HAWK
LiDAR Scanner

| Software	RayStudio
Supported OS	**Windows	iOS**

PACKING LIST

External GPS
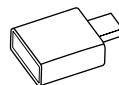
USB-C to A Adapter
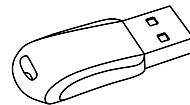
USB Drive
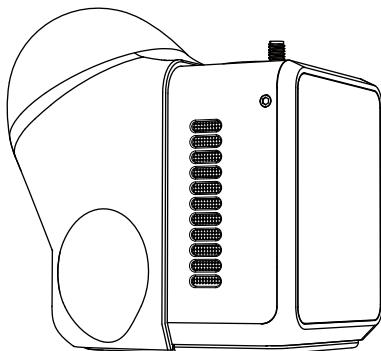
Scanner Body

(It comes with a silicone protective cover. Please remove it while using the scanner.)
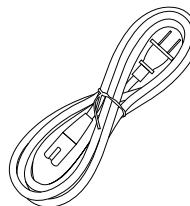
Power Cable*4
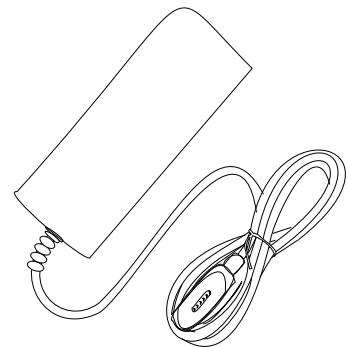
Power Adapter
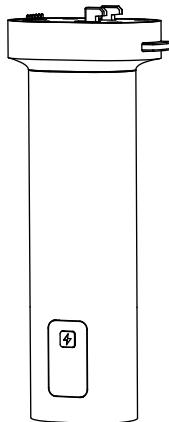
Handle*2
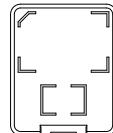
Memory Card Holder
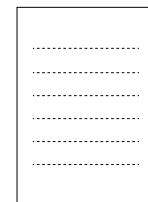
Manual
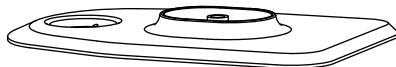
Handle Holder

D-Ring Mounting Screw

Card Reader

*Product images are for illustrative purposes only! The actual product may vary.

*The memory card has been installed in the device before leaving the factory. The memory card holder is for storing the memeory card.

Scanner Components

Front View

Lidar

Front Camera

Left Camera

Right Camera

Back View

Screen

Top View

GPS Interface

Bottom View

Handle Slot

Memory Card Slot

Left View

Air Inlet

Data Port
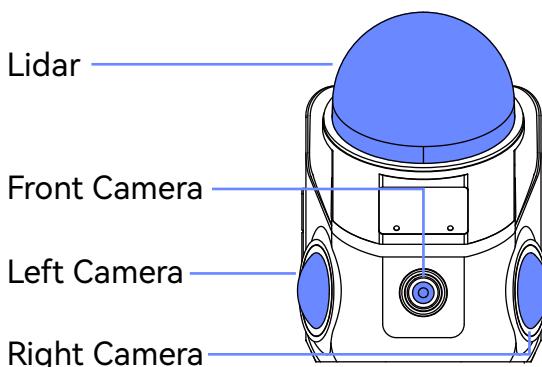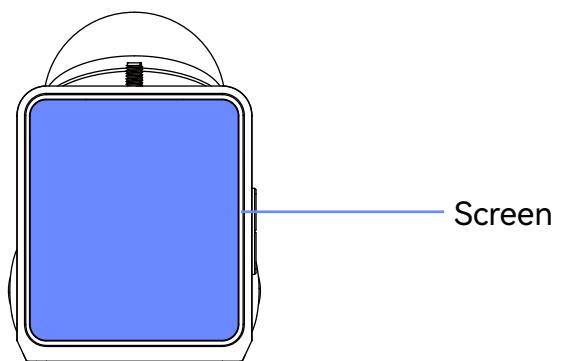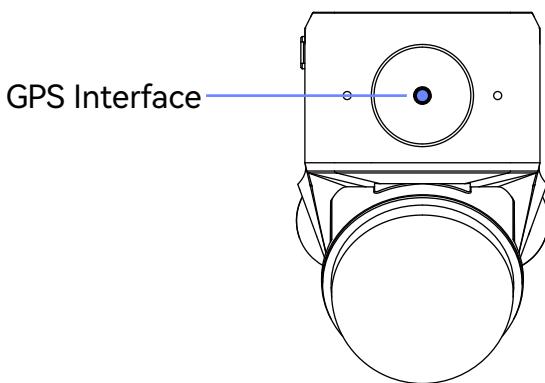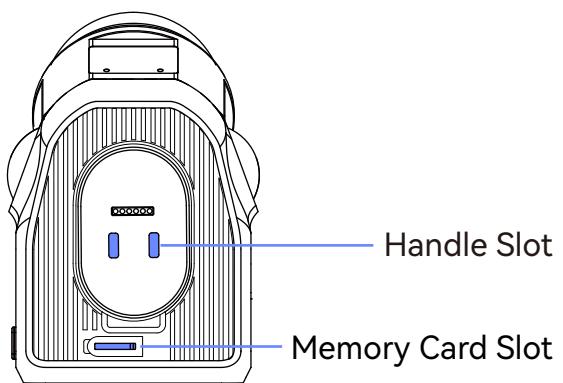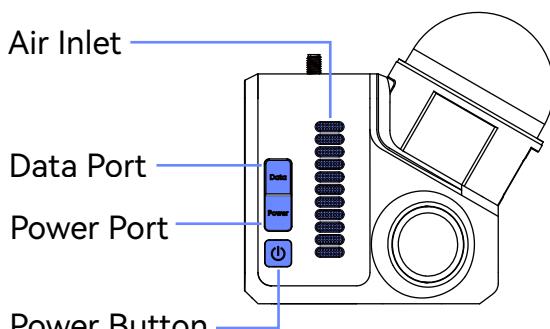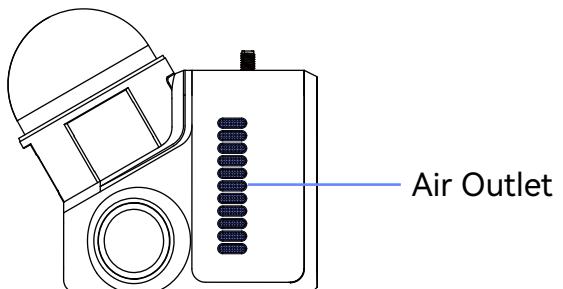
Power Port

Power Button

(Click once to turn it on; long-press for 6s to turn it off.)

Right View

Air Outlet

*The power port is for connecting to an external power supply. (The connection to the handle is optional.)

