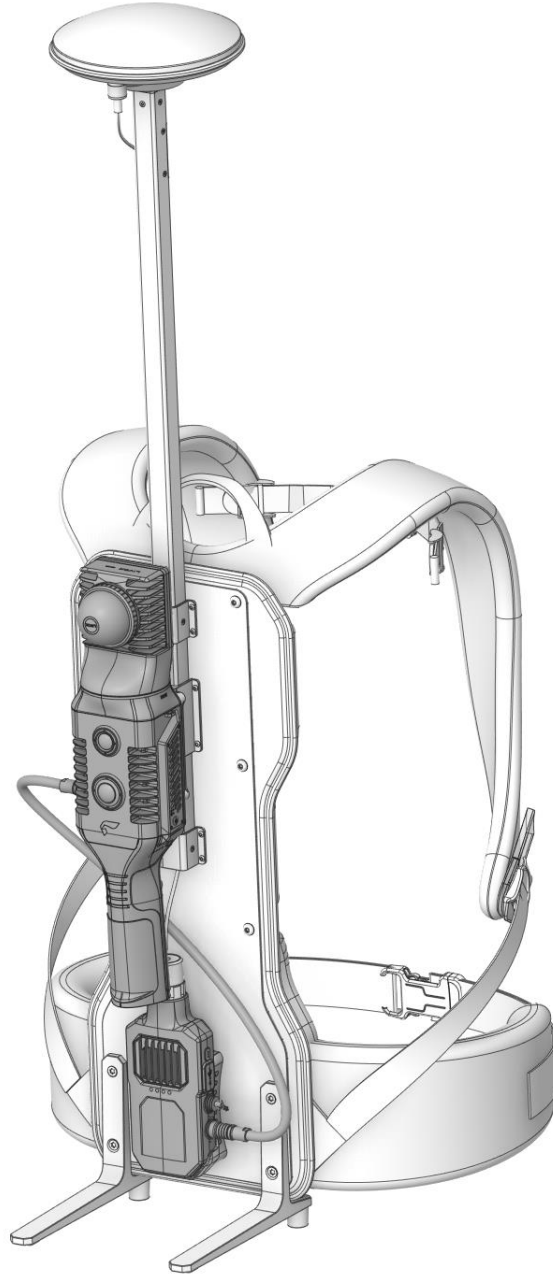


S-PACK200

LiDAR Backpack Platform
Product Manual
202408



Shenzhen Feima Robotics Co., Ltd.

Disclaimer

Thank you for choosing Feima Robotics products.

The contents mentioned in this document are related to your safety and legal rights and responsibilities, please read this document carefully to ensure that you have set up the product correctly before using it. Failure to follow the instructions and warnings in this document may result in injury to you and others around you, damage to the S-PACK200 or other surrounding items. The final interpretation of this document and all related documents of S-PACK200 belongs to Shenzhen Feima Robotics Co., Ltd. Updates are subject to change without notice.

Once you use this product, you are deemed to have read the disclaimers and warnings carefully and to have understood, recognised and accepted all the terms and contents of this statement. You undertake to take full responsibility for the use of this product and the consequences that may arise. You undertake to use this product for legitimate purposes only and agree to these terms and conditions as well as any related regulations, policies and guidelines set by Feima Robotics.

Except as provided by the current laws and regulations of China, Feima shall not be liable for any loss, injury, or any legal liability arising from the direct or indirect use of the product or this information. Users should follow all safety guidelines including but not limited to those mentioned in this document.



Feima reserves the right to change this product manual and product status. For the latest version of the product manual, please go to www.feimarobotics.com/en official website to download it.

This symbol is a trademark of Shenzhen Feima Robotics Co., Ltd. and its affiliates. Product names, brands, etc. Appearing in this document are trademarks or registered trademarks of their respective companies.

The S-PACK200 is a precision product that requires the user to have basic hands-on skills and safety knowledge, and to use it with care. Please read the S-PACK200 product manual first and familiarise yourself with the functions of the product before using it. Uncertain operation may result in damage to the product and property, or even personal injury. This product is not suitable for children. Do not use the product in conjunction with products that are not provided or recommended by Feima Robotics, or do not follow the safety guidelines mentioned in the product documentation provided by Feima Robotics. To ensure that you can use the S-PACK200 correctly and safely, be sure to read the product manual carefully before installation, setup, and use, and strictly follow the instructions for installing and using the S-PACK200.

Catalog

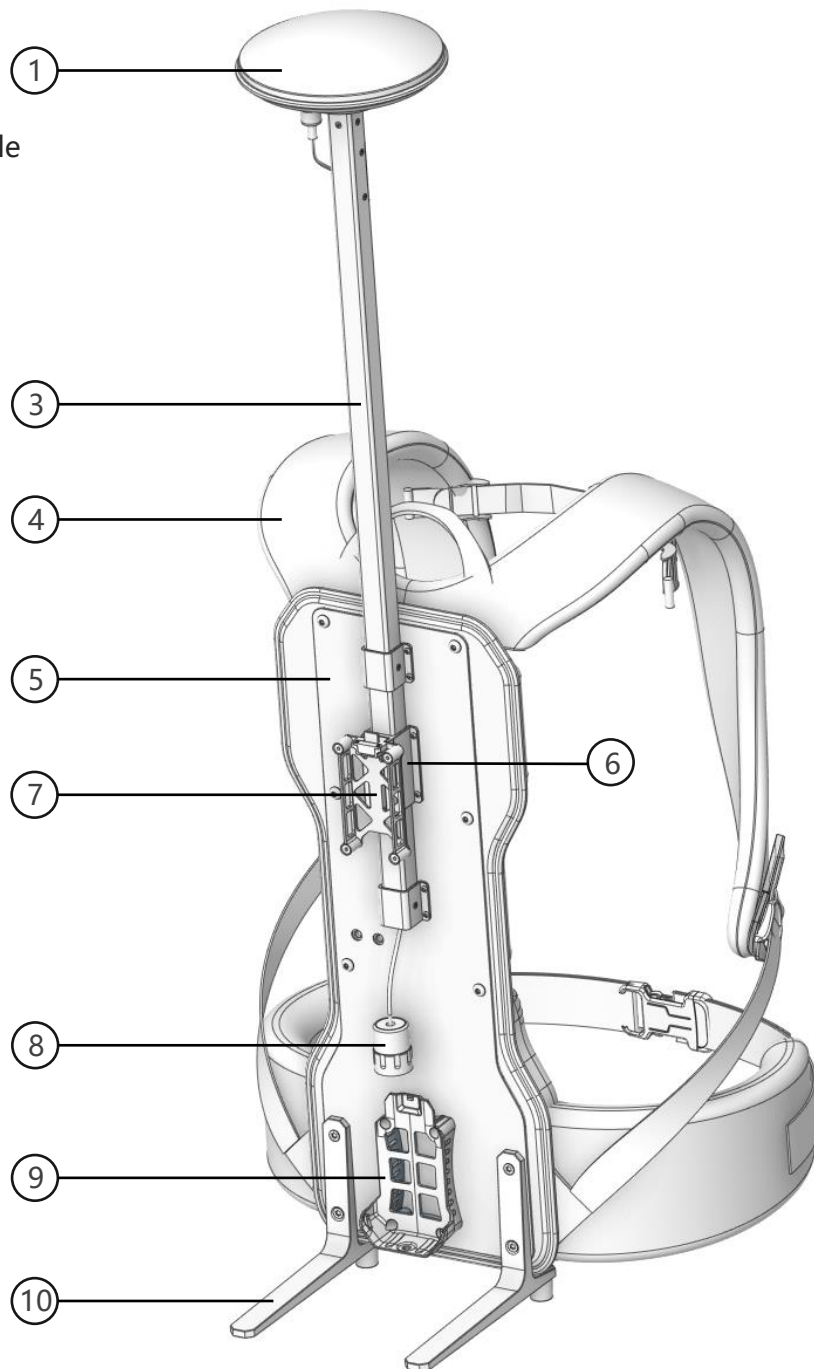
Disclaimer.....	1
S-PACK200 Overview	3
Part Introduction	3
Parameter.....	4
Backpack parameter.....	4
GNSS Antenna Specification.....	5
Assembly Instructions.....	6
Combination I S-PACK200 + SLAM2000 + S-RTK100 (recommended)	6
Combination II S-PACK200 + SLAM2000.....	13
APPENDIX	17
Cleaning and maintenance.....	17
Storage.....	17
Contact Us	17

