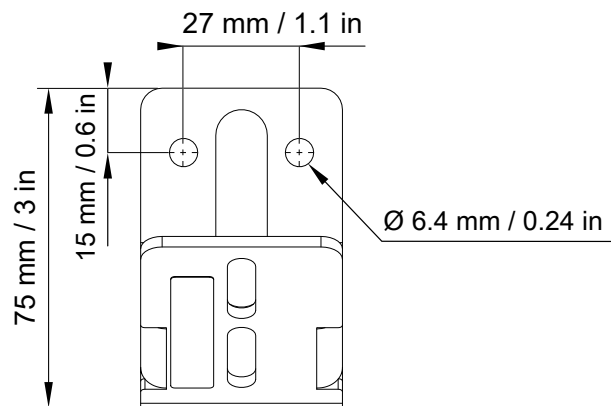
GROUND

5. Place X6i at its final location and secure GROUNDxx to the ground.

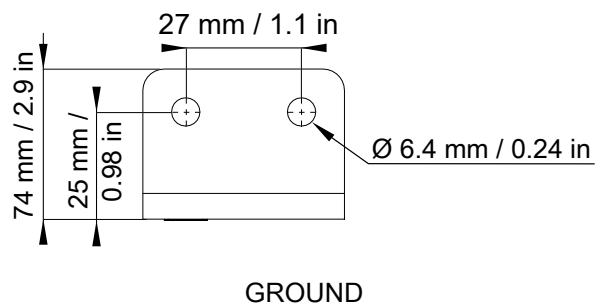
Make sure the assembly is stable.



GROUND55



GROUND35



Pole-mounting

Pole-mounting X6i with POLE

Type of deployment	pole-mounting
Rigging accessories	POLE
Additional material	Ø 35 mm (1-3/8") pole
Tools	torque screwdriver
	screwdriver extension
	T30 Torx bit
	17 mm wrench
Min. number of operators	1

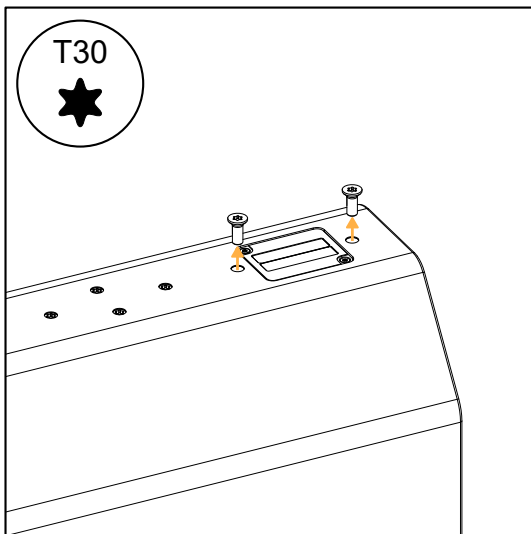
Assembly

Procedure

1. Remove the two placeholder screws in the middle or at the bottom of X6i.

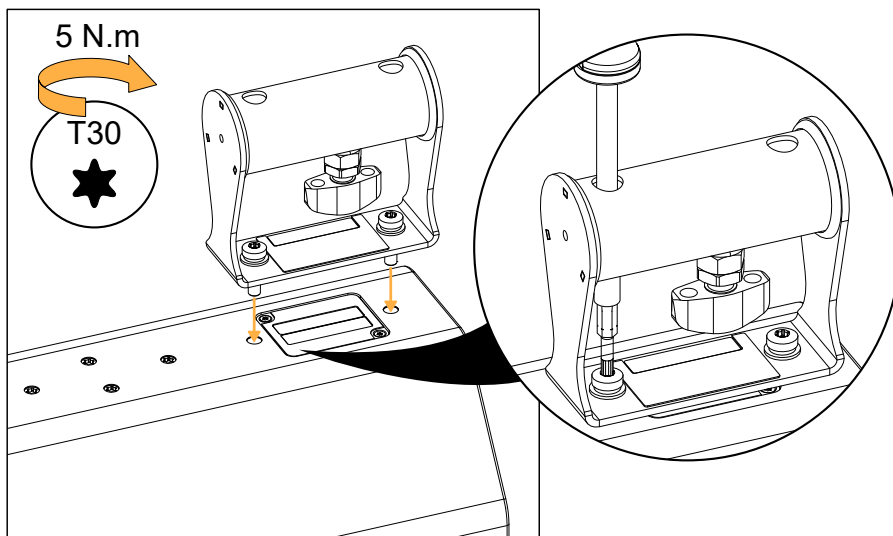


When using SPCON, mount POLE at the bottom of X6i.



- Secure POLE to X6i with the two captive screws.

Use a screwdriver extension.

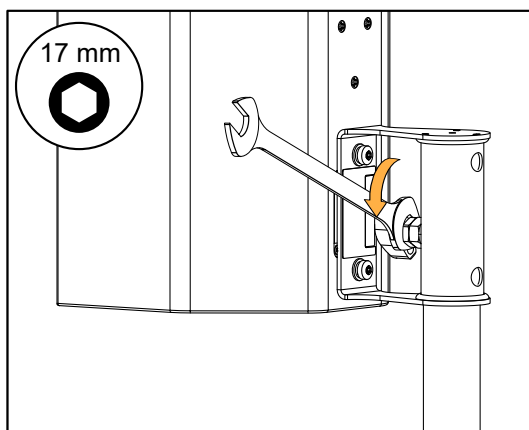
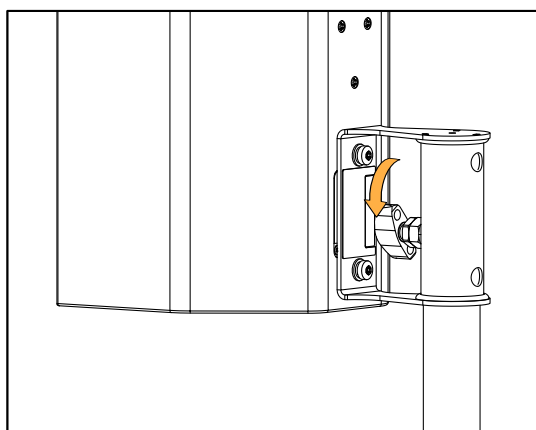


- Mount the assembly on a \varnothing 35 mm (1-3/8") pole.


Use a screwdriver extension.

- Tighten the locking knob and the nut.

Make sure the assembly is stable.




Connection to LA amplified controllers

 Refer to the **Amplification reference** technical bulletin for the latest information on compatibility with amplified controllers and cabling schemes for all enclosure types.

Enclosure drive capacity per amplified controller

Make sure the total number of connected enclosures does not exceed the maximum number of enclosures per controller (refer to the footnotes).

	LA2Xi	LA4X	LA7.16i	LA12X
	per output* / total	per output* / total	per output* / total ^a	per output* / total
X6i	2 / 8 (SE), 1 / 2 (BTL)	2 / 8	1 / 16	3 / 12

 Reduced maximum SPL or drive capacity with LA2Xi: refer to the **LA2Xi owner's manual**.

* For passive loudspeakers, the value corresponds to the number of enclosures in parallel on the output. For active loudspeakers, the value corresponds to the number of sections in parallel on the output.

^a Given for nominal use, assuming that all channels are driven at full power. When sending the same signal to all outputs, never exceed the maximum numbers, regardless of the Power Budget values, otherwise the Fuse Protect algorithm may be triggered. When powered by a 100 V power supply, reduce the number of enclosures in order not to exceed 75% of the power gauge.

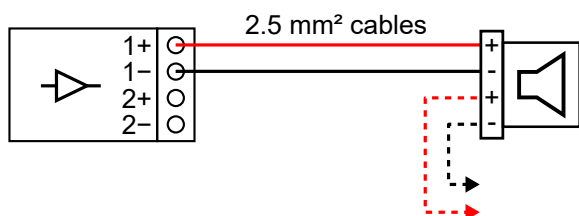
Cabling schemes for X6i

Refer to the cabling schemes to connect the enclosures to different types of output configurations.

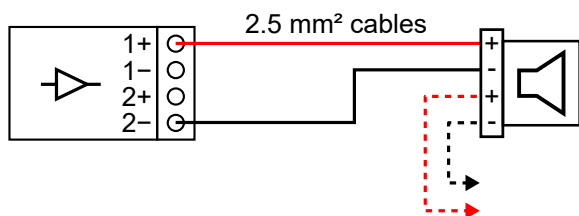
! Refer to the cable manufacturer documentation for the wire color code.

i Refer to the **LA2Xi owner's manual** for more information on output configurations.

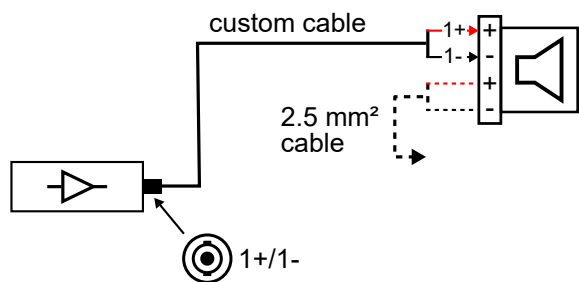
Terminal block output (LA2Xi SE / LA7.16i)



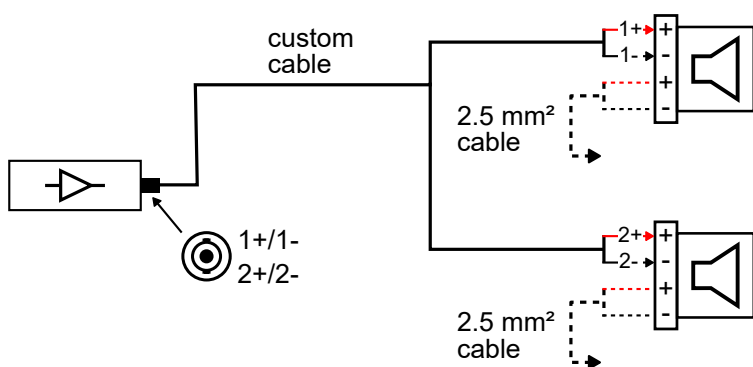
Terminal block output (LA2Xi BTL)



One-channel speakON output



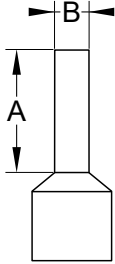
Two-channel speakON output



Cabling X6i

Accessory	connector sealing plate (provided)
Screws and fasteners	2 M6×16 screws (mounted on enclosure)
Tools	torque screwdriver
	T30 Torx bit
	small tool or flat screwdriver (3 mm or less)
Additional material	recommended: insulated cable ferrules and crimping tool
Min number of operators	1

Specifications for insulated cable ferrules

Wire range	14 AWG / 2.5 mm ²		
Maximum electric current	30 A		
Maximum electrical rating	105 °C (221 °F) / 600 V		
Terminal material	tin-plated copper		
Dimensions	A	12 mm / 0.47 in	
	B	2.5 mm / 0.10 in	

Cabling

Prerequisite

! The cable glands on the connector sealing plate are compatible with cables up to $2 \times 2.5 \text{ mm}^2$ gauge.

Refer to:

- [APPENDIX B: Recommendation for speaker cables](#) (p.215)
- [Cabling schemes for X6i](#) (p.171)

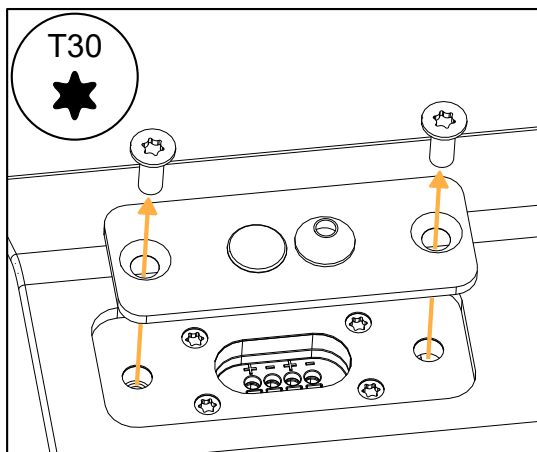
About this task

The connector sealing plate has two holes: one for the input cable and one for the cable connecting to the next enclosure in parallel. By default, the first hole is fitted with a cable gland and the second one with a protective plug. An extra cable gland is provided with each enclosure.

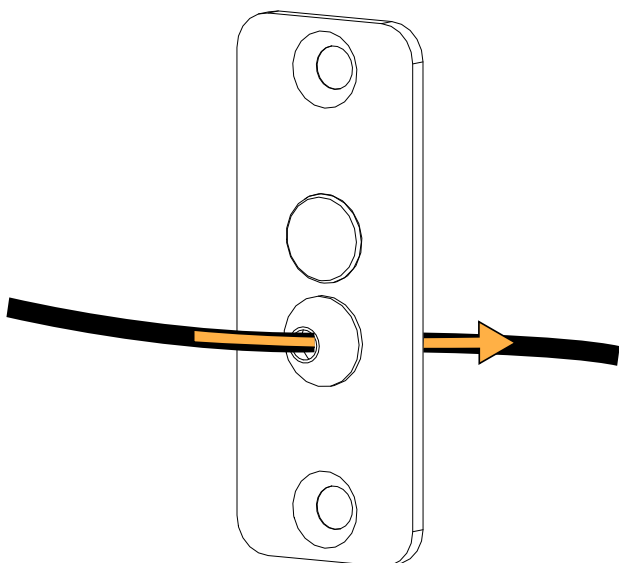
This procedure describes how to connect the input cable to the enclosure. If the enclosure must be connected in parallel, replace the protective plug with the extra cable gland and proceed identically for both cables.

Procedure

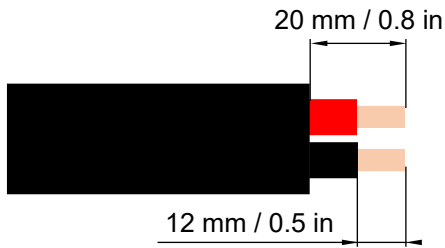
1. Remove the connector sealing plate (if present) or the placeholder screws.



