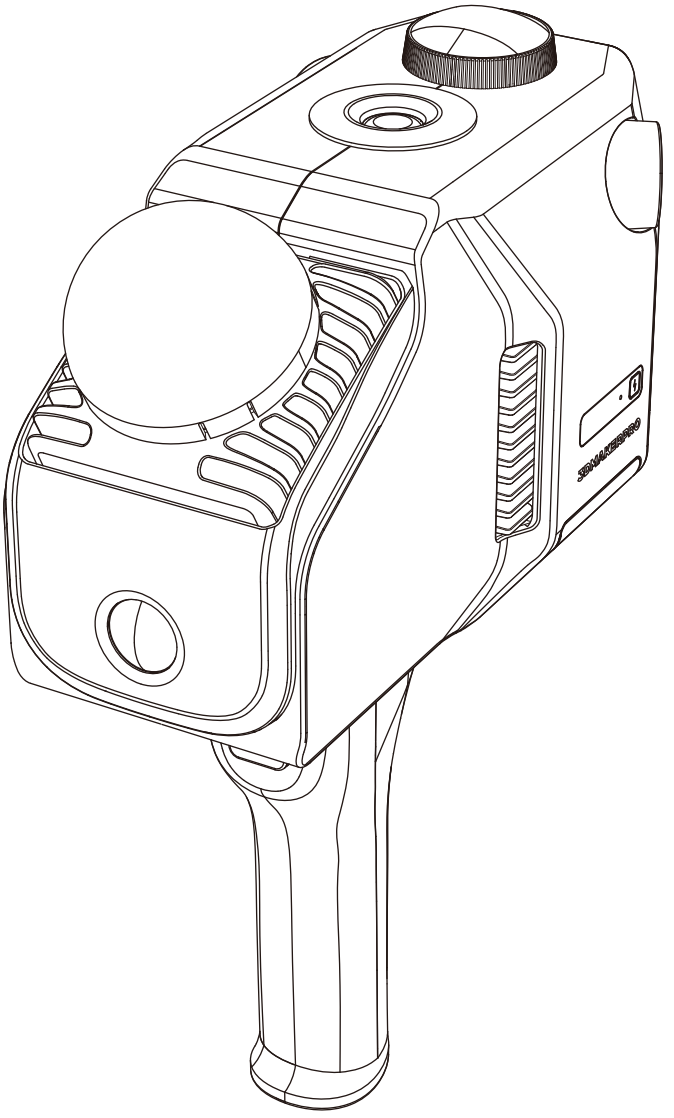
MANUAL

V1.6

3DMAKERPRO
store.3dmakerpro.com



Eagle LiDAR

3DMAKERPRO

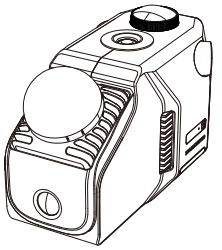
@3DMakerProCares
@official3DMakerPro
@3DMakerPro
https://store.3dmakerpro.com/
service@3dmakerpro.com

JimuMeta

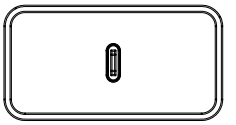
@JimuMeta
@JimuMeta
https://www.jimumeta.com/
service@jimumeta.com

3D MAKERPRO LIMITED

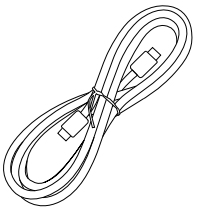
PACKING LIST



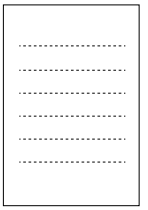
Scanner Body



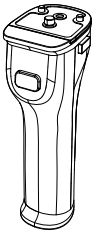
Power Adapter



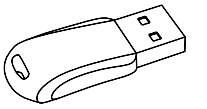
Power Cable



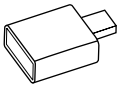
Manual



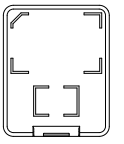
Handle



USB Flash Drive



USB-C to A Adapter



Memory Card Case



Dispensing screw



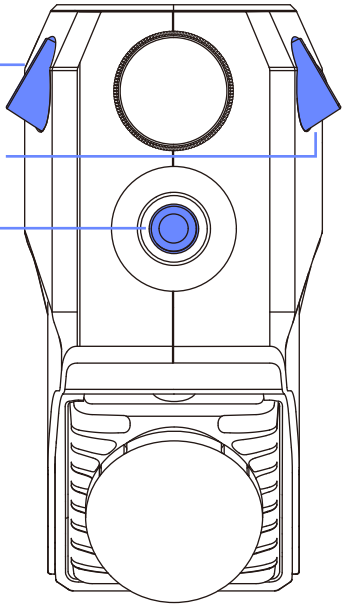
Hex wrench

*The appearance of the product isn't standard across all specifications and editions. Product images are for illustrative purposes only!

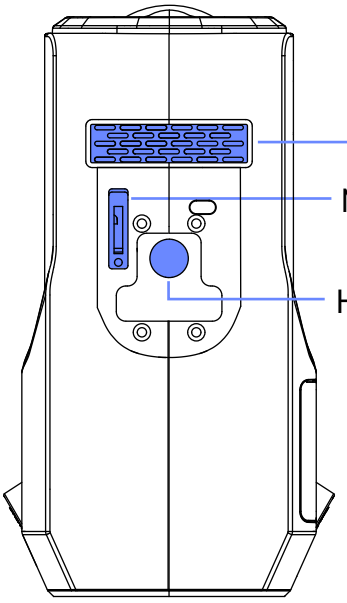
*The memory card has been installed in the device before leaving the factory. The memory card case is only for storing the card.

MAIN STRUCTURE

Top View

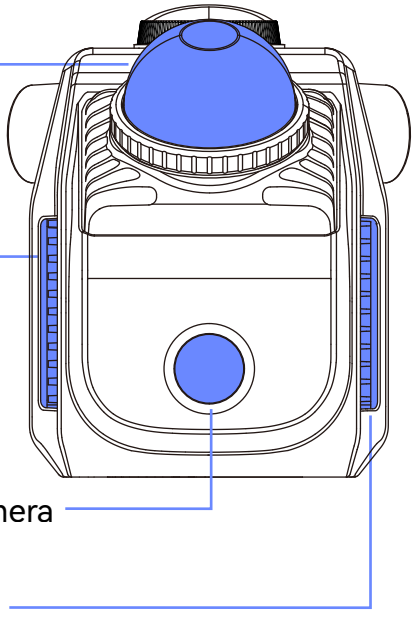


Bottom View

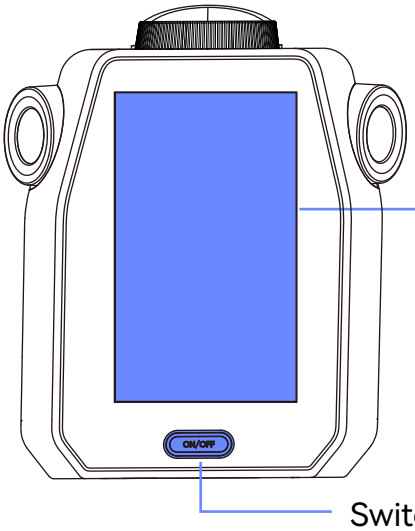


*Standard edition does not have the 3 cameras shown in the picture !