S-PACK200 Overview

The Lidar Backpack Platform (hereinafter referred to as S-PACK200) is a new all-in-one extension platform for the SLAM2000 Lidar Scanner from Feima. The total weight of the platform is only 2.2kg, it can support the expansion of RTK module, mounted SLAM2000 LIDAR scanner, it can realise the back-loaded operation, enhance the efficiency of SLAM2000 and at the same time can liberate the hands, effectively reduce the physical consumption of the operators, so as to make the application mode of SLAM2000 more flexible and realise more possibilities.

Part Introduction

- ① GNSS Antenna
- ② Feeder terminal (A)
- ③ Antenna extension pole
- ④ Backpack body
- ⑤ Backplane
- ⑥ Quick release base
- ⑦ Quick release bracket
- ⑧ Feeder Terminal (B)
- ⑨ S-RTK100 base
- ⑩ Backpack base



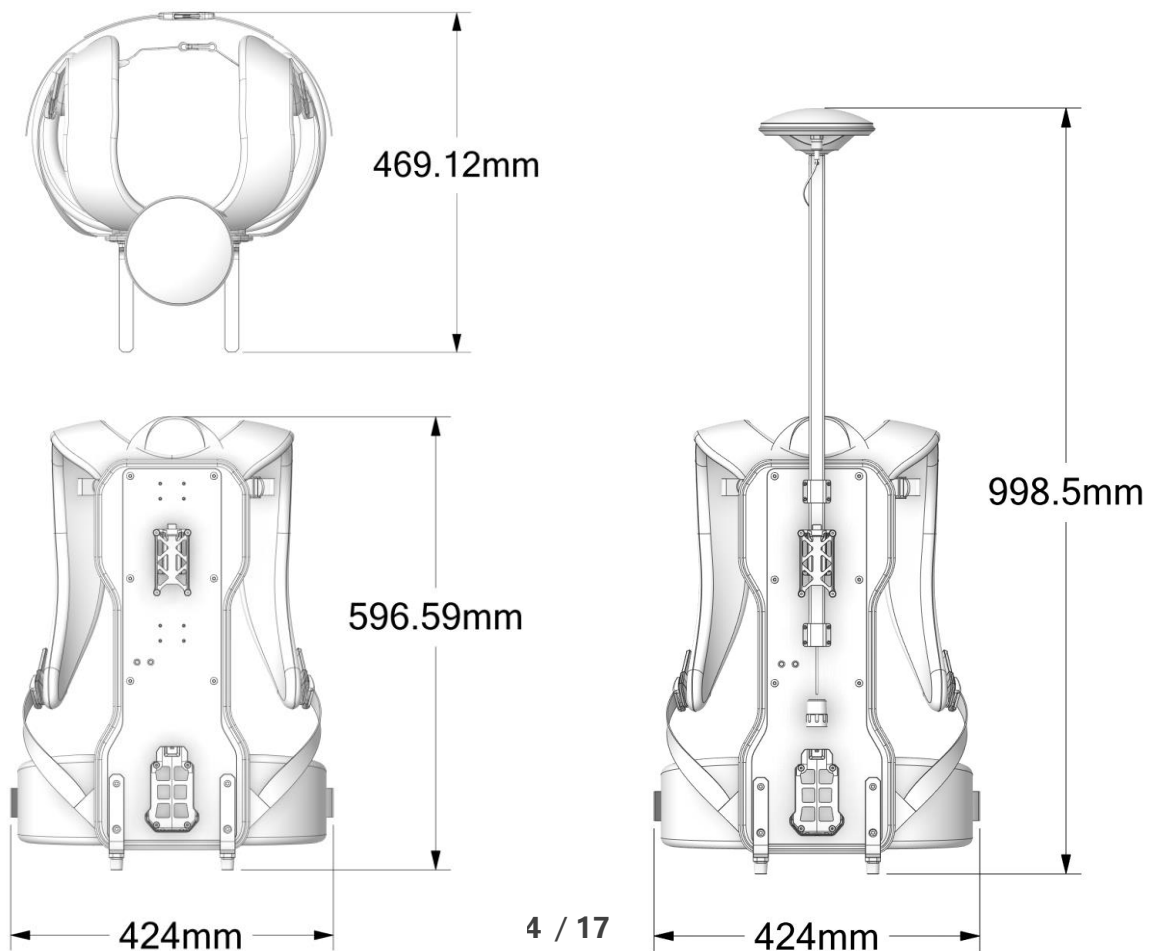
Parameter

Backpack parameter

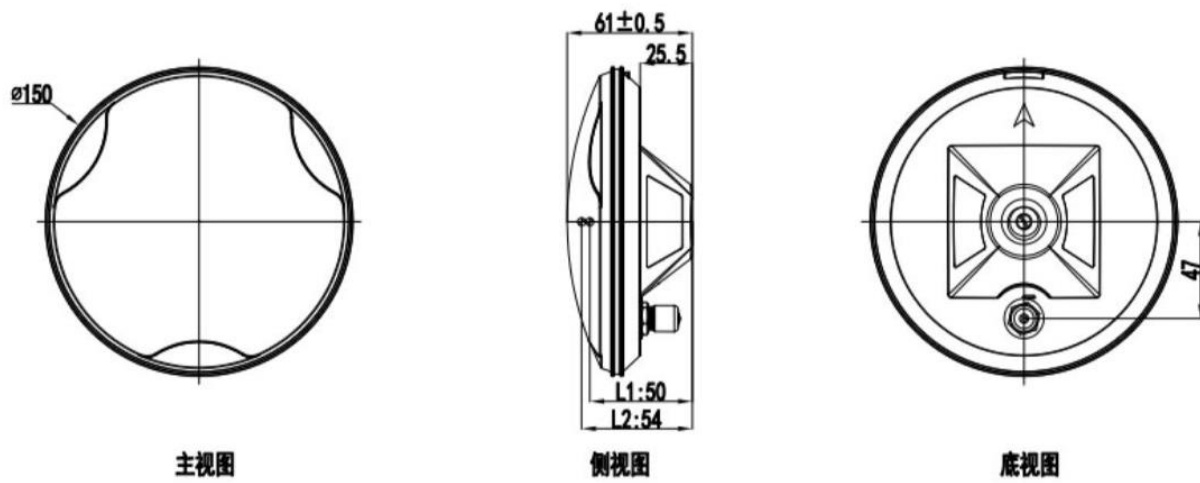
Backpack fabric material		Nylon
Colour		Black
Back Panel Material		Carbon Fibre
Antenna Material	Extension Rod	Aluminium Alloy
