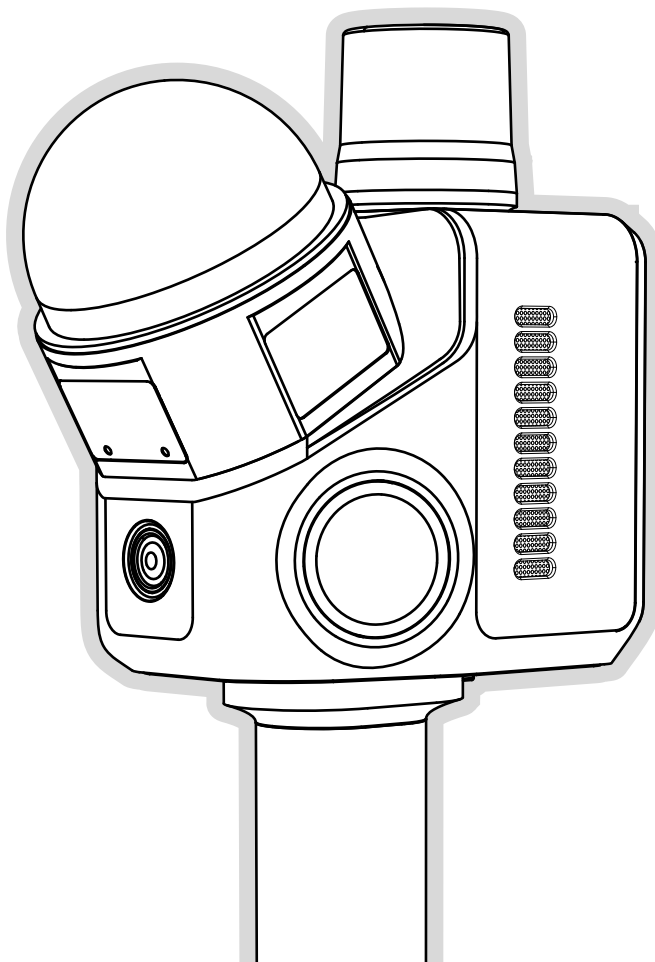


# MANUAL

V1.0

**3DMAKERPRO**

store.3dmakerpro.com



# HAWK

## LiDAR Scanner

**3DMAKERPRO**

f @3DMakerProCares  
@official3DMakerPro  
@3DMakerPro  
https://store.3dmakerpro.com/  
service@3dmakerpro.com

**JimuMeta**

f @JimuMeta  
@JimuMeta  
https://www.jimumeta.com/  
service@jimumeta.com



**Software**

**RayStudio**

**Supported OS**

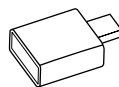
**Windows | iOS**

3D MAKERPRO LIMITED

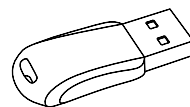
# PACKING LIST



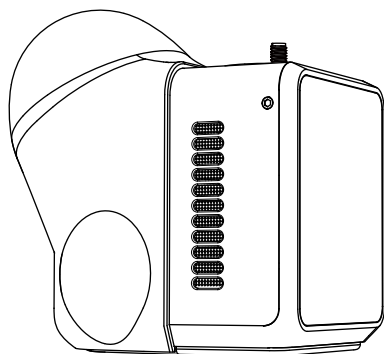
External GPS



USB-C to A Adapter

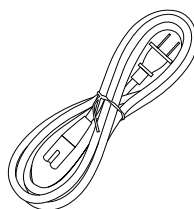


USB Drive

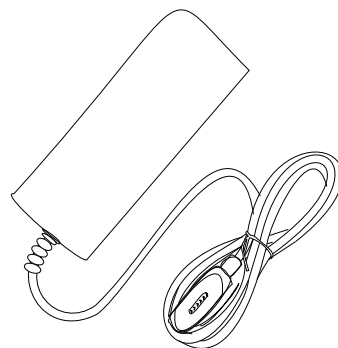


Scanner Body

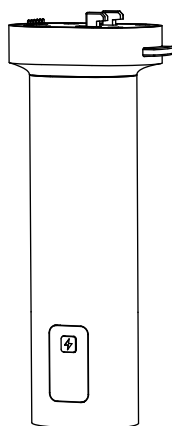
(It comes with a silicone protective cover.  
Please remove it while using the scanner.)



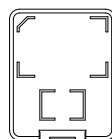
Power Cable\*4



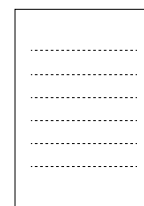
Power Adapter



Handle\*2



Memory Card Holder



Manual



Handle Holder



D-Ring Mounting Screw



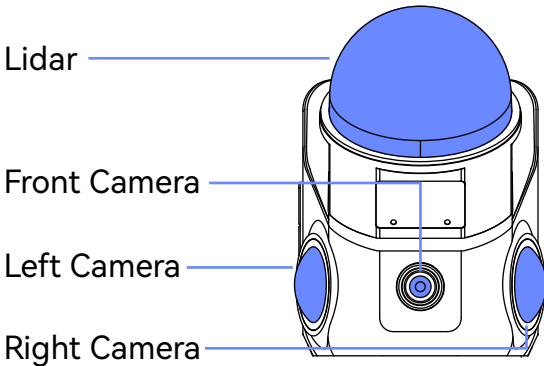
Card Reader

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

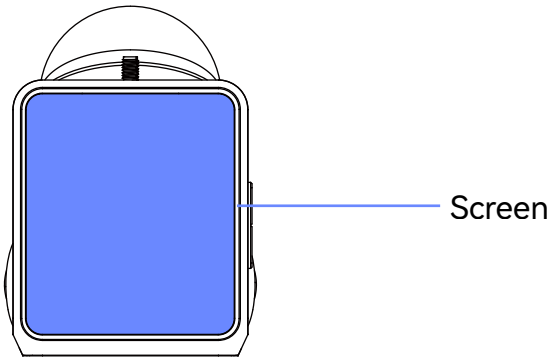
\*The memory card has been installed in the device before leaving the factory. The memory card holder is for storing the memory card.