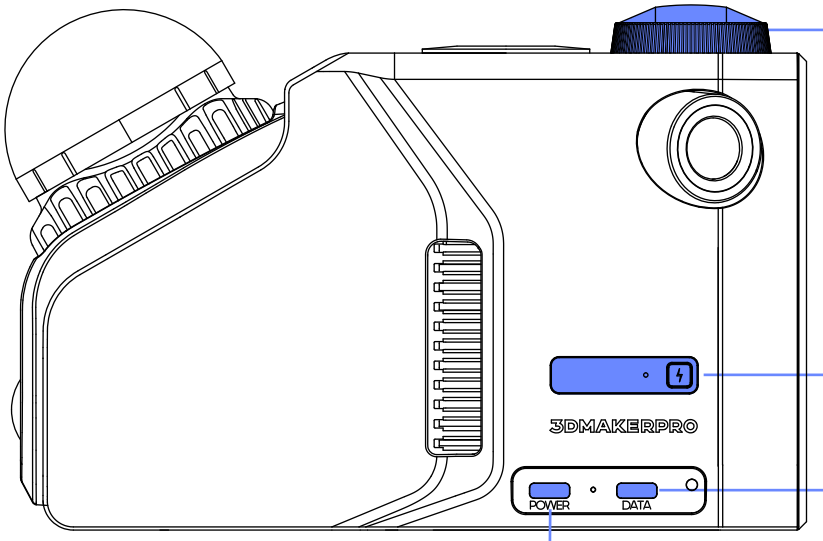
Front View



Back View



Side View



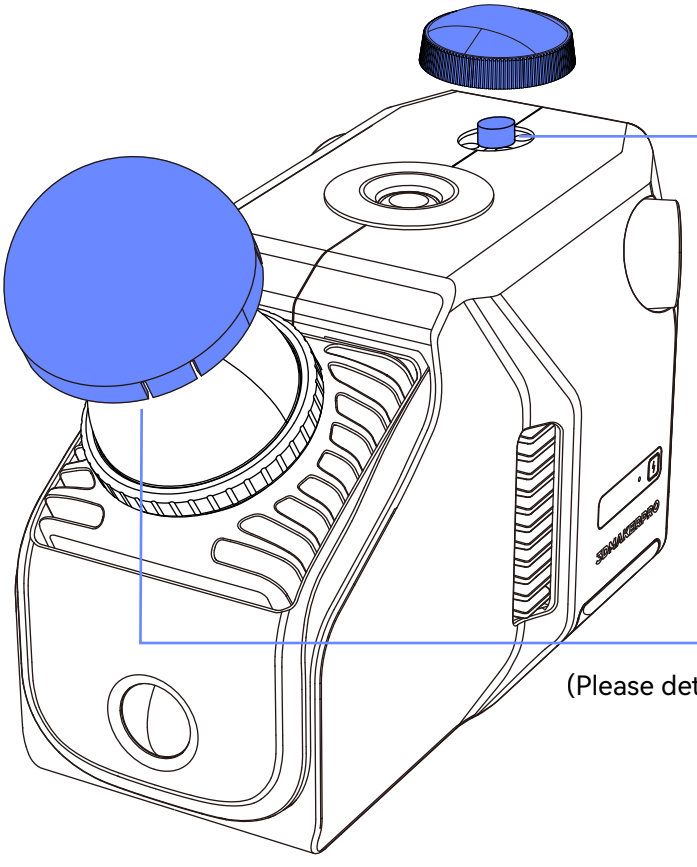
GPS Lid

Battery Display

Data Port

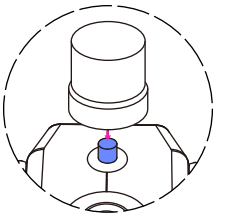
Power Port

(needs 2 hours to fully charge and the ambient temperature should be 0~45 degrees.)



GPS Interface

(connects to an external GPS)



Lidar Cover

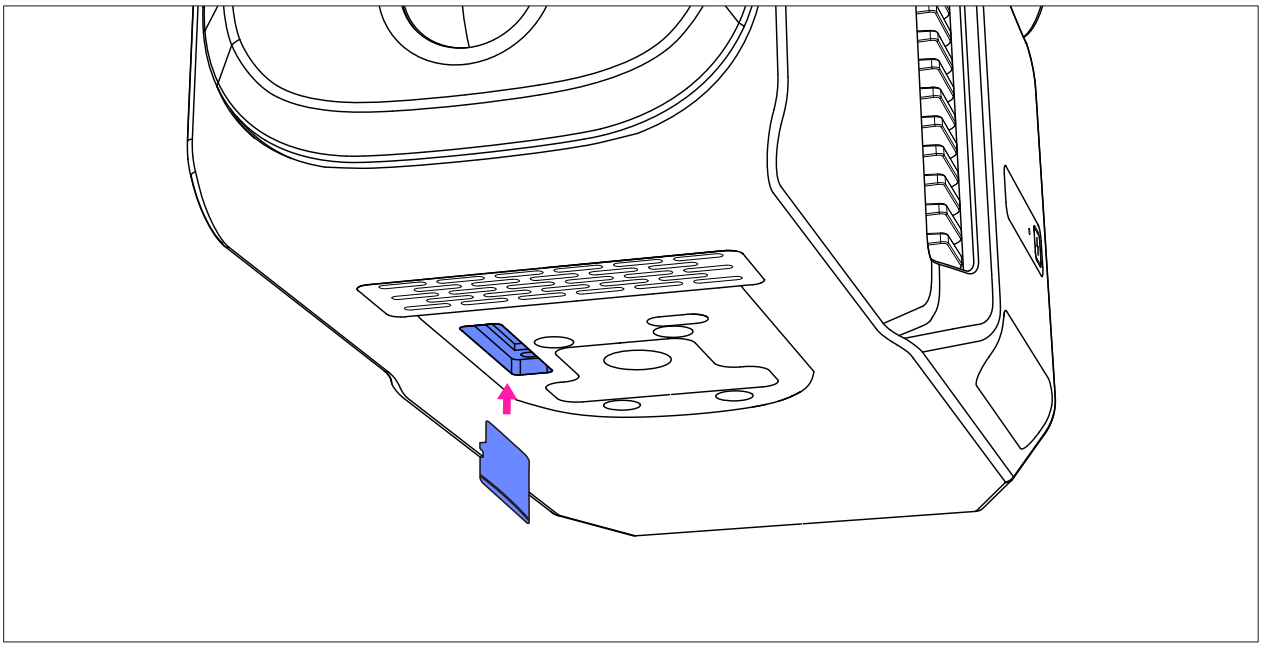
(Please detach it while using the device.)

*To protect the device, please do not charge when using it above 35 degrees.

HARDWARE CONNECTION

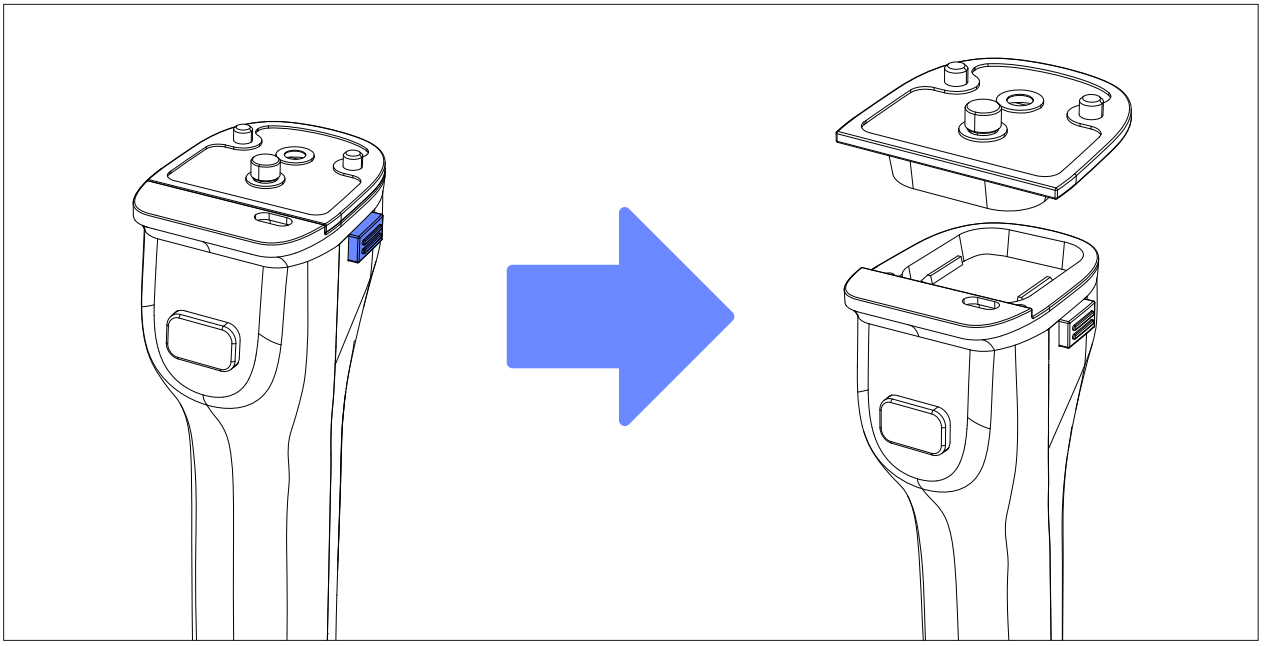
*1.Insert the Memory Card

(The memory card is factory installed in the device, if you need to unplug and reinsert it for other operations, you can refer to the following operations:)