2. Insert the cable through the cable gland.



3. Strip the wires of the cable.



2 × max. 2.5 mm² cable



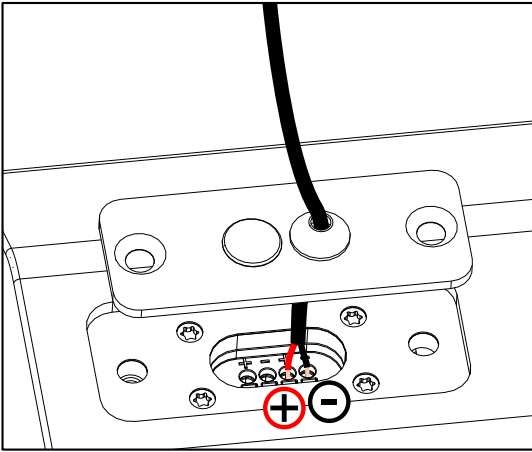
It is recommended to crimp insulated ferrules at the end of both wires.
See [Specifications for insulated cable ferrules](#) (p.172).



Refer to the cable manufacturer documentation for the wire color code.

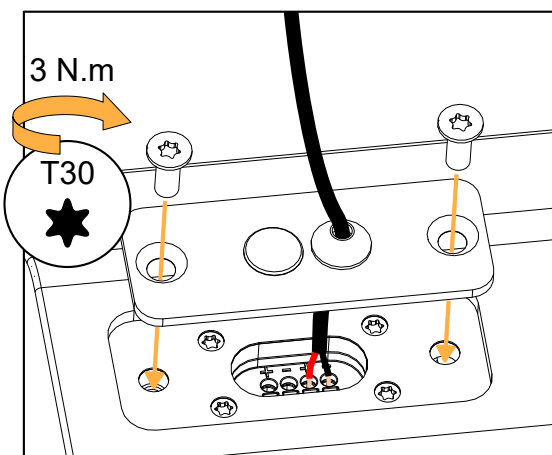
4. Push the wires into the terminals.

If necessary, use a small tool in the hole next to the terminal to unlock it.



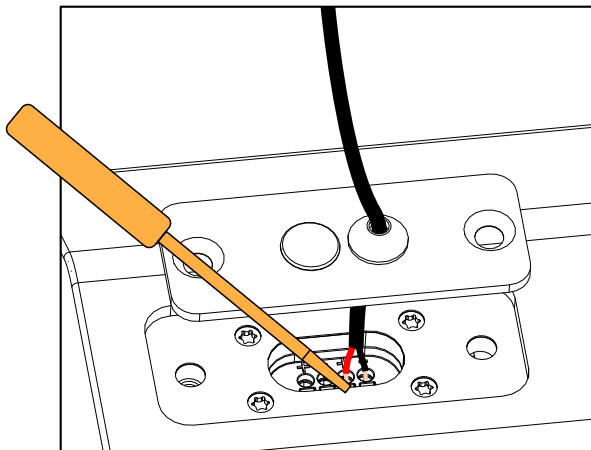
5. Secure the connector sealing plate to the enclosure.

Apply a torque of 3 N.m.



What to do next

To remove the cables, use the small tool to unlock the terminals and pull on the wires.



Cabling with SPCON

About this task



Risk of electric shock

When SPCON is connected to an amplified controller, the bare wires carry electrical voltage.

Always mount SPCON to the enclosure **before** connecting the speaker cable to SPCON.

Always disconnect the speaker cable from SPCON **before** removing SPCON from the enclosure.

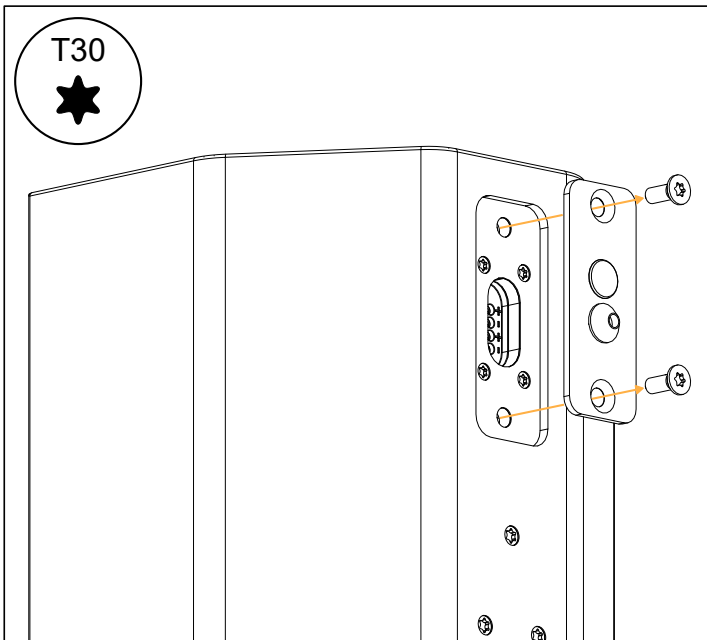
If the speaker cable cannot be disconnected, unplug the amplified controller from the mains.

SPCON is **not compatible** with the following rigging accessories:

- X6i-onCW
- WALLx2
- PANx2
- GROUND55
- GROUND35
- GROUND

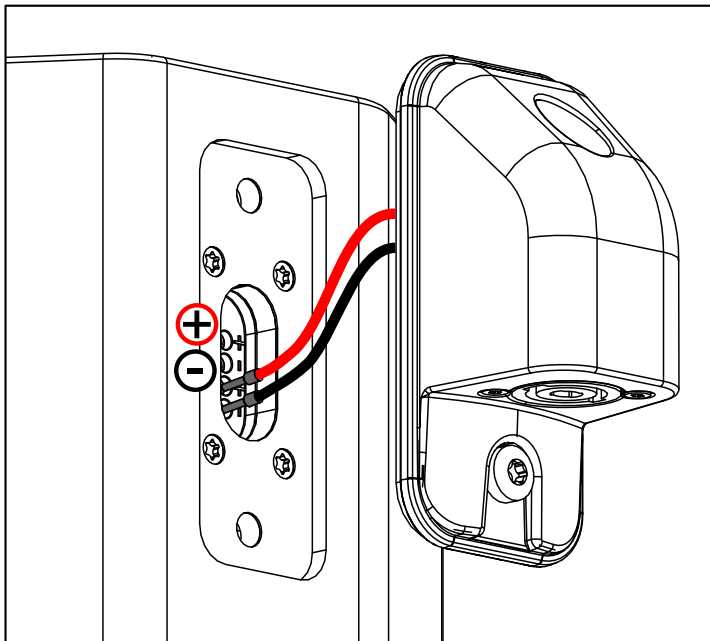
Procedure

1. Remove the connector sealing plate (if present) or the placeholder screws.



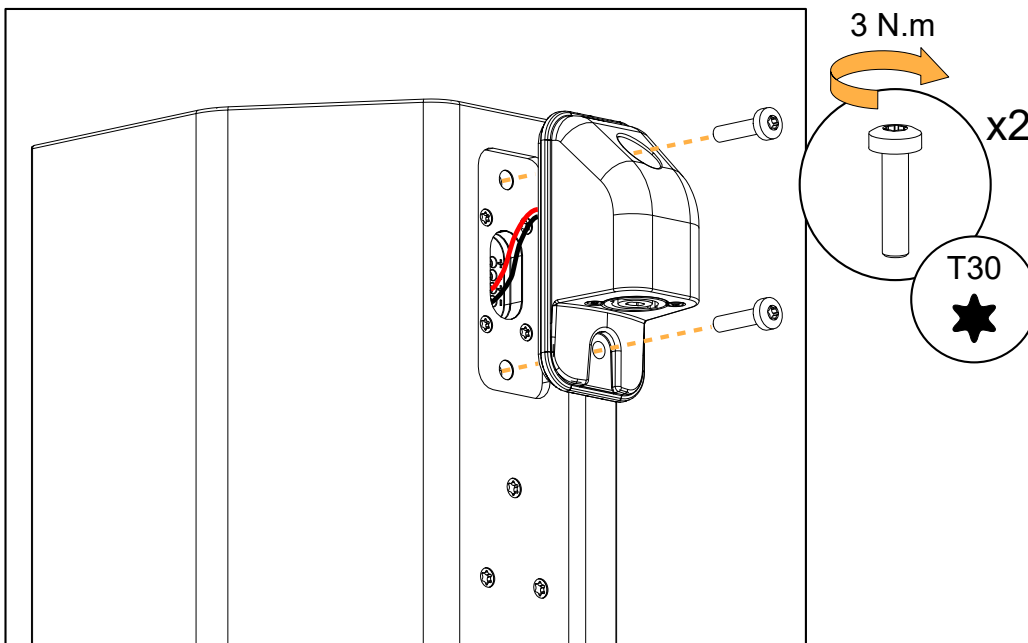
2. Push the SPCON ferrules into the terminals.

If necessary, use a small tool in the hole next to the terminal to unlock it.

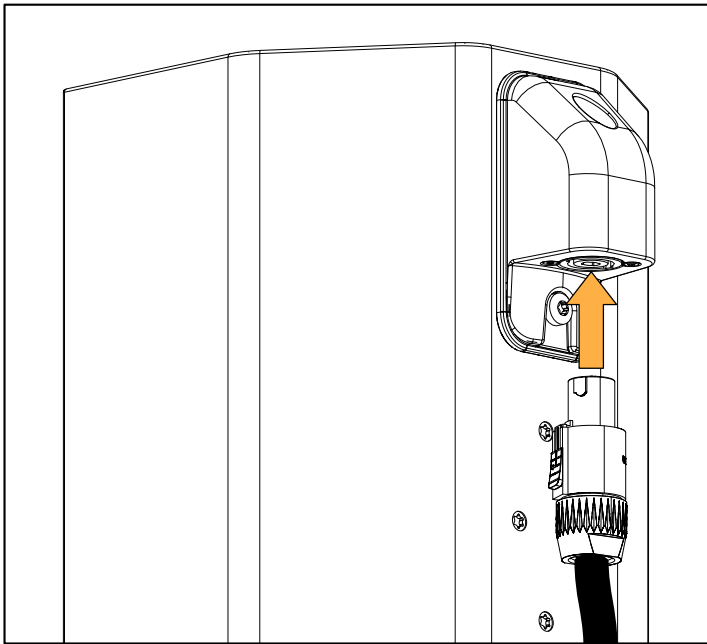


3. Secure SPCON to X6i.

Use the two provided M6×25 Torx screws.



4. Connect the speaker cable to SPCON.



Corrective maintenance

Introduction

This section contains the following maintenance procedures:

X6i

- [D/R - Grill](#) (p.181)
- [D/R - Coaxial loudspeaker](#) (p.185)
- [D/R - Diaphragm](#) (p.188)

For advanced maintenance, contact your L-Acoustics representative.

Tools and consumables

Before performing maintenance on this product, make sure all the tools listed are available. References are given for FACOM® products in this table. Other manufacturers can be used.

name	reference	distributor
set of 6-point 1/4" sockets *	RL.NANO1 / R.360NANO	FACOM
torque screwdriver (2 - 10 N.m) *	A.404	FACOM
torque screwdriver (0.5 - 2.5 N.m) *	A.402	FACOM
flat tool	-	-
trim clip removal pliers	-	-
compressed air blower	-	-



* included in the L-Acoustics Maintenance Toolcase.

Maintenance Toolcase

The Maintenance Toolcase is a carry-on suitcase that includes all the tools required to perform maintenance on L-Acoustics products. This toolcase is aimed at Certified Providers.

The Maintenance Toolcase uses a Peli™ 1510 Protector case that features three pre-cut layers of foam to safely fit the tools. The Maintenance Toolcase includes tools manufactured by FACOM®, Fluke®, Tohnichi, ABUS, and Würth.



All third-party trademarks, registered trademarks, or product names are the property of their respective owners.

Exploded views

In order to operate, follow the order outlined here. Each assembly refers to the corresponding Disassembly/ Reassembly (D/R) procedure and the necessary repair kit (KR).

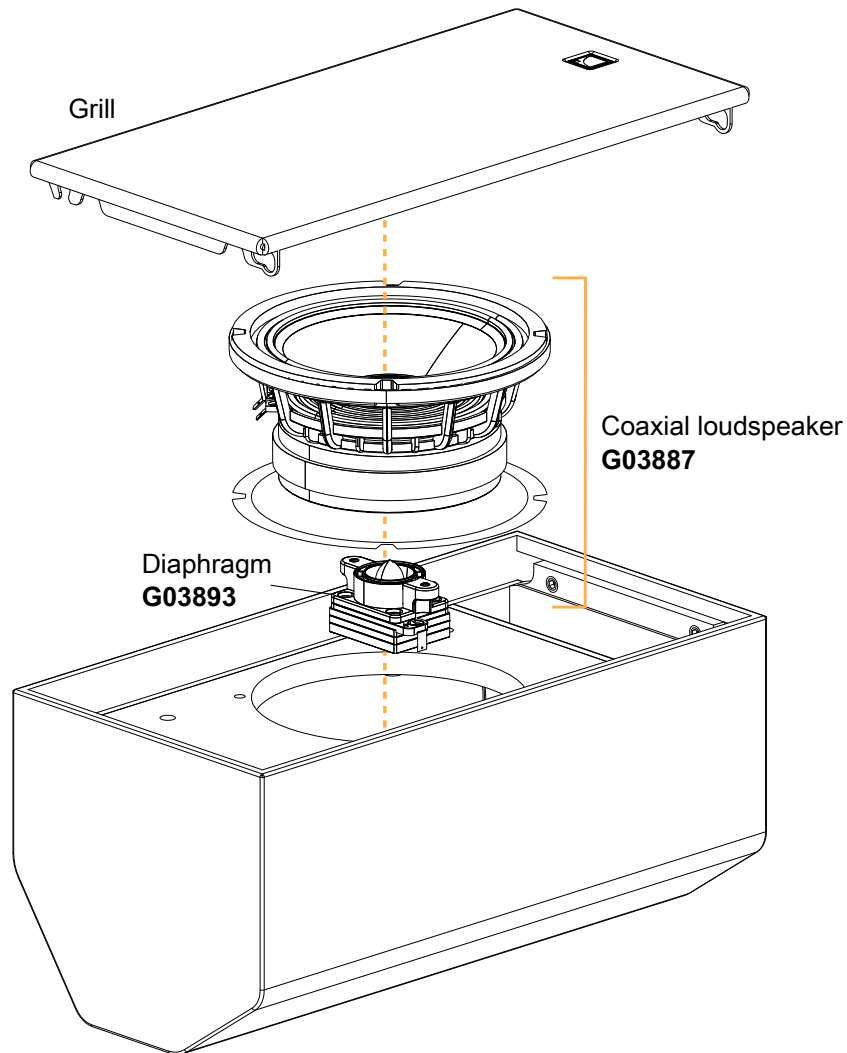


Using the G03892 reconing kit

Follow the instructions to remove the LF speaker from the enclosure.