Dimensions (L, W, H)		469mm × 424mm × 999mm (size of antenna assembled in backpack) 469mm × 424mm × 597mm (size of separate backpack)
Weight		2.2kg (excluding equipment such as SLAM2000 and S-RTK100)

Notice!

- When the S-PACK200 backpack is placed vertically on the ground, special care should be taken to prevent the backpack from tipping over and causing damage to the unit;
- The S-PACK200 backpack is not recommended for use in rainy scenarios.



GNSS Antenna Specification



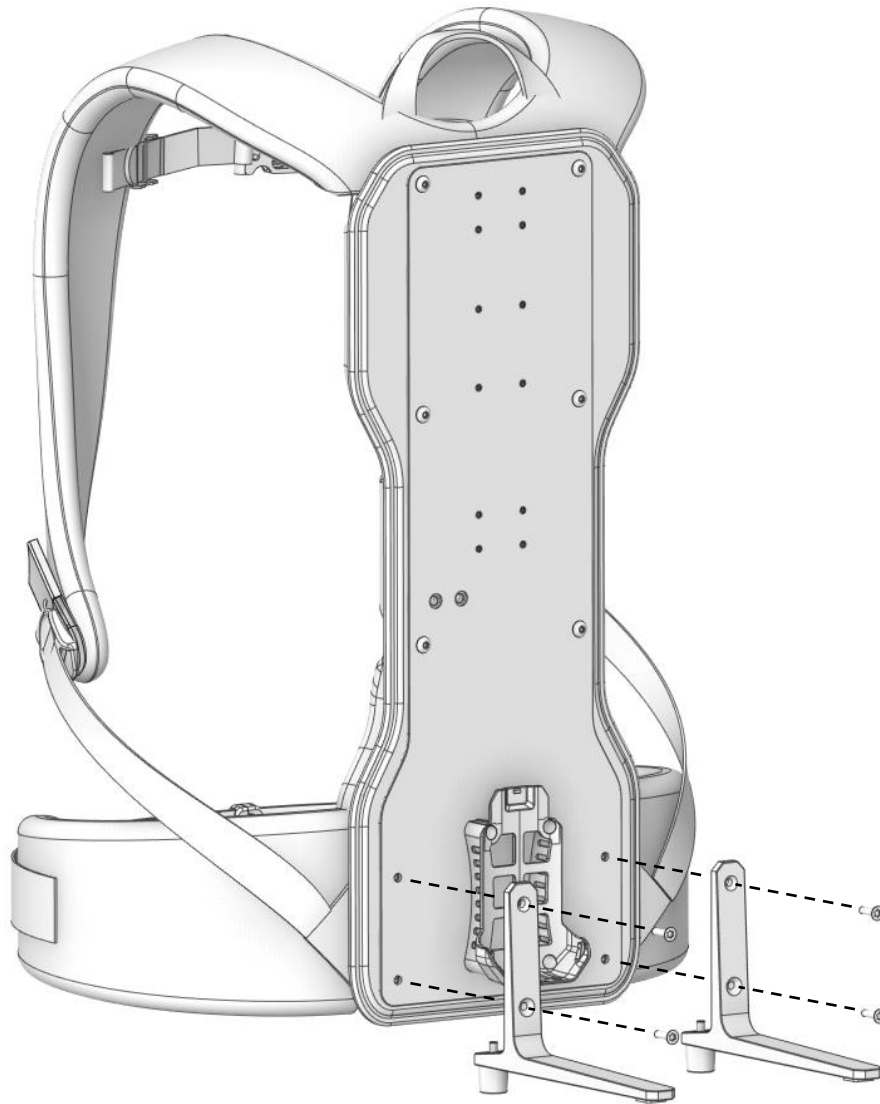
结构&环境适应性	
Antenna Size	150mm×61mm
Antenna Weight	450g
Connector Type	TNC-K
Mounting Method	5/8"×11(Inch)
Waterproof and Dustproof Grade	IP67
Working Temperature	-40°C~+85°C
Storage Temperature	-55°C~+85°C
Storage Humidity	95% non-condensing

Assembly Instructions

Combination I S-PACK200 + SLAM2000 + S-RTK100 (recommended)

1

Remove the backpack body and base, align the base assembly holes with the pre-drilled assembly holes in the back panel as shown in the figure below, and tighten them in place using the screws supplied with the product.

