

# SHARE Capture App

## Introduction

V2.0



2025.04

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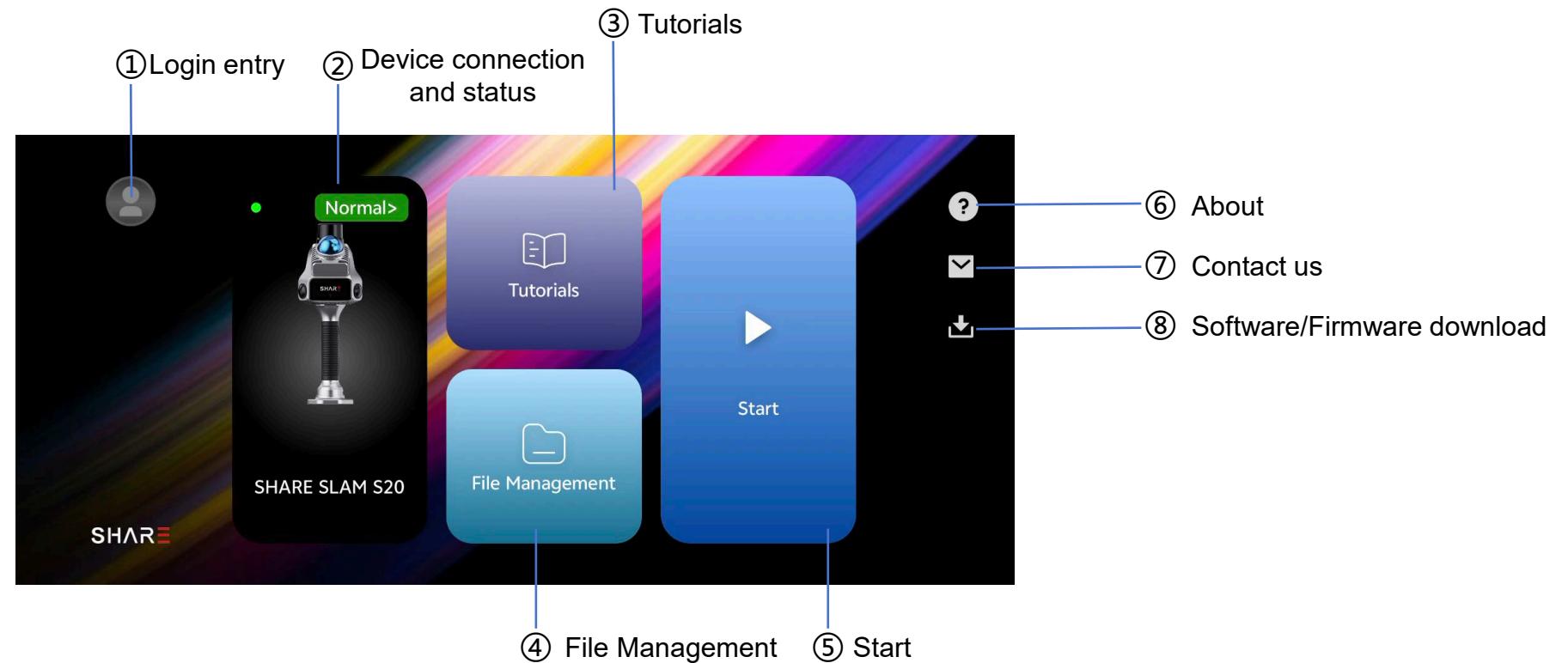
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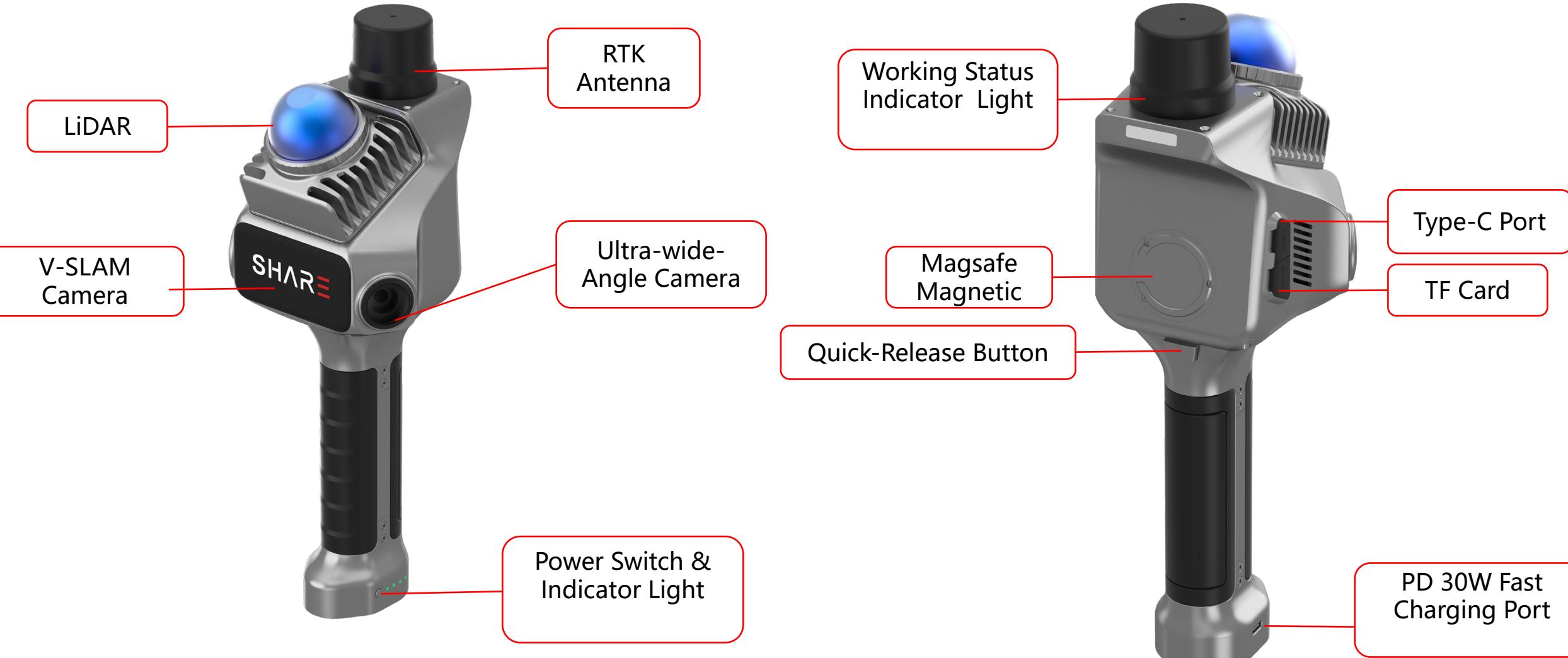
SHARE Capture is a mobile app used with SHARE handheld LiDAR series products. Currently it supports Android system. The app provides functions such as device connection, firmware upgrade, and full-process visual scanning.

Users can interactively view real-time reconstructed true-color three-dimensional space point clouds, fully displaying rich information such as acquisition status, storage, power, RTK status, and network, to avoid missing or wrong acquisitions during the scanning process.



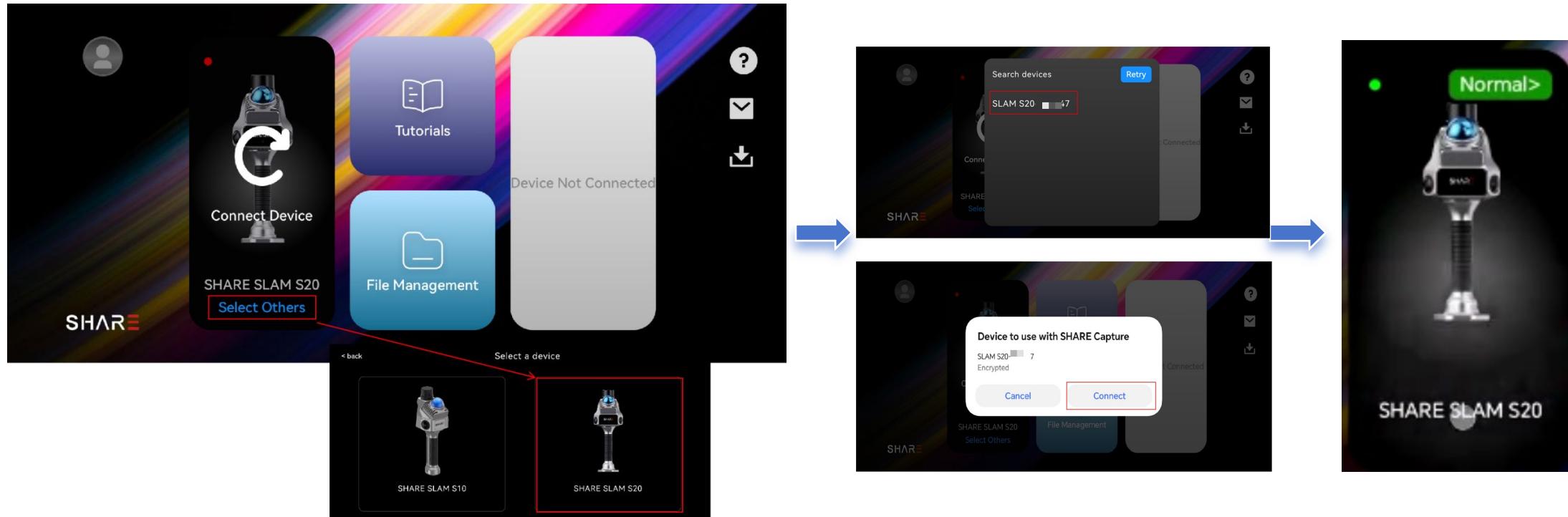
## 02 SHARE SLAM S10 Introduction





### 03 Device Connection——First Time Connecting

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**Step 1:** Power on device. If the indicator light is always blue, the device is successfully started;