Hardware Assembly
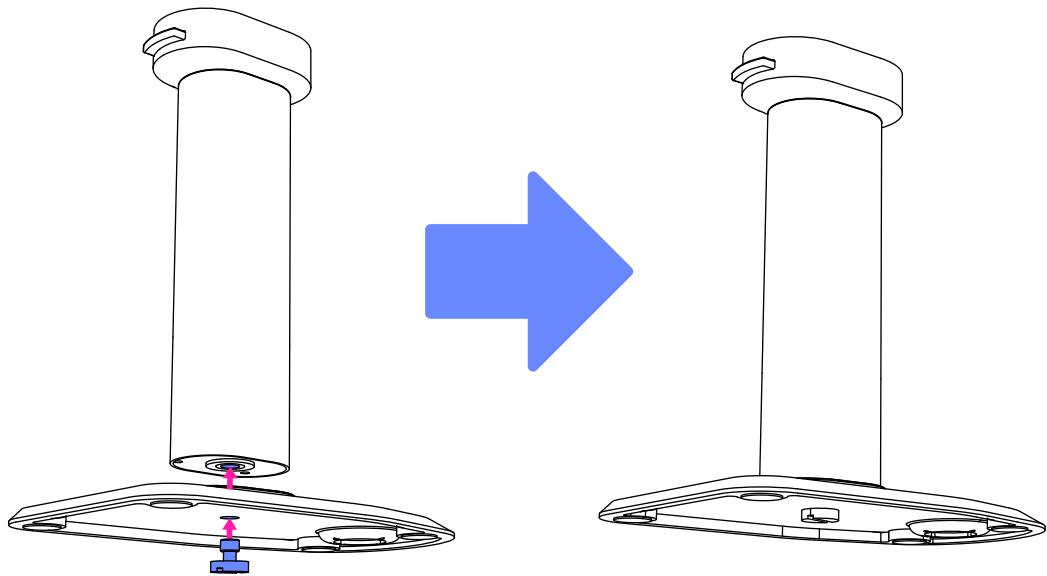
①Connect the handle holder to the handle using the ring screw.

Pass the D-Ring mounting screw through the screw hole on the handle holder first, pre-fix the handle on the holder, then tighten the screw at the bottom.
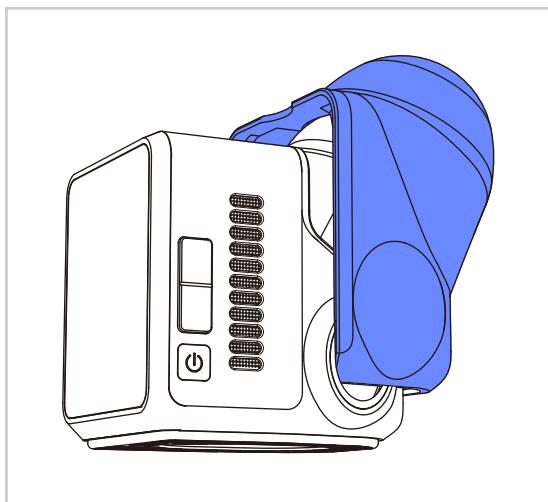
②Remove the silicone protective cover before usage.
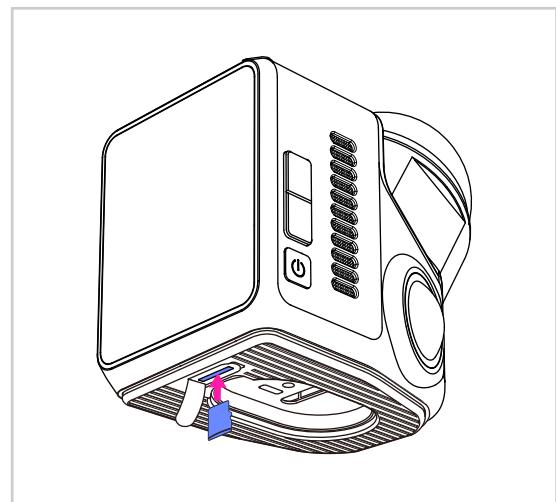
*③Insert the memory card into the device through the bottom card slot.

(The memory card has been installed in the device before leaving the factory. It can also be removed if necessary.)
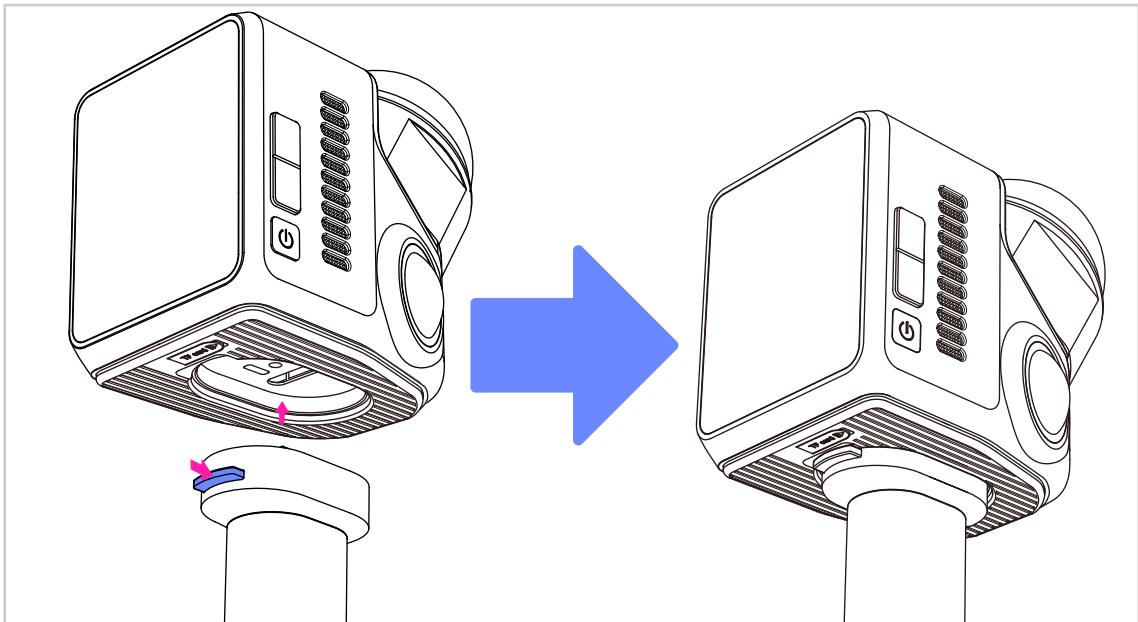
④Press the button on the handle to connect it to the device.
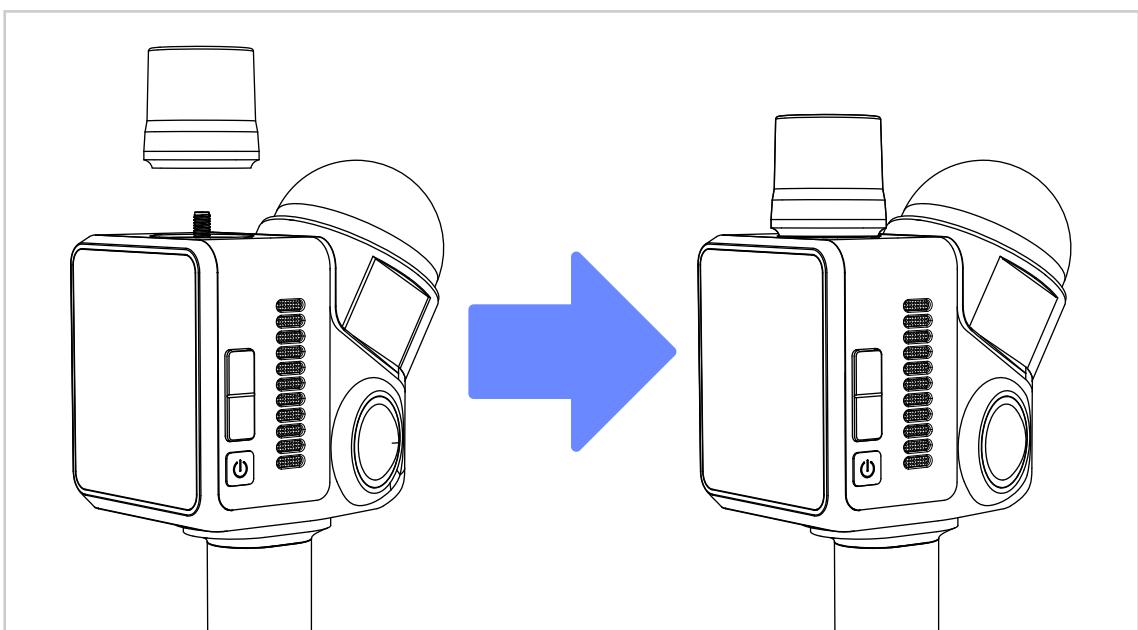
⑤Install the external GPS on the top of the device through the GPS interface.