# Scanner Components

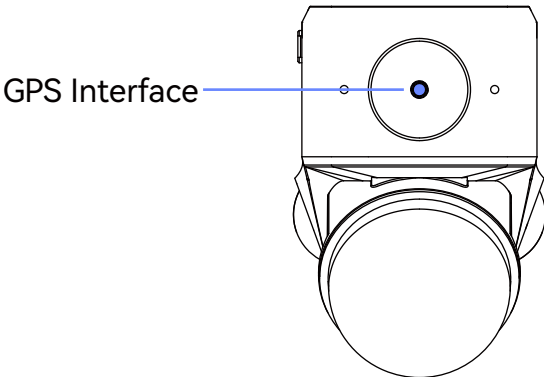
Front View



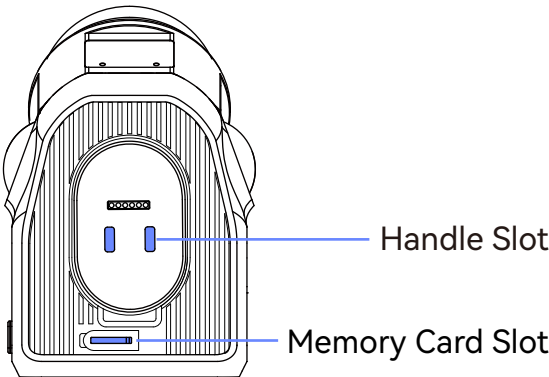
Back View



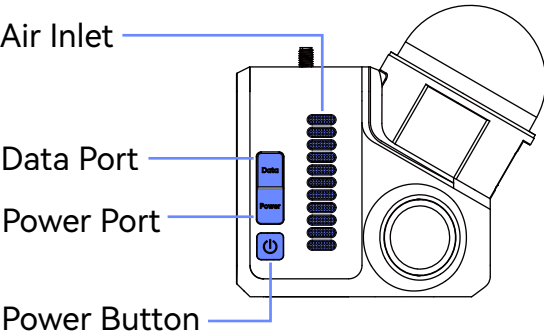
Top View



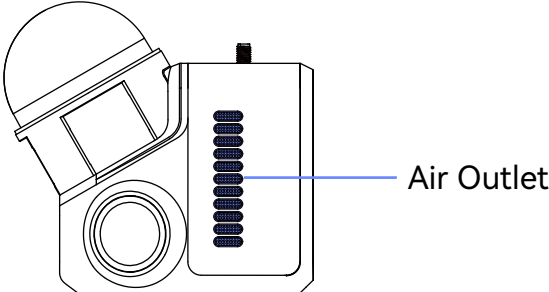
Bottom View



Left View



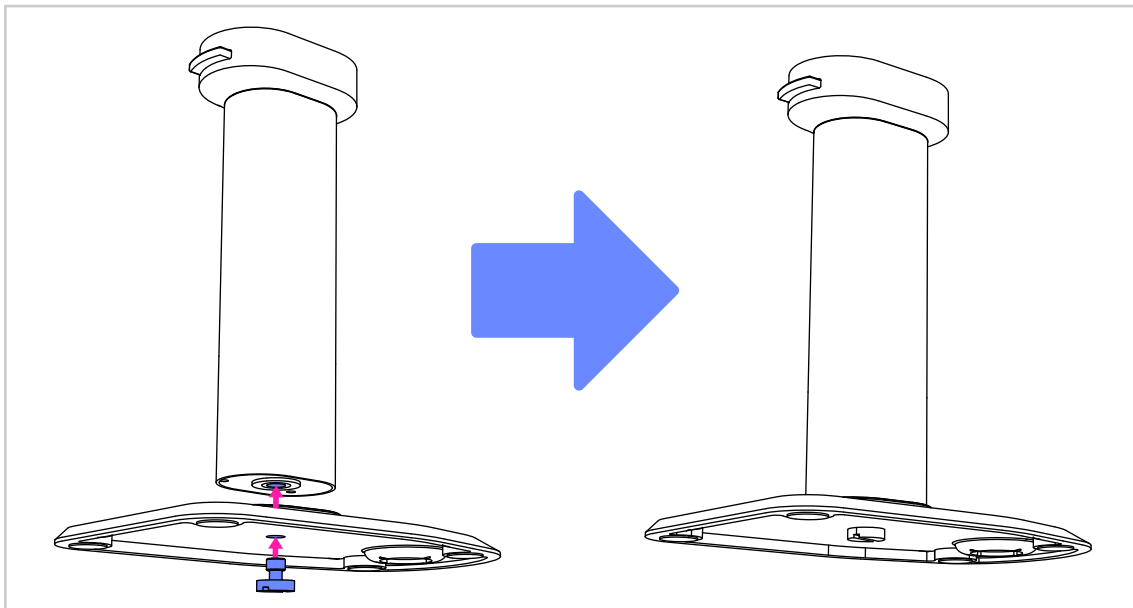
Right View



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

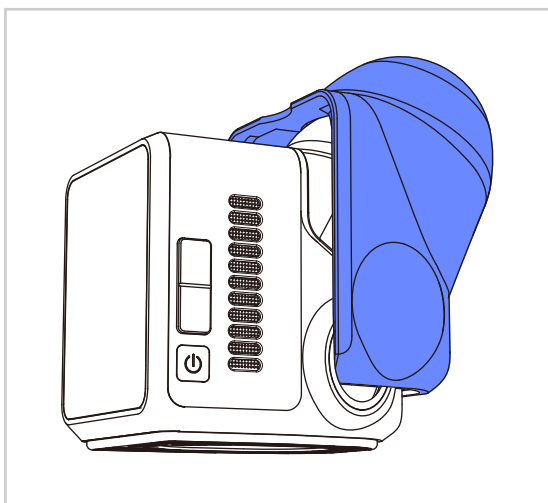
\*The power port is for connecting to an external power supply. (The connection to the handle is optional.)