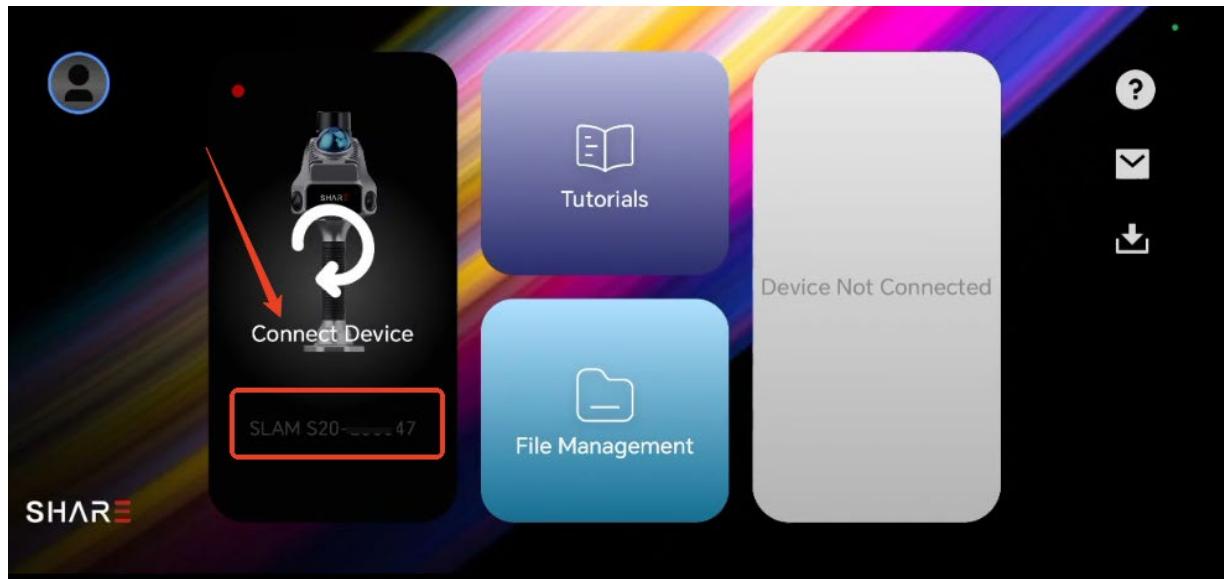
**Step 2:** Turn on "Bluetooth" and "WIFI" on your phone (for "SHARE SLAM S10", just turn on "WIFI");

**Step 3:** On the app homepage, click "Select Other" and select the device model you want to connect, such as "SHARE SLAM S20";

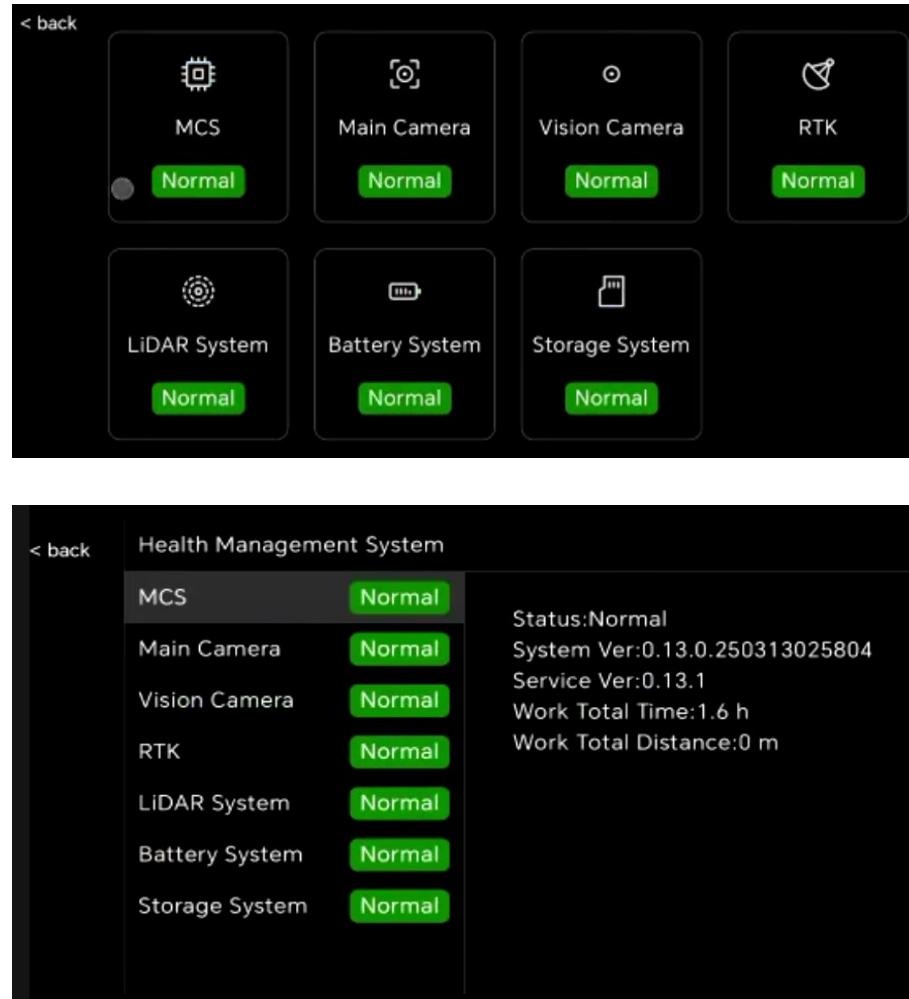
**Step 4:** The app automatically searches for surrounding devices and generates a device list. Select the device you want to connect;

**Step 5:** Wait for a while. After the device is successfully connected, you can start the operation process.

Note: If options such as "Do you allow 'SHARE Capture' to discover and connect to...", "The 'SHARE Capture' app wants to use a temporary WLAN network to connect to your device..." and "Do you allow 'SHARE Capture' to obtain location information" appear during the device connection process, please allow these requests, otherwise the connection may fail.



The app will automatically remember the last connected device. Turn on the device and turn on the "WIFI" on your phone, and click "**Connect Device**" on the mobile App to automatically search and connect to the last connected device. (As shown, you can check the SN under the "Loading" icon in the app.)



After the device is connected, click the "Normal" icon to enter the "HMS" system to view the health status of the MCS (main control system), Main Camera, Visual Camera, RTK, LiDAR System, Battery System, and Storage System.

Click a module to view the detailed information of the module.

**Note:** Only SHARE SLAM S20 devices have HMS modules.

Health Management System	
MCS	Normal
Main Camera	Normal
Vision Camera	Normal
RTK	Normal
LiDAR System	Normal
Battery System	Normal
Storage System	Normal
Status:Normal System Ver:0.15.0.250410065025 Service Ver:0.17.0 Work Total Time:7.1 h Work Total Distance:10231 m	

The MCS mainly displays the current status of system , versions of system firmware and service firmware, as well as total working hours and total distance.

Health Management System	
MCS	Normal
Main Camera	Normal
Vision Camera	Normal
RTK	Normal
LiDAR System	Normal
Battery System	Normal
Storage System	Normal
Status of the left camera:Normal Status of the right camera:Normal Number of shutter uses for the left camera:6065 Number of shutter uses for the right camera:6065	

The main camera section displays the status of both left and right cameras, as well as their shutter counts.

Health Management System		
MCS	<span>Normal</span>	Status:Normal
Main Camera	<span>Normal</span>	
Vision Camera	<span>Normal</span>	
RTK	<span>Normal</span>	
LiDAR System	<span>Normal</span>	
Battery System	<span>Normal</span>	
Storage System	<span>Normal</span>	

Health Management System		
MCS	<span>Normal</span>	Status:Normal
Main Camera	<span>Normal</span>	
Vision Camera	<span>Normal</span>	
RTK	<span>Normal</span>	
LiDAR System	<span>Normal</span>	
Battery System	<span>Normal</span>	
Storage System	<span>Normal</span>	

The vision camera and the RTK section display their status information.

Health Management System		
MCS	<span>Normal</span>	Status:Normal
Main Camera	<span>Normal</span>	LiDAR SN:47MDM720020535
Vision Camera	<span>Normal</span>	LiDAR IP:192.168.1.135
RTK	<span>Normal</span>	Ver:13180236
LiDAR System	<span>Normal</span>	Core Temperature:0.0 °C
Battery System	<span>Normal</span>	Power-on Count:83
Storage System	<span>Normal</span>	Time Synchronization Type:0
		Time Elapsed Since Last Synchronization:0
		Total Usage Time:7.1 h

The radar system displays most of the detailed information about the radar, as shown in the figure.