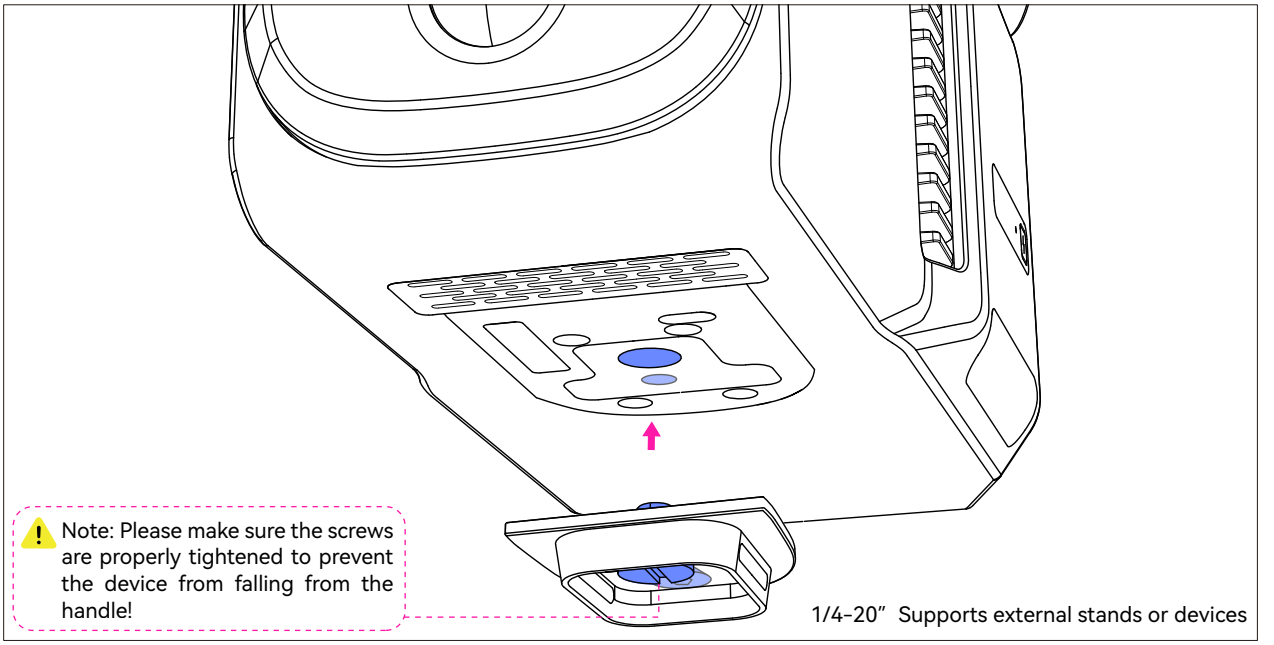


Insert the memory card into the device through the slot at the bottom.

2.Connect to the Handle

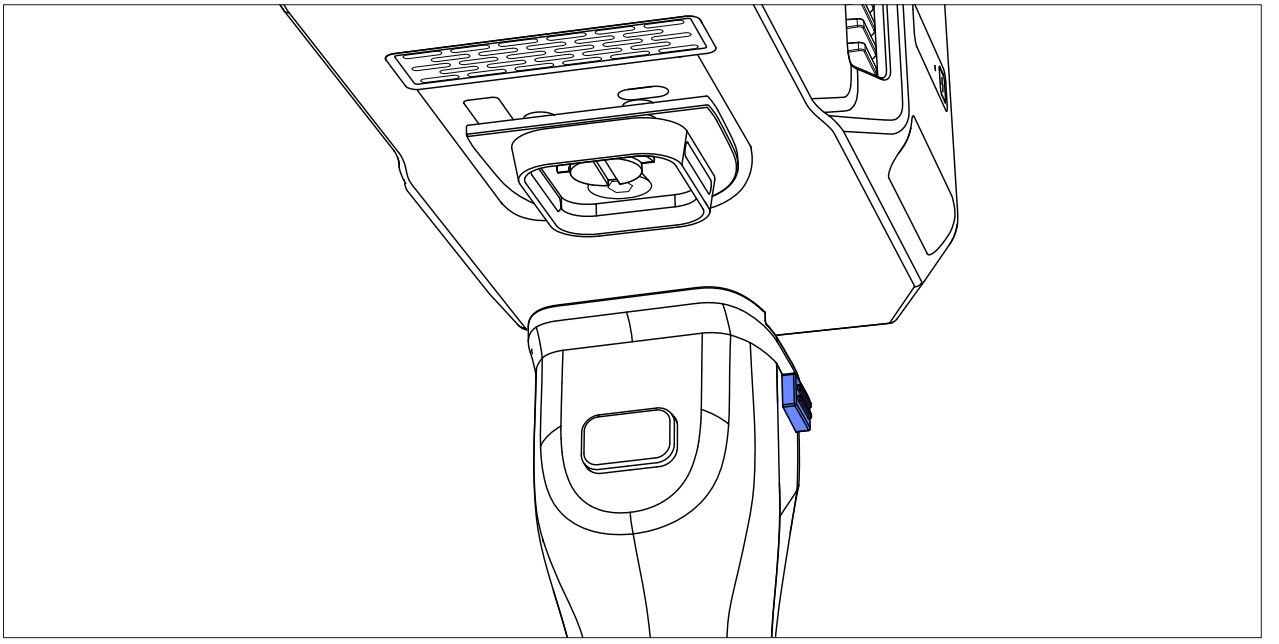


Press the two side buttons to release the mounting plate from the handle.



Fit the mounting plate into the scanner through the bottom screw hole.

1. Pre-fix the mounting plate into the scanner through the bottom screw hole. Once in place, tighten the ring screw on the plate.
2. Use a hex wrench to tighten the dispensing screw from the hole behind the ring screw to reinforce it.



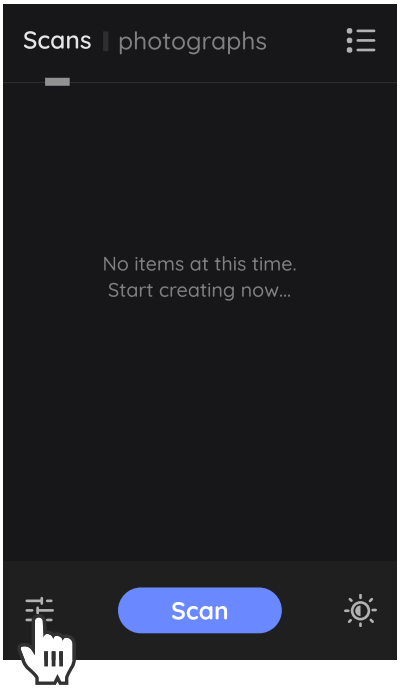
Press the two side buttons on the handle and sit the scanner onto it.

Before Scanning

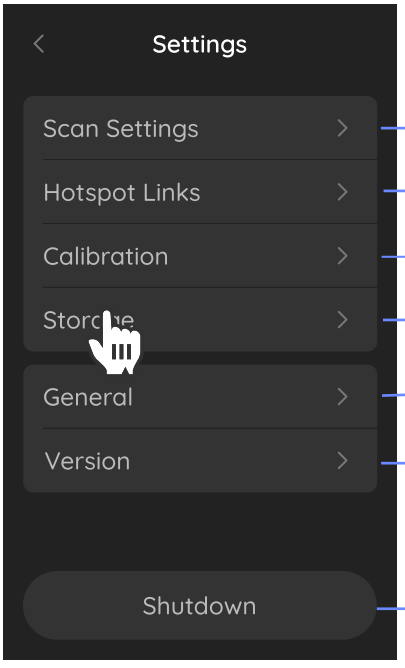
1 Single press the button below the screen to turn on the device.



2 Go into system settings.



3 Set the system language and other related configurations. SD card needs to be formatted before using it. ①



Set the point size, point cloud density, point color and appearance settings.

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.

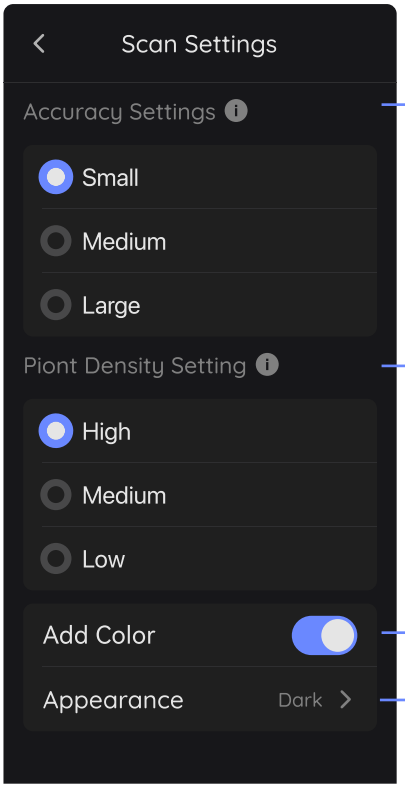
Version Info.