# Hardware Assembly

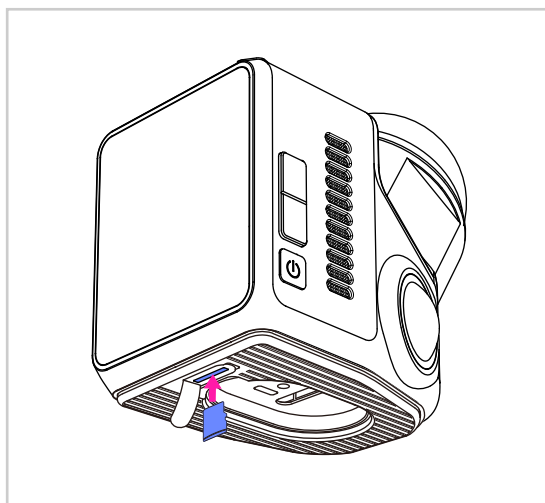


① Connect the handle holder to the handle using the ring screw.

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.

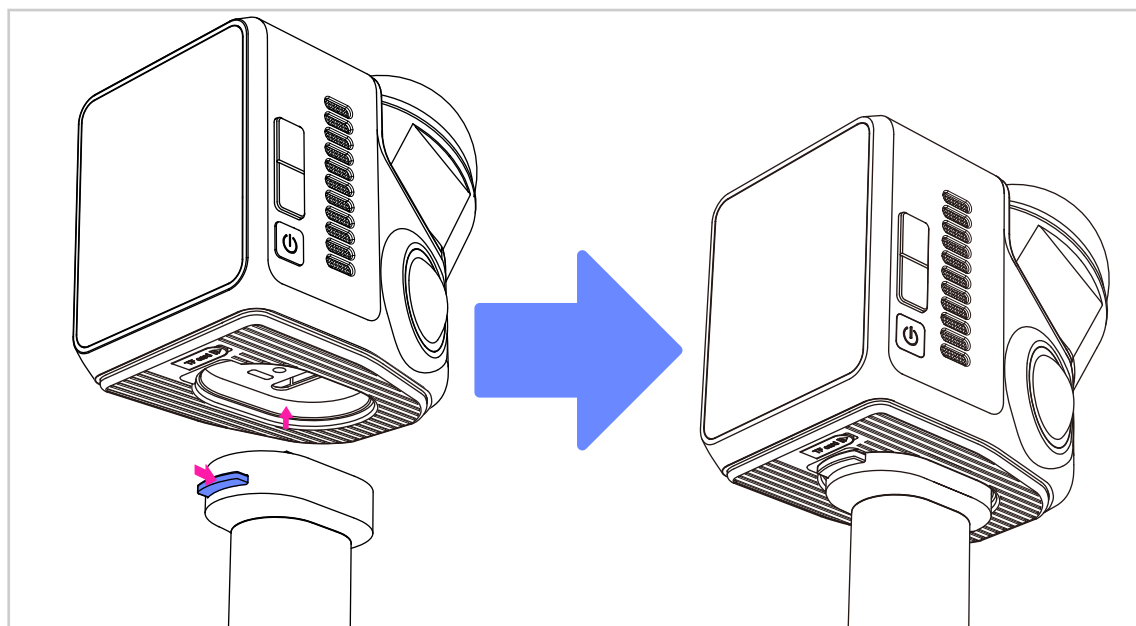


② Remove the silicone protective cover before usage.

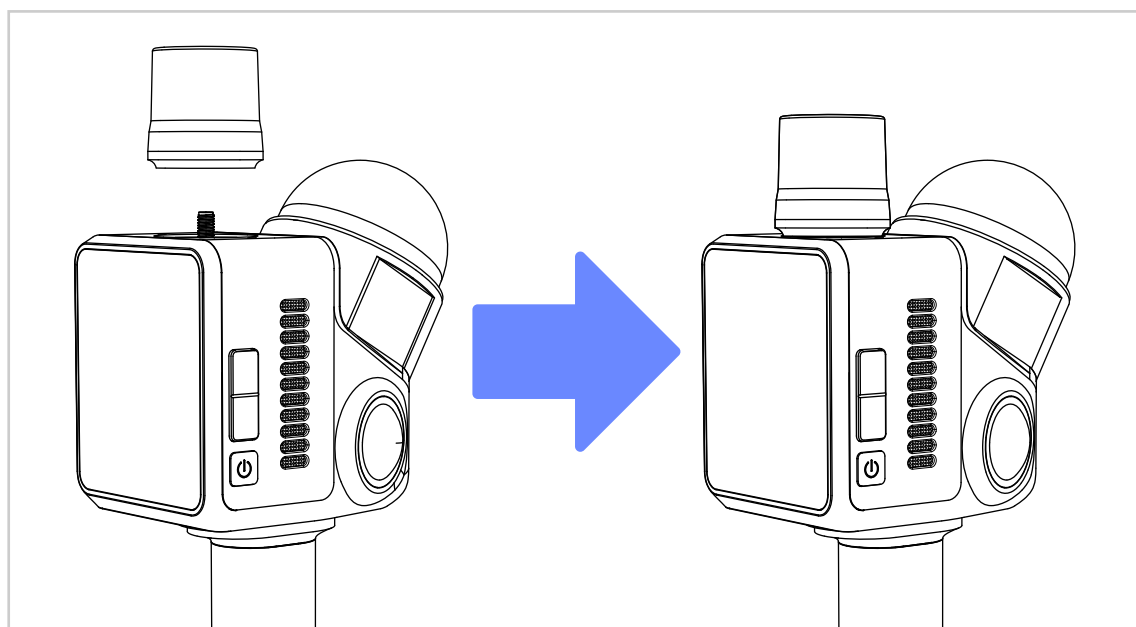


\*③ Insert the memory card into the device through the bottom card slot.