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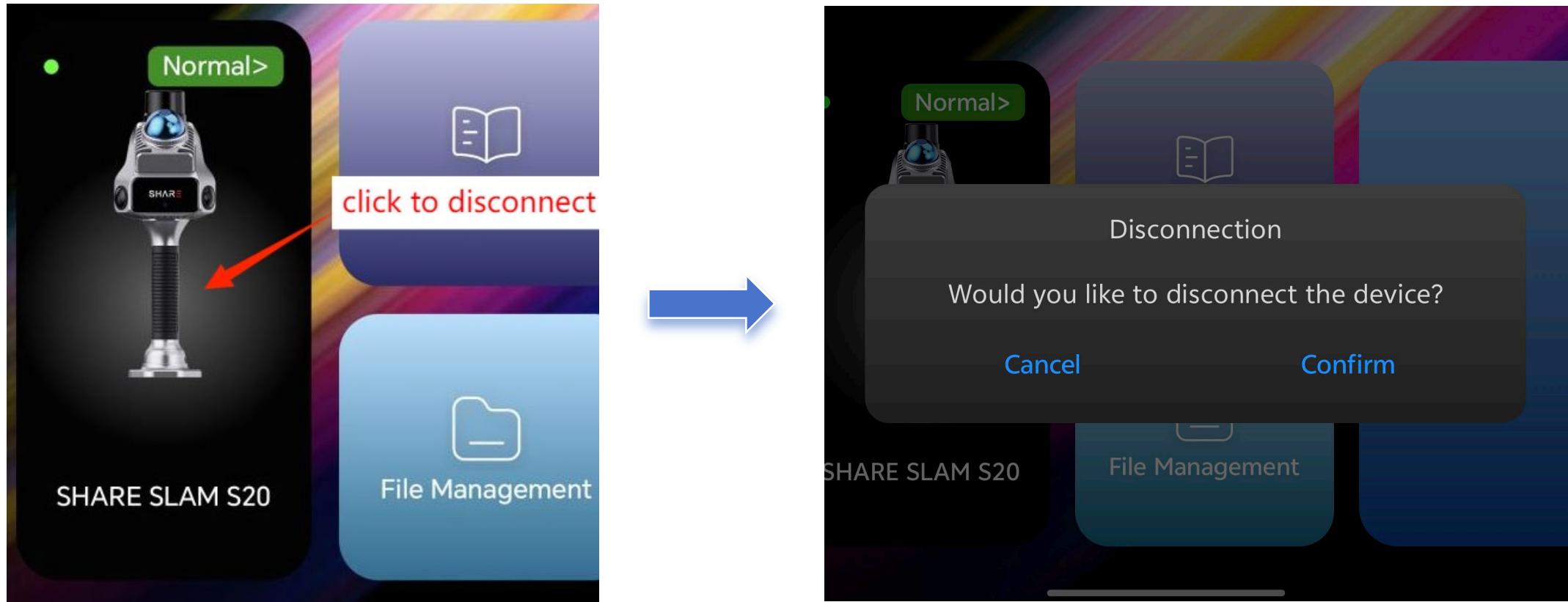
Health Management System		
MCS	<span>Normal</span>	Status:Normal
Main Camera	<span>Normal</span>	Battery:98%
Vision Camera	<span>Normal</span>	Temperature:25.0 °C
RTK	<span>Normal</span>	Voltage:16.4 V
LiDAR System	<span>Normal</span>	Current:0.5 A
Battery System	<span>Normal</span>	Cycles:4
Storage System	<span>Normal</span>	

The battery section displays the status, power level, temperature, voltage, and current information of the battery.

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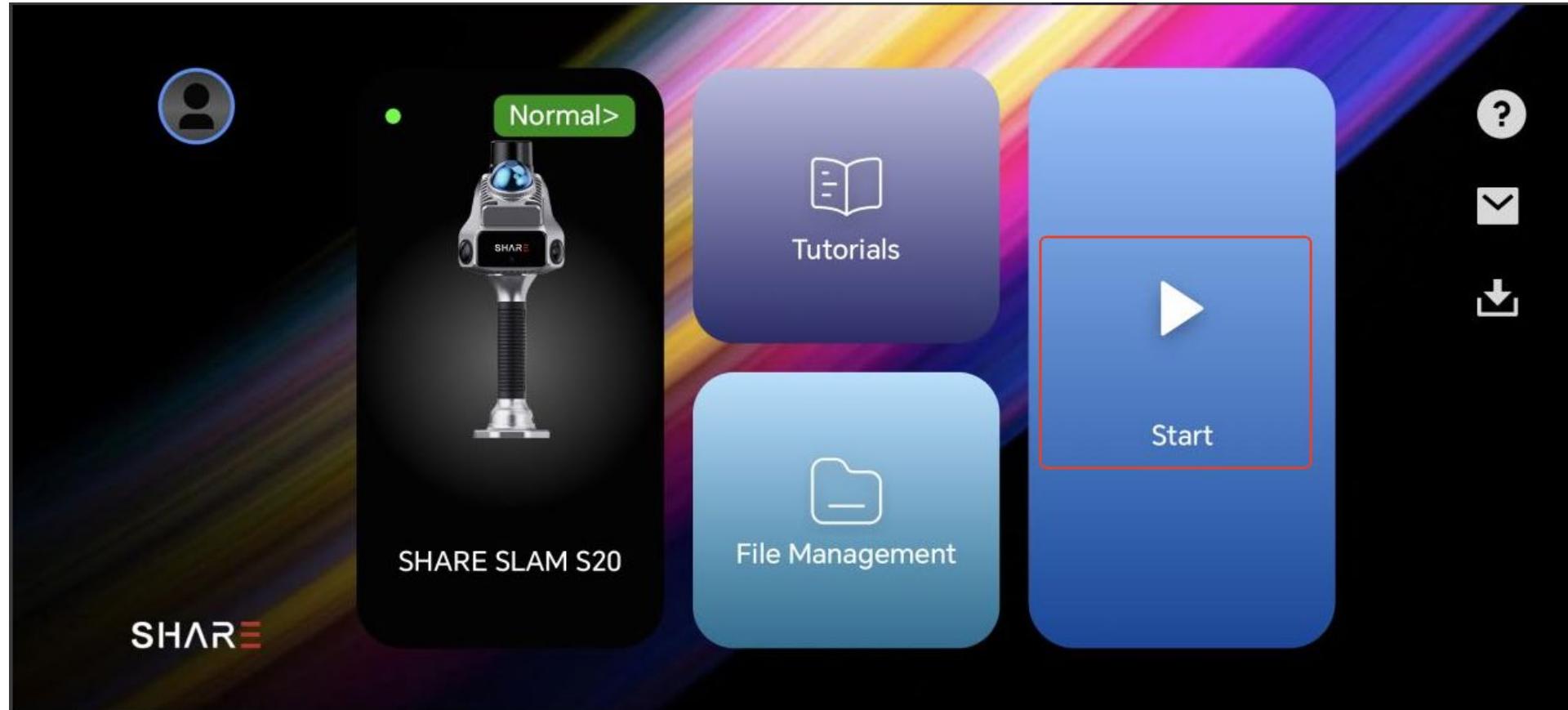
Health Management System		
MCS	<span>Normal</span>	Status:Normal
Main Camera	<span>Normal</span>	Used Space:181 GB
Vision Camera	<span>Normal</span>	Available Space:56 GB
RTK	<span>Normal</span>	Total Space:238 GB
LiDAR System	<span>Normal</span>	
Battery System	<span>Normal</span>	
Storage System	<span>Normal</span>	

The storage section displays the usage of memory card capacity.



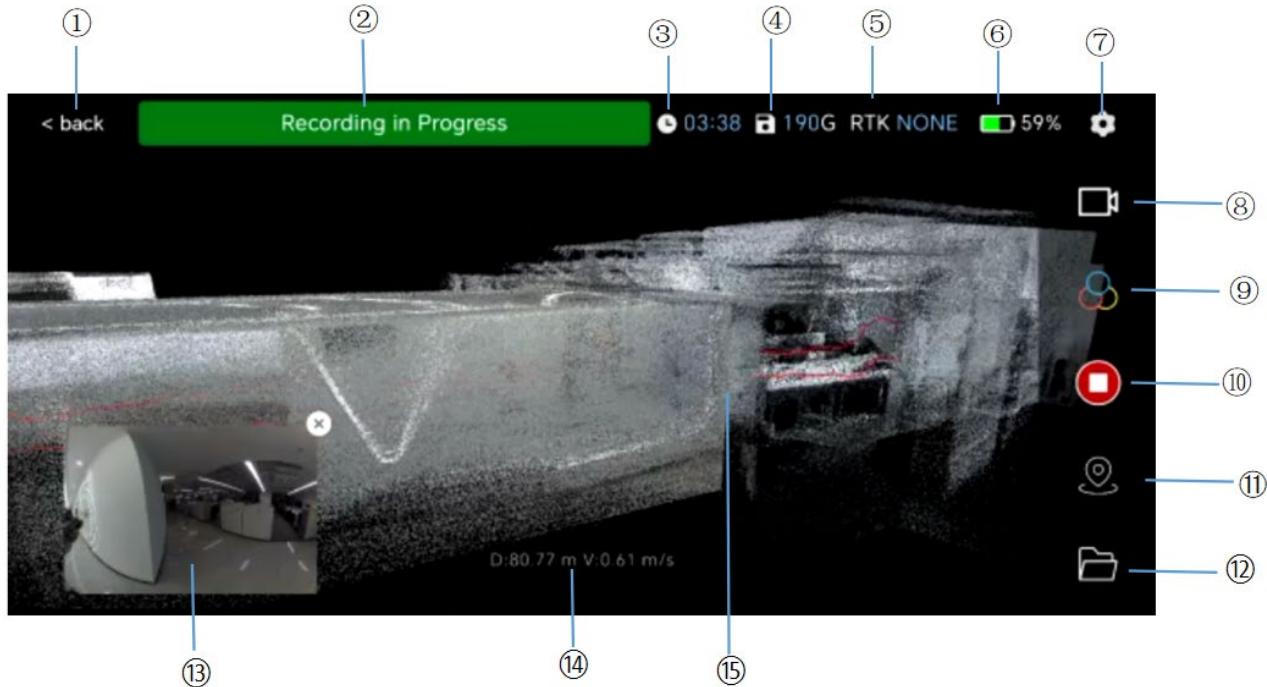
Click "Device Icon" and the "Disconnect" option will pop up. Click "Confirm" to disconnect the device.