Perform the reconing procedure according to the information provided by the manufacturer.

Use the screws and fasteners provided in G03892 for reassembly.



Disassembly and Reassembly procedures

D/R - Grill

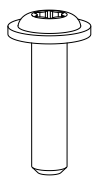
Tools

- flat tool
- torque screwdriver
- T10 Torx bit

G03887 - KR coaxial speaker (6.5" LF + 1" diaphragm HF) X6i

or

G03893 - KR diaphragm 1" X6i



x2

S100338

M3x12 Torx



x2

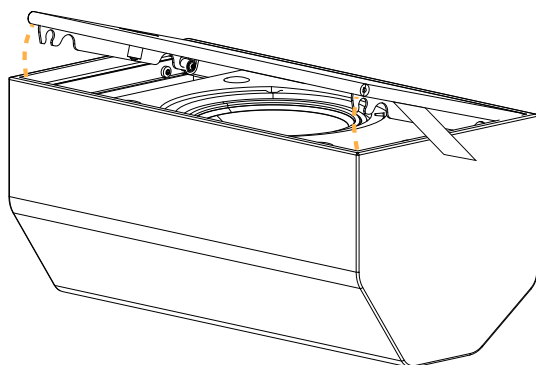
104788

spacer

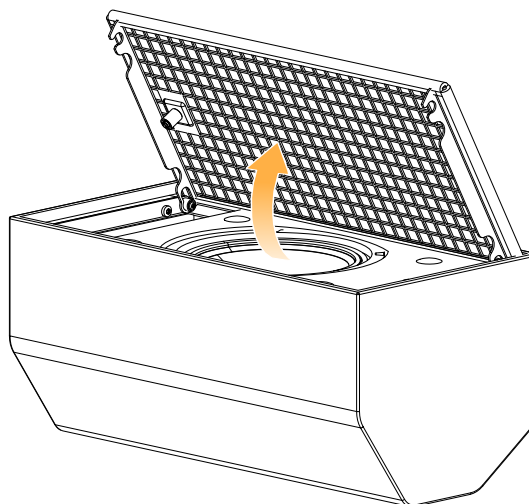
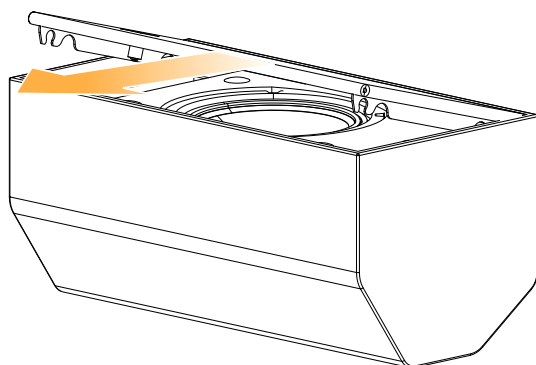
Disassembly

Procedure

1. Use a flat tool as a lever to unlock the grill from each side of the enclosure.

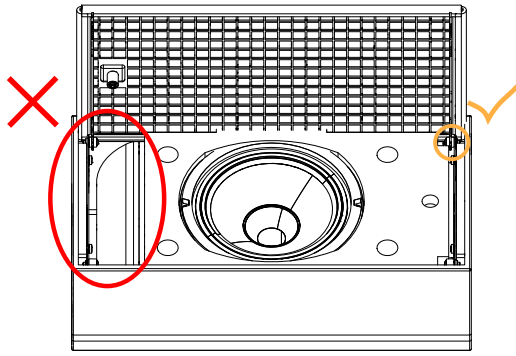


2. Pull the grill forwards and slide it up.

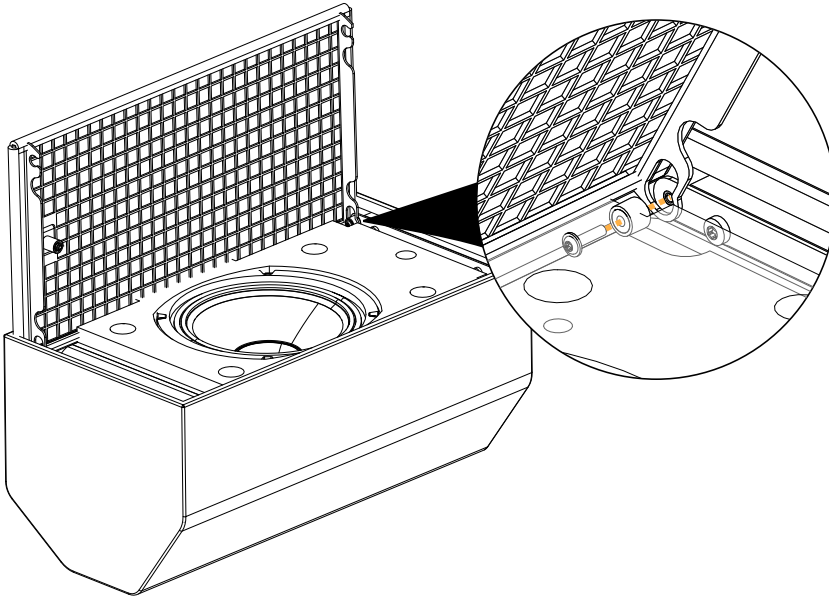




Remove the grill pivot screw that is not on the vent side.



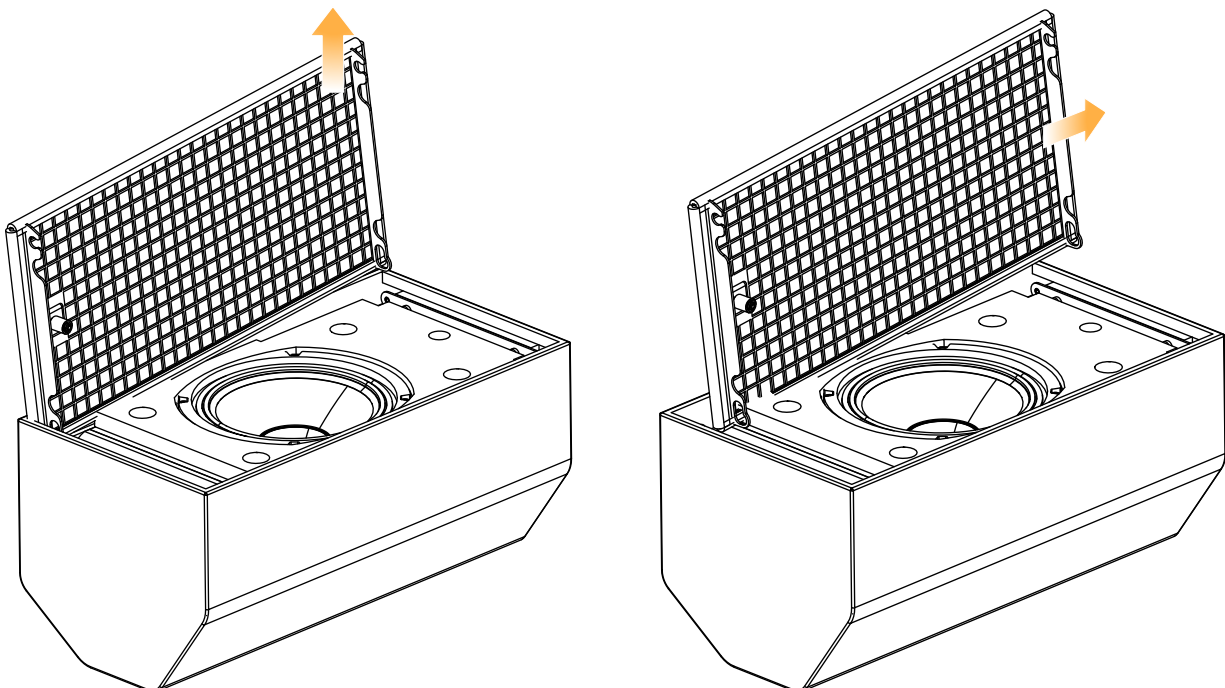
3. Remove the M3×12 Torx screw and the spacer securing the grill.
Use the T10 Torx bit.



4. Pull up the grill then slide it towards the side to remove it.



Put the grill on a flat and clean surface.



Reassembly

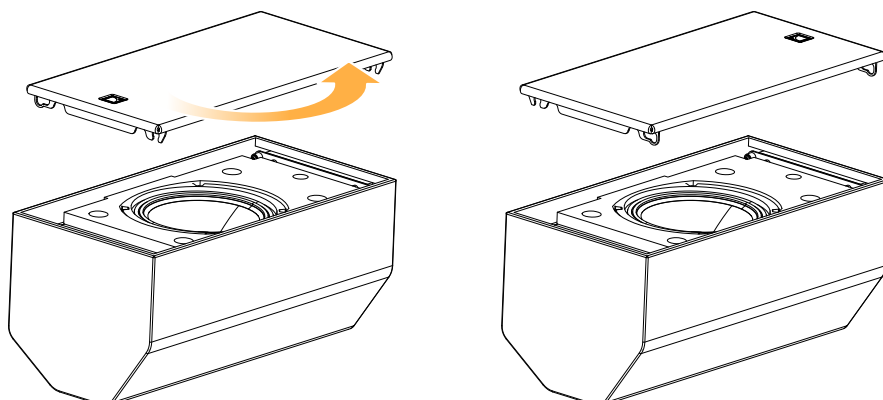
About this task



For safety reasons, always use the new screws and spare parts provided in the KR.



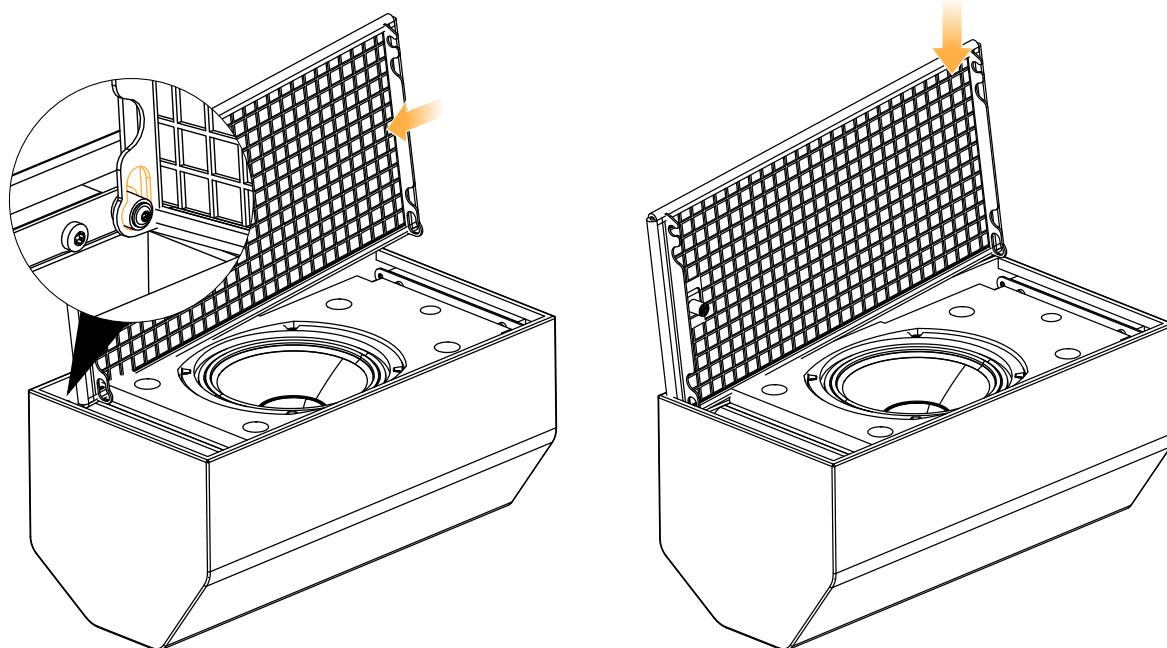
The grill is reversible.