Battery Charging
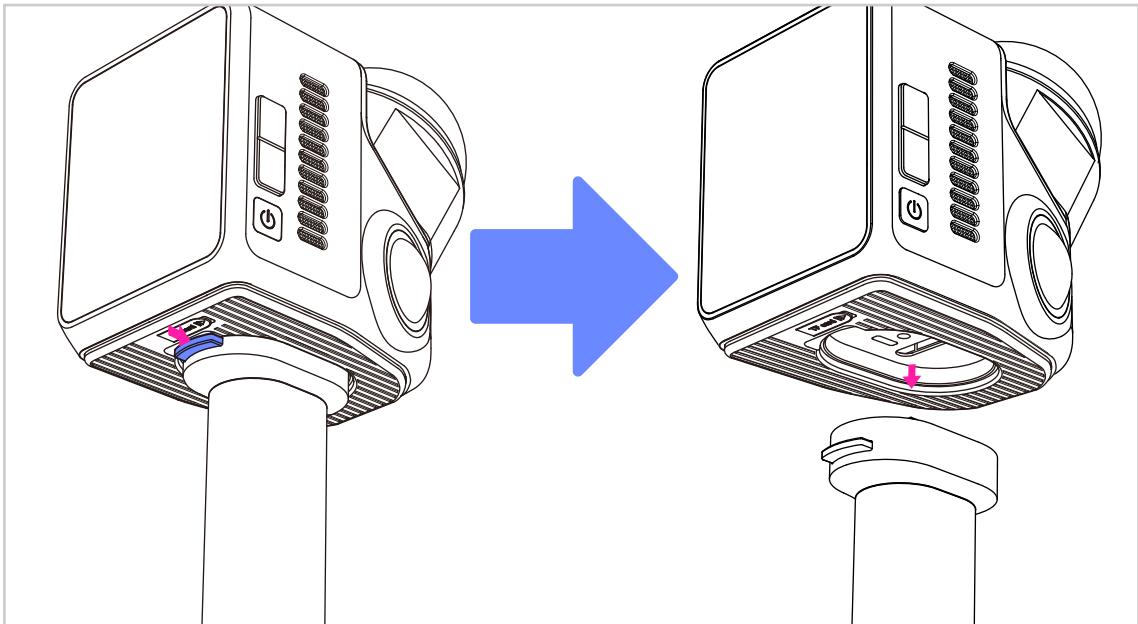
①Press the button on the handle to disconnect it from the device.

- Red: Charging
- Green: Fully charged

Power source

Tap here to display the battery
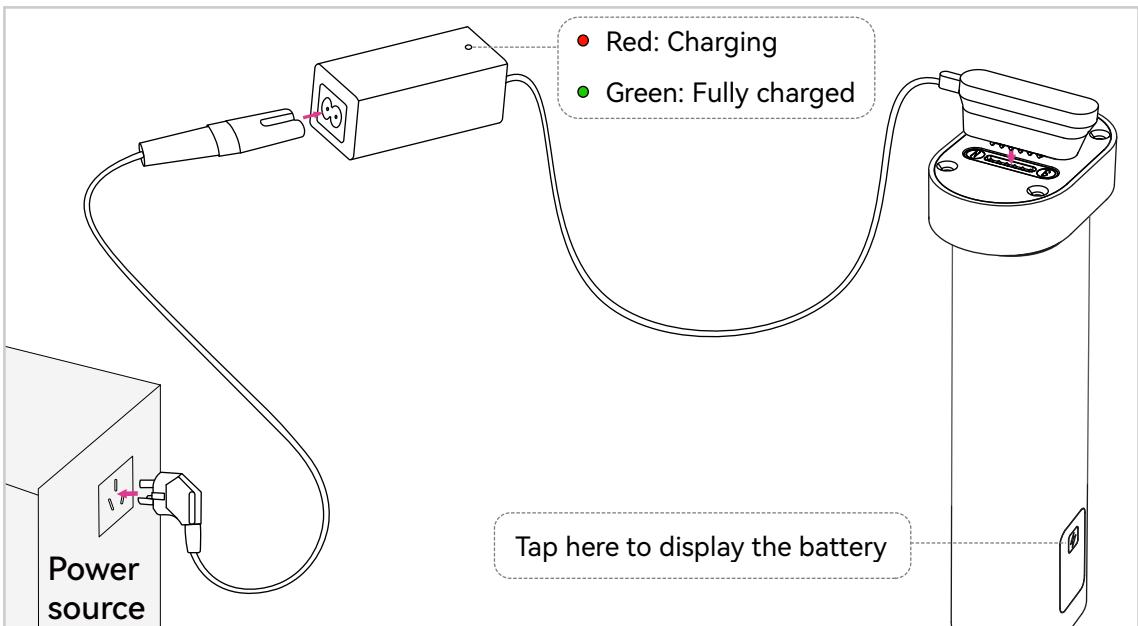
②Please follow the image to connect the cables.