### Enter Main Interface



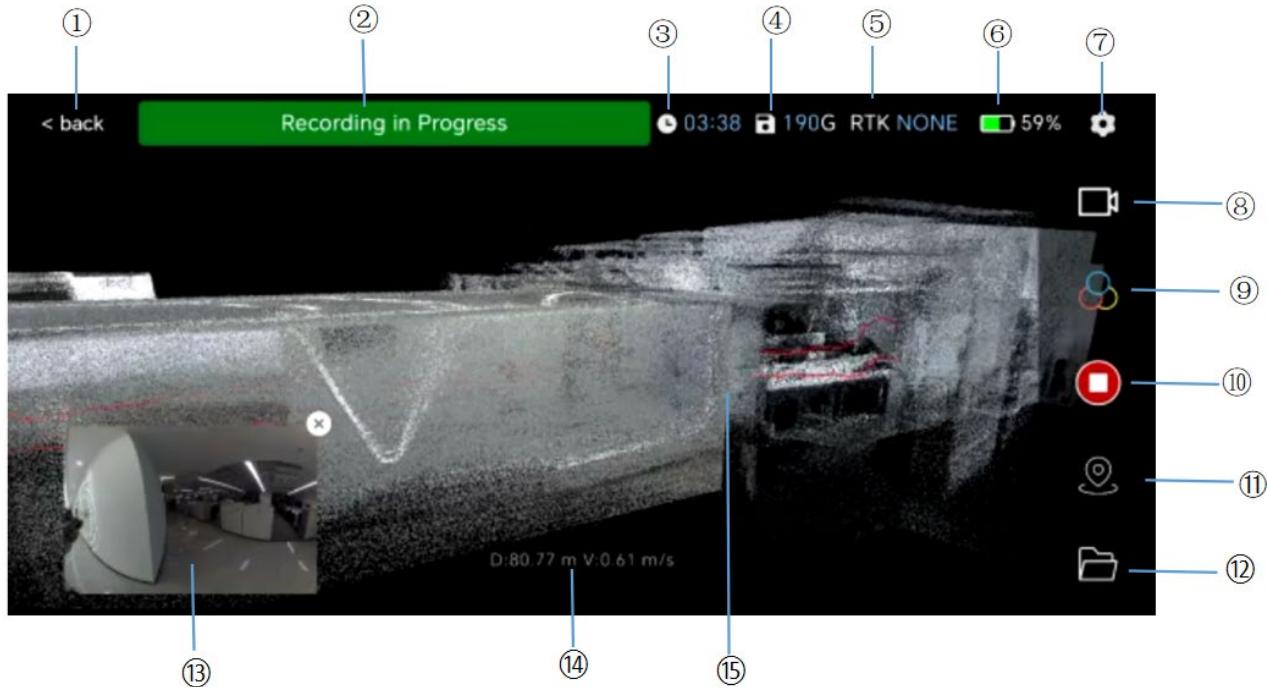
After the device is connected, click "**Start**" to enter the scanning interface.

# APP Interface Introduction

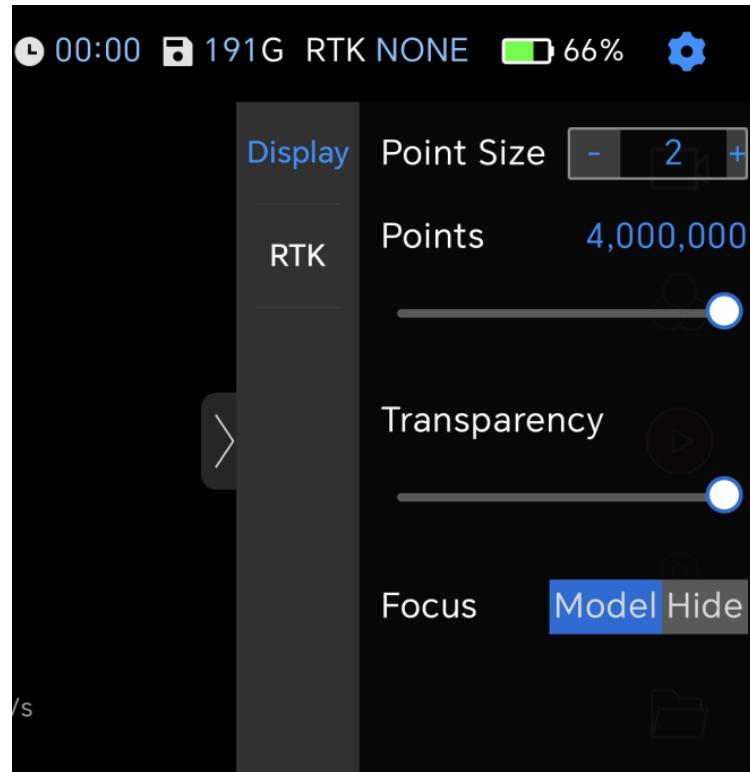


- ①Back : Click to return to the main interface of the software;
- ②Status Description: prompts the current status of the project;
- ③Working Time: Prompts the working time of the current project;
- ④Remaining Storage Space: SD card remaining space;
- ⑤RTK Status: Prompts the status of the RTK;Click to view details;
- ⑥Power: Device power description;
- ⑦Setting: Project parameter setting button, click to set relevant parameters;
- ⑧Roaming mode: Switch roaming modes, including free roaming and third-person;
- ⑨Point Cloud Mode: Switch the display mode of point cloud in the three-dimensional scene.Supports three modes: color point cloud, intensity coloring and elevation gradient;

# APP Interface Introduction



- ⑩ON/OFF: Control the start and end of project;
- ⑪Control Point Management: Operations such as adding, deleting and covering control points of the project can be performed;
- ⑫File Management: Jump to the file management page, where you can manage, delete, view and other operations on local (save in mobile) or device project data;
- ⑬Image: View image information taken by the device;
- ⑭Cumulative distance/travel speed: Displays the accumulated length of data collected in the current project and the current travel speed;
- ⑮Three-dimensional Scene: Display point cloud and trajectory lines, and can be manually operated to view details.

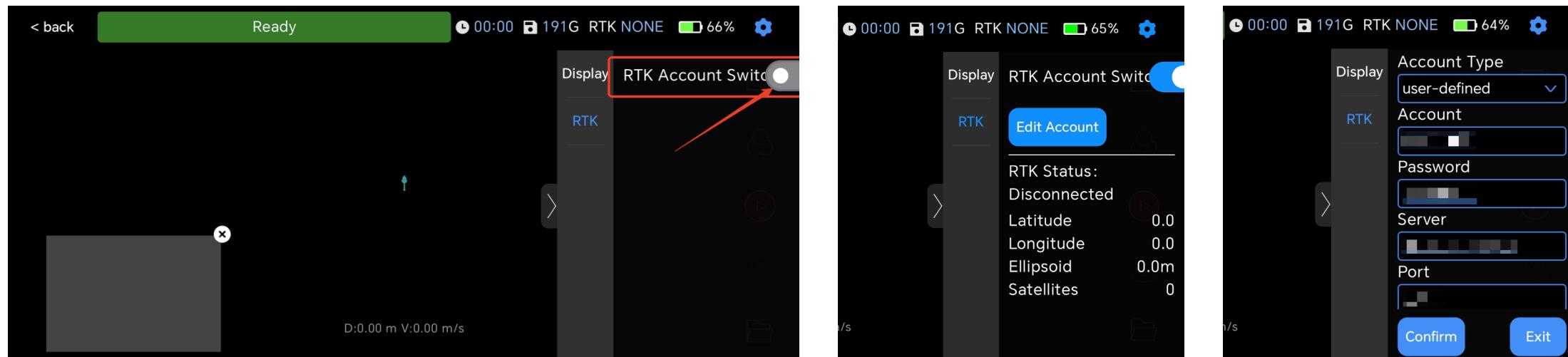


	Parameter	Describe
Display	Point Size	Set the size of the point cloud rendered in the app, ranging from 1-10
	Points	The maximum number of point clouds that can be rendered in the app is 4 million
	Transparency	set transparency
	Focus	Control the visibility of the location model of the app device
RTK	RTK Switch	Control whether RTK is turned on

Click the "Settings" button in the upper right corner of the app interface to set Display and RTK

## 04 Data Collection Process —— ①Parameter Setting

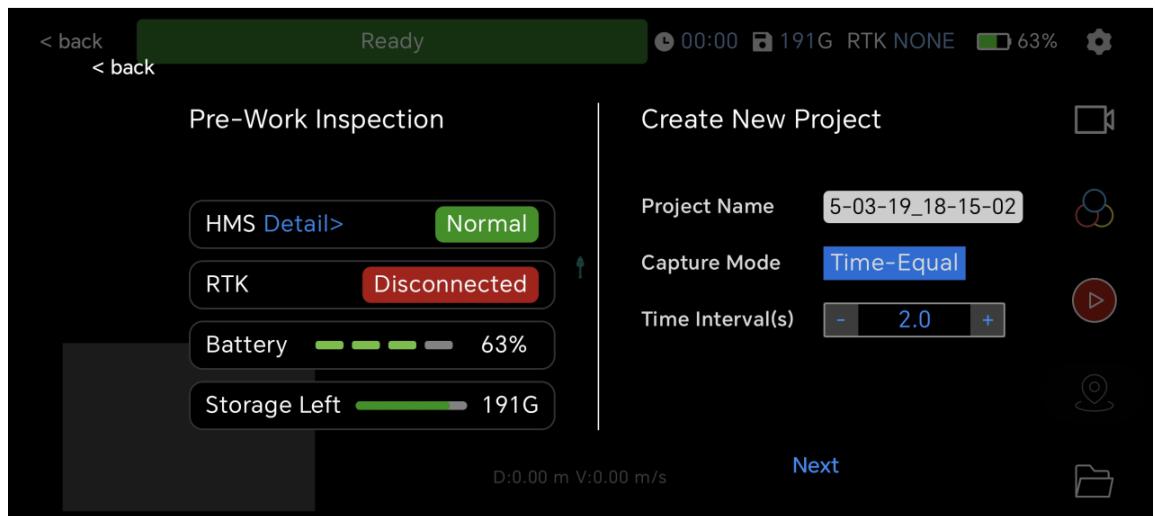
You can open RTK and log in to the network CORS account, which supports network CORS of NTRIP protocols.