Turn it off.

*Scan Settings Instructions:

②

All configuration items in the scan settings take effect only when scanning, but do not affect the scan data.



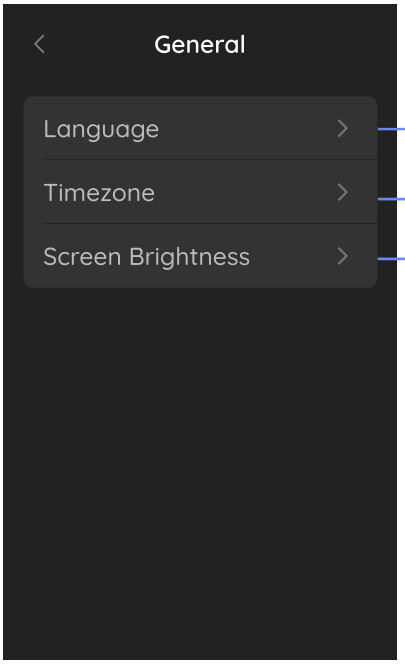
Sets the size of the point cloud at the time of scanning.

Sets the density of the point cloud at the time of scanning.

When turned on, the point cloud when scanning has a simple coloring effect.

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

*General Settings Instructions:



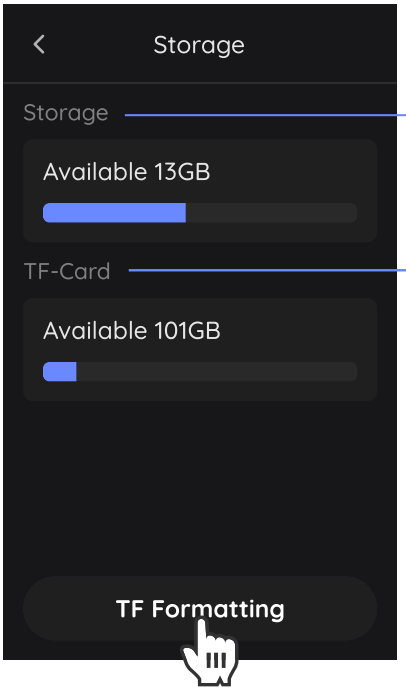
Select Language

Enter the specific information and select the corresponding time zone.

(Switching time zones will affect the display of scan times)

Screen brightness

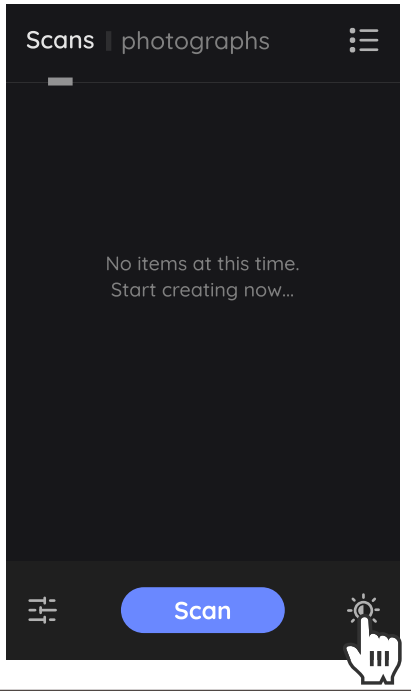
4 Format the SD card(optional)



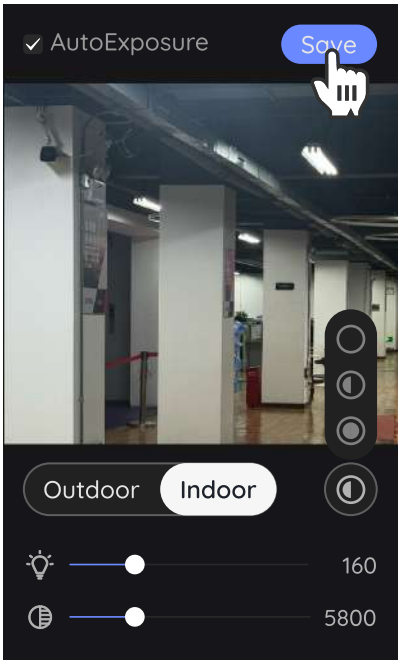
Internal storage space of the device.

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

5 Set up a scanning scane.



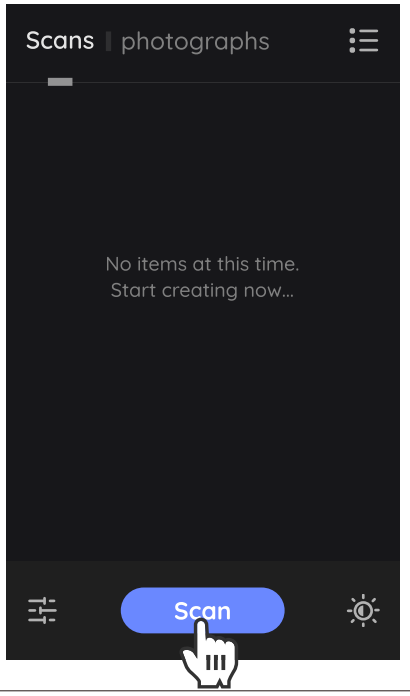
6 Select a scene, adjust the brightness and white balance parameter.



Start Scanning

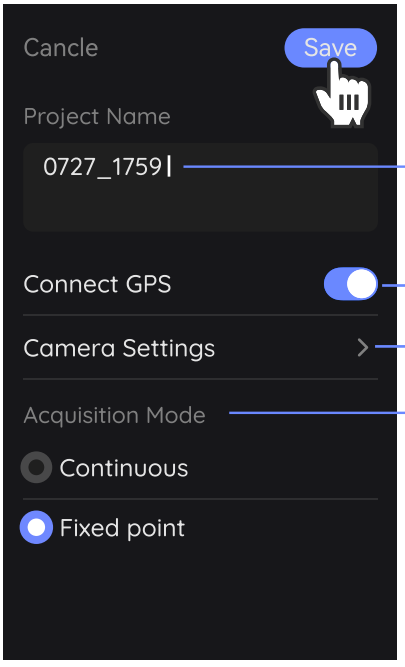
1

Enter the scan interface.



2

Configure the project info and scan settings.



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.)

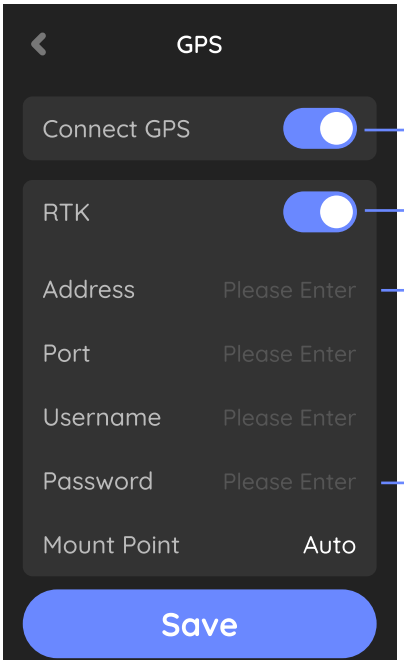
Two acquisition modes available, continuous and fixed point mode.

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

Fixed point: used for point cloud settlement, network construction, and panorama stitching. When collecting, you can take a photo manually, and the photo can be viewed in the camera folder.

3

GPS settings(optional)



Control whether enabling GPS.

Control whether enabling RTK.

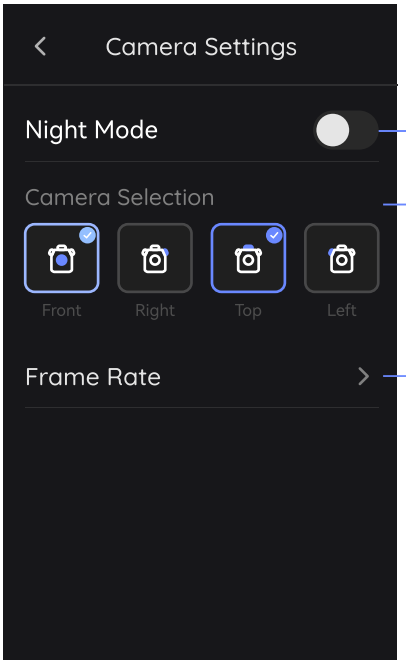
Enabling RTK requires filling in the RTK differential data service (the RTK differential data service needs to be purchased by the user separately).