* Please select the appropriate power cable according to actual conditions.

Before Scanning

1

Single press the button below the screen to turn on the device.

3DMAKERPRO

2

Go into system settings.

Scans Photographs

No Items At This Time.
Start Creating Now...

Start
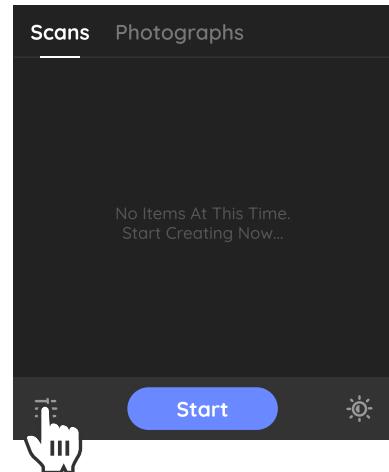
3

Set the system language and other related configurations. SD card needs to be formatted before using it

Settings

Scan Settings

Hotspot Links

Calibration

S

General

New Version

Shutdown

General

Language

Time Zone

Appearance   Dark
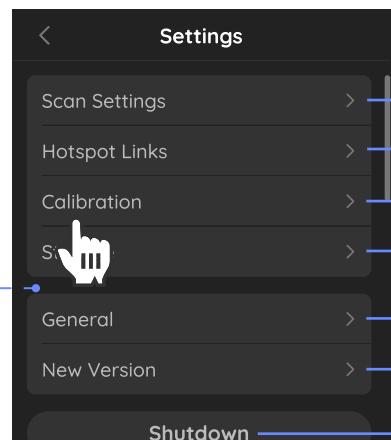
Set the point size and point cloud density
*All configuration only affects the viewing effect during scanning, not the scan data.

Hotspot connection: supports data transmission, remote data collection, etc..

Import the calibration file

Check the storage space and format the SD card

General: to switch languages, time zones, and appearance.

Version Info

Turn off the scanner

Switching time zones will modify the time when the project is created.

Set the background color when scanning, and you can set the dark or light mode.
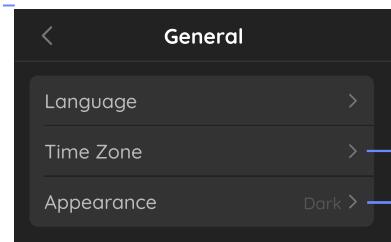
4

Format the SD card(optional)

Storage
Storage
Available 23GB
TF-Card
Available 101GB
TF Formatting
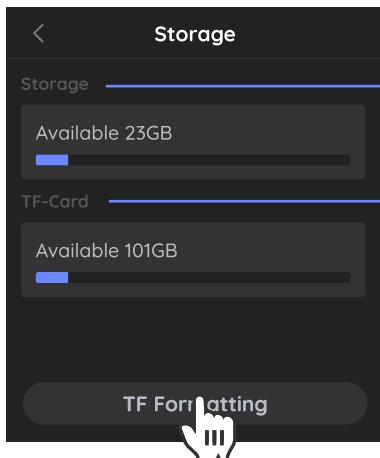
Internal storage space of the device.

TF card storage space.
(TF card can be formatted once the device detects it.)

5

Set up a scanning scane.

Scans Photographs

No Items At This Time.
Start Creating Now...

Start
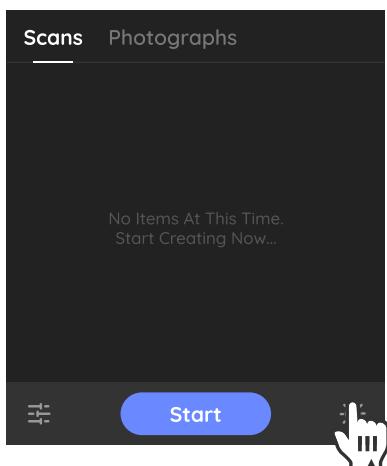
6

Select a scene, adjust the brightness and white balance parameter.

⟳ Switch Camera   Save

○ Outdoor

160
5800
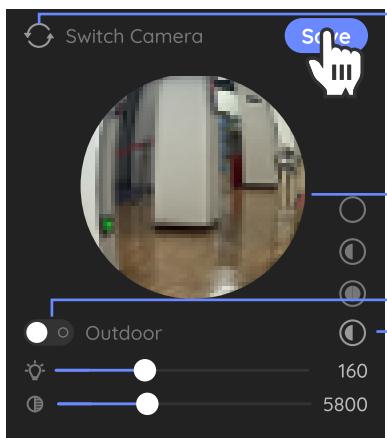
Switch between the left and right camera views
(All configuration takes effect on the two cameras simultaneously.)

The live effect is relatively blurry, only used to adjust brightness.

Choose whether you are scanning outdoors; the brightness will auto-matically increase outdoors.

Three available brightness settings

Start Scanning

1 Enter the scan interface.

Scans   Photographs

No Items At This Time.
Start Creating Now...
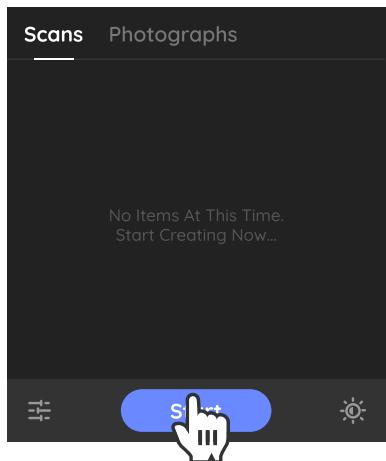
2 Configure the project info and scan settings.

Cancel   Save

Project Name

0727_1759

Connect GPS

Camera Settings
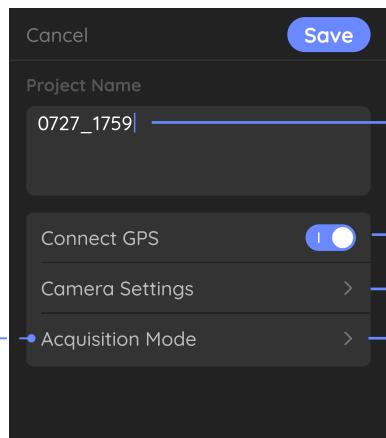
Acquisition Mode

Tap to rename the project.

Control GPS for location verification
(Please refer to image 3 for details.)

Control whether enabling night mode
and cameras.(Please refer to image 4
for details.)