(The memory card has been installed in the device before leaving the factory. It can also be removed if necessary.)

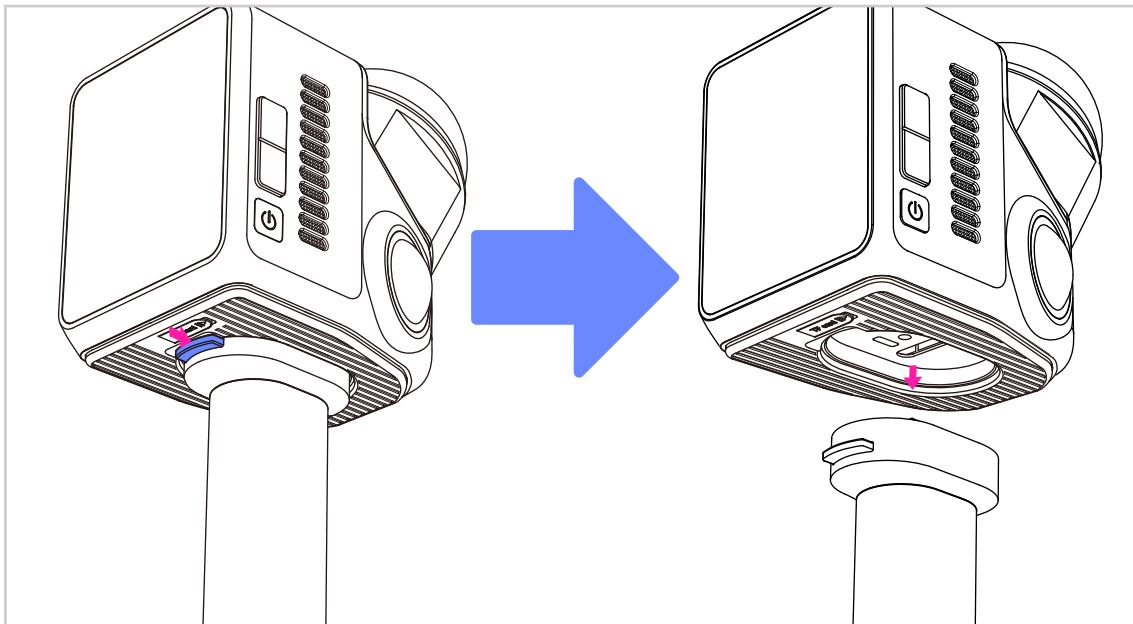


④ Press the button on the handle to connect it to the device.

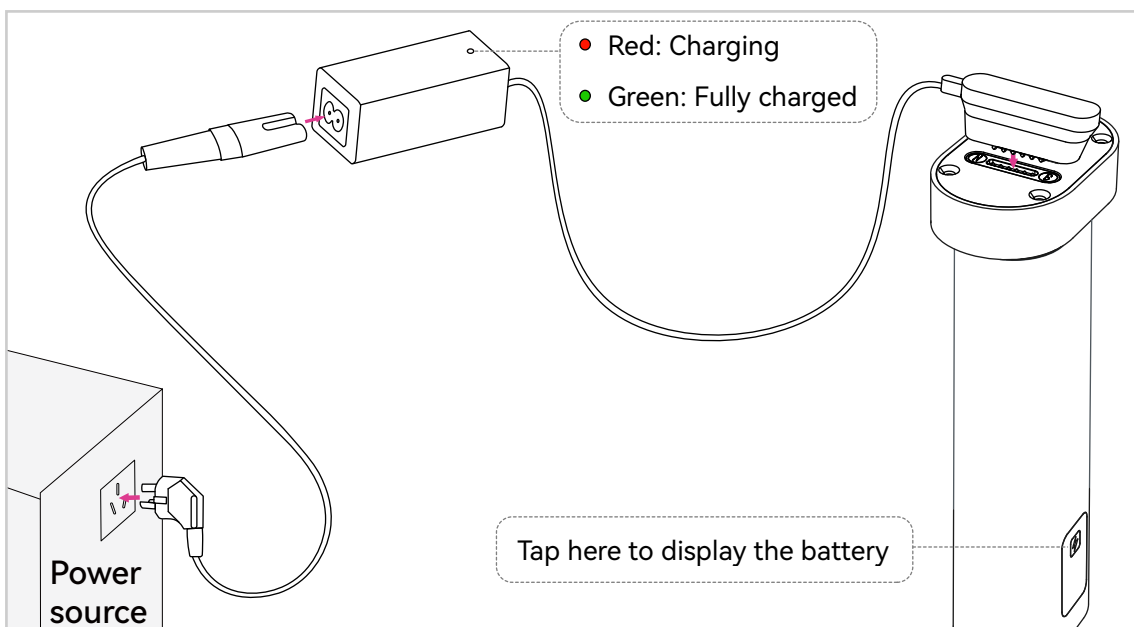


⑤ Install the external GPS on the top of the device through the GPS interface.

# Battery Charging



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



② Please follow the image to connect the cables.