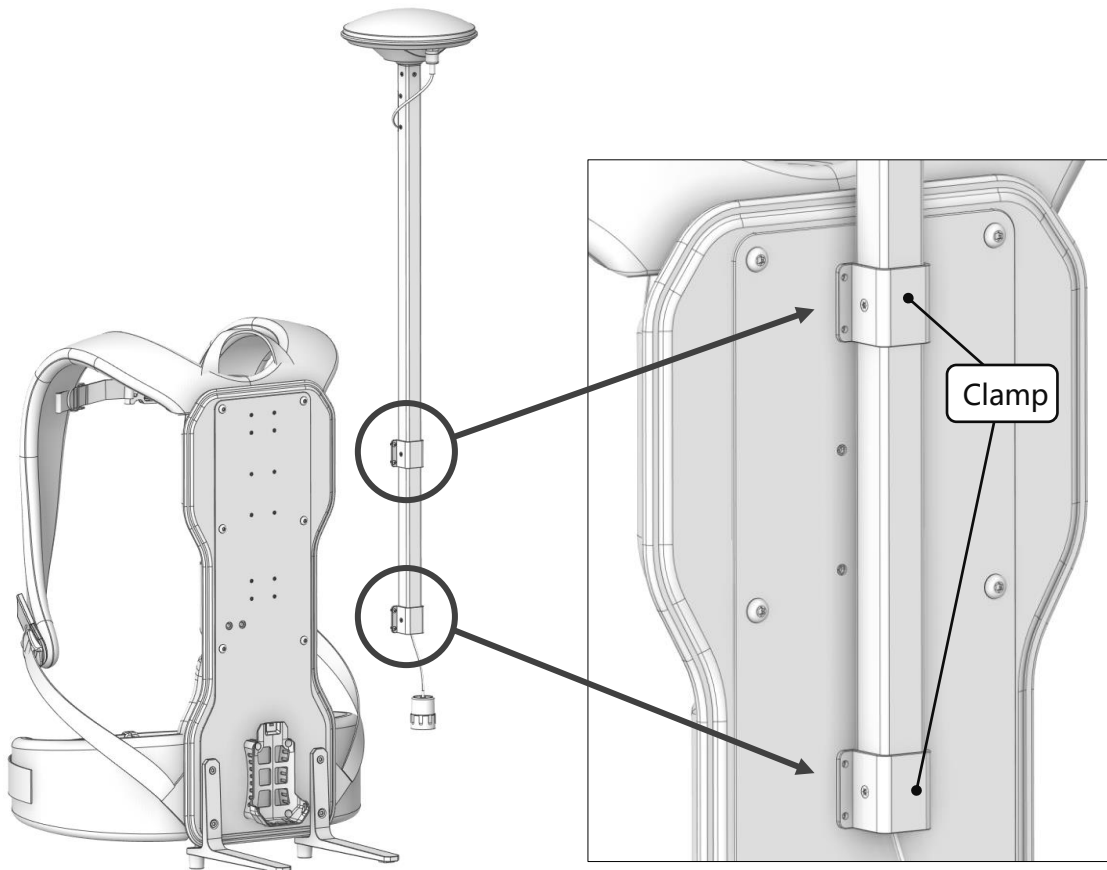


Tips:

- To prevent the backpack from tipping over, it is recommended that the backpack base be installed each time it is used.

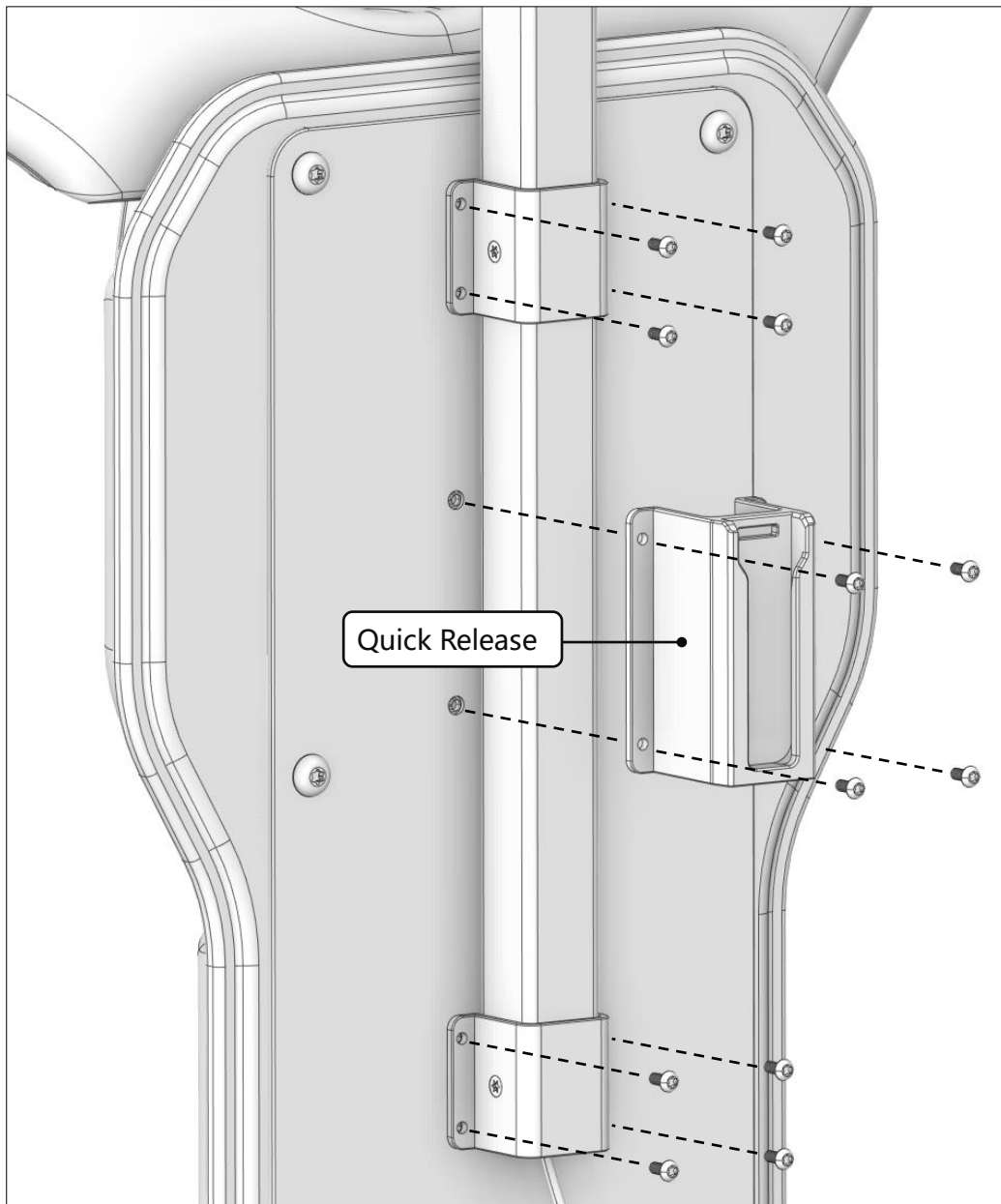
2

Remove the antenna extension rod and GNSS antenna section and align the clamp assembly holes with the reserved assembly holes in the back plate as shown in the following figure.