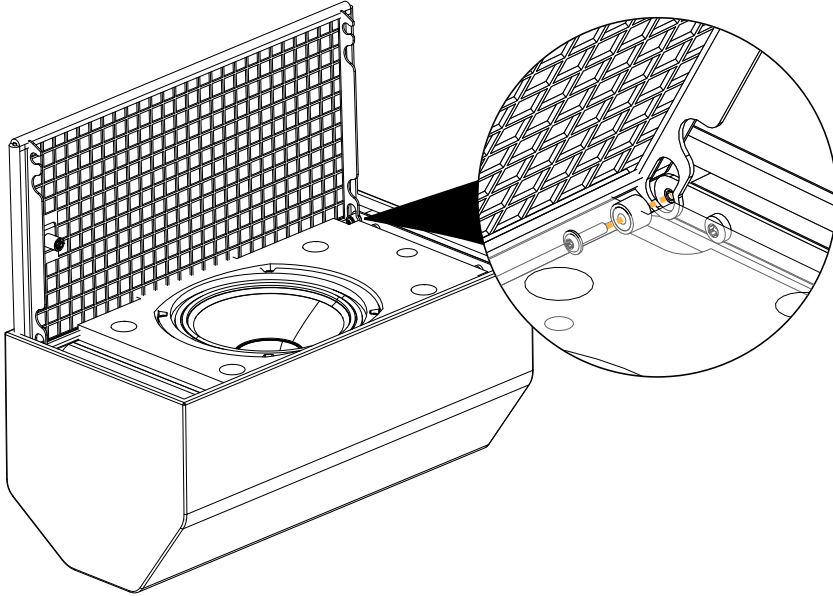
Procedure

1. Position the grill.

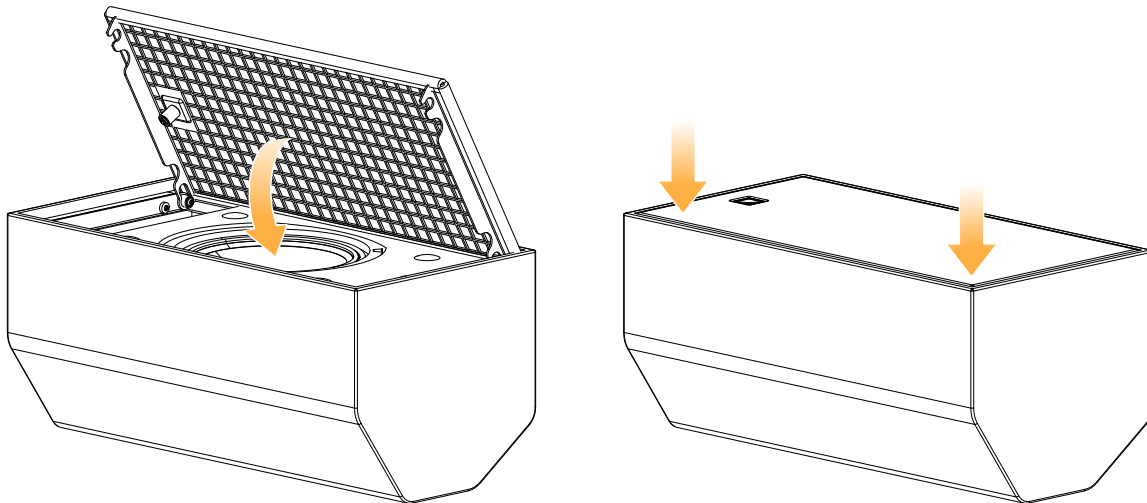
Align the hook on the side of the grill with the pivot stud.



2. Secure the grill using the M3×12 Torx screw and the spacer.
Use the T10 Torx bit.



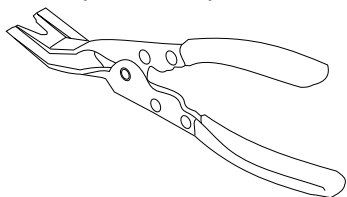
3. Close the grill.
Press the sides of the grill to make sure it is locked.



D/R - Coaxial loudspeaker

Tools

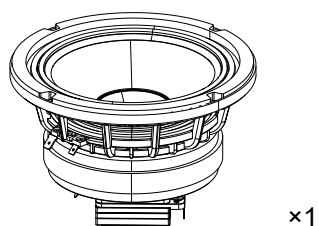
- torque screwdriver
- 3 mm hex bit
- trim clip removal pliers



Repair kit

G03887

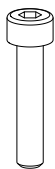
KR coaxial speaker (6.5" LF + 1" diaphragm HF) X6i



x1

18364

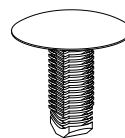
6.5" coaxial speaker - 8 ohms



x4

S100145

M4x20 hex



x4

FT011061

Push-rivet Ø7.5x17

Prerequisite

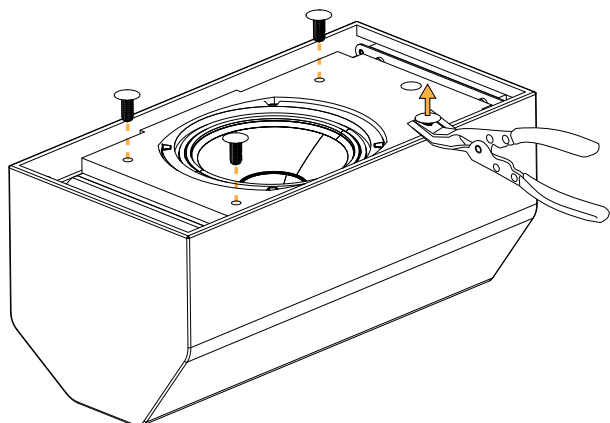
Grill removed.

See [D/R - Grill](#) (p.181).

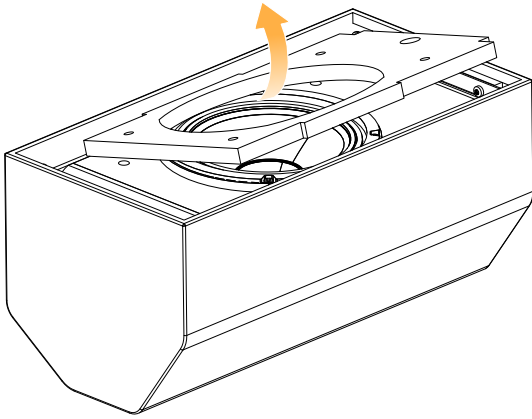
Disassembly

Procedure

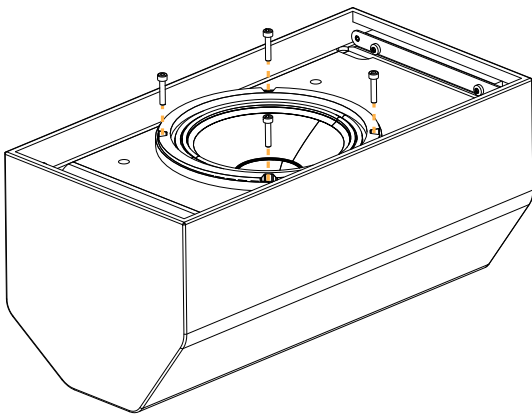
1. Remove the rivets securing the wadding.
Use trim clip removal pliers.



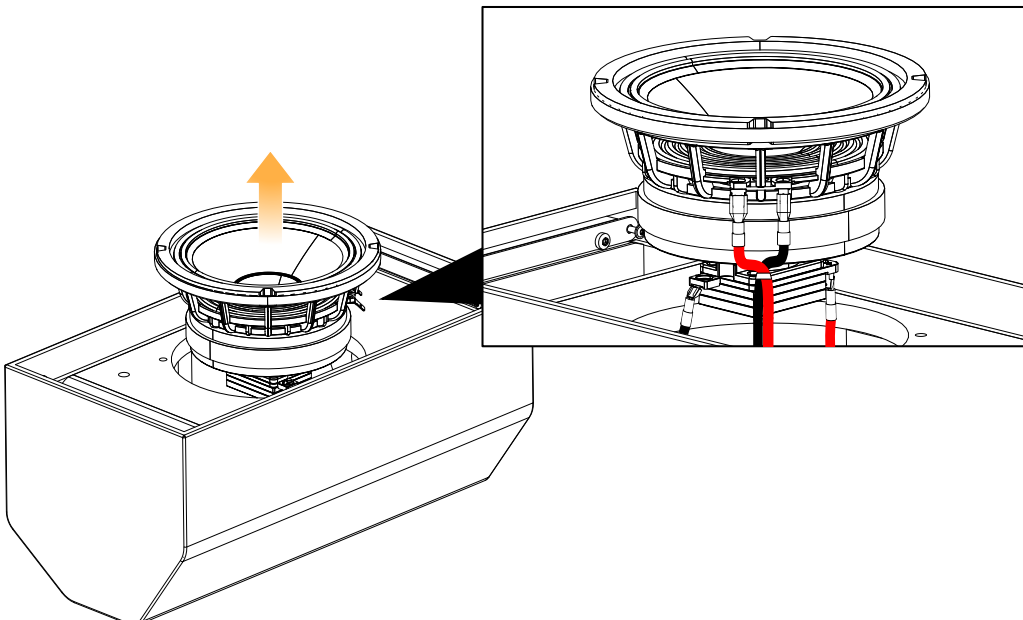
2. Remove the wadding.



3. Remove the four M4×20 hex screws securing the speaker.
Use the 3 mm hex bit.



4. Carefully disconnect the cables before removing the speaker.



Reassembly

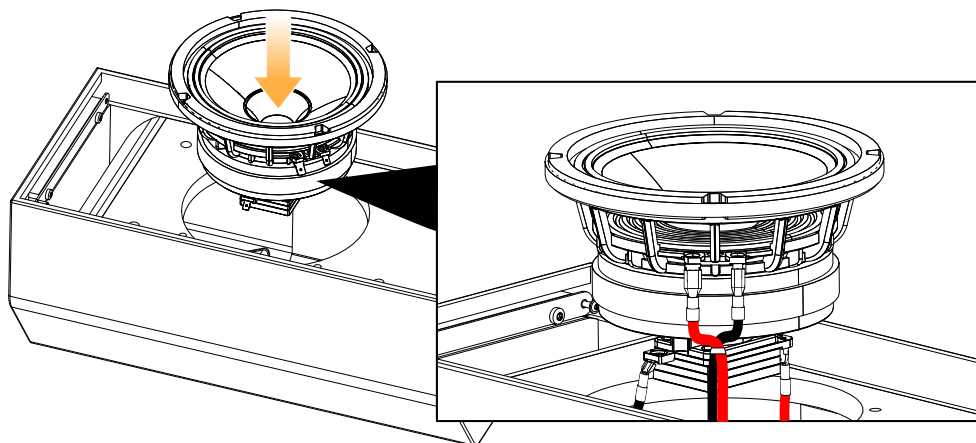
About this task



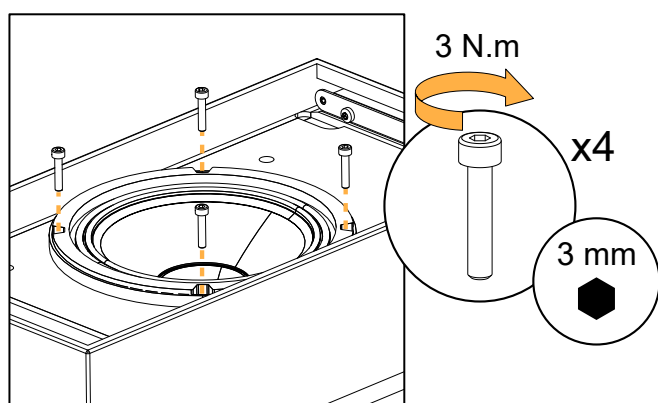
For safety reasons, always use the new screws and spare parts provided in the KR.

Procedure

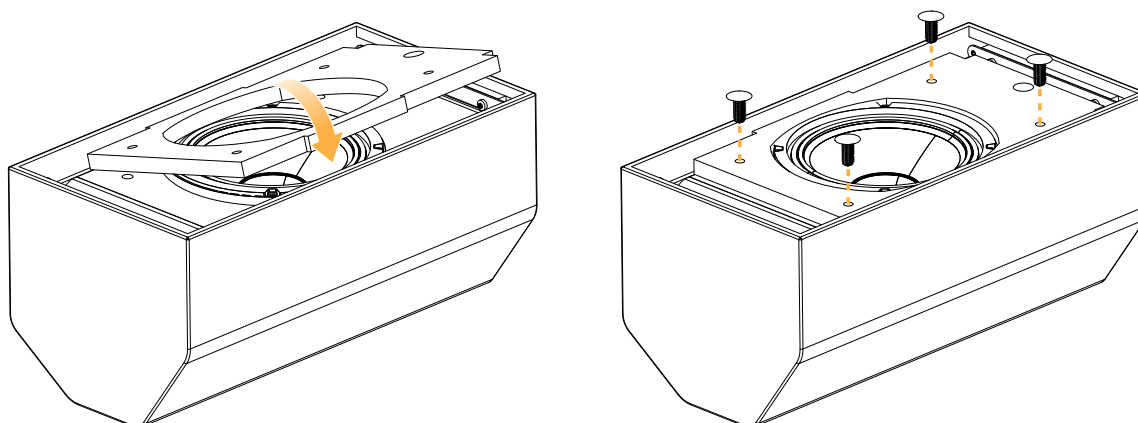
1. Connect the cables and position the speaker.



2. Secure the speaker using the four M4×20 hex screws.
Use the 3 mm hex bit.



3. Position and secure the wadding using the rivets.
Push the rivet by hand to secure it.



What to do next

Perform the [Acoustical check](#) (p.190) procedures.

D/R - Diaphragm

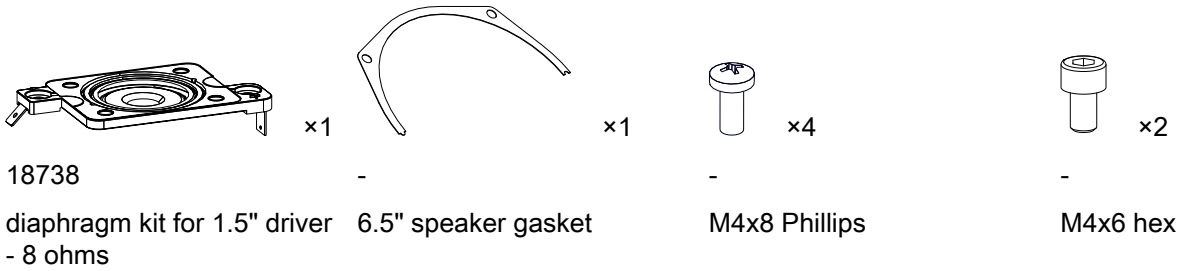
Tools

- torque screwdriver (0.5 - 2.5 N.m)
- 3 mm hex bit
- PH2 Phillips bit

Repair kit

G03893

KR diaphragm 1" X6i



Prerequisite

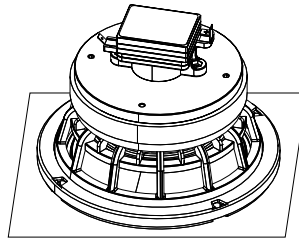
Grill removed.

Coaxial speaker removed.

The speaker is placed on a flat surface in a dust-free environment.

See [D/R - Grill](#) (p.181).

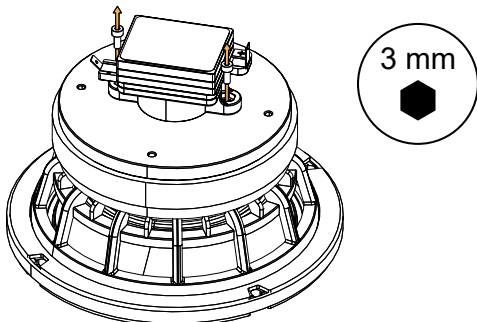
See [D/R - Coaxial loudspeaker](#) (p.185).