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

# Before Scanning

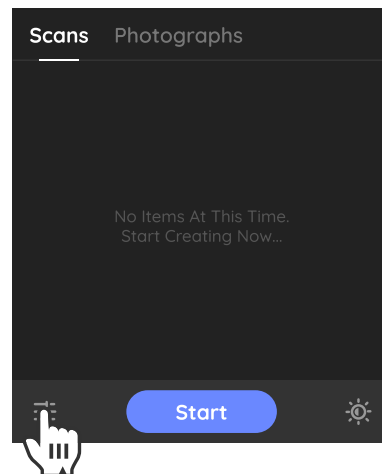
1

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



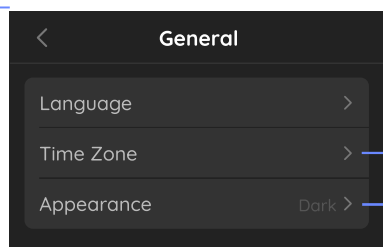
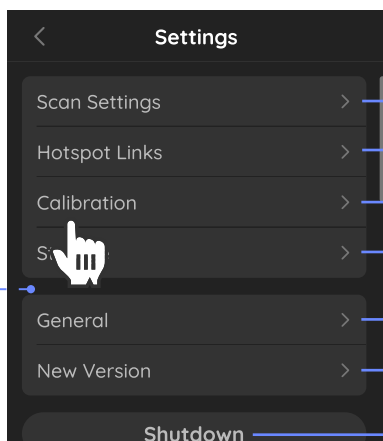
2

Go into system settings.



3

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



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

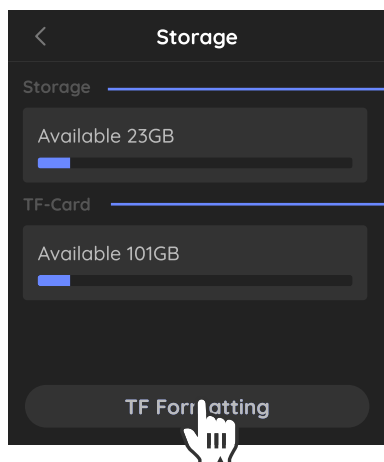
Turn off the scanner

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)

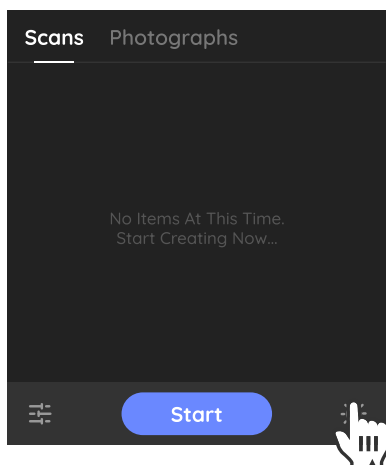


Internal storage space of the device.

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

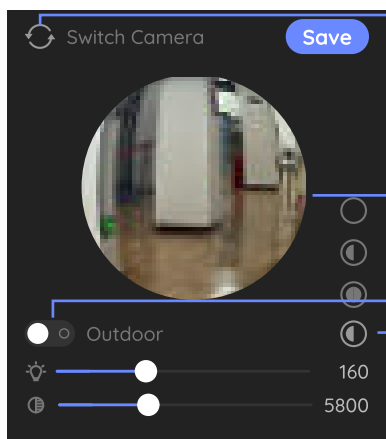
5

## Set up a scanning scene.



6

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



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 automatically increase outdoors.

Three available brightness settings



# Start Scanning

1

Enter the scan interface.

Scans

Photographs

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

Start

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 whether enabling GPS.

Control whether enabling night mode and cameras.(Please refer to image 3 for details.)

Two acquisition modes available, continuous and fixed point mode.

Acquisition Mode

Continuous

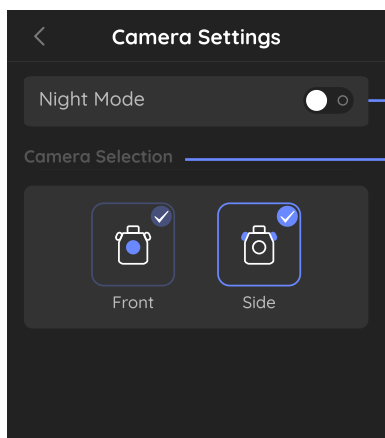
Fixed Point

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

## Camera settings(optional)

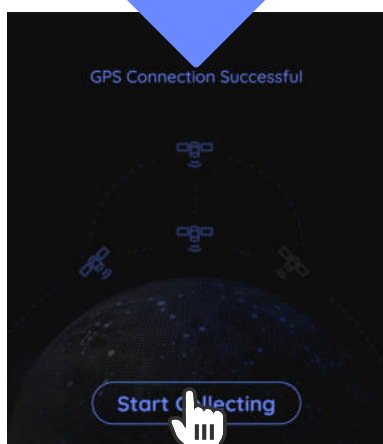
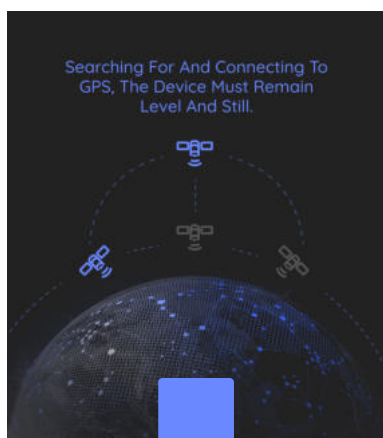


All cameras will be disabled automatically if you enable night mode.

All cameras will be enabled automatically if night mode is disabled; the side cameras can be manually turned off.