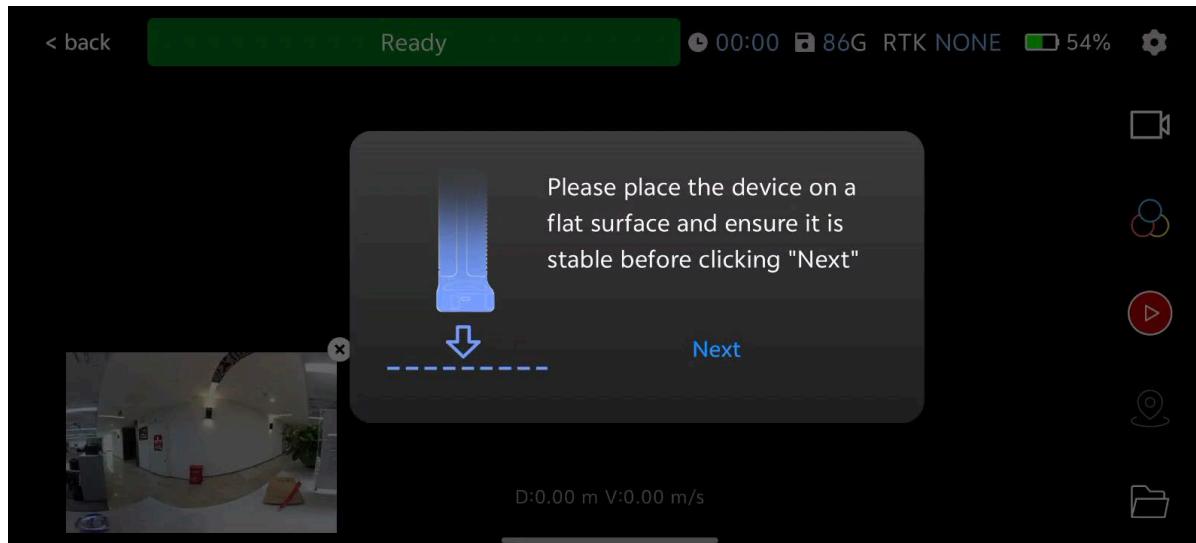
When the device status shows "Ready", you can click the "Start" button on the right to start the project.



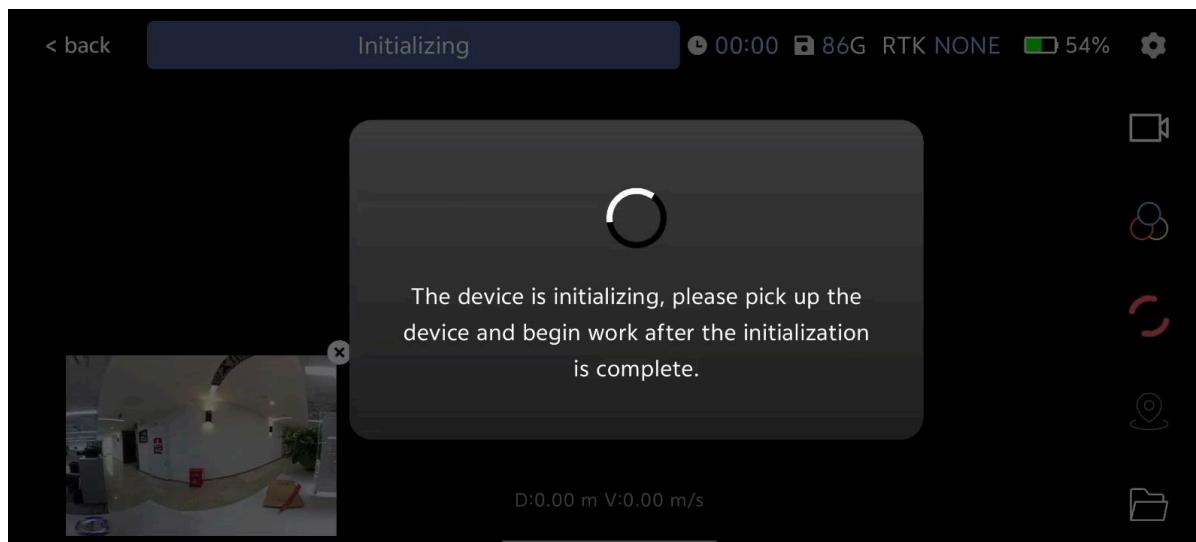
The "Pre-Work Inspection" and "Create New Project" windows will pop up. Enter the project name and click "Next". Follow the instructions to complete the operate process.



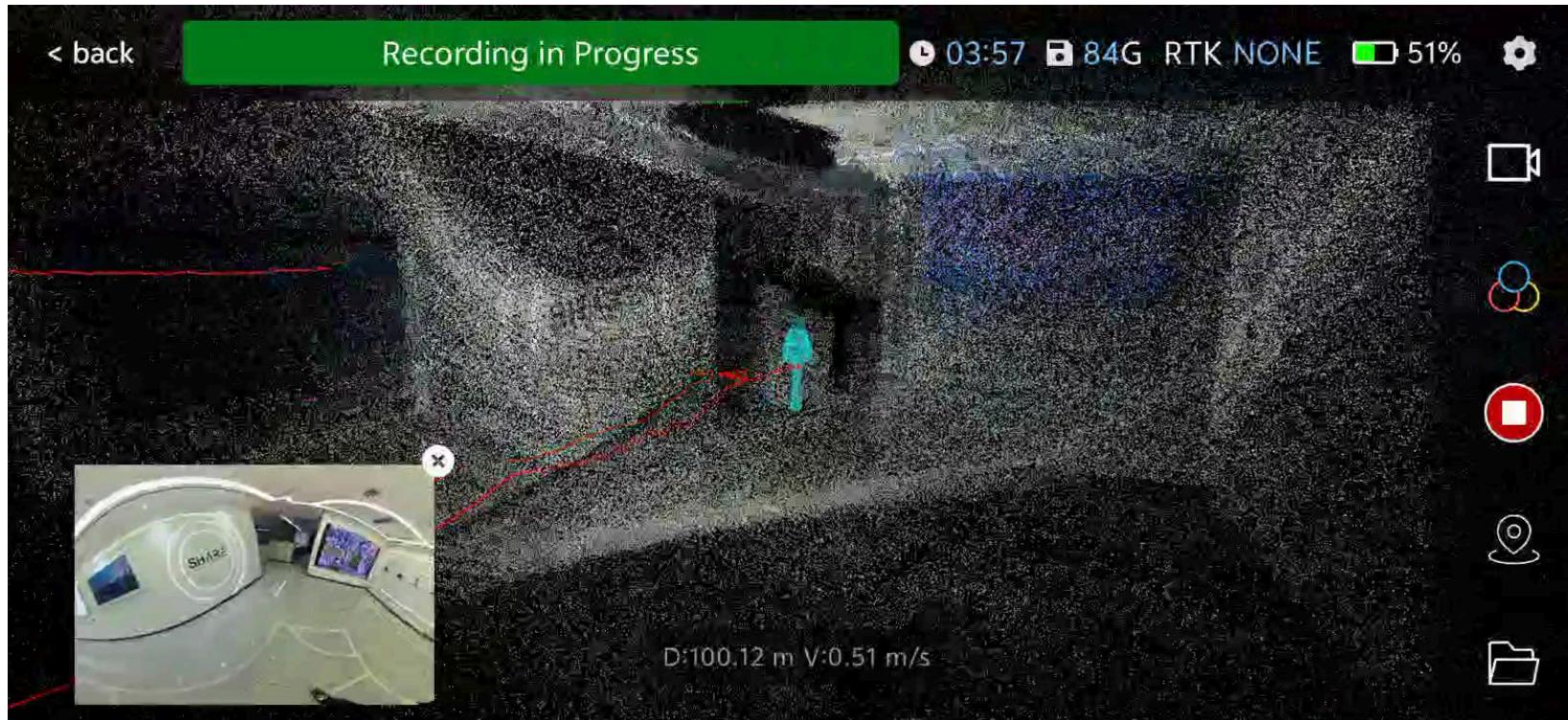
## 04 Data Collection Process —— ③Initialization



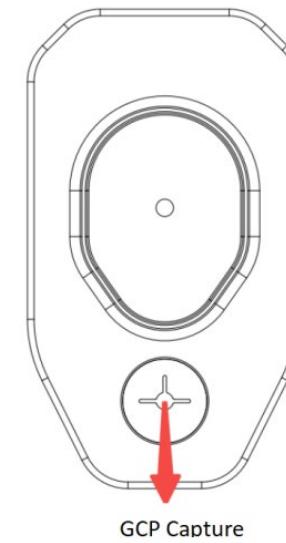
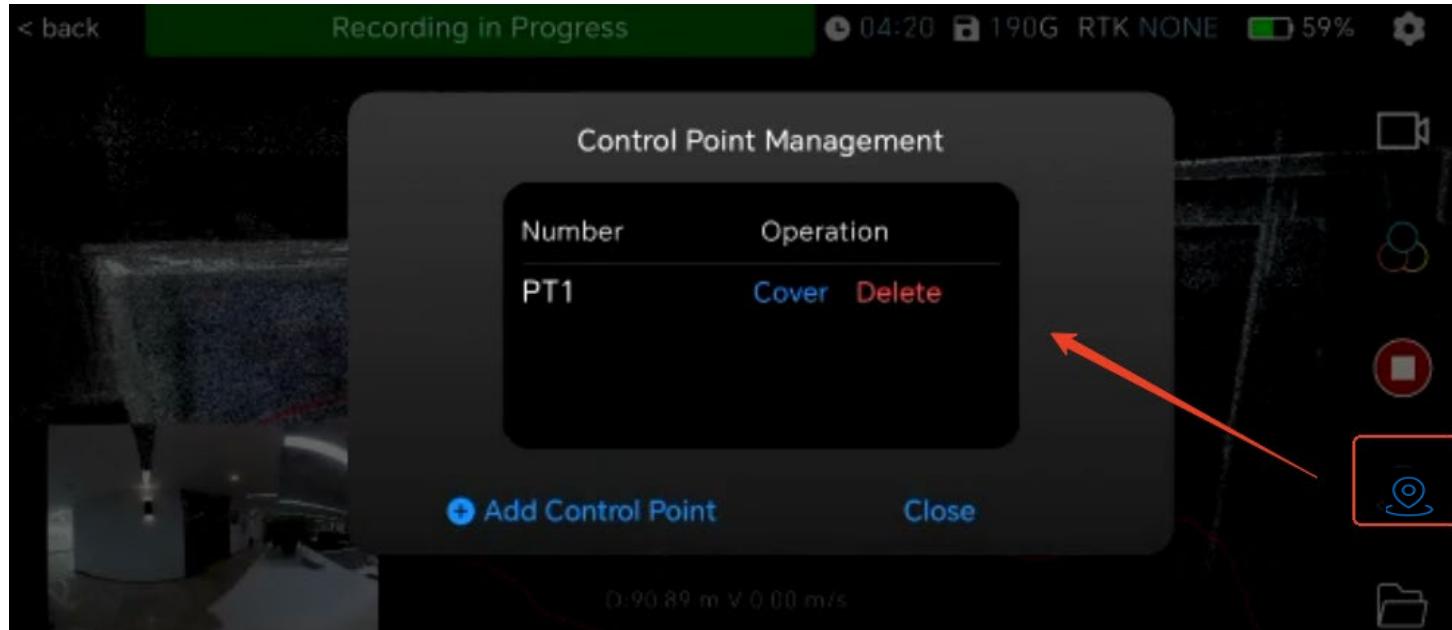
Please place the device on a flat surface and ensure it is stable before clicking "Next".