*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)

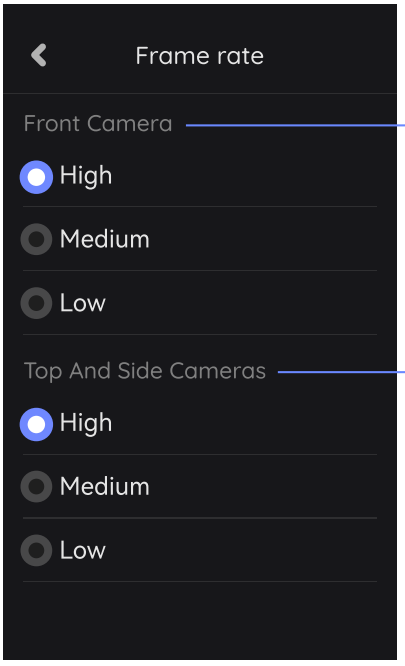


All cameras will be disabled automatically if you enable night mode.

All cameras will be enabled automatically if night mode is disabled; the left, right and top camera can be manually turned off.

Configure the frame rate of the front camera and other cameras.

*The frame rate of the camera has an effect on Gaussian splashes in post-processing. The higher the frame rate, the better the Gaussian splash, but the longer it takes to process.



Configure the frame rate of the front camera

Configure the frame rate of the top and left and right cameras

(Standard edition does not have this option)

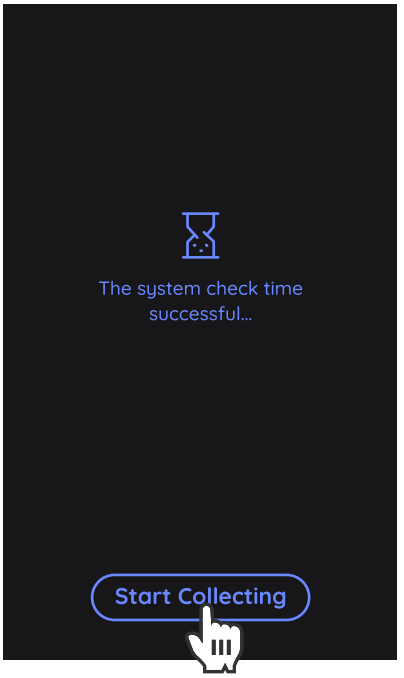
5

GPS connection and time synchronization(GPS enabled)



or

Time synchronization(GPS disabled)

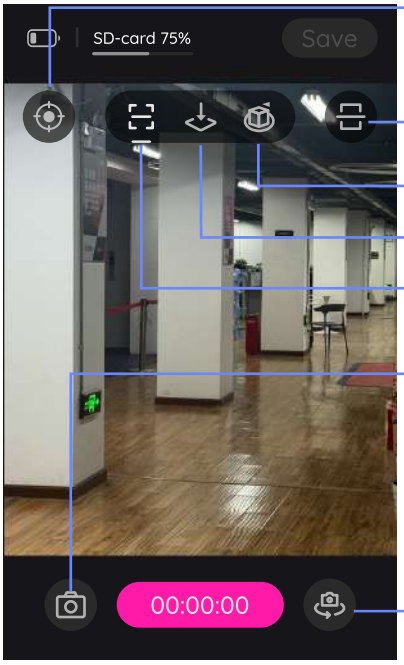


It takes a long time to align the time for the first time after booting on, please be patient!

6

The scanning starts.

①



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

Split-screen mode off/on.

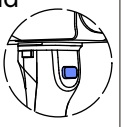
Top view with 45° inclined.

Top view

Front camera view

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

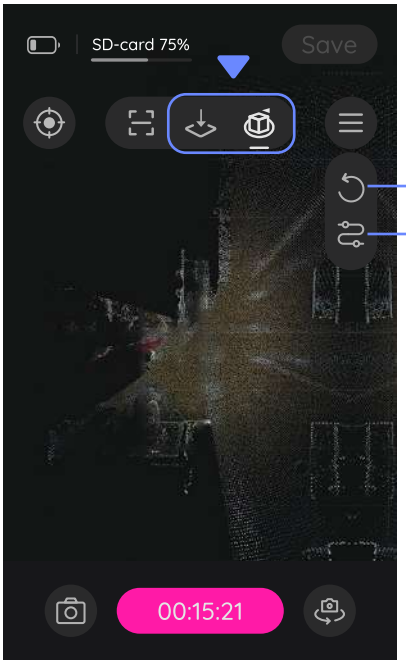
(You can also take a photo by pressing and holding the button in front of the handle)



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

②

* 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.

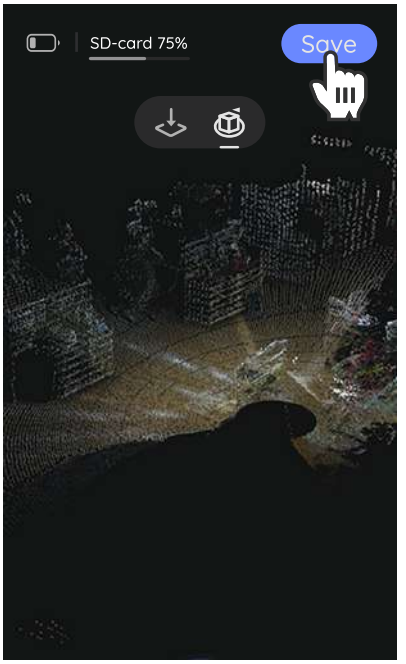
7

Tap the timer to end scanning.



8

Confirm the scan result.



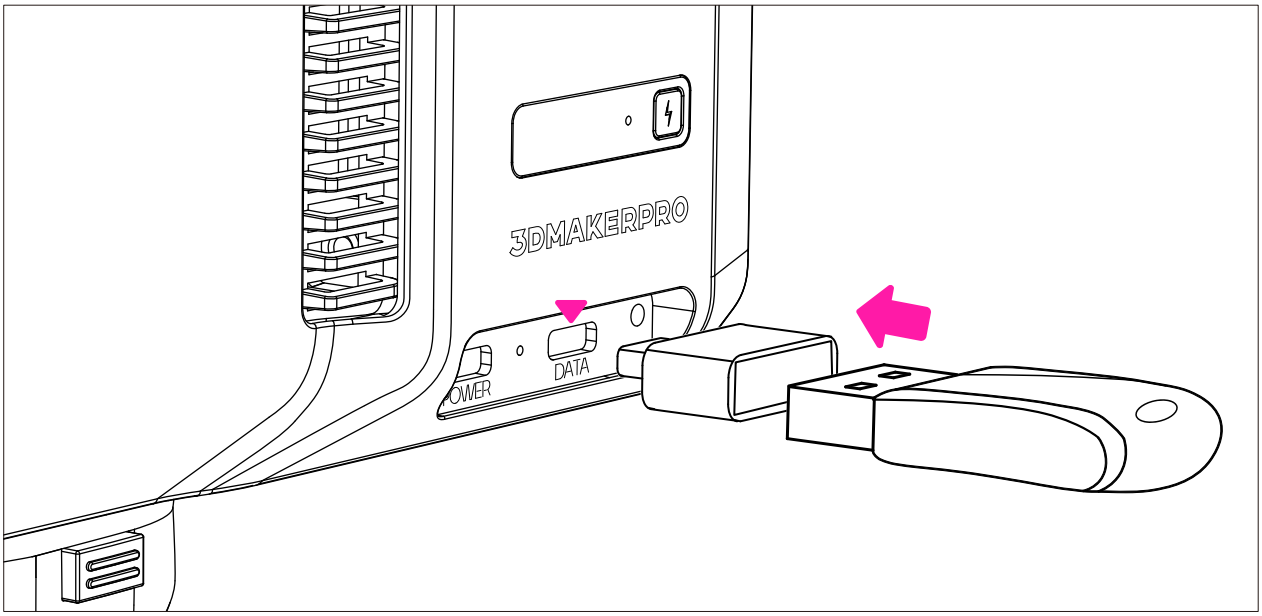
Data Export

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

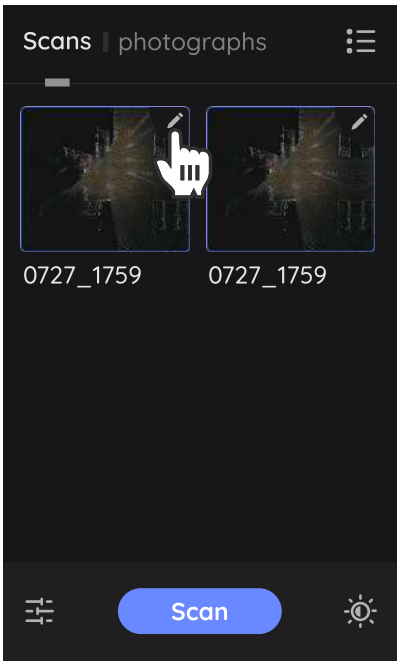
Connect the USB drive with the adapter, and insert them into the device via data port.