Two acquisition modes available,
continuous and fixed point mode.

<   Acquisition Mode

Continuous   ✓

Fixed Point

Continuous: used for point cloud settlement,
point cloud shading, Gaussian Splatting,
network construction, and texture mapping.

Fixed point: used for point cloud solving,
meshing, and panorama stitching. When
collecting data, you can take a photo
manually, and the photo can be viewed in the
camera folder.
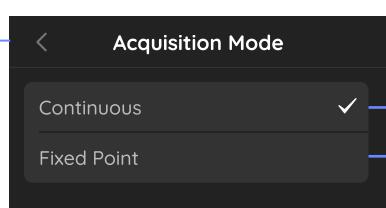
3

GPS settings(optional)
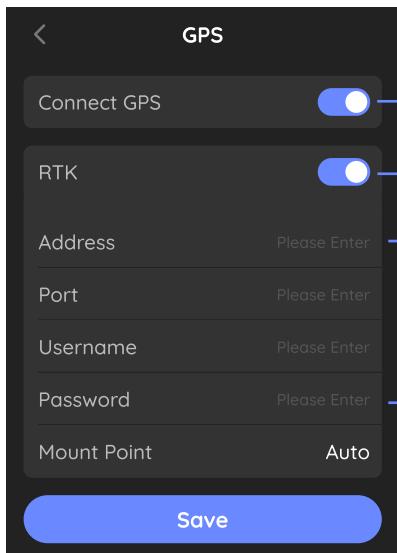
GPS	
Connect GPS	⬤ —	Control whether enabling GPS.
RTK	⬤ —	Control whether enabling RTK.
Address	Please Enter
Port	Please Enter
Username	Please Enter
Password	Please Enter
Mount Point	Auto
Save	

Enabling RTK requires filling in the RTK differential data service (the RTK differential data service needs to be purchased by the user separately).

*There are 3 modes for position verification:

1. Built-in GPS (only need to turn on GPS)

2. High-precision base station (turn on GPS and use base station calibration)

3. RTK differential data service (turn on GPS and use real-time RTK differential data service)

4

Camera settings(optional)
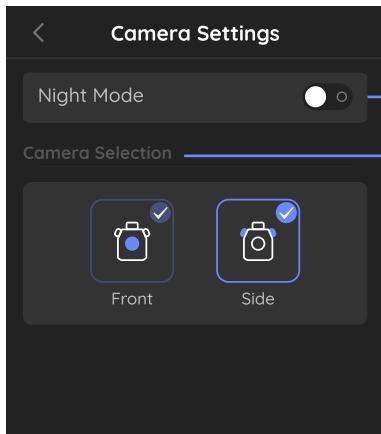
Camera Settings	
Night Mode	⚪ ○ —	All cameras will be disabled auto-matically if you enable night mode.
Camera Selection —	
Front ✓	Side ✓	All cameras will be enabled auto-matically if night mode is disabled; the side cameras can be manually turned off.

5

## GPS connection and time synchronization(GPS enabled)

Time synchronization(GPS disabled)

or

Searching For And Connecting To GPS, The Device Must Remain Level And Still.

The System Is Synchronizing, Please Keep The Device Level And Still.

GPS Connection Successful

The System Check Time Successful

Start Collecting

Start Collecting
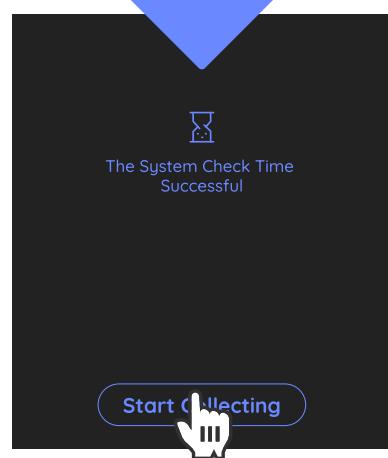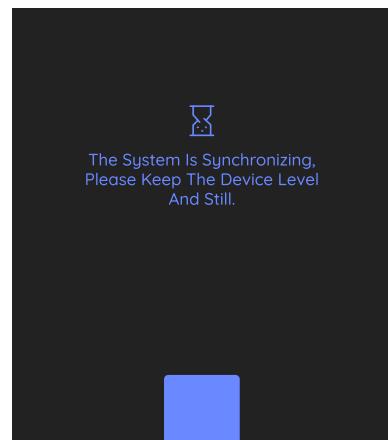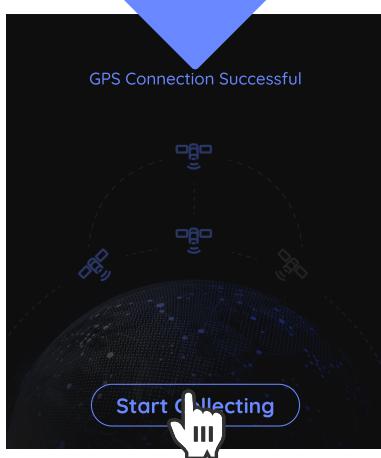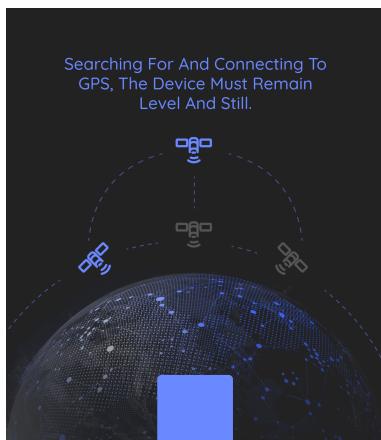
Time synchronization for the first time will take some time. Please kindly be patient!

The scanning starts.
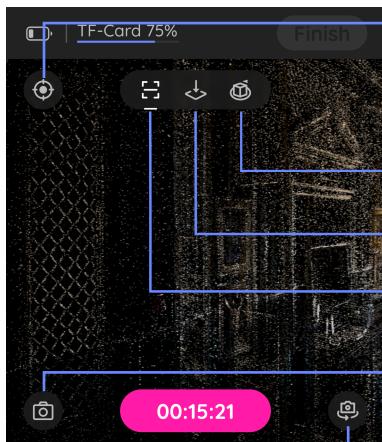
Add control point
The control point can be added manually in real time for modifying its coordiates later.

Top view with 45° inclined

Top view

Front camera view

* In fixed-point acquisition mode, click here to take photos.

Live/point cloud display when split-screen mode is off.

TF-Card 75%   Finish

00:15:21

* Switch between top view with 45° inclined and front camera view to check the initial view and trajectory line.