After the device initialization is complete, you can pick it up and start working.

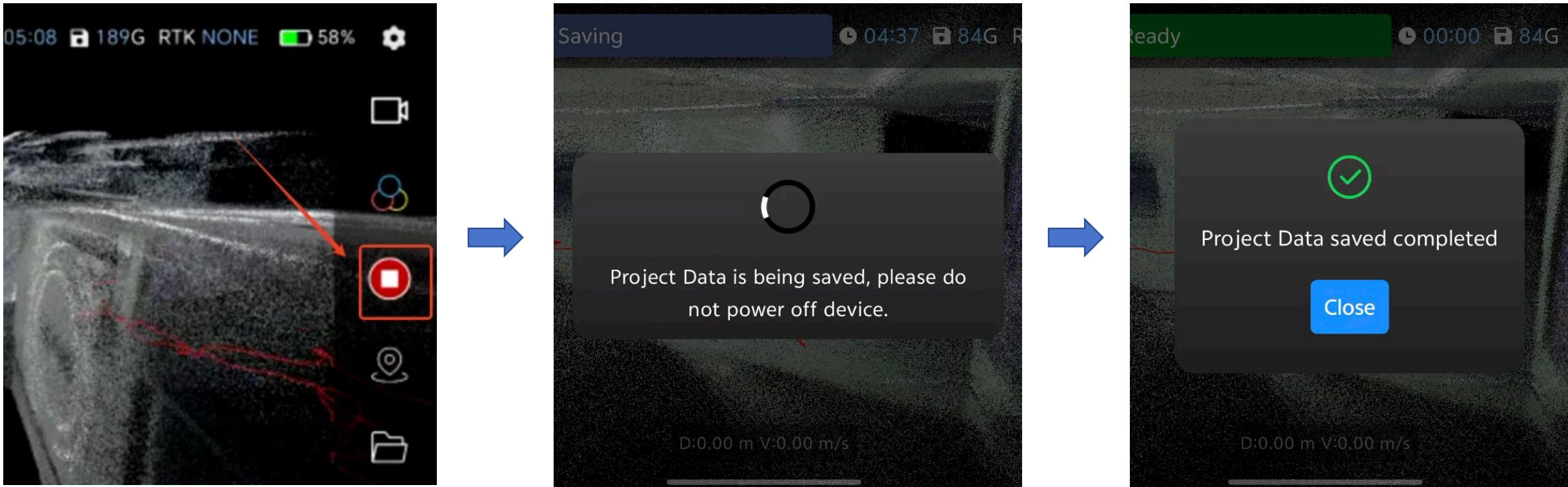


The app displays the reconstructed three-dimensional space point cloud information and collection trajectory in real time, and you can manually view the spatial three-dimensional true color point cloud.



When collecting control points, you need to align the center of the acrylic plate of the positioning plate with the control point position, and then click “**Add Control Point**”. Keep the device stable for about 10 seconds to complete the collection.

## 04 Data Collection Process — ⑥Data Saving



When data collection is completed, click the **red button** on the right to end the collection task of the current project. After clicking the button, a prompt saying 'Project Data saved completed' will appear after about 15 seconds. **Do not turn off the power before saving successfully!**

If you want to continue scanning, please wait for **1 minute** after the 'Saved successfully' prompt appears before performing the next scan.

## Scanning Tips

1. After starting scanning, keep the device steady and move at a slow speed (about 1m/s).
2. If you find that the color point cloud on your phone is updating slowly, you can stand still and wait until the color point cloud on your phone becomes denser before continuing to move (it takes some time for the device to color the point cloud).
3. In order to better record the pipelines on the top of the building or the ground of the site, you can change the angle of the device upward or downward to scan the target area once more.
4. If you need to record a complete object, you can scan a circle around the object and scan the complete outer contour of the object in a closed loop.
5. If you need to record parts with information (signboards, posters, large screens, etc.), it is recommended to scan them while standing still for 1 to 2 seconds to improve the efficiency of coloring the object.

## Guaranteed Better Coloring Effect

In order to obtain high-definition effects of specific parts of objects, it is recommended to wait 1 to 2 seconds at the location where high-definition data needs to be obtained when scanning to make the picture clearer.

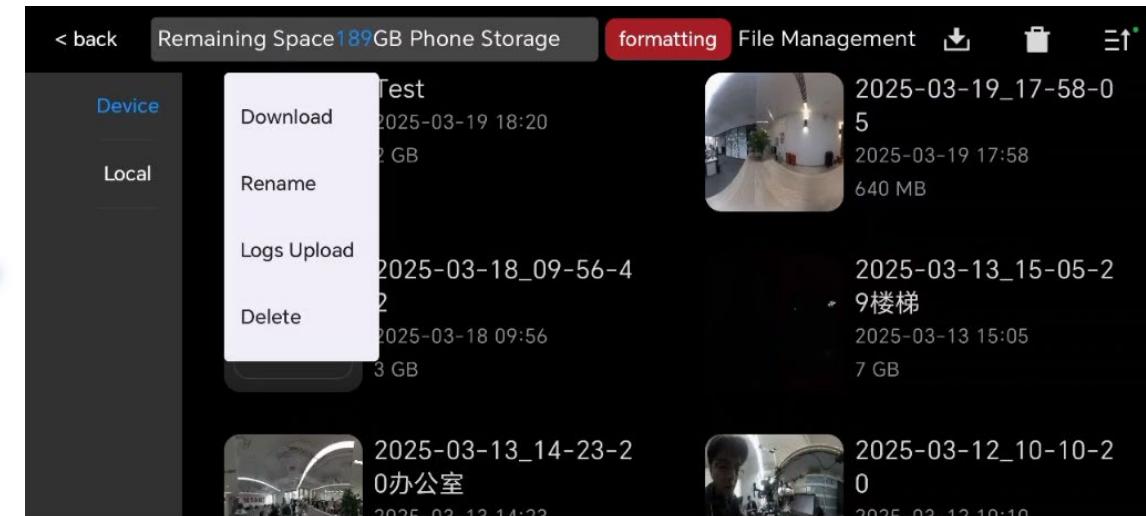
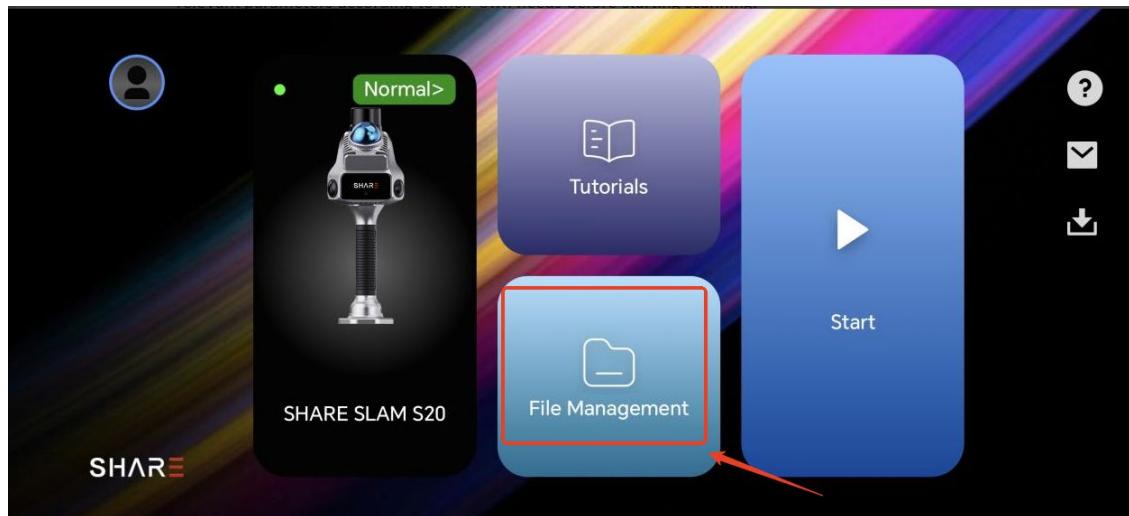
## Prevent Data Degradatio

In a small space or a single structure scene, there is a small probability of scanning degradation, which is manifested in the following: the "device point" on the screen quickly moves away from the actual position at an abnormal speed.

To avoid this phenomenon, when entering the above scene, please point the LiDAR toward a place with rich structures and a long detection range, and try to avoid the rotational movement of the LiDAR in such scenes; or start new project, and manually combine the two project data during post-processing.