Single Data Export

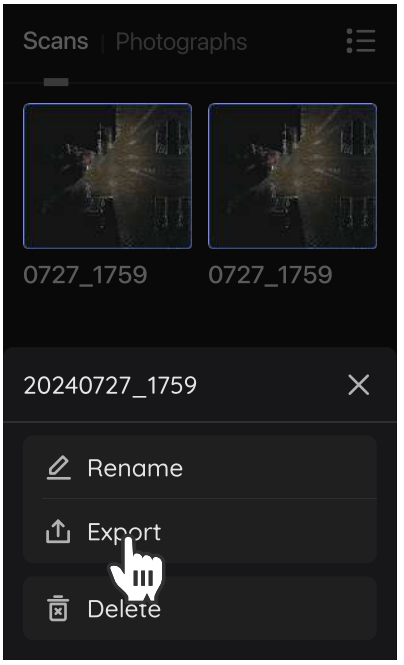
1

Select the data to be exported.



2

Tap "Export".



Batch Export

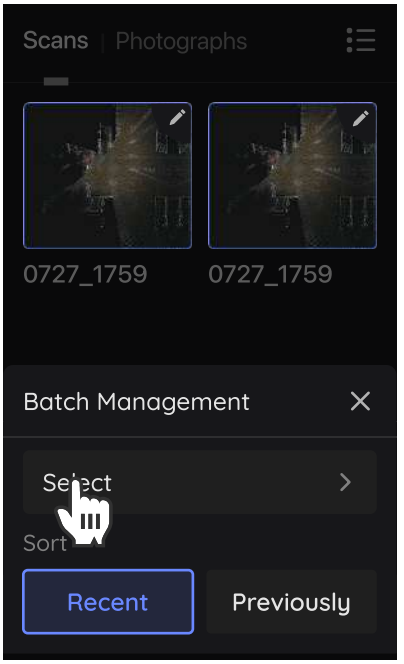
1

Tap the icon to manage the data list.



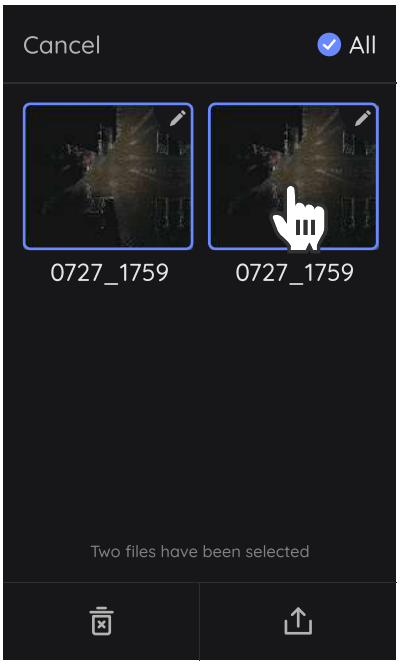
2

Set the sorting method and enter the selection page.



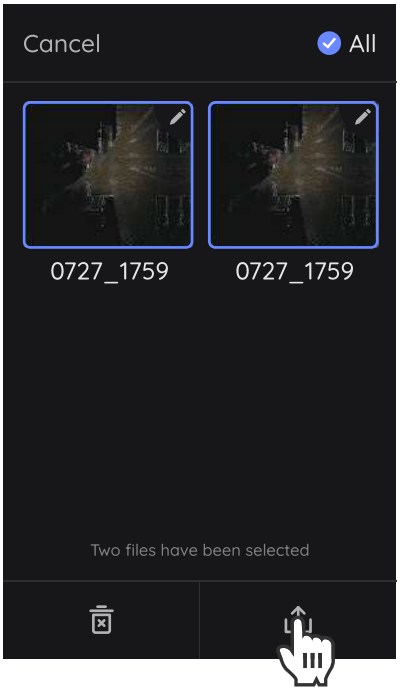
3

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

Export using a card reader

Preparation Before Export

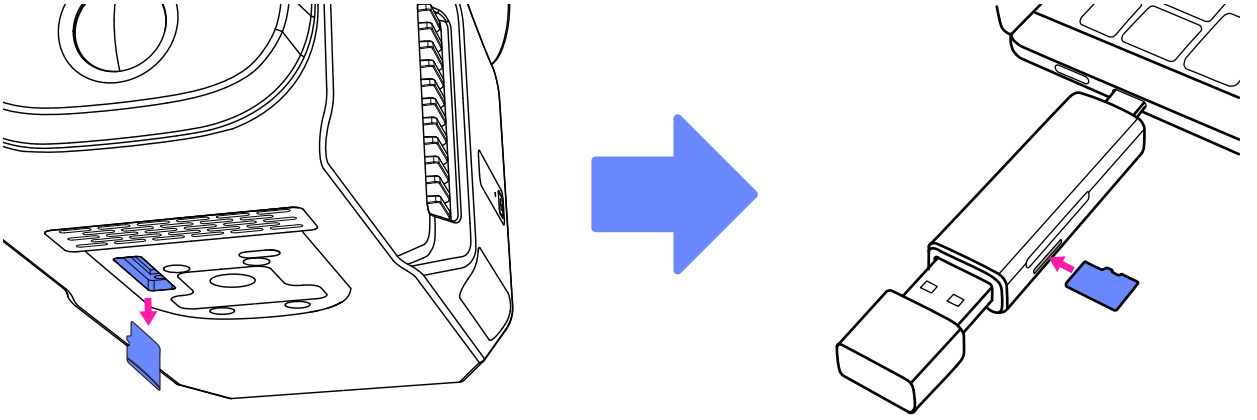
1. Please prepare your own card reader (USB 3.0 or USB 3.2 is recommended, with a read/write speed of 100MB/s).

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.

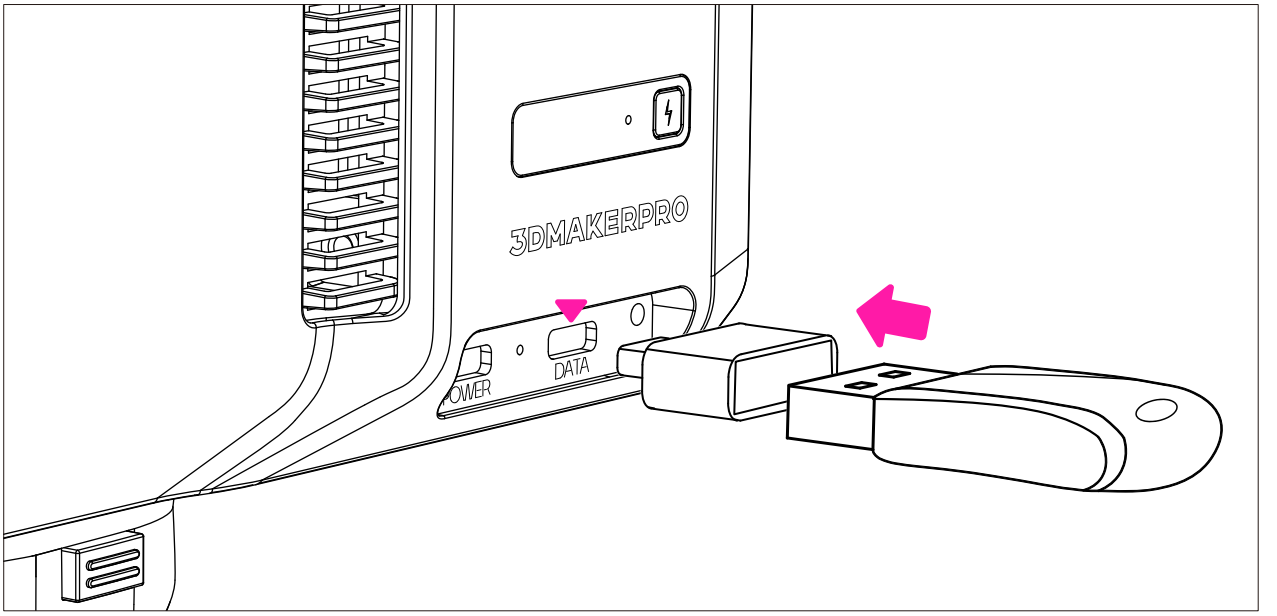


2. After the export is complete, insert the memory card into the device and restart the device.

Upgrade to Latest Version

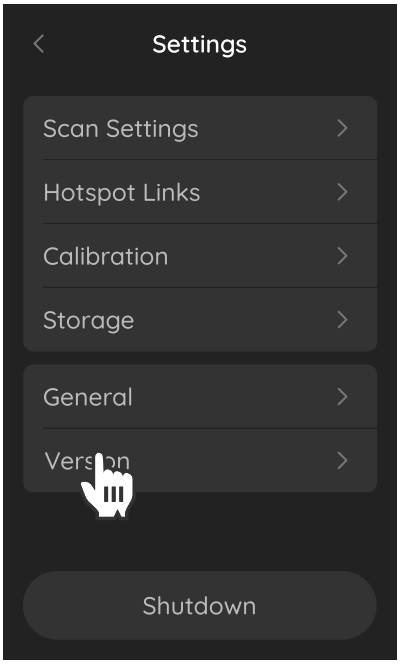
Preparing for Upgrade

1. Download the latest firmware from our JMMeta community(https://forum.jimu-meta.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.