TF-Card 75%   Finish
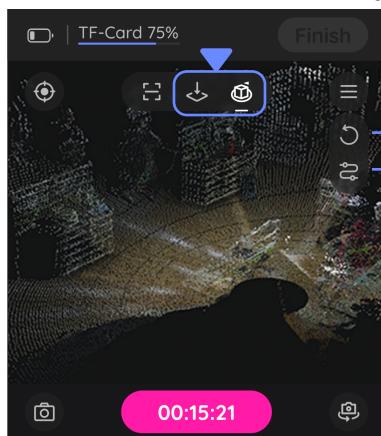
Initial view, for returning back to the initial scanning view.

Trajectory line, for viewing the shooting trajectory while scanning.

00:15:21

*In live mode, you can view the current shooting situation.

TF-Card 75%   Finish

Click to switch camera view

00:15:21
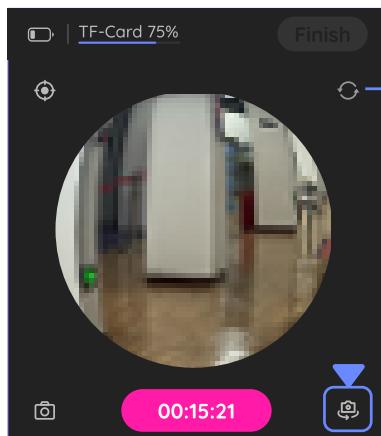
7 Tap the timer to end scanning.
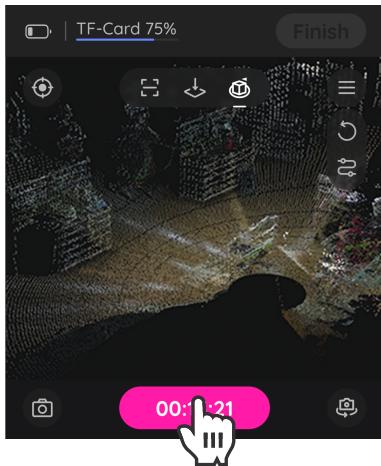

8 Confirm the scan result.
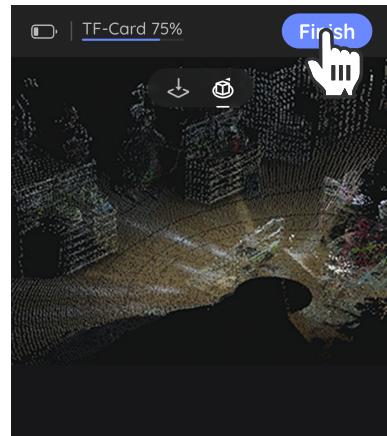
Data Export

Export the data with the provided USB drive or through a hotspot.

(*If the above methods do not work, you can export it with the card reader.)

Export using USB drive

Connect the USB drive with the adapter, and insert them into the device via data port.
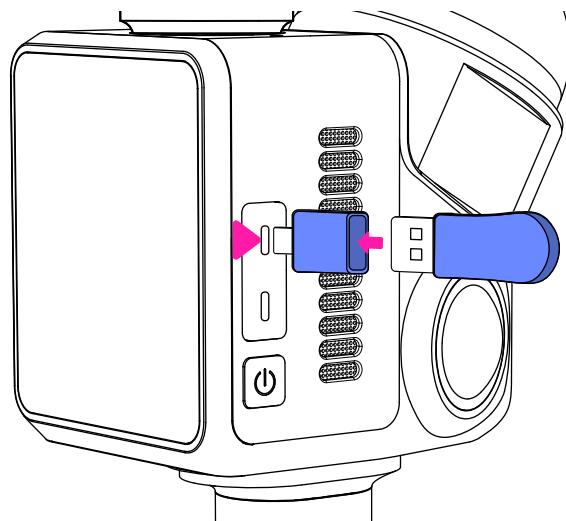