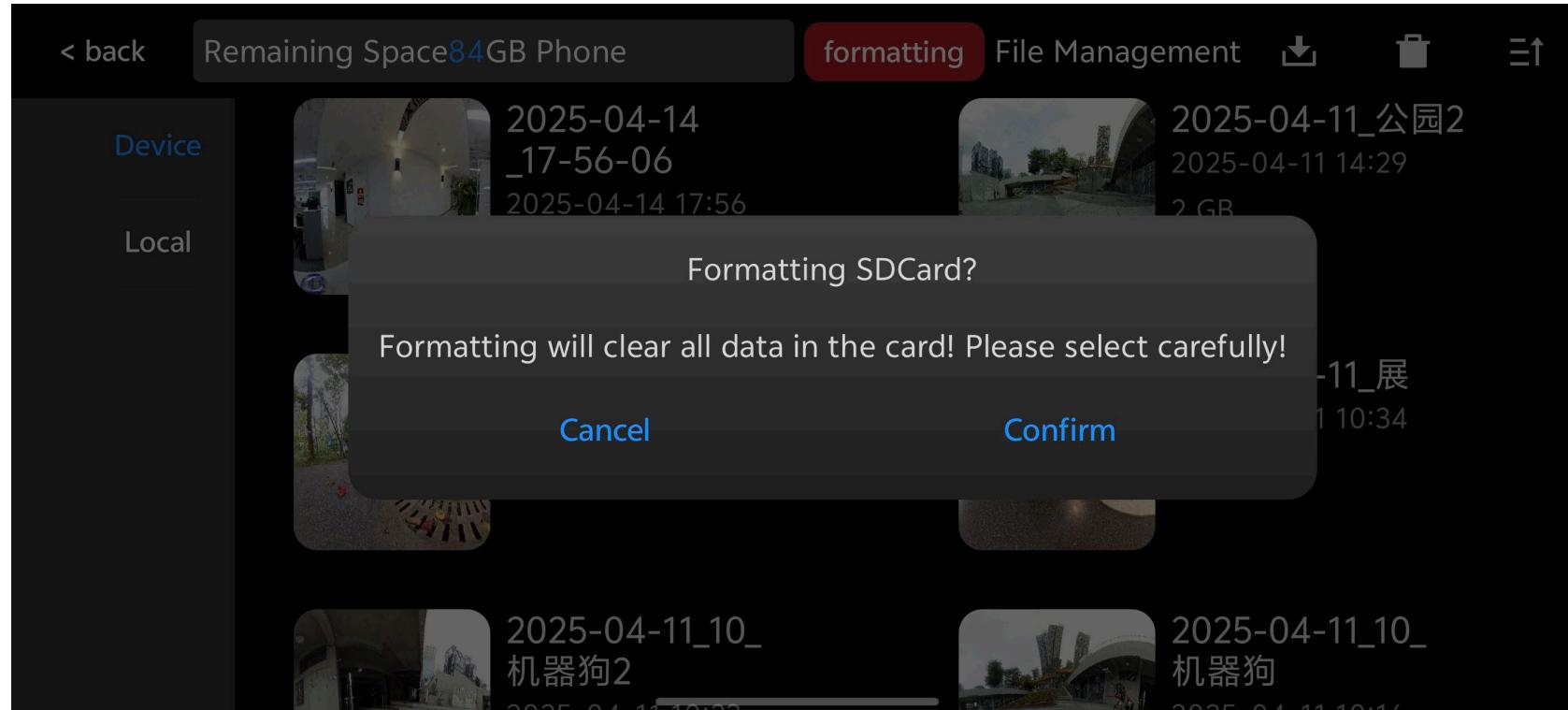
## Avoid Human Figures

When scanning, please keep the device as far away from your body as possible to avoid scanning yourself and other people, which will affect the data quality.



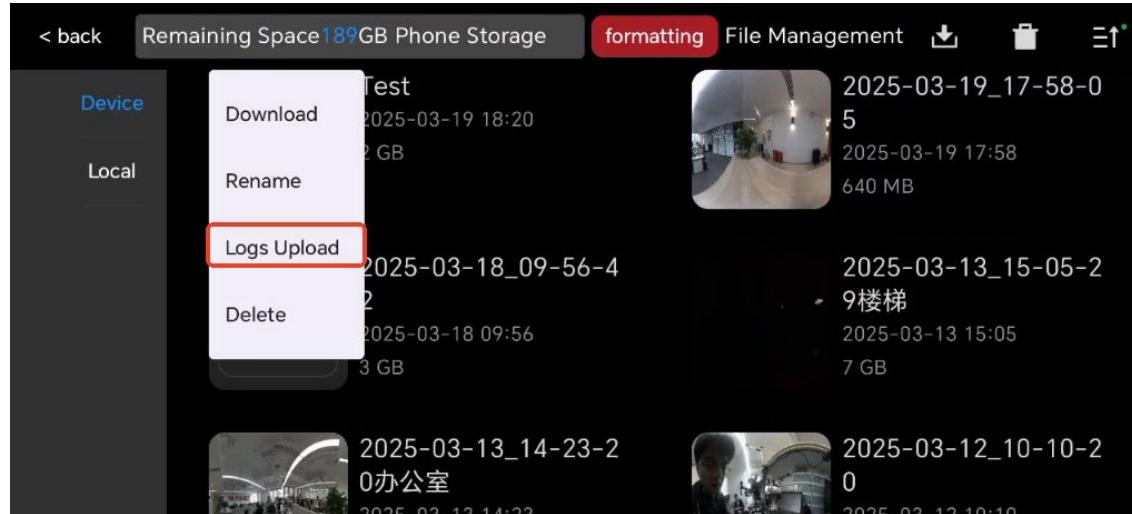
Click "File Management" on the main interface of the software. Supports management of device files and local files.

When the device is connected to the App, you can **sort**, **rename**, **download**, **upload logs** and **delete** the device project files, and also support formatting the device TF card.

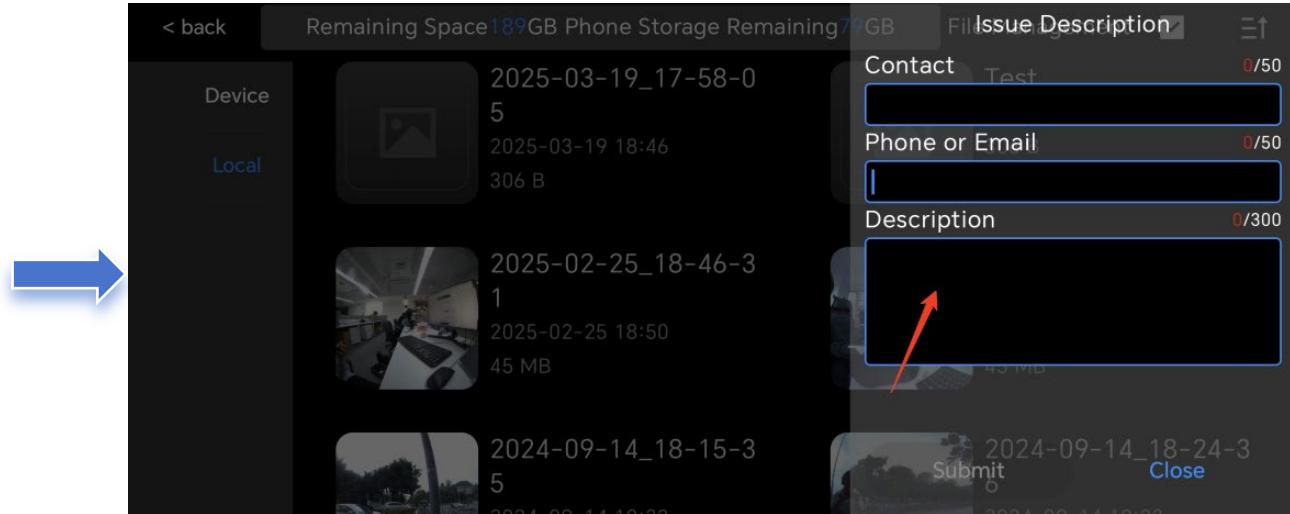


Click the "Format" icon to format the TF card. After formatting, all data in the memory card will be cleared.

**Note:** Before formatting, make sure that all project files have been completely copied. Deleting them cannot be restored.