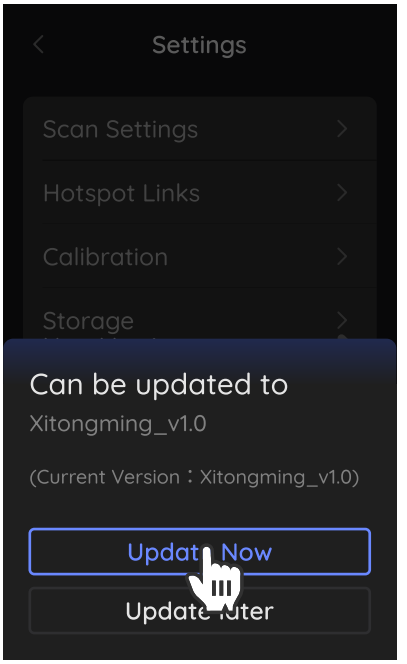
1

Tap "Version" in the settings page.



2

Select "Update Now".

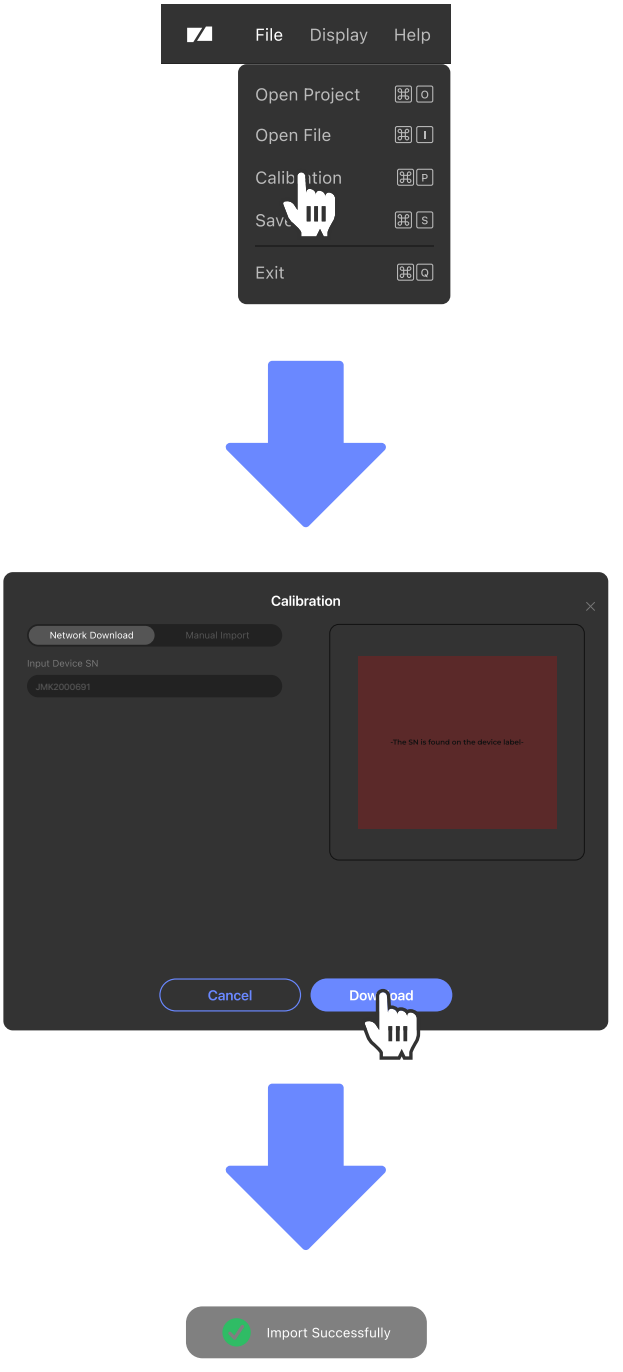


Import the Calibration File

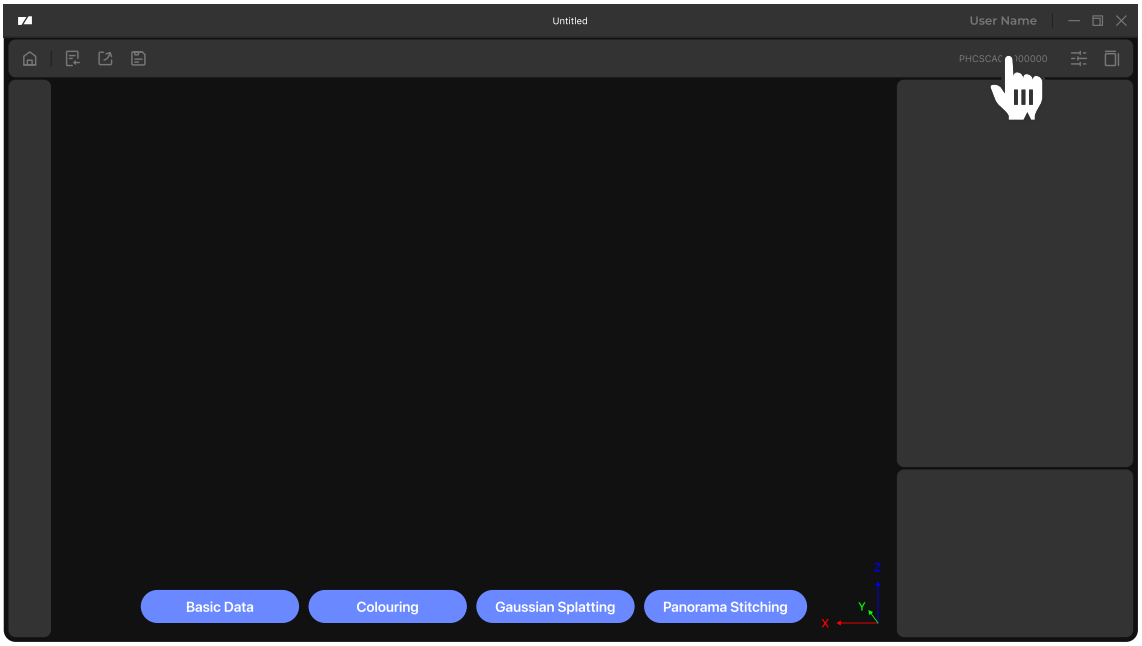
The device has been calibrated before leaving the factory. If your device needs to be re-calibrated, please follow the steps below to re-import the calibration file.