Single Data Export

1 Select the data to be exported.


Scans   Photographs

2025_0626   2025_0626

2025_0626   2025_0626

Start

2 Tap "Export".

Scans   Photographs

2025_0626   ✕

✎ Rename

→ Export

🗑 Delete

Batch Export

**1** Tap the icon to manage the data list.

**2** Set the sorting method and enter the selection page.

3 Batch data selection.
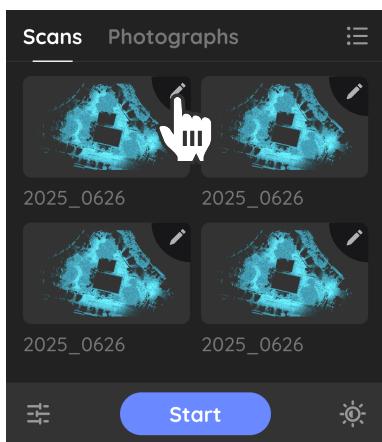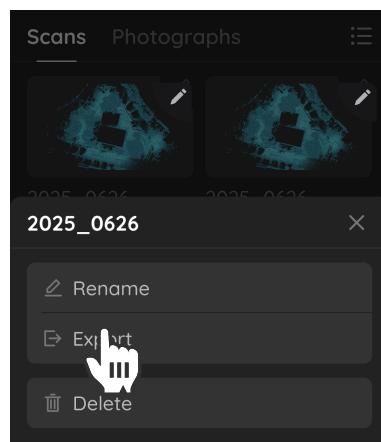
4 Tap to export.
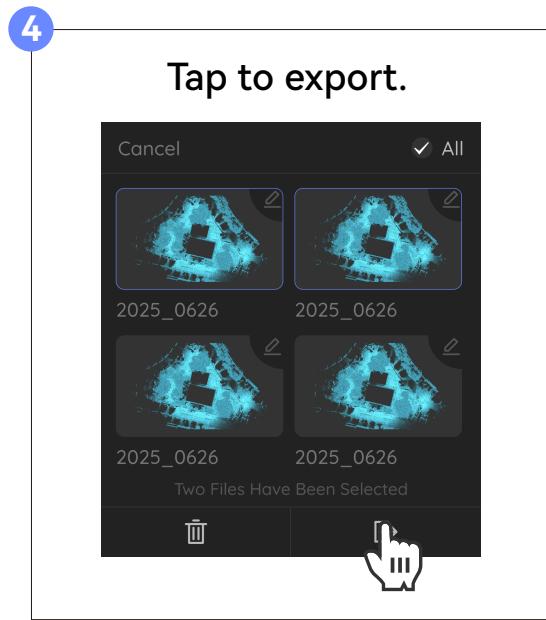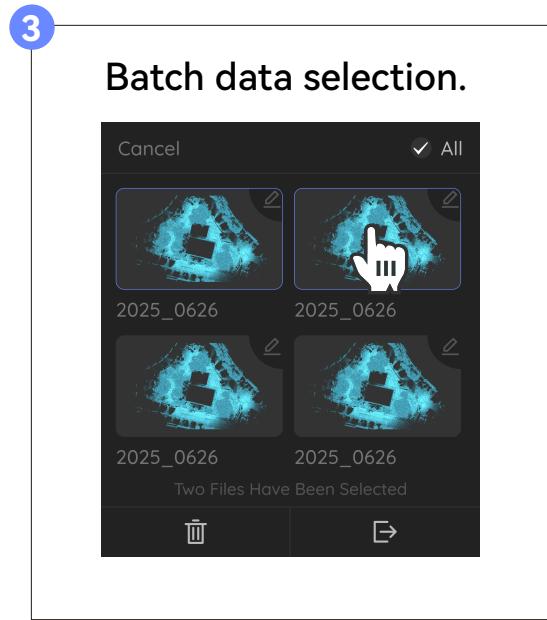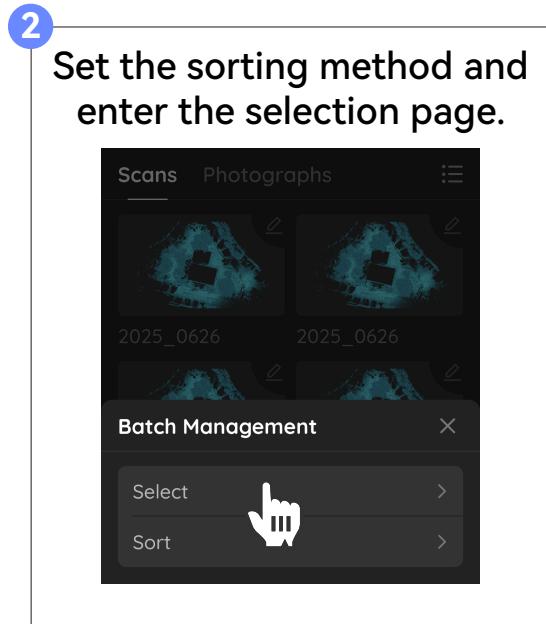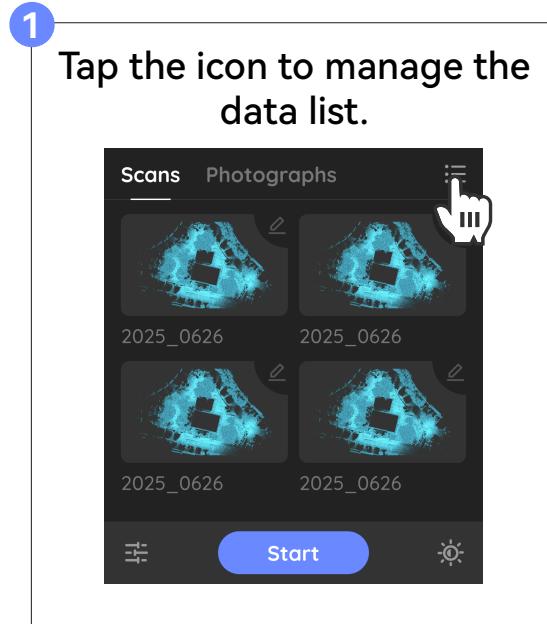
Export through a hotsopt

For detailed instructions, please refer to the following link:

https://forum.jimumeta.com/home/help/support/manual/
89ce7b9ffff54351bd89dc31c66253f4.html?id=118c52711181435a9f78870feb12a130&cid=m_a3918e1f8d52

Export using a card reader

Preparation Before Export

1. Please prepare your own card reader (USB 3.0 or USB 3.2 is recommended, with a read/write speed of 100MB/s).

2. When using the card reader to export data for the first time, if you cannot read the data in the data directory, please upgrade your device to the latest version first. After upgrading, you will also need to format the memory card (if there is scanning data on the device, it is recommended to export it first using a hotspot or USB drive before formatting, as formatting will erase all data).

Export

1. Pull the memory card out from the bottom of the device and use your own card reader to transfer the data to your computer. Simply copy the data from the 'data' directory.

*The card reader shown is for reference only; please refer to the actual purchased product for use.
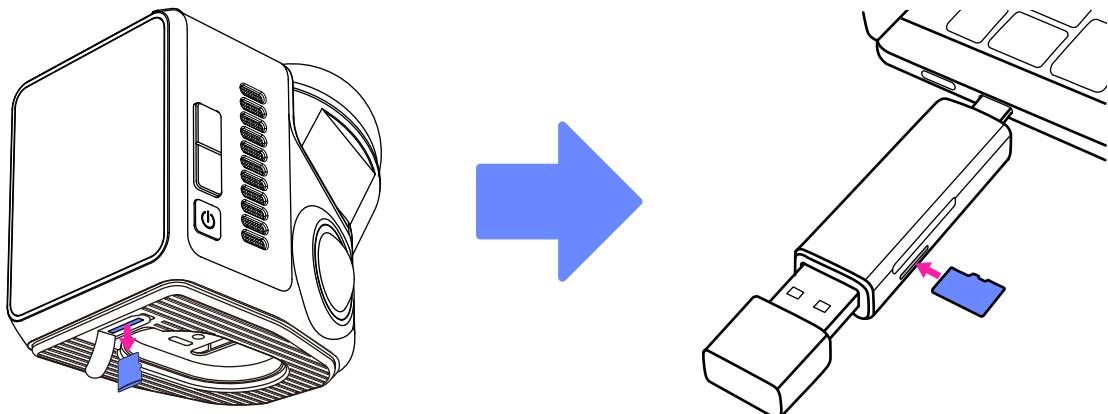
2. After the export is complete, insert the memory card into the device and restart the device.

Upgrade to Latest Version

Preparing for Upgrade

1. Download the latest firmware from our JMMeta community(**https://fo-rum.jimumeta.com/home/help/support.html**) to the USB flash drive and save it in the folder named upgrade.
Note: The upgrade folder needs to be created manually if there's no such folder in the USB.
2. Turn on the device first, then connect the USB flash drive to the converter and insert it into the data transmission port of the device.
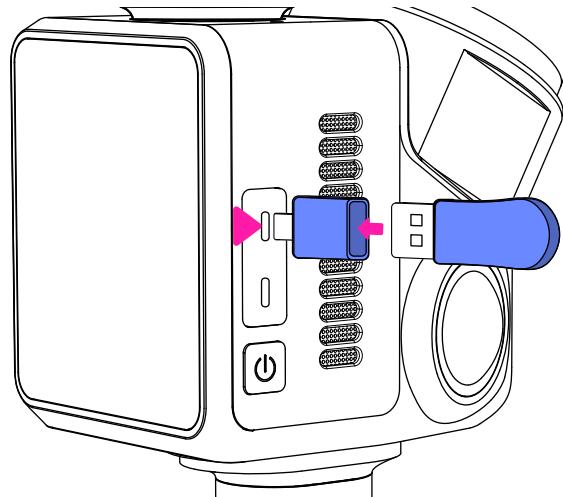