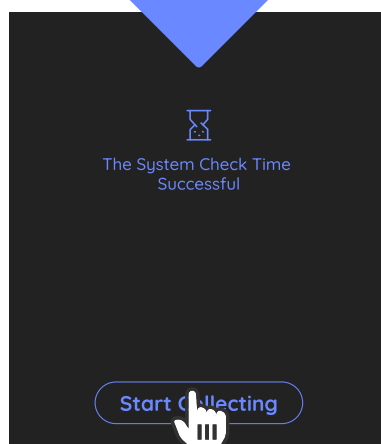
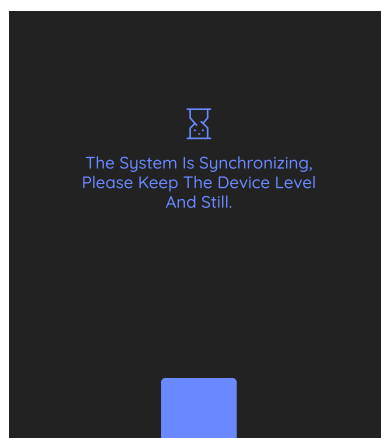
4

## GPS connection and time synchronization(GPS enabled)



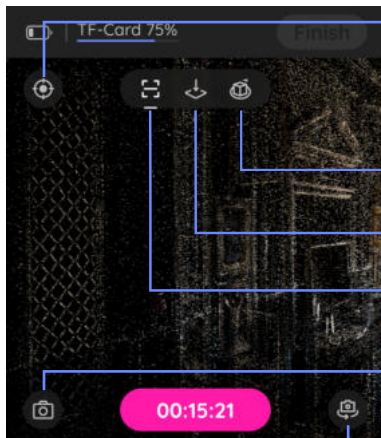
## Time synchronization(GPS disabled)

or



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 coordinates later.

Top view with 45° inclined

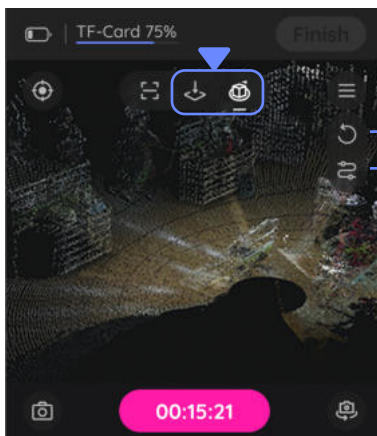
Top view

Front camera view

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

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

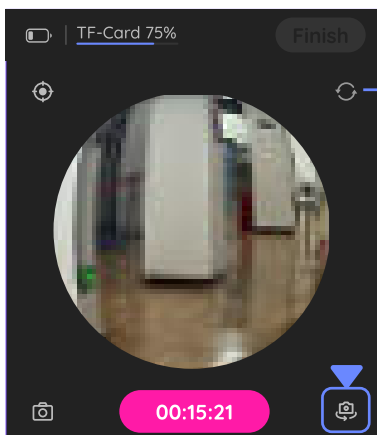
\* Switch between top view with 45° inclined and front camera view to check the initial view and trajectory line.



Initial view, for returning back to the initial scanning view.

Trajectory line, for viewing the shooting trajectory while scanning.

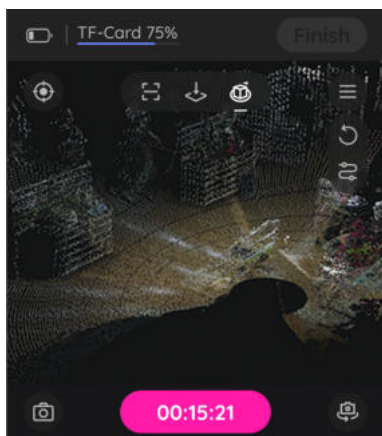
\*In live mode, you can view the current shooting situation.



Click to switch camera view

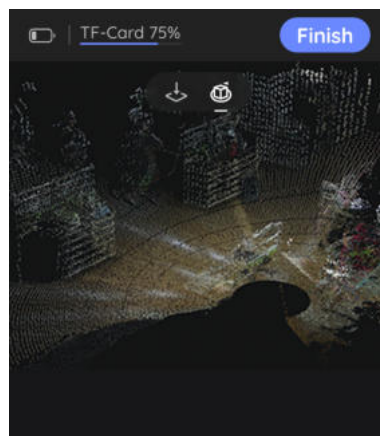
6

Tap the timer to end scanning.



7

Confirm the scan result.



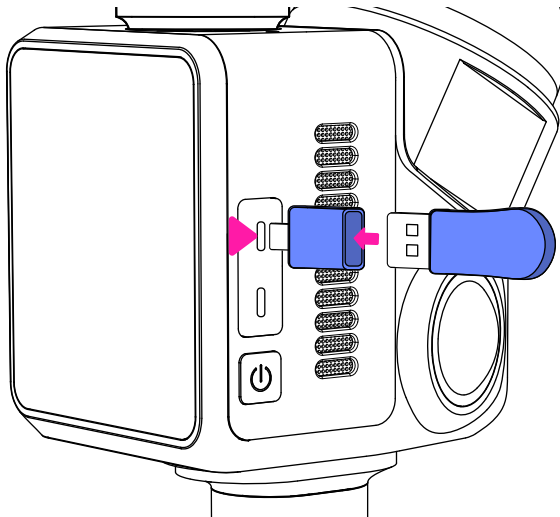
# Data Export

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

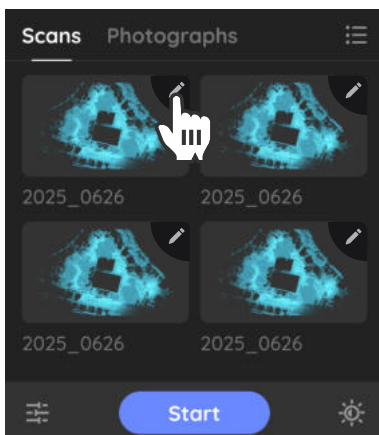
Connect the USB drive with the adapter, and insert them into the device via data port.



## Single Data Export

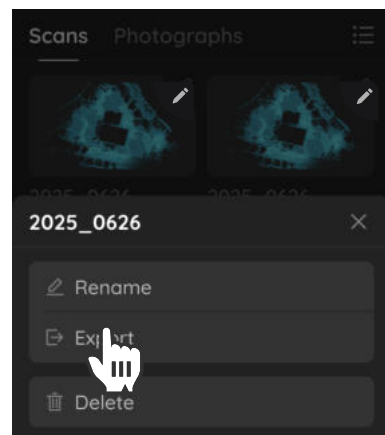
1

Select the data to be exported.