Preparation before importing the file

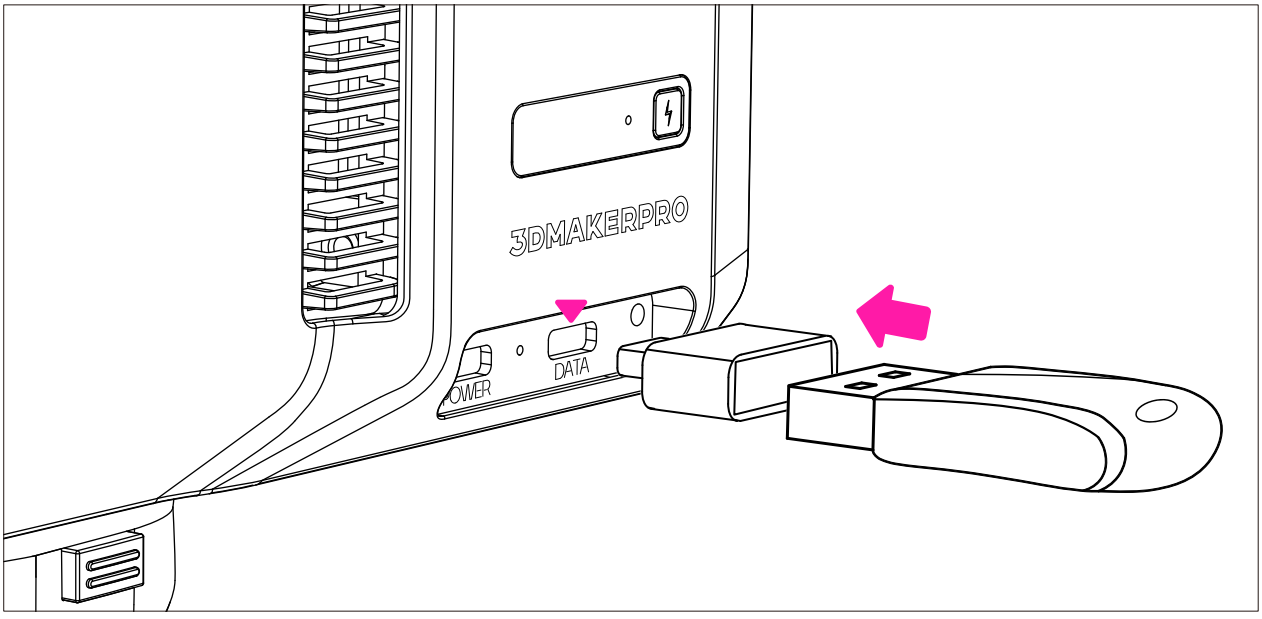
1. Enter the device SN number in the PC software and download the calibration file.



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 'calibration' folder on the USB drive.
Note: The Calibration folder needs to be created manually if there's no such folder in the USB.

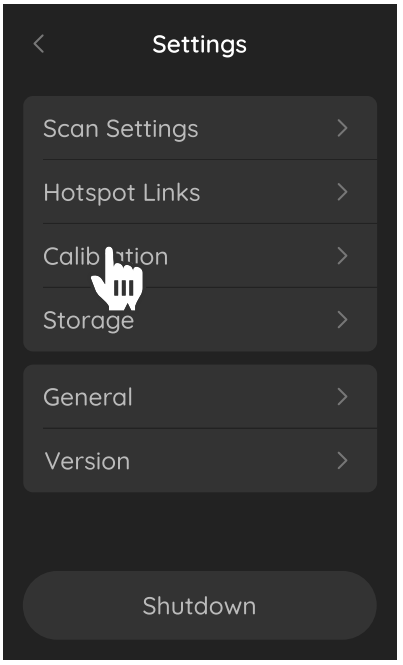


3. Connect the USB flash drive to the adapter and insert them into the the device via data port.

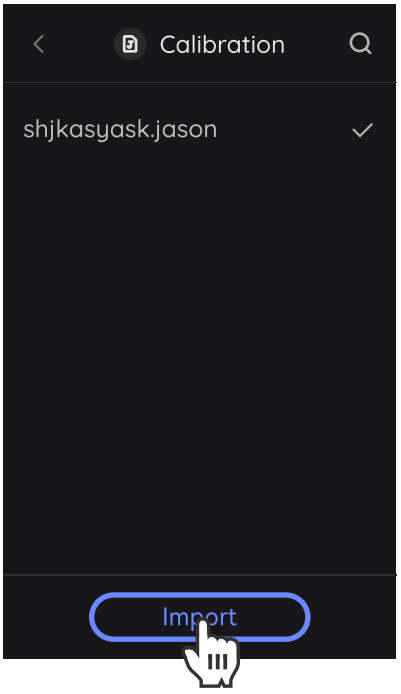


Import

1 Tap "Calibration" in the settings page.

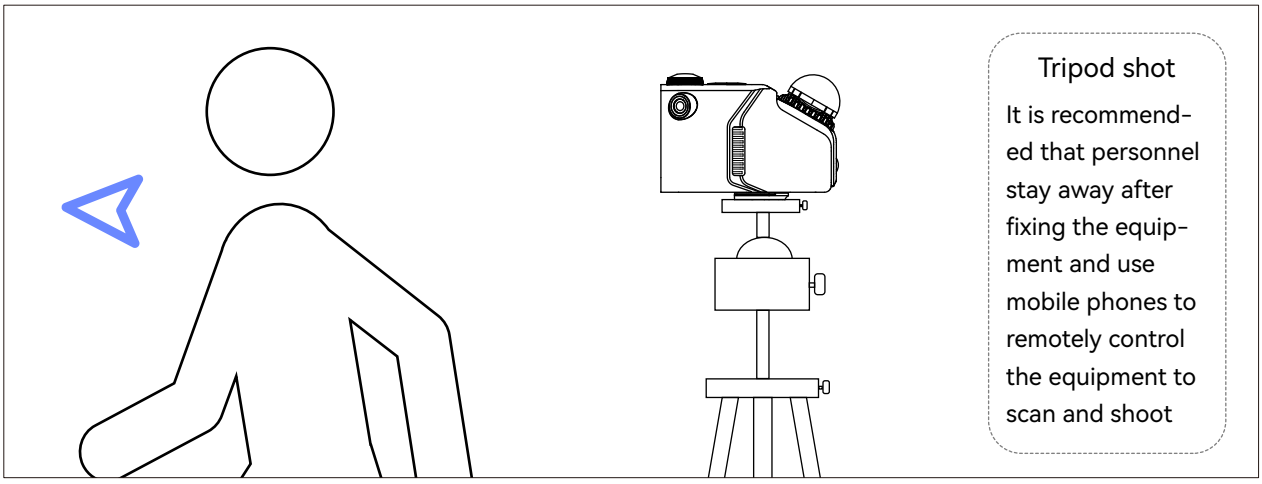


2 Import the calibration file.



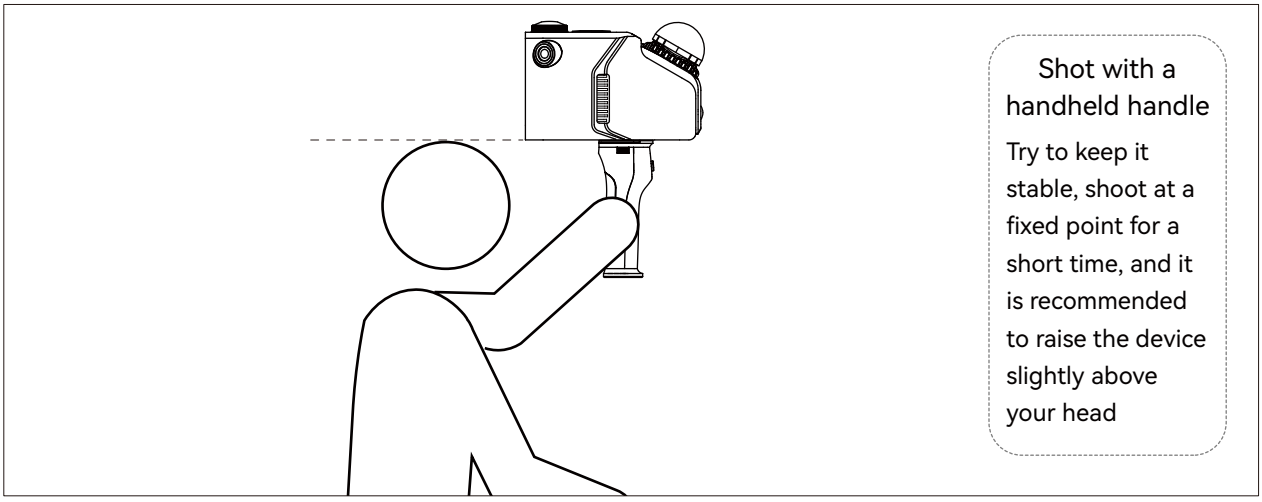
Fixed-point shooting

When shooting at a fixed point to prevent the user from being photographed, if using a tripod to assist shooting, pay attention to the fixed equipment, and recommend that the user stay away from the equipment; If shooting with a handheld device handle, the user will need to hold the device up. To keep your shots stable, it is recommended to use a tripod.



Tripod shot

It is recommended that personnel stay away after fixing the equipment and use mobile phones to remotely control the equipment to scan and shoot



Shot with a handheld handle

Try to keep it stable, shoot at a fixed point for a short time, and it is recommended to raise the device slightly above your head

When shooting at a fixed point, it is recommended to control the photo in the following ways. Every time you click to shoot, you can shoot 1-2 times at the same position and angle, and it is recommended to shoot again at intervals of about 3-5 meters.

Remote shooting on mobile



Shot with a handheld handle