Disassembly

Procedure



1. Remove the two screws securing the HF driver.
Use the 3 mm hex bit.



2. Remove the HF driver.
3. Place the HF driver on a flat surface.
4. Remove the four screws securing the cover and remove the cover.
Use the PH2 Phillips bit.
5. Carefully remove the diaphragm holding it by the connectors.

Reassembly


About this task

-  For safety reasons, always use the new screws and spare parts provided in the KR.
If no new screws are available, use blue threadlocker.
-  Gradually tighten the screws following a star pattern.

Procedure

1. Clean the driver and the air gap.

Use a blower or double face adhesive tape to clean any particle.

-  Make sure the air gap is perfectly clean before moving to the next step.

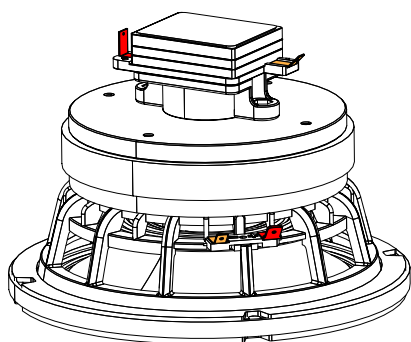
2. Position the diaphragm using the screw holes as reference points.

3. Secure the cover with the four screws.

- a) Gradually secure each screw manually with the PH2 Phillips bit.
Follow a star pattern.
- b) Tighten the screws in the same order with the torque screwdriver.
Use the PH2 Phillips bit. Set the torque to 0.95 N.m.

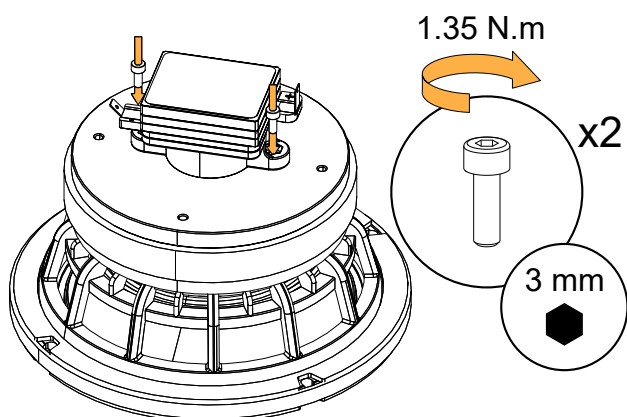
4. Carefully position the HF driver on the LF speaker.

Use the connectors as reference points. When facing the LF speaker connectors, the small HF driver connector must be on the left, and the larger one on the right.



5. Secure the HF driver on the LF speaker with the two screws.

Use the 3 mm hex bit. Set the torque to 1.35 N.m.



Acoustical check

Enclosure check



This feature is available on:

LA4X
LA12X

ENCLOSURE CHECK measures impedance at the reference frequencies for the connected loudspeaker family. The measured impedance is compared to the expected range allowing for fast detection of loudspeakers presenting circuit continuity issues.



The results can be used for preliminary diagnosis but cannot replace a comprehensive quality control.

Prerequisite



ENCLOSURE CHECK measurements can only be reliable if the following requirements are met:

Environment and temperature:

- Ambient temperature must be comprised between 0 °C / 32 °F and 40 °C / 104 °F. Ideal temperature is 20 °C / 68 °F.
- Enclosures must be at room temperature. If warm from a recent high level use or recently moved from a cold environment, let the loudspeakers reach room temperature before starting.

Enclosures:

- Enclosures must be included in the embedded factory preset library.
- Enclosures must be in nominal operating conditions:
 - Remove covers or dollies obstructing the loudspeakers or the vents.
 - Check for obvious physical damage or air leak: visually inspect the grill, gasket, cabinet, and connector plate for loose, missing or damaged parts.

Connection:

- Use only 10 m / 30 ft 4 mm² / AWG 11 speaker cables.
- Do not connect enclosures in parallel.

Amplified controllers:

- LA4X must run at least firmware version 1.1.0.
- LA4X load sensors must be calibrated. Refer to the **Load Sensor Calibration Tool** technical bulletin for more information.
- LA4X must warm up for at least 10 minutes after power up. Do not power off, reboot or switch to standby mode to avoid resetting the countdown.
- Load a preset corresponding to the connected loudspeaker's family. Presets from the user memories may be used on condition they are made of presets supported in the embedded factory preset library.

Procedure

1. Power up the amplified controller. Let LA4X warm up for at least 10 minutes.
2. Connect the loudspeaker enclosures to the amplified controller.
3. Load a preset from or built from the embedded library corresponding to the connected loudspeaker family.
4. On the amplified controller, use the encoder wheel to select **MONITORING & INFO**. Press the OK key or the encoder wheel to validate.
5. Use the encoder wheel to select **ENCLOSURE CHECK**.



Beware of sound levels.

Although the sound pressure levels generated for the ENCLOSURE CHECK are moderate, do not stay within close proximity of the loudspeakers and consider wearing ear protection.

6. Press the OK key or the encoder wheel to launch the ENCLOSURE CHECK.

The amplified controller generates short sinusoidal signals simultaneously for each connected output.

The amplified controller displays the results for each output.

7. Depending on the displayed results, follow the instructions in the table.

result	interpretation	instructions
OK	measured impedance is within expected range	enclosure is in working order electrically
?	unsupported preset family	only supported enclosures should be tested
NC	Not Connected	if cables are connected: a. inspect the cables and connections b. go to step 8 (p.191)
NOK	measured impedance is not within expected range	a. check that all the prerequisites are met, in particular that the loaded preset corresponds to the connected speaker's family b. inspect the cables and connections c. go to step 8 (p.191)
UNDEF	measured impedance is undefined	

8. Under NC, NOK and UNDEF results, press and hold the corresponding OUT key.

The amplified controller displays:

- the tested frequencies,
- information on the measured impedance:
 - OPEN for open circuit (found in NC results),
 - SHORT for short circuit (found in NOK results), or
 - a percentage of variation from the expected range (found in NOK and UNDEF results)
- the number of operational transducers out of the total



Low variations from the expected range are acceptable: displayed percentage can be different from 0 and all transducers considered operational.

Listening test

Procedure

1. Load the preset on an LA2Xi / LA4X / LA7.16i / LA12X amplified controller.
2. Connect a sine wave generator to the amplified controller.



Risk of hearing damage

Set a low sound level to start and use ear protection to adjust before testing.

3. Scan the bandwidth focusing on the usable range.
The sound should remain pure and free of unwanted noise.
4. Focus on the 35 Hz frequency.
The sound should remain pure and free of unwanted noise.

Troubleshooting for LF speakers

One or more LF speaker produces distorted, buzzing, rubbing, clicking, muffled or weak sound.

Possible causes

- The screws are not tightened with the appropriate torque.
- There is an air leak in the gasket.
- There is dust on the cone.
- The cone is damaged.
- The surround is torn or delaminated.
- The voice coil or the spider is damaged.

Procedure

1. Perform the speaker disassembly procedure.
2. Visually inspect the cables and the connectors.
3. Visually inspect the speaker cone, the voice coil and the spider.
If any damage is visible, replace the speaker.
4. Carefully clean the speaker with a dry cloth.
5. Perform the reassembly procedure.
Replace the speaker gasket and the screws.
Apply the recommended torque.
6. Repeat the listening test.
If the problem persists, replace the speaker.

Troubleshooting for HF drivers

One or more HF driver produces high-frequency harmonic distortions, strange vibrations or weak sound.

Possible causes

- There are foreign particles on the air gap.
- The diaphragm is not centered correctly.
- The screws used for reassembly are too loose.
- The diaphragm is damaged.

Procedure

1. Perform the diaphragm disassembly procedure.
2. Visually inspect the diaphragm and the voice coil.
If any damage is visible, replace the diaphragm.
3. Clean the air gap thoroughly.
Use double-face adhesive tape to remove any particles.
4. Perform the diaphragm reassembly procedure.
Apply the recommended torque.

5. Repeat the listening test.

If the problem persists, replace the driver.

Troubleshooting for installation enclosures

One or more enclosure produces a high-pitched, leaking air sound.

Possible cause

- Placeholder screws are missing.

Procedure

Visually inspect the screws on each side of the enclosures.

Secure placeholder screws in the empty inserts.

Specifications

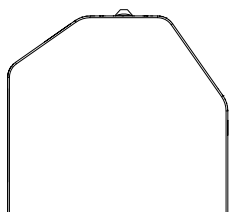
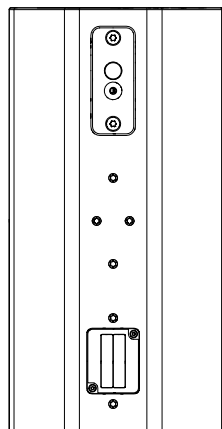
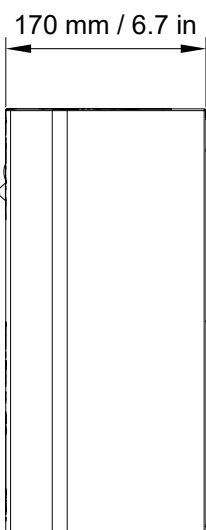
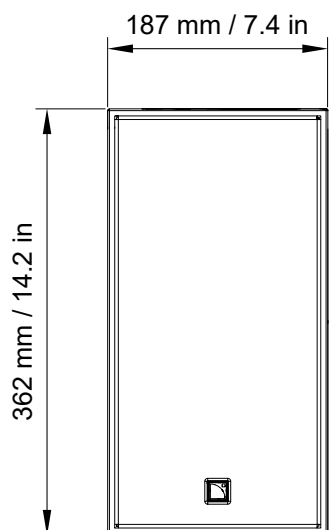
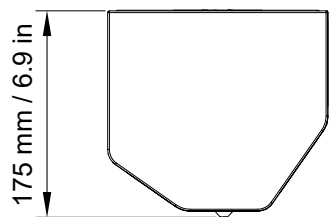
X6i specifications

Description	2-way passive coaxial enclosure: 6,5" LF + 1.5" HF diaphragm (installation version) amplified by LA2Xi / LA4X / LA7.16i / LA12X	
	with [X6i_50]	with [X6i]
Usable bandwidth (-10 dB)	54 Hz - 20 kHz	69 Hz - 20 kHz
Maximum SPL¹	with LA2Xi (bridge mode) / LA4X / LA7.16i / LA12X	123 dB
	with LA2Xi (single-ended mode)	122 dB
Nominal directivity (-6 dB)	90° axisymmetric	
Monitoring angle	35° / 55°	
Transducers	LF: 1 × 6.5" HF: 1 × 1.5" neodymium	
Acoustical load	bass-reflex	
Nominal impedance	8 Ω	
Connectors	1 × 4-point terminal block with push-in connection	
Rigging and handling	8 M6 inserts	
Weight (net)	6.3 kg / 14 lb	
Cabinet	premium grade Baltic beech and birch plywood	
Front	coated steel grill acoustically neutral 3D fabric	
Finish	dark grey brown Pantone 426 C pure white RAL 9010 custom RAL code on special order	
IP	IP55 ²	

¹ Peak level measured at 1 m under free field conditions using pink noise with crest factor 4 (preset specified in brackets).

² With connector at the top and connector sealing plate.

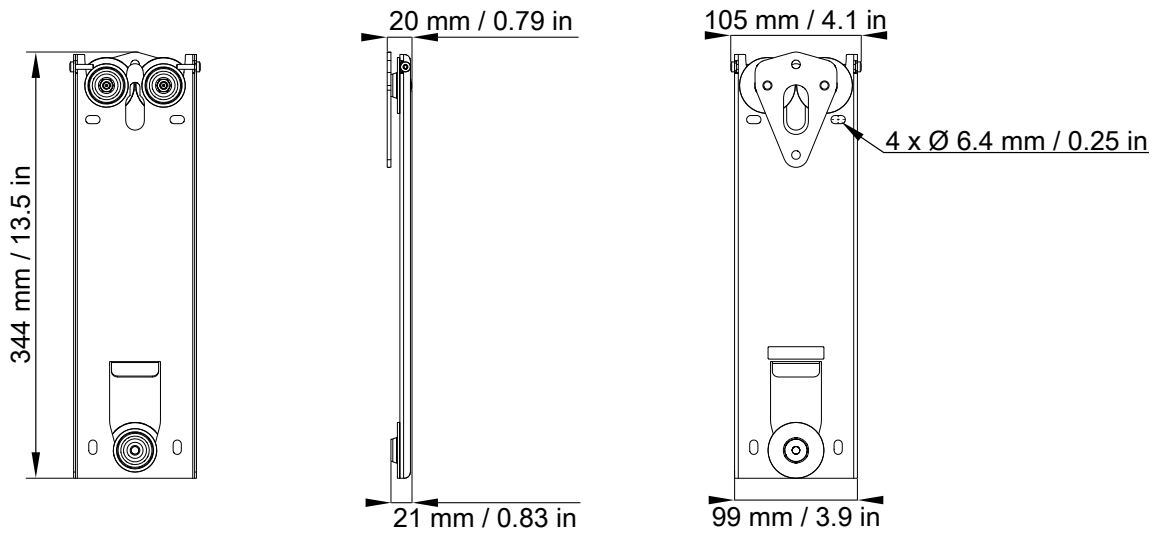
X6i dimensions



X6i-onCW specifications

Description	On-wall or on-ceiling mounting accessory with silent blocks for X6i
Weight (net)	0.7 kg / 1.5 lb
Material	steel with anti-corrosion coating