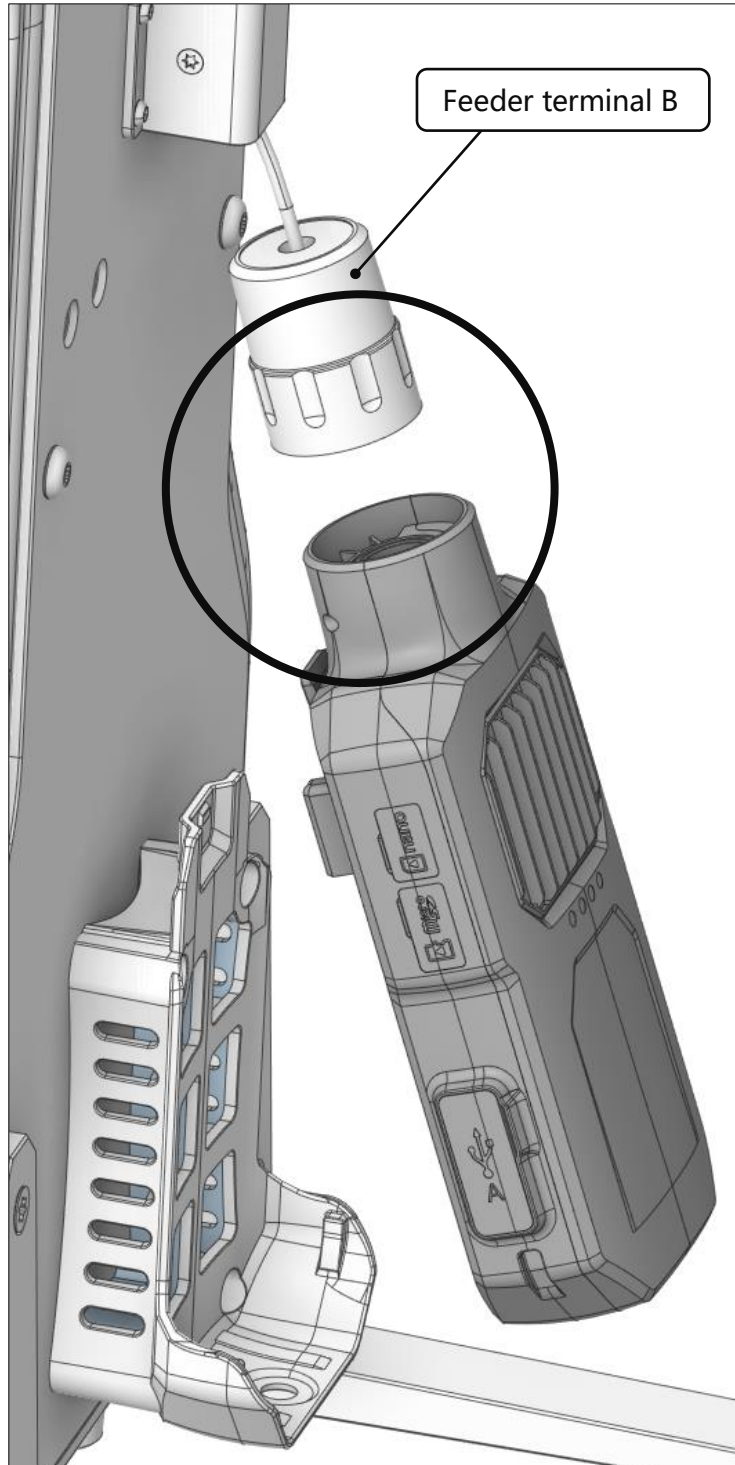


3

Align the top and bottom of the extension pole with a total of 8 screws in the reserved holes to install the first do not tighten, and then align the holes of the quick release base with the holes in the middle of the back plate (note that the opening is facing upwards), and install the corresponding 4 screws, and finally, a total of 12 screws can be tightened all the way.

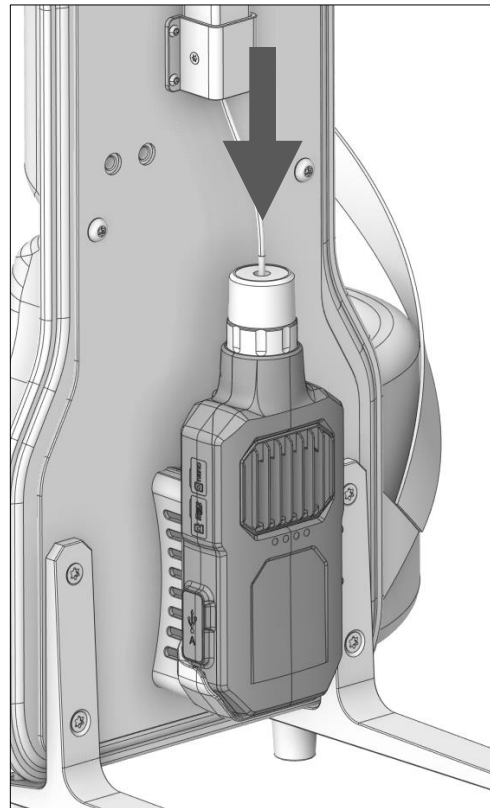


- 4 Connect and secure the feeder terminal (B) to the S-RTK100 antenna connector.



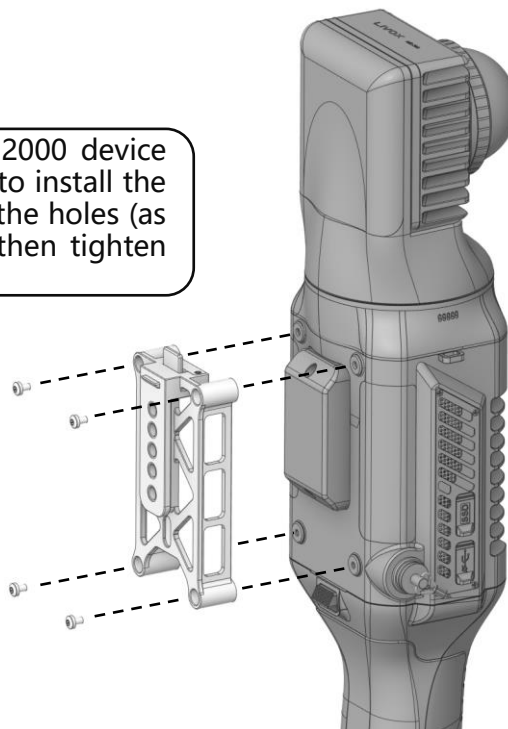
5

In this case, the S-RTK100 unit can first be mounted in the unit base underneath the backpack.