2

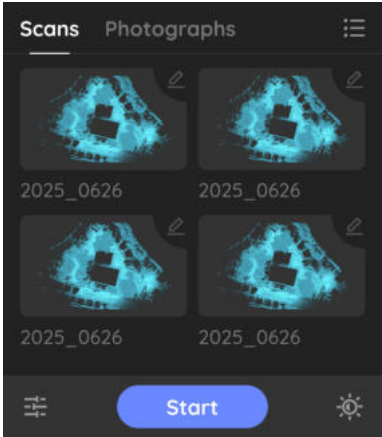
Tap "Export".



# Batch Export

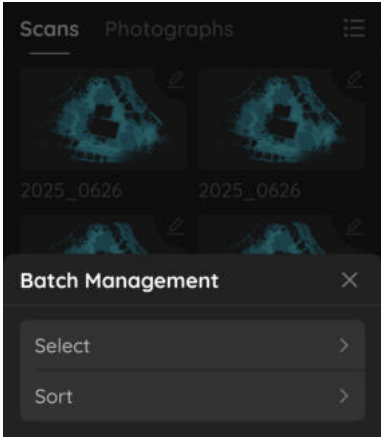
1

Tap the icon to manage the data list.



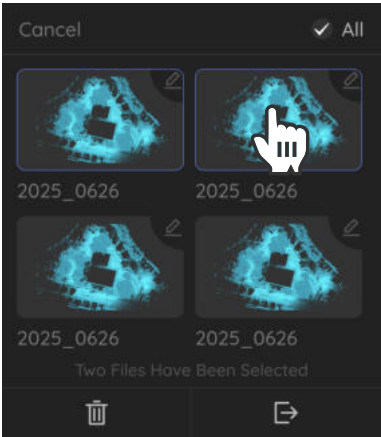
2

Set the sorting method and enter the selection page.



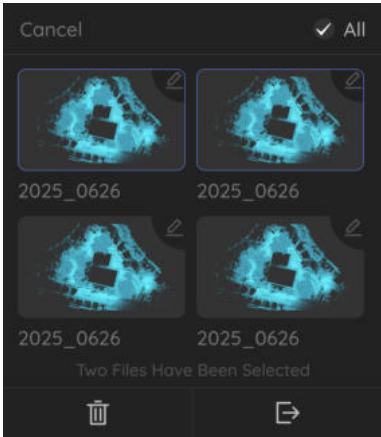
3

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

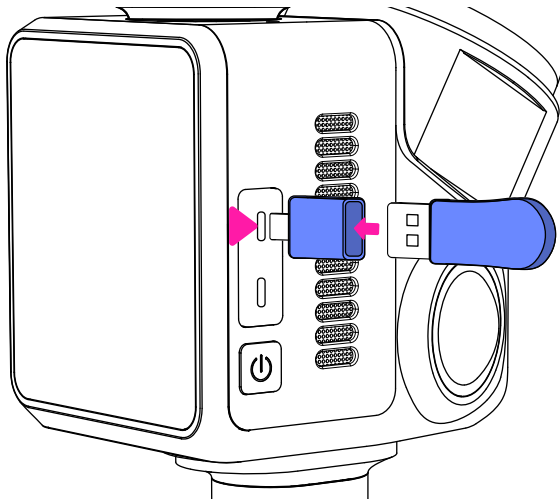
# Upgrade to Latest Version

## Preparing for Upgrade

1. Download the latest firmware from our JMMeta community(<https://forum.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.

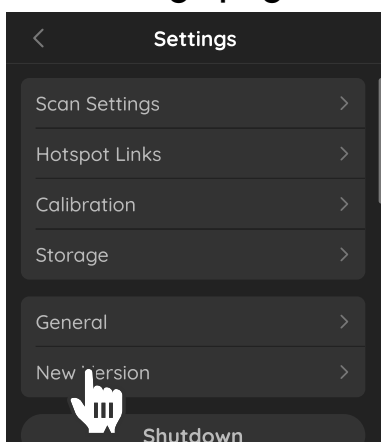
2. Turn on the device first, then connect the USB flash drive to the converter and insert it into the data transmission port of the device.



## Upgrade

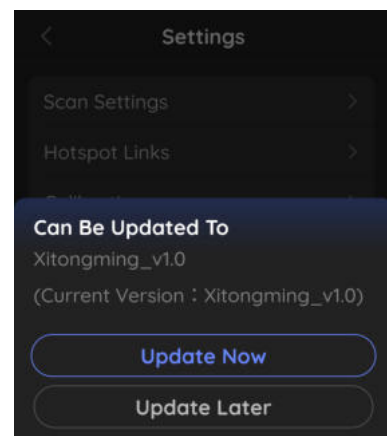
1

Tap "New Version" in the settings page.



2

Select "Update Now".

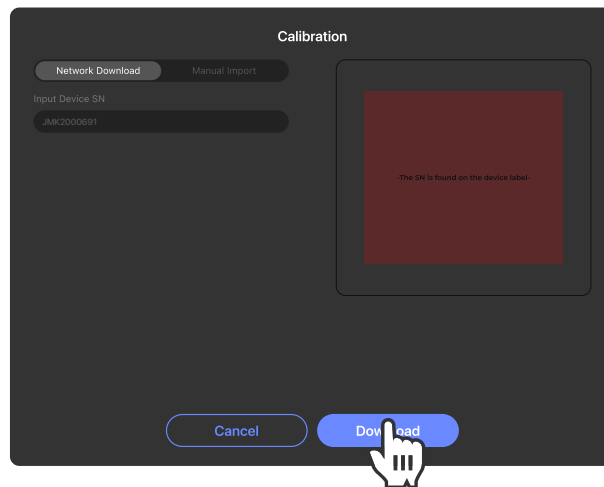
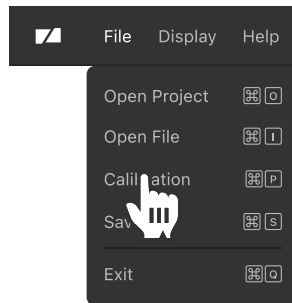


# Import the Calibration File

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.