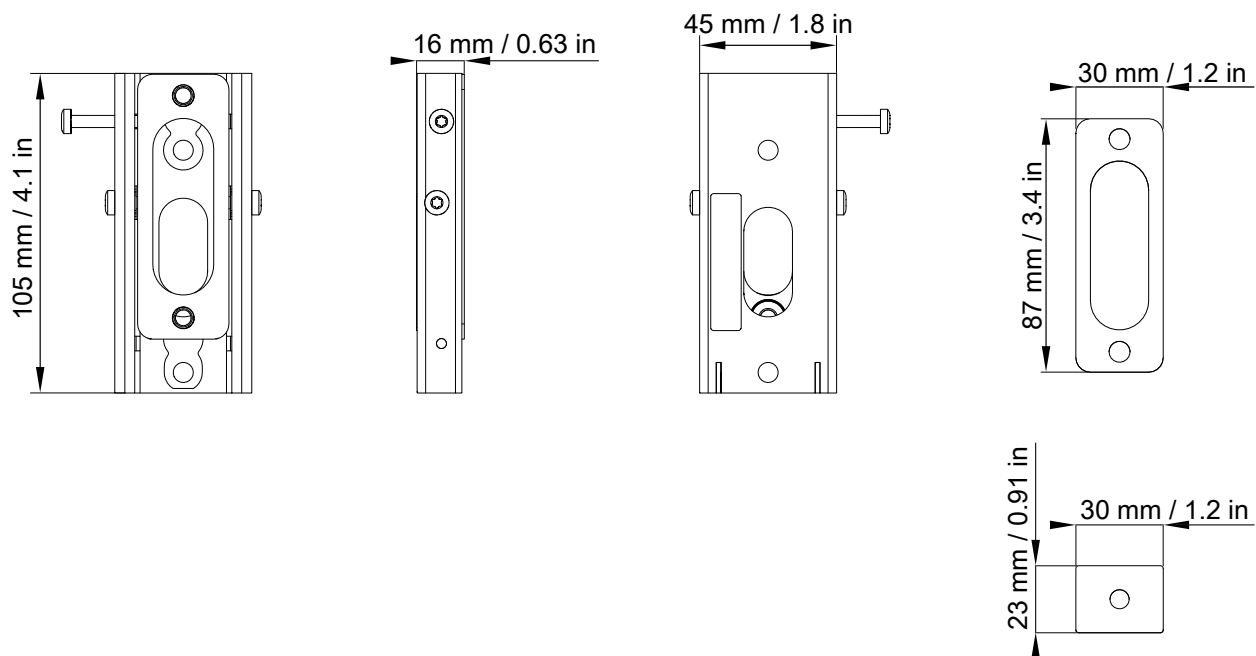
X6i-onCW dimensions



WALL specifications

Description	Wall-mounting accessory
Weight (net)	0.2 kg / 0.4 lb
Material	steel with anti-corrosion coating

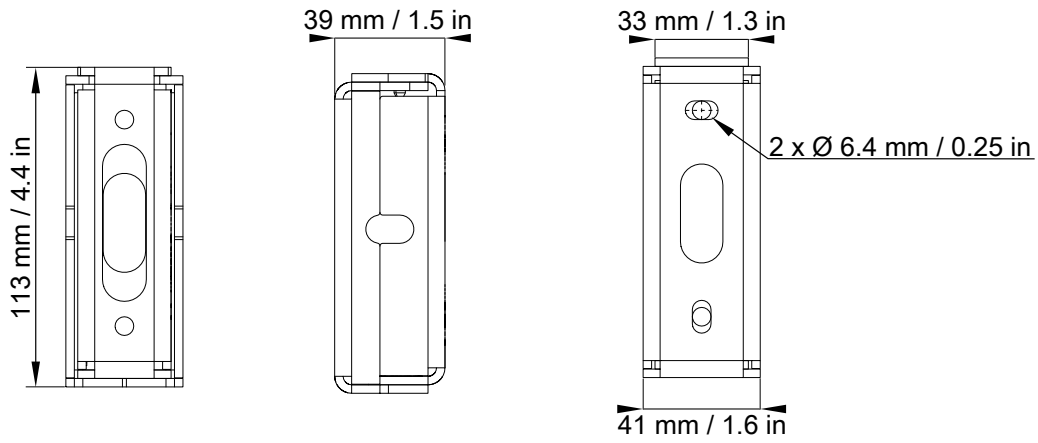
WALL dimensions



PAN specifications

Description	Adjustable pan accessory +/-45°
Weight (net)	0.4 kg / 0.9 lb
Material	steel with anti-corrosion coating

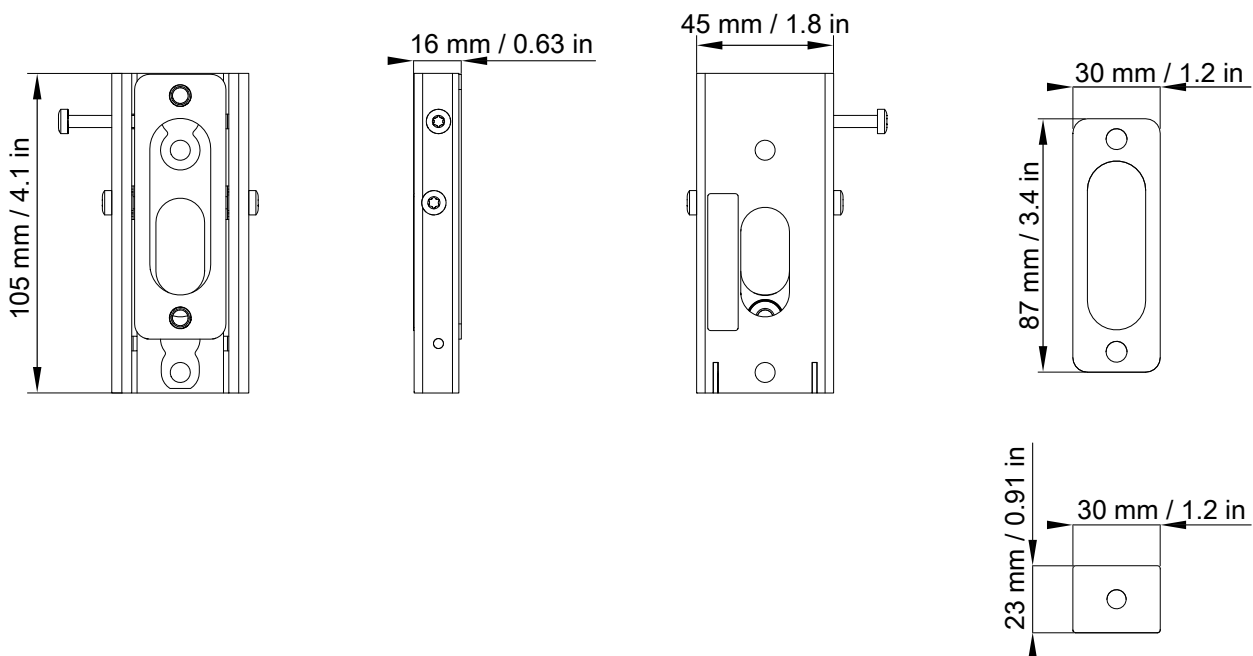
PAN dimensions



WALLx2 specifications

Description	Wall-mounting kit
Weight (net)	0.4 kg / 0.9 lb
Material	steel with anti-corrosion coating

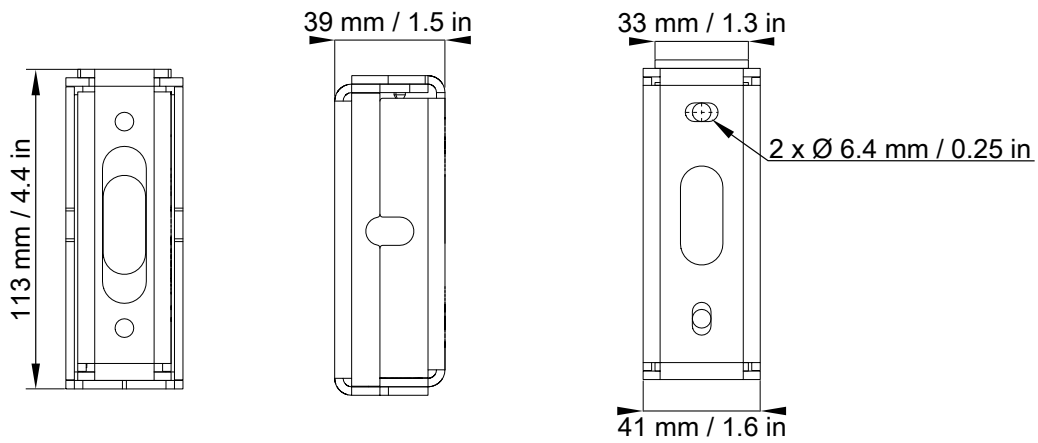
WALLx2 dimensions



PANx2 specifications

Description	Adjustable pan accessory kit +/-45°
Weight (net)	0.8 kg / 1.8 lb
Material	steel with anti-corrosion coating

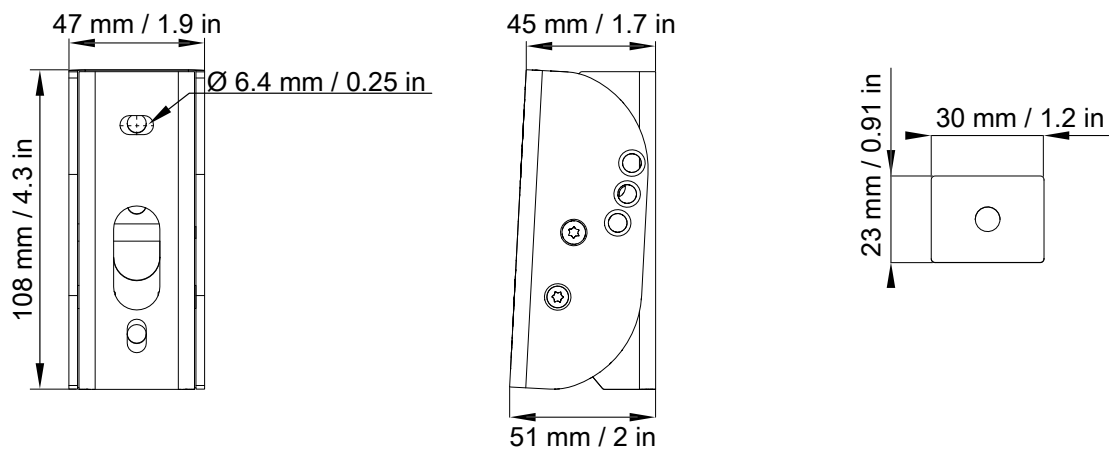
PANx2 dimensions



TILT specifications

Description	Adjustable tilt accessory from 0° to 40°
Weight (net)	0.6 kg / 1.3 lb
Material	steel with anti-corrosion coating

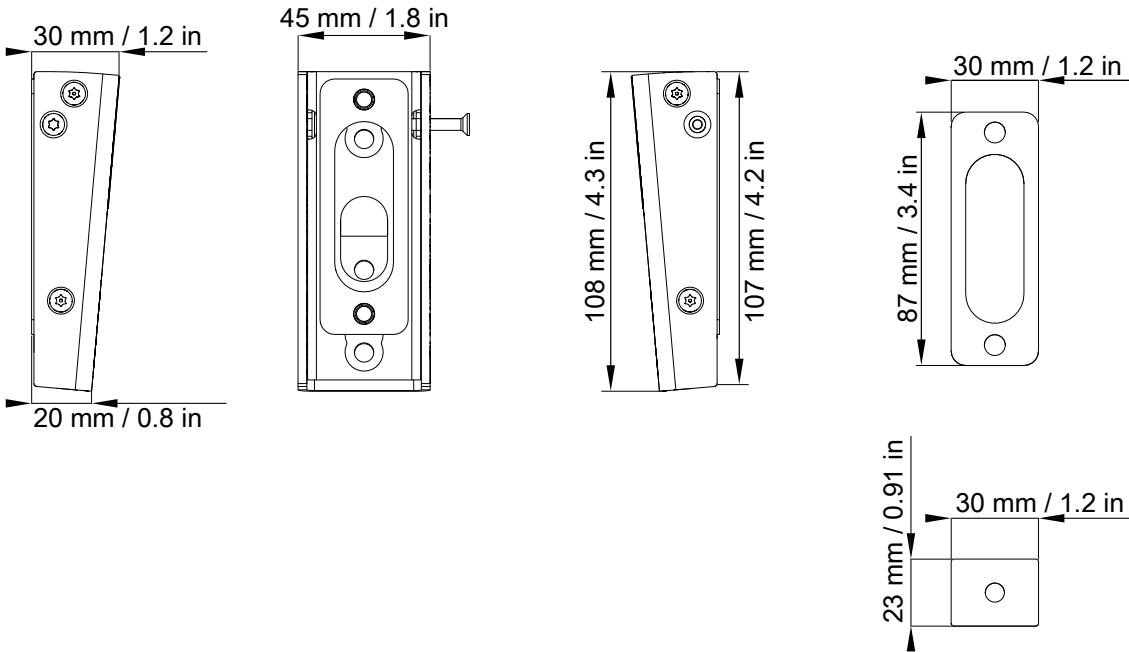
TILT dimensions



TILT5 specifications

Description	Fixed tilt accessory 5°
Weight (net)	0.3 kg / 0.7 lb
Material	steel with anti-corrosion coating