Upgrade

1 Tap "New Version" in the settings page.
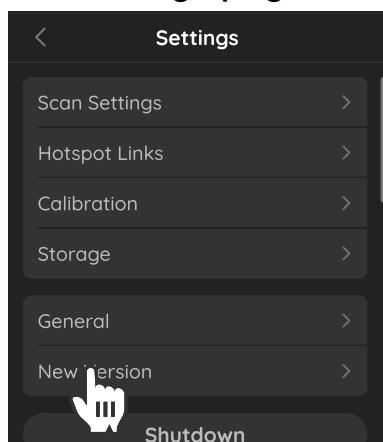

2 Select "Update Now".
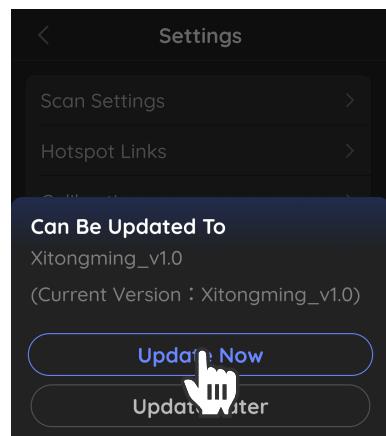
Import the Calibration File

The device has been calibrated before leaving the factory. If your device needs to be re-calibrated, please follow the steps below to re-import the calibration file.

Preparation before importing the file

1. Enter the device SN number in the PC software and download the calibration file.
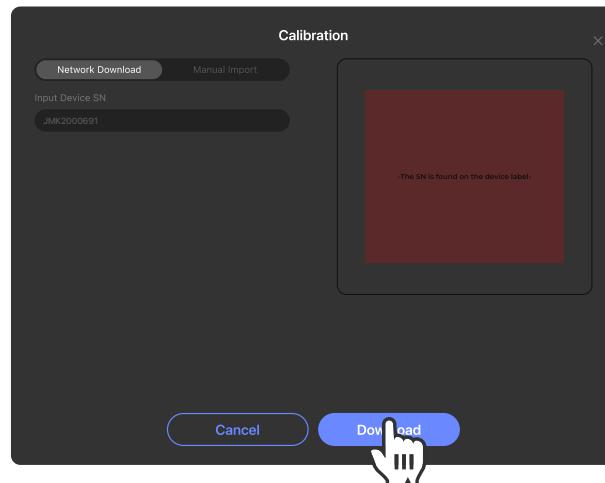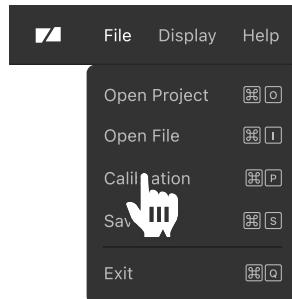
2. Click the top right corner of the PC software to get the path of the calibration file, and download the corresponding calibration file to the U-drive in the 'calibration' folder (if this folder does not exist, you need to create a folder with this name first).
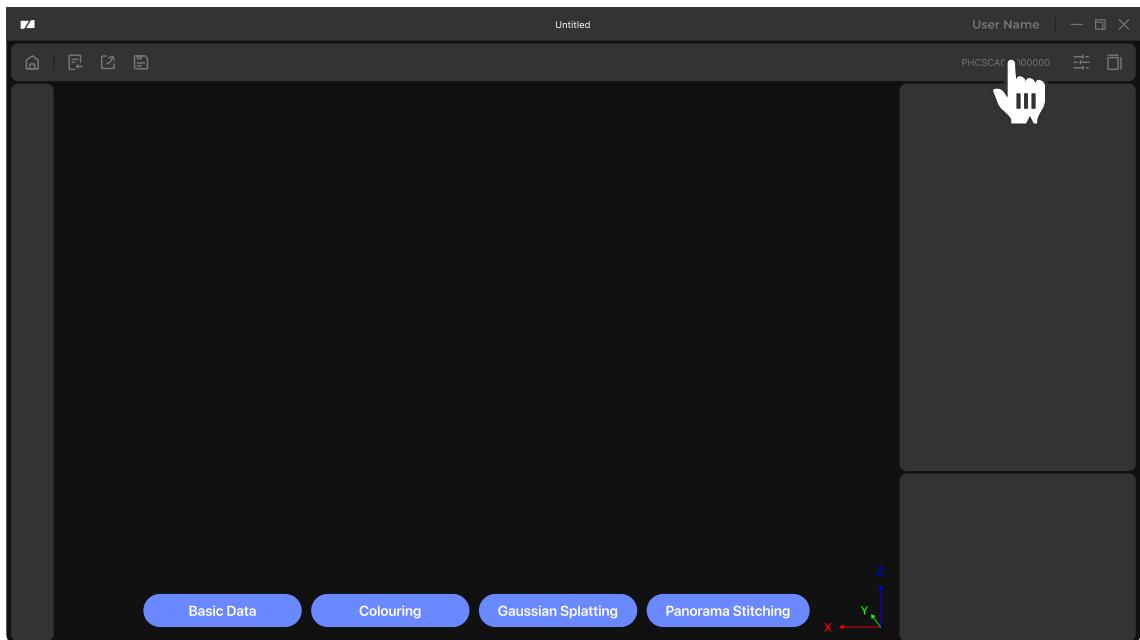

3. Connect the USB flash drive to the adapter and insert them into the the device via data port.
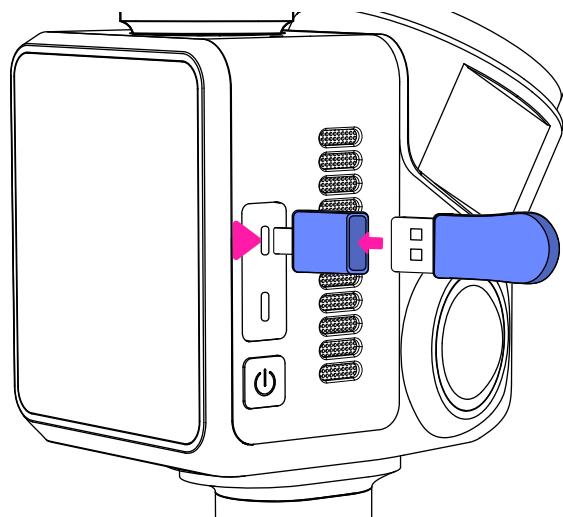
Import

1 Tap "Calibration" in the settings page.

Settings

Scan Settings >

Hotspot Links >

Calibration >

Storage >

General >

New Version >

Shutdown

2 Import the calibration file.

Calibration

Asjkaksk

Shjkasyask.Jason

PHCSCA02 000000 ✓

2

Import