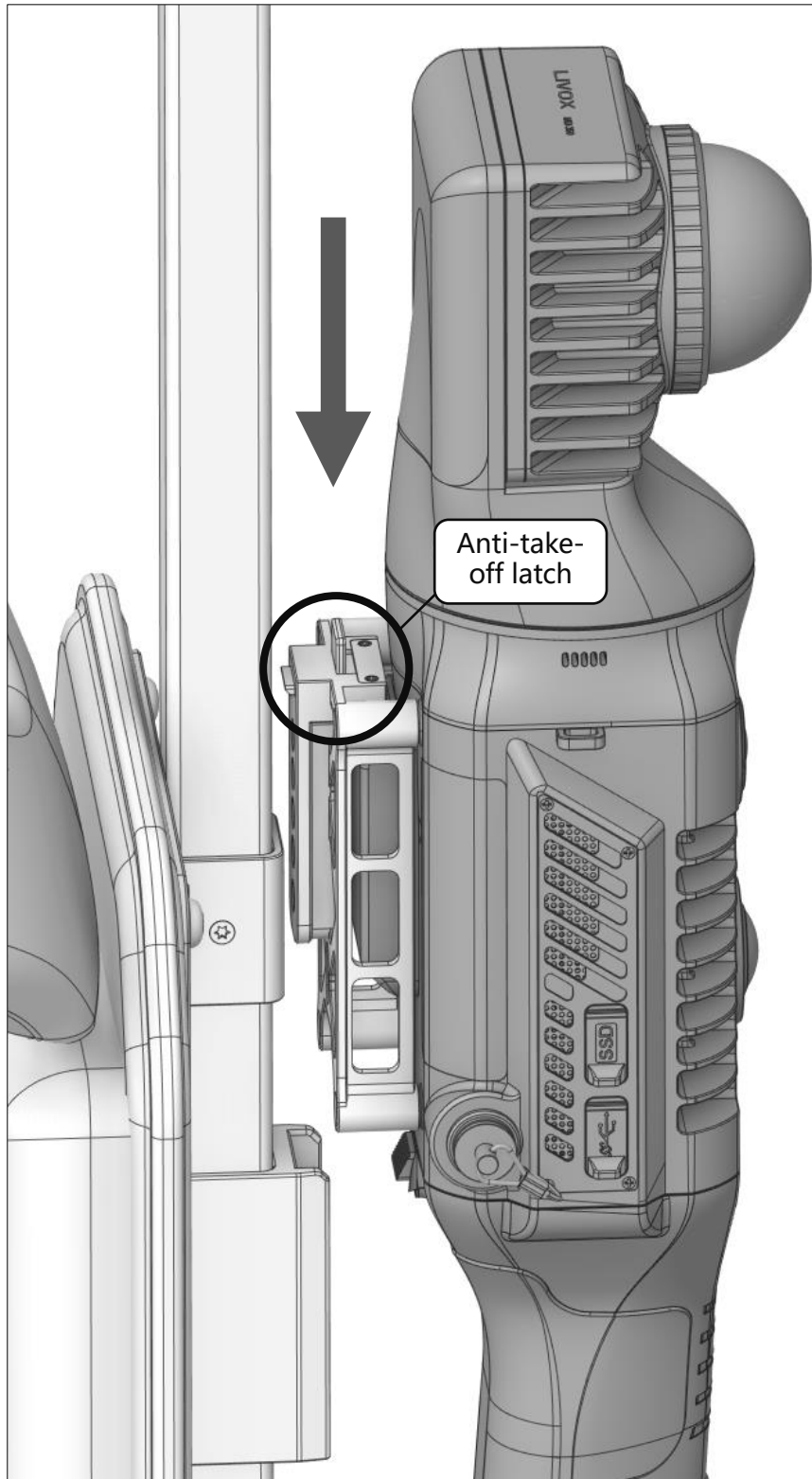
6

Before mounting the SLAM2000 device on the backpack, you need to install the quick release bracket, align the holes (as shown in the picture) and then tighten the 4 fixing screws.



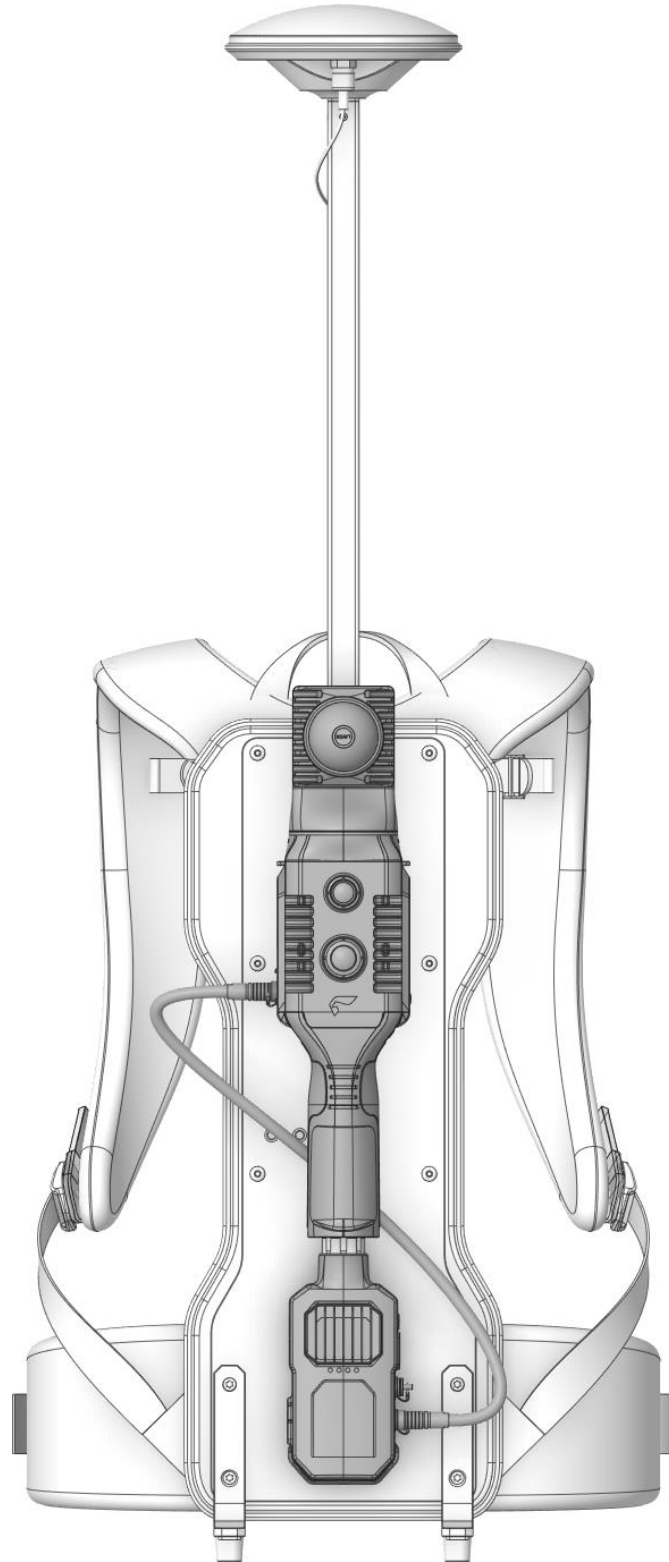
7

When assembling the SLAM2000 with the backpack, align the slide rail in the middle of the quick-release bracket with the slot of the quick-release base, then it can be easily inserted downwards, and when you hear the 'click' sound, make sure that the anti-release locking clasp has been rebounded to the locking position, check that the device is firmly connected to the backpack without loosening, and the installation of the laser scanner is completed.