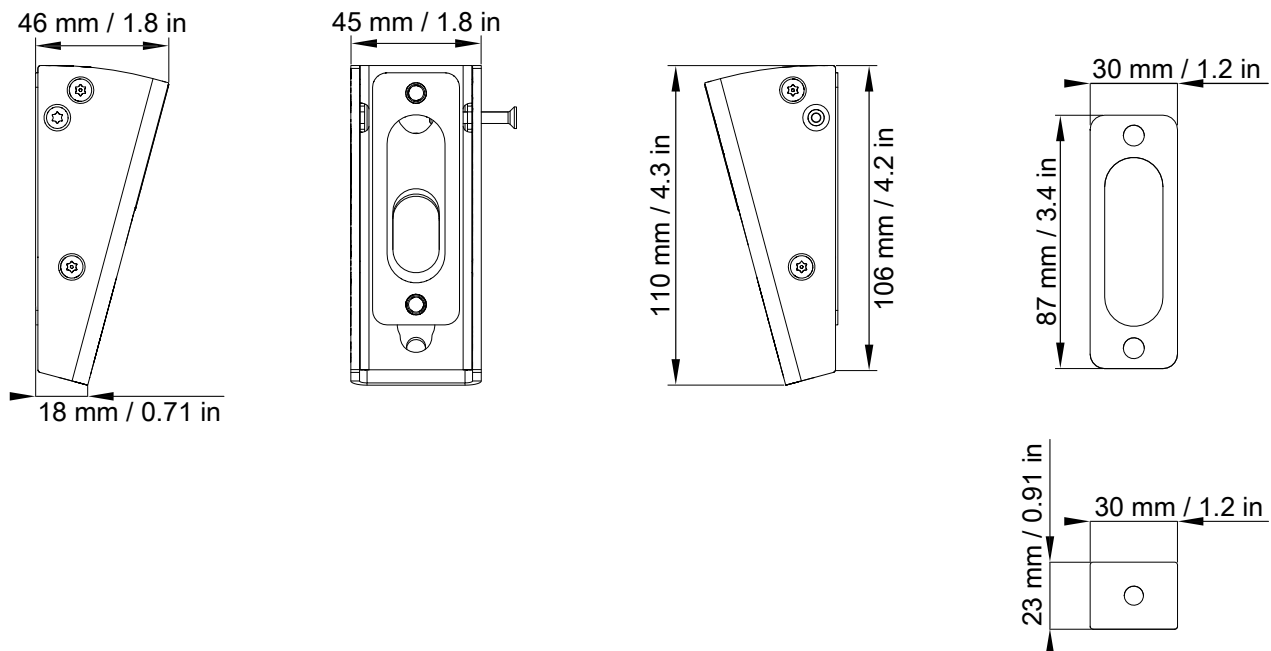
TILT5 dimensions



TILT15 specifications

Description	Fixed tilt accessory 15°
Weight (net)	0.4 kg / 0.9 lb
Material	steel with anti-corrosion coating

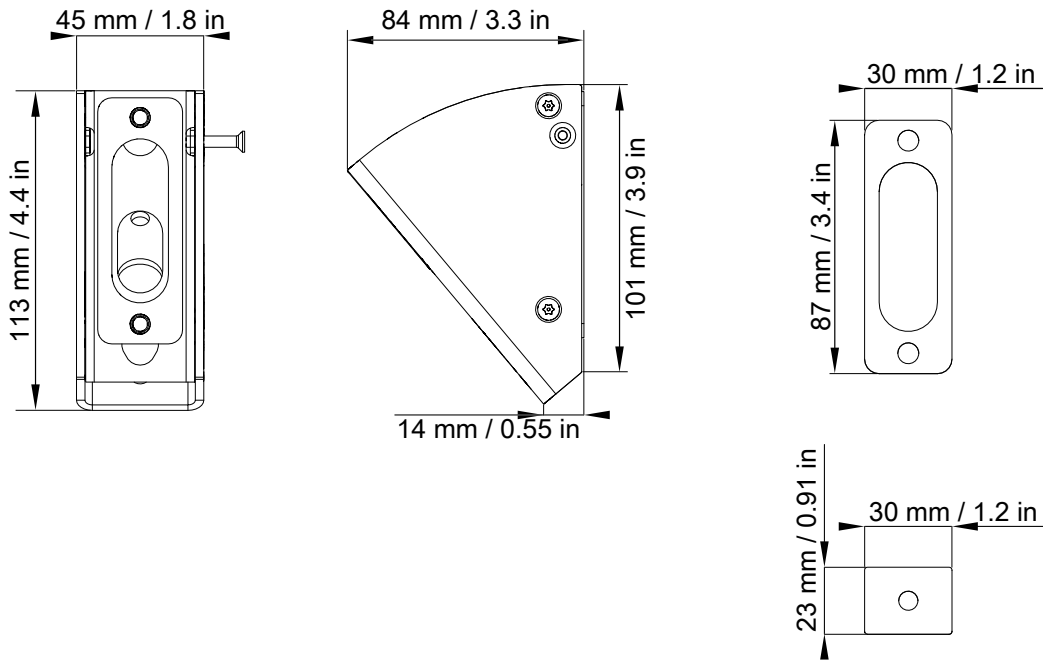
TILT15 dimensions



TILT40 specifications

Description	Fixed tilt accessory 40°
Weight (net)	0.5 kg / 1.1 lb
Material	steel with anti-corrosion coating

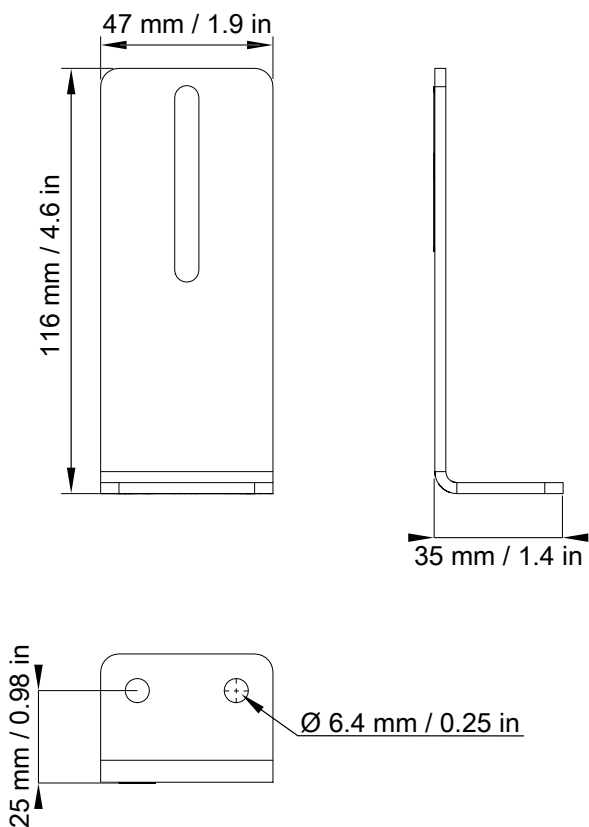
TILT40 dimensions



GROUND specifications

Description	Ground-mounting accessory
Weight (net)	0.2 kg / 0.4 lb
Material	steel with anti-corrosion coating

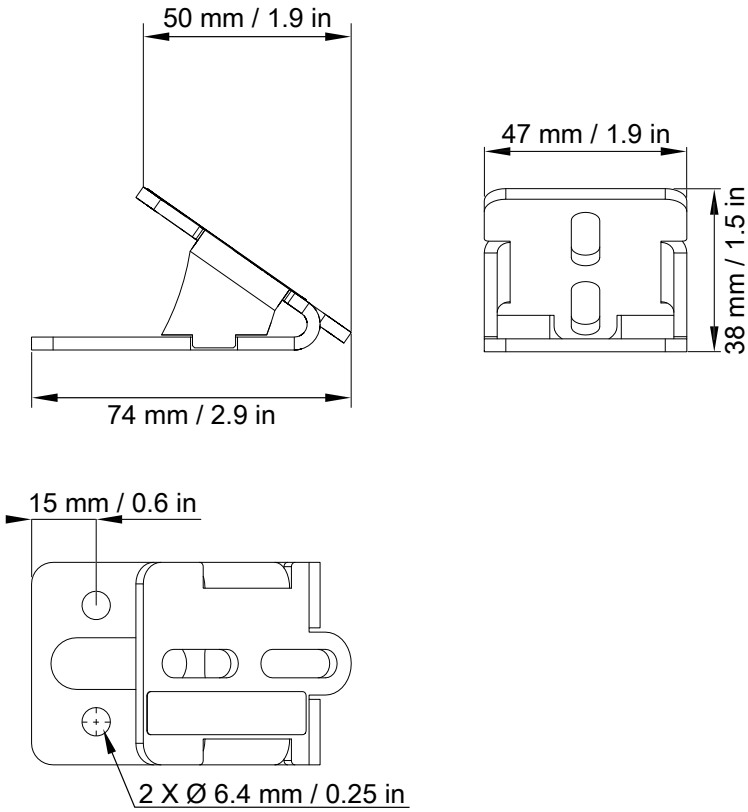
GROUND dimensions



GROUND55 specifications

Description	Ground-mounting accessory for 55° site angle
Weight (net)	0.1 kg / 0.2 lb
Material	steel with anti-corrosion coating

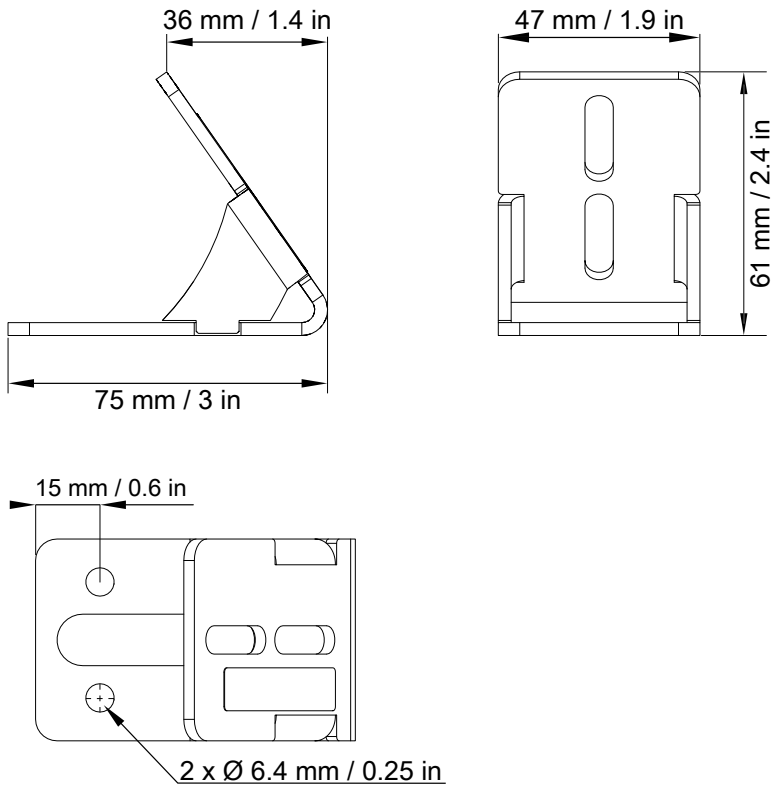
GROUND55 dimensions



GROUND35 specifications

Description	Ground-mounting accessory for 35° site angle
Weight (net)	0.2 kg / 0.4 lb
Material	steel with anti-corrosion coating

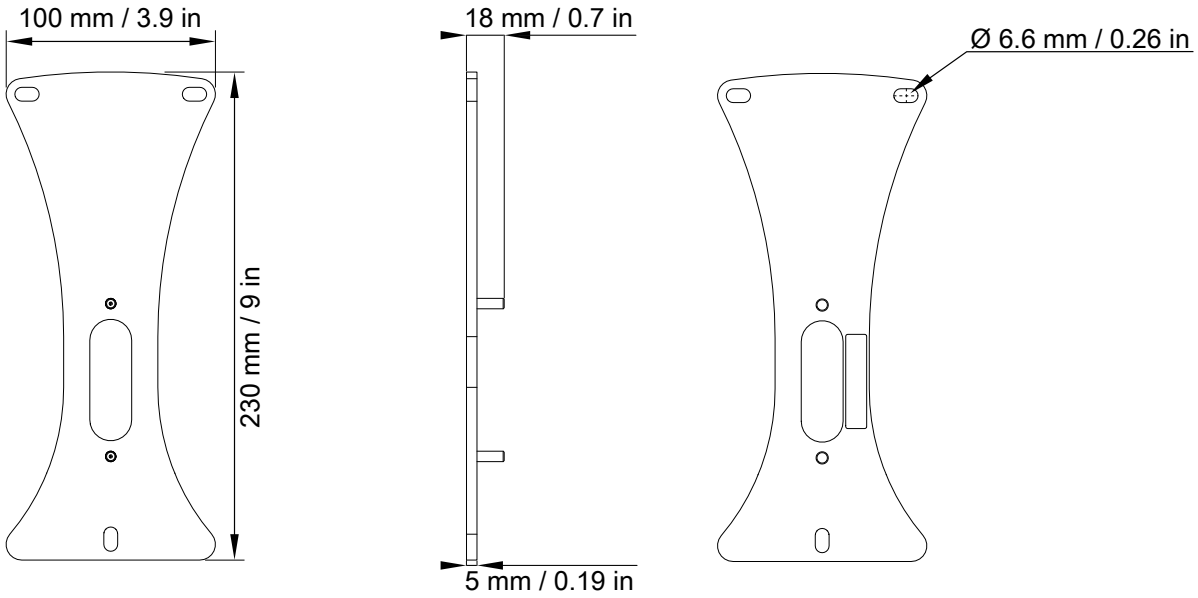
GROUND35 dimensions



TILT-SUPPORT specifications

Description	Support plate for TILT/PAN/WALL accessories
Weight (net)	0.5 kg / 1.1 lb
Material	steel with anti-corrosion coating