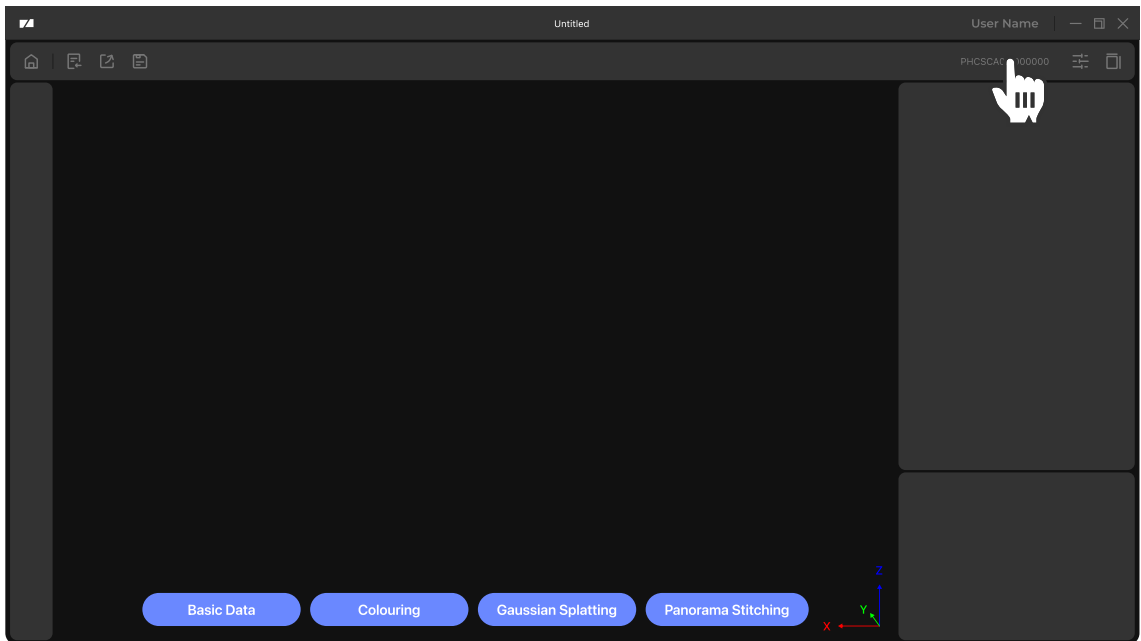
## Preparation before importing the file

1. Enter the device SN number in the PC software and download the calibration file.

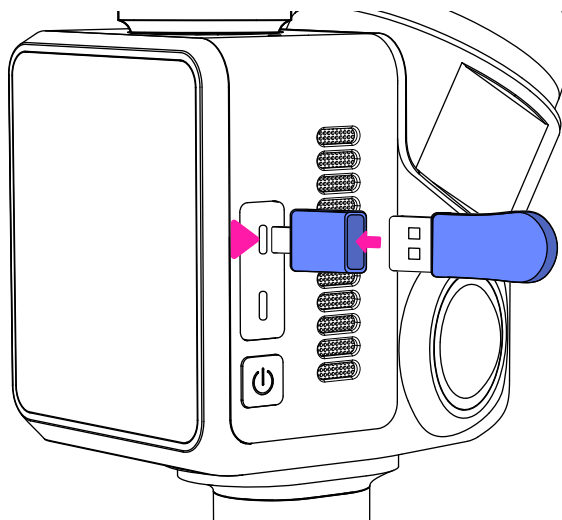




2. Click the top right corner of the PC software to get the path of the calibration file, and download the corresponding calibration file to the U-drive in the 'calibration' folder (if this folder does not exist, you need to create a folder with this name first).



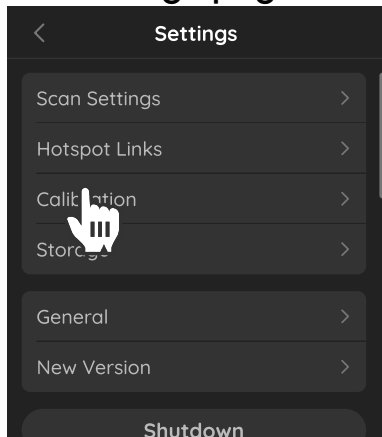
3. Connect the USB flash drive to the adapter and insert them into the the device via data port.



# Import

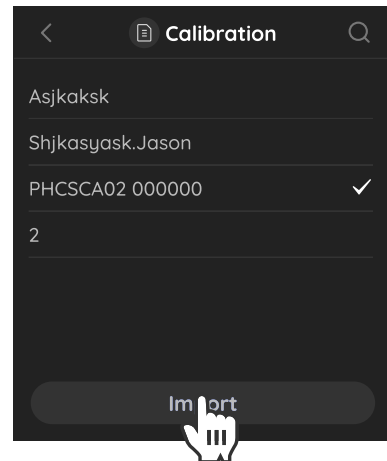
1

Tap "Calibration" in the settings page.



2

Import the calibration file.



# FCC Statement

1. This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

(1) This device may not cause harmful interference.

(2) This device must accept any interference received, including interference that may cause undesired operation.

2. Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Note: This equipment has been tested and found to comply with the limits for a class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

The device has been evaluated to meet general RF exposure requirement. This equipment should be installed and operated with a minimum distance of 20 cm between the radiator and your body.