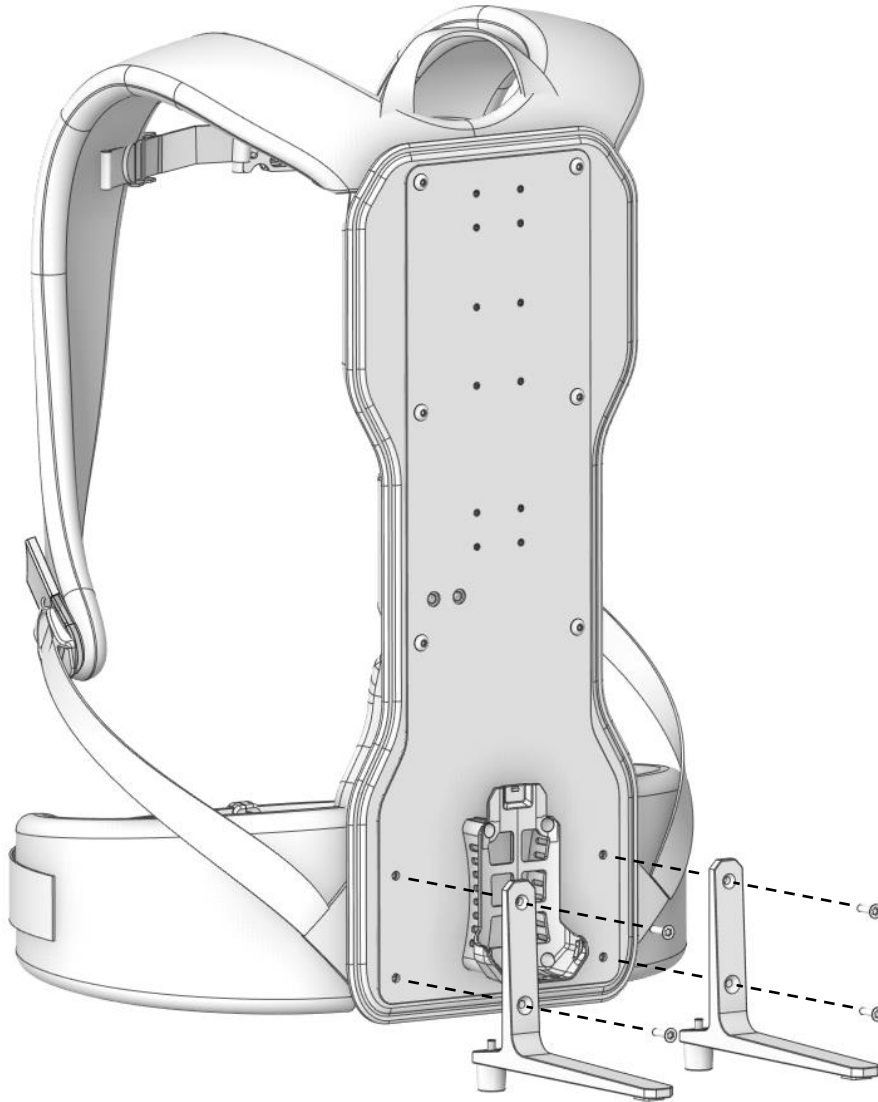
8

Finally, connect the aerial plug cable to both devices and you are ready for normal operation.



1

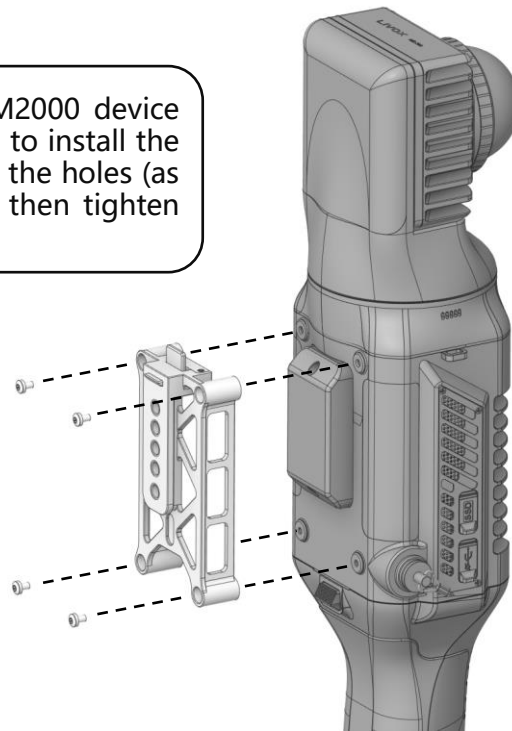
Remove the backpack body and base, align the base assembly holes with the pre-drilled assembly holes in the back panel as shown in the figure below, and tighten them in place using the screws supplied with the product.

**Tips:**

- To prevent the backpack from tipping over, it is recommended that the backpack base be installed each time it is used.

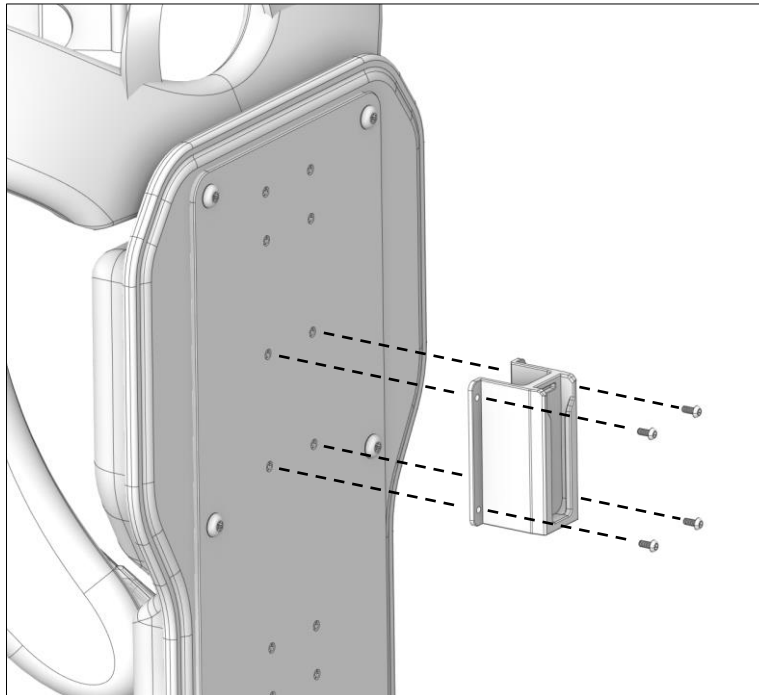
2

Before mounting the SLAM2000 device on the backpack, you need to install the quick release bracket, align the holes (as shown in the picture) and then tighten the 4 fixing screws.