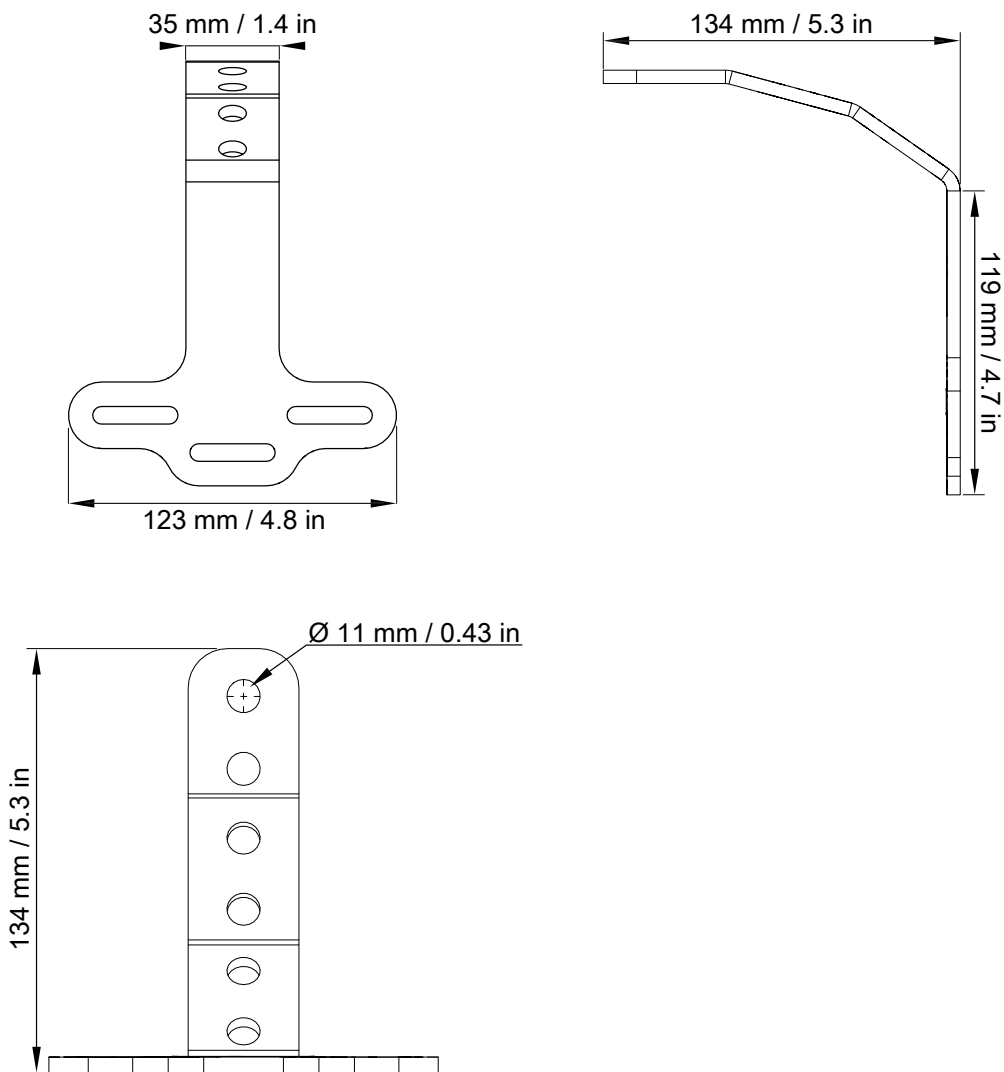
TILT-SUPPORT dimensions



X6i-HBAR specifications

Description	Rigging accessory for horizontally-oriented X6i
Weight (net)	0.4 kg / 0.9 lb
Material	steel with anti-corrosion coating

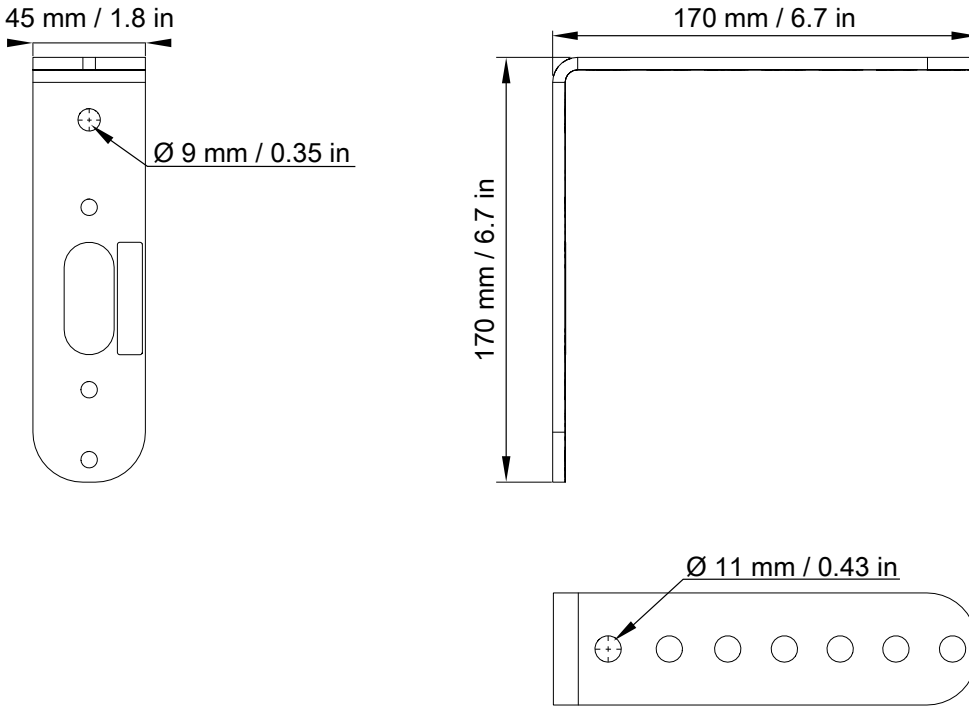
X6i-HBAR dimensions



VBAR specifications

Description	Rigging accessory for vertically-oriented loudspeaker
Weight (net)	0.6 kg / 1.3 lb
Material	steel with anti-corrosion coating

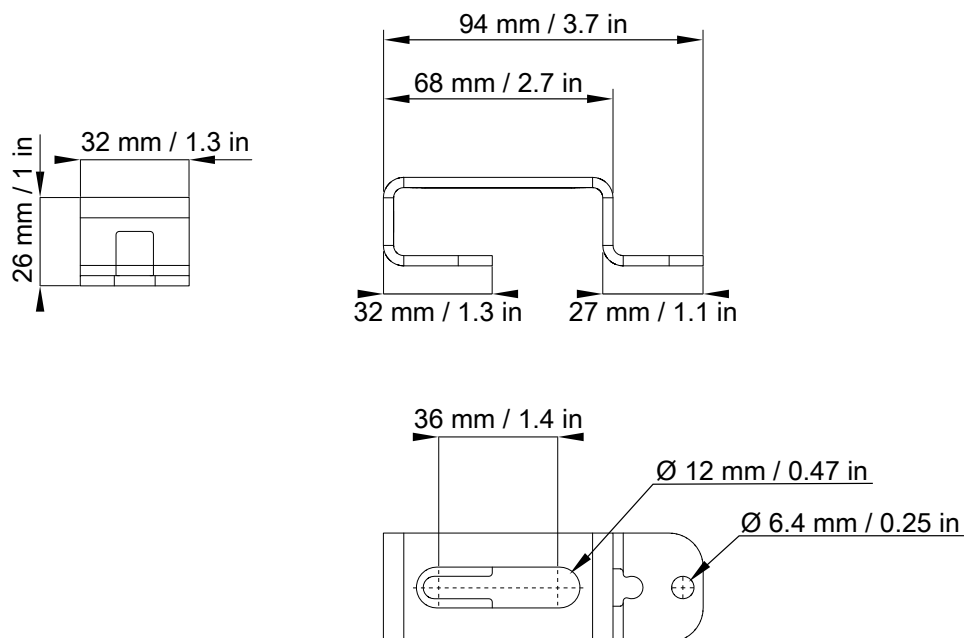
VBAR dimensions



CEILING-PENDANT specifications

Description	Rigging accessory for ceiling-hung pendant loudspeaker
Weight (net)	0.1 kg / 0.2 lb
Material	steel with anti-corrosion coating

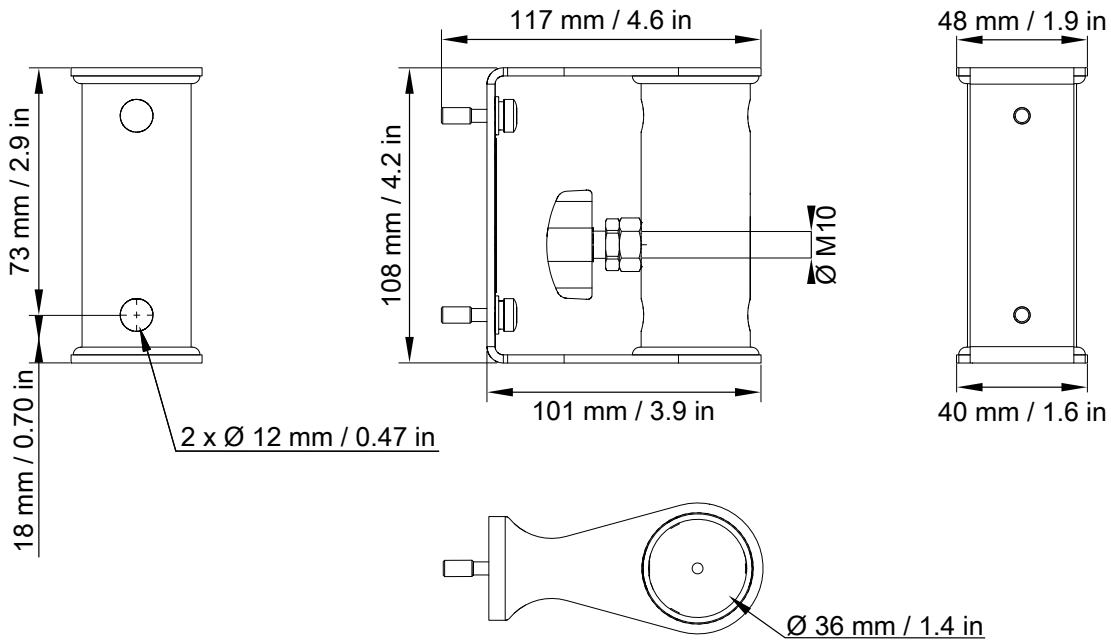
CEILING-PENDANT dimensions



POLE specifications

Description	Pole-mount adapter
Weight (net)	0.5 kg / 1.1 lb
Material	steel with anti-corrosion coating

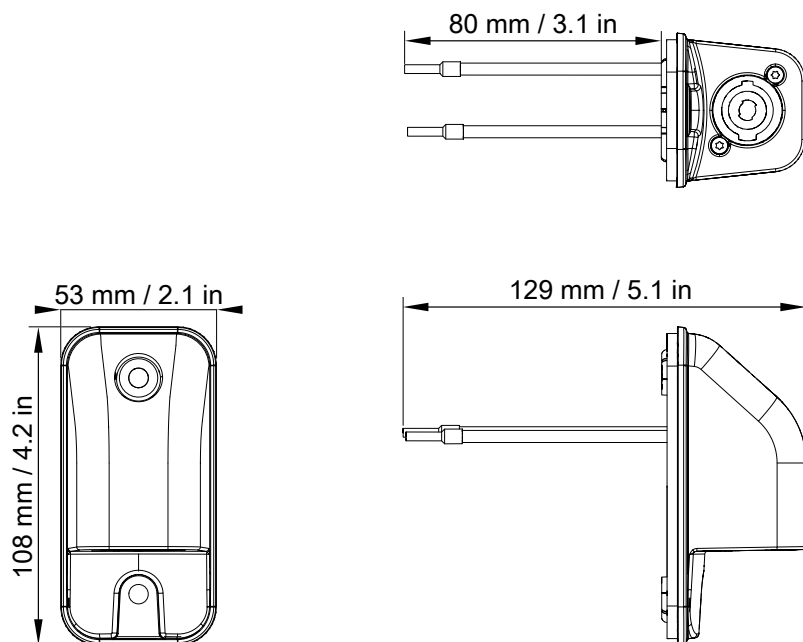
POLE dimensions



SPCON specifications

Description	2-point speakON adaptor (2.5 mm ² gauge) for terminal blocks
Weight (net)	0.1 kg / 0.2 lb
Material	moulded ABS polymer

SPCON dimensions



Specifications for screws and anchors

Use the following information to choose compatible screws and anchors for mounting X6i on the wall, on the ceiling, or on the ground.



Risk of crushing injury

Ensure that the wall or ceiling can support the load of the product.

It is recommended to mount only on solid structures. If mounting on a hollow structure (such as a wall cavity), place anchoring points on the framework (wall studs, ceiling joists), or reinforce the mounting area.

Select screws and anchors applicable to the wall or ceiling properties and to the load of the product. Prevent screws from loosening over time, using for example thread locker or lock washers.

deployment	accessory	ultimate tensile load per screw (daN)	ultimate shear load per screw (daN)	screws quantity	mounting hole size	specific constraints
wall-mounting	TILT-SUPPORT + any accessory	6	6	3	Ø 6.4 mm / 0.25 in (slotted)	–
wall-mounting	X6i-onCW	4	3	4	Ø 6.4 mm / 0.25 in (slotted)	total thickness with washers: 13.10 mm / 0.51 in
wall-mounting	WALLx2	4	3	4	Ø 5.2 mm / 0.20 in	maximum screw head size: Ø 11 mm / 0.43 in
wall-mounting	PANx2	4	3	4	Ø 6.4 mm / 0.25 in (slotted)	–
ceiling-mounting	X6i-onCW	4	–	4	Ø 6.4 mm / 0.25 in	total thickness with washers: 13.10 mm / 0.51 in
ceiling-mounting	VBAR + optional TILT or TILTxx	9	–	2	Ø 10.4 mm / 0.41 in	use the holes 1 and 7 (at both ends)
ceiling-mounting	X6i-HBAR	9	–	2	Ø 10.3 mm / 0.40 in	use two adjacent, coplanar holes distance between centers: 23 mm / 0.90 in
ground-mounting	GROUND / GROUND35 / GROUND55	–	–	2	Ø 6.4 mm / 0.25 in	–

Recommendation for speaker cables



Cable quality and resistance

Only use high-quality fully insulated loudspeaker cables made of stranded copper wire.

Use cables with a gauge offering low resistance per unit length and keep the cables as short as possible.

It is good practice to keep loudspeaker cables short to ensure optimal system performance. L-Acoustics strongly recommends using cables of similar type, length, and gauge to address symmetrical deployment of loudspeakers, such as stereo systems, L-ISA frontal systems, or outfill systems.



For more information about cable effect on loudspeaker frequency response, refer to the publication **Demystifying the effects of loudspeaker cables** on the L-Acoustics website, in **Education > Scientific resources > Scientific publications**.

Refer to the following table for recommended cable length for uncompromised performance.

cable gauge			recommended maximum length					
			8 Ω load		4 Ω load		2.7 Ω load	
mm ²	SWG	AWG	m	ft	m	ft	m	ft
1.5	18	16	18	60	9	30	–	–
2.5	15	14	30	100	15	50	10	33
4	13	11	50	160	25	80	17	53
6	11	9	74	240	37	120	25	80

Use the more detailed L-Acoustics calculation tool to evaluate cable length and gauge based on the type and number of loudspeakers connected. The calculation tool is available on our website:

<https://www.l-acoustics.com/installation-tools/>



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