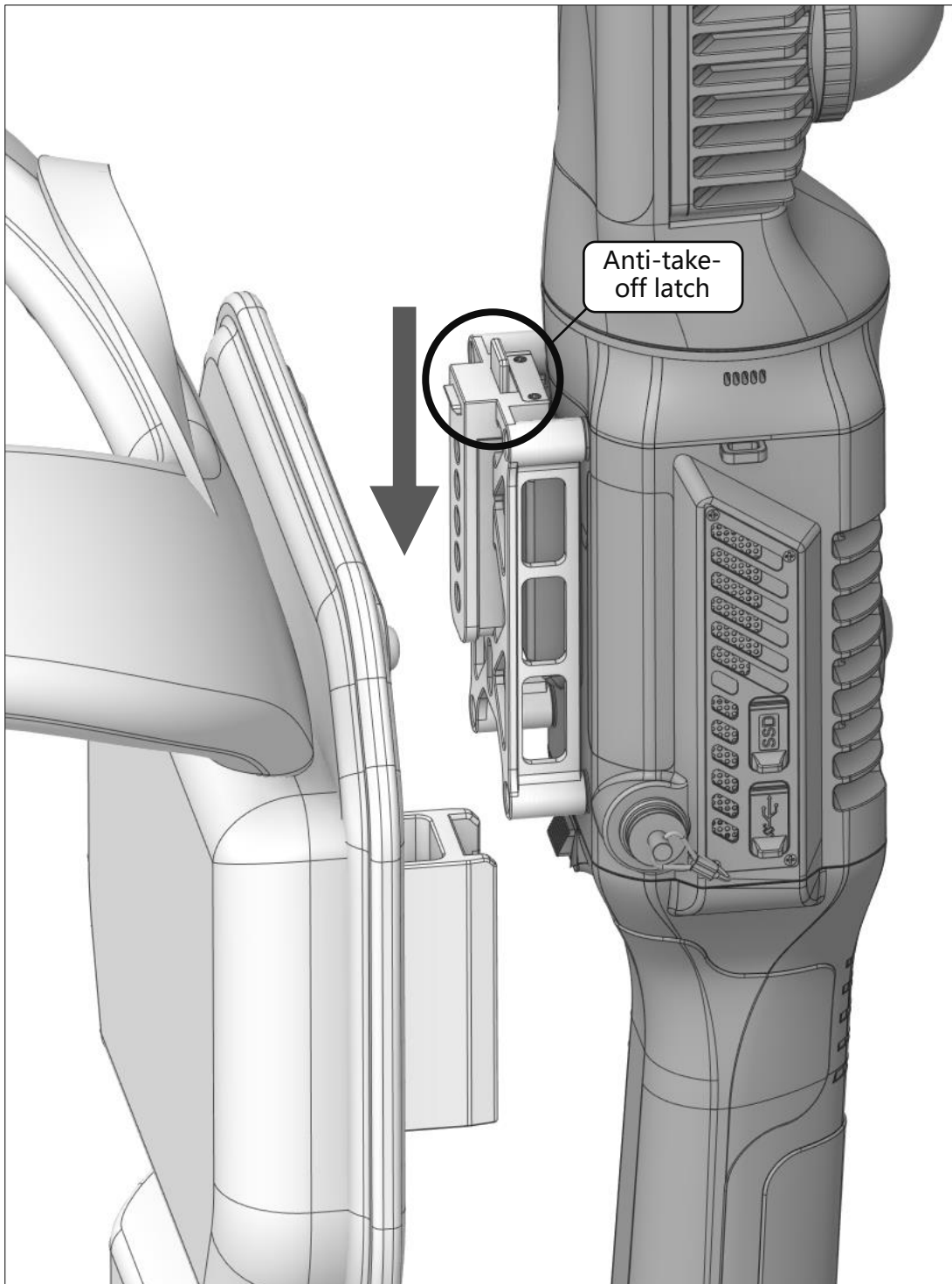


3

Remove the quick release base with the opening facing upwards, align the reserved holes in the base with the four screw holes in the middle of the back panel of the backpack (as shown in the picture), and secure it firmly with the four fixing screws.

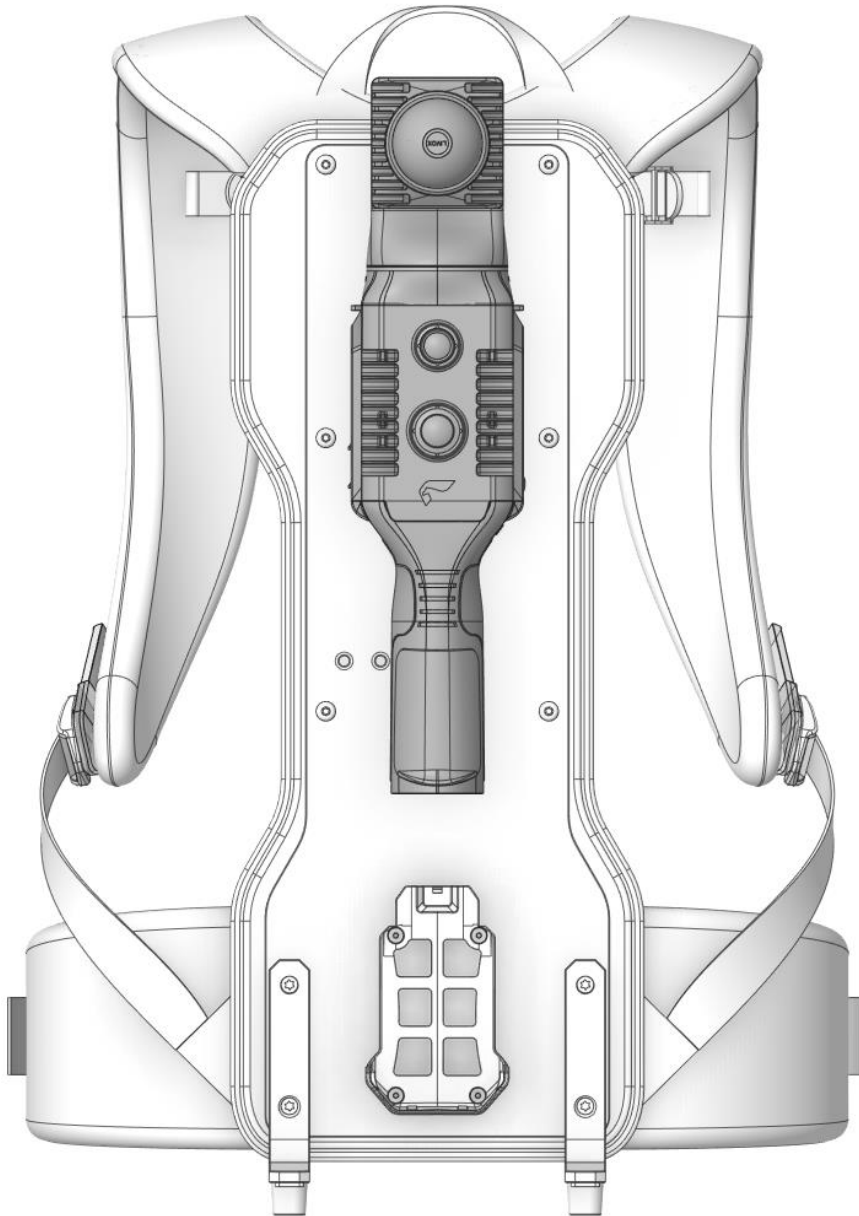


- 4 When assembling the SLAM2000 with the backpack, align the slide rail in the middle of the quick release bracket with the slot of the quick release base, then it can be easily inserted downwards, after hearing the 'click' sound, make sure that the anti-dislodgement locking clasp has been rebounded to the locking position, and then check that the device and the backpack are firmly connected without loosening, and then the installation is completed.



5

S-PACK200 + SLAM2000 Assembly
Complete



APPENDIX

Cleaning and maintenance

① Topical treatment of stubborn stains

Use a soft brush or towel with a small amount of soapy water to wipe until all stains are gone.

② Drying

Place the cleaned backpack in a well-ventilated area away from direct sunlight and do not use a dryer or hair dryer to speed up the process

Warning!

- It is prohibited to wash the rucksack in a washing machine!!

Storage

Using a dry bag can protect your backpack and valuables such as electronics from moisture. If you are not going to use it for a long time, please store your backpack in a dry environment away from direct sunlight.

Contact Us



If you have any questions or suggestions about the manuals, please contact us by e-mail: aftersales@feimarobotics.com

www.feimarobotics.com