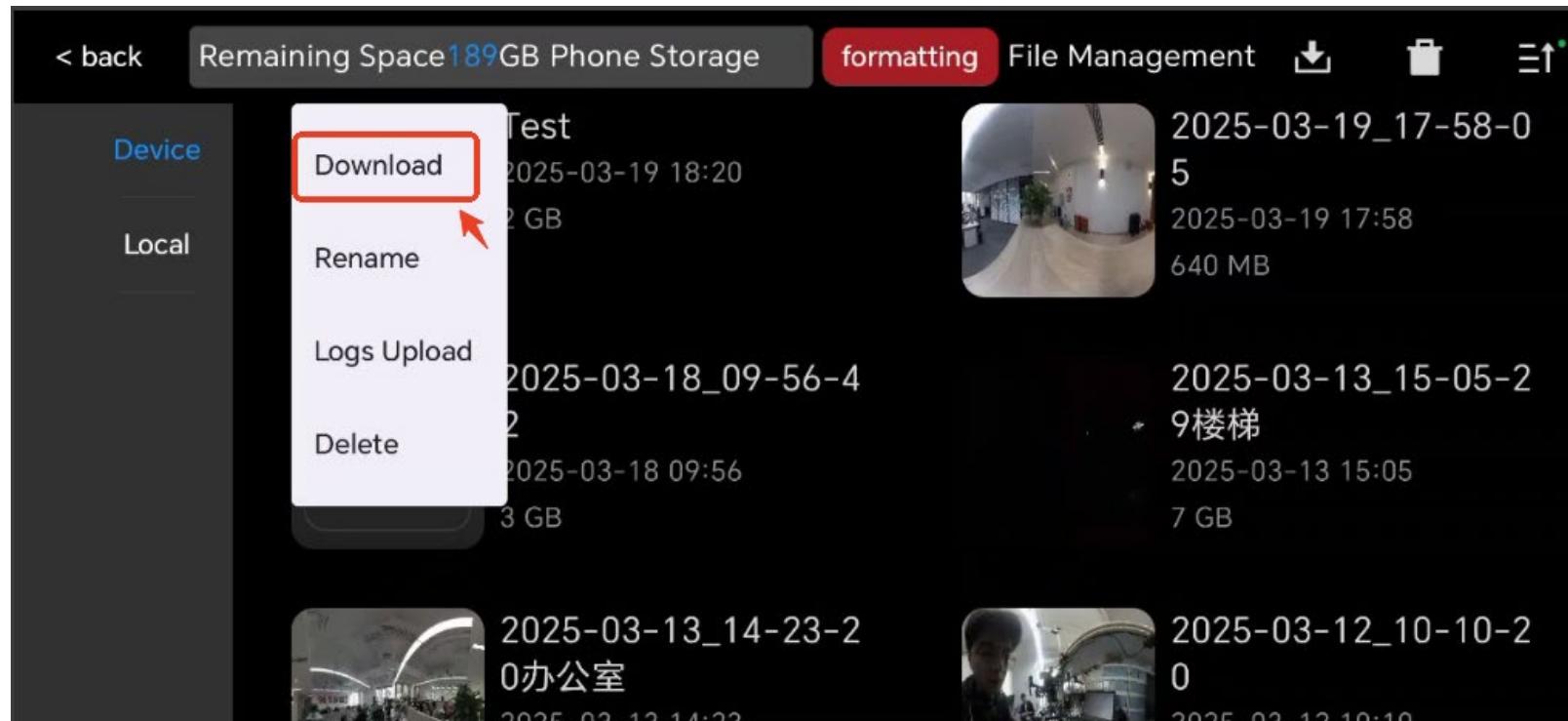


When an abnormality occurs during the scanning process, you can **contact SHAREUAV's technicians first** and send the corresponding log file of the project. Click the project and click "**Logs Upload**" in the pop-up options, and a "**Issue Description**" pop-up window will pop up.



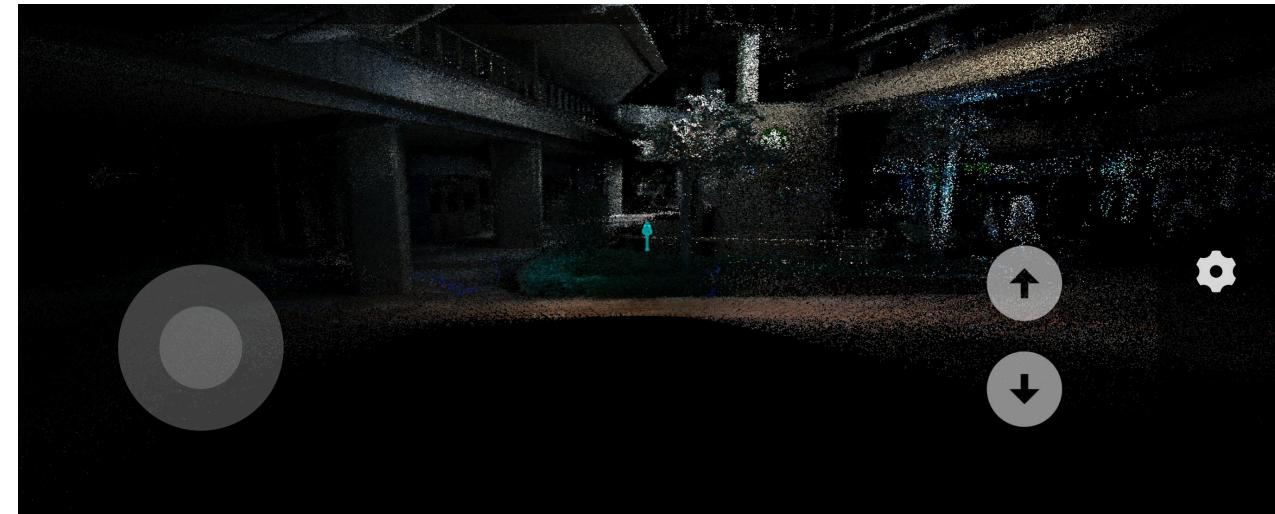
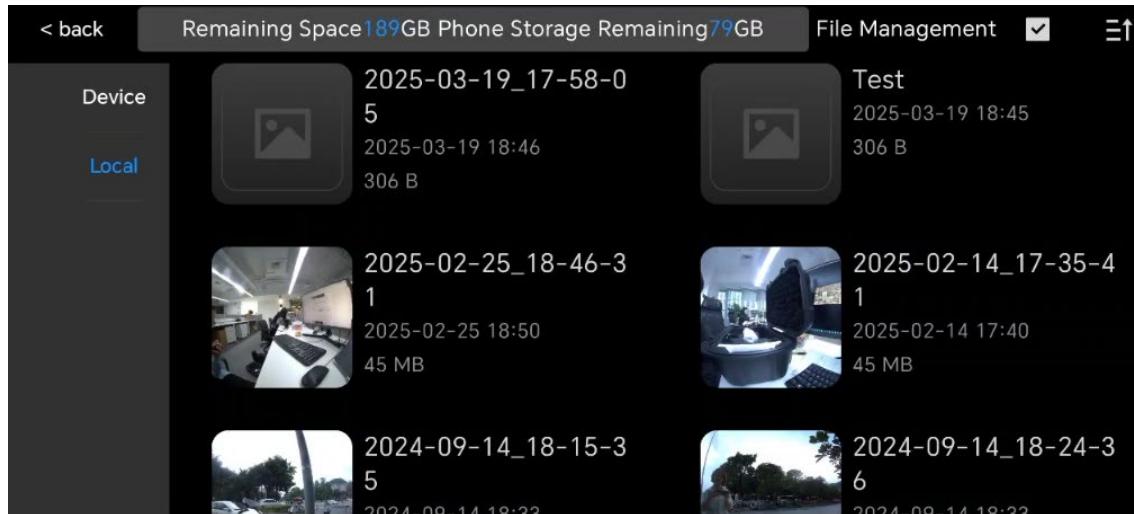
Fill in the relevant information in the "**Issue Description**" window and click the "**Submit**" button to upload the log file corresponding to the project.

**Note:** Only SHARE SLAM S20 device log files can be uploaded.



If you want to download the scanned project data to your mobile phone, you can first click on the file you want to download on the "Device" page, click "Download", and then you can find the downloaded file in "Local" later

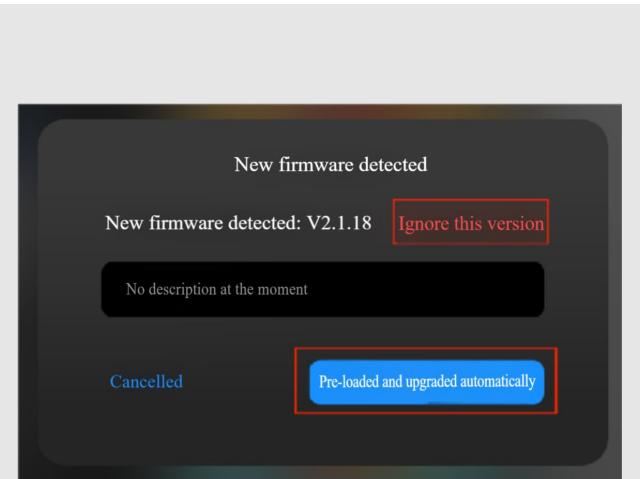
Switch to "Local" file management, click on the corresponding project, and in the "Review" interface, you can **rotate/zoom** and **pan** point cloud.



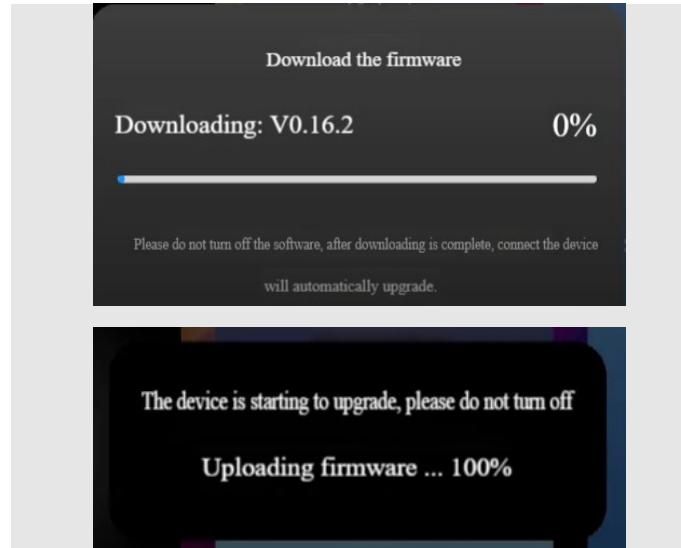
Note: This preview point cloud is only used for viewing whether there are any missed or incorrect scans, as well as the scan path. The actual point cloud effect requires processing using desktop software.



**Step1** : You can check the firmware version information, and a prompt will pop up if the new **service firmware** can be updated.



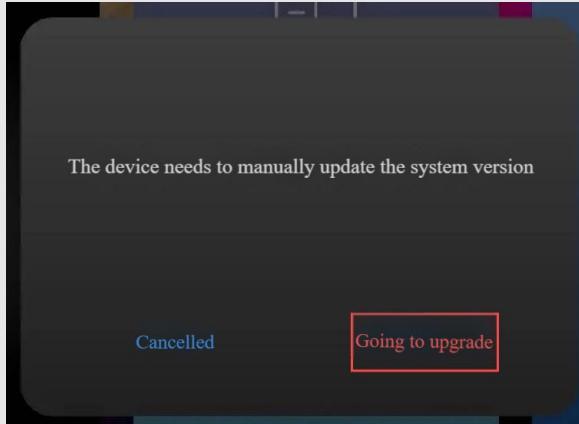
**Step 2:** Click "**Upgrade**" to download the latest firmware to your phone.



**Step 3:** During the device upgrade process, the device may automatically restart several times. Please wait patiently for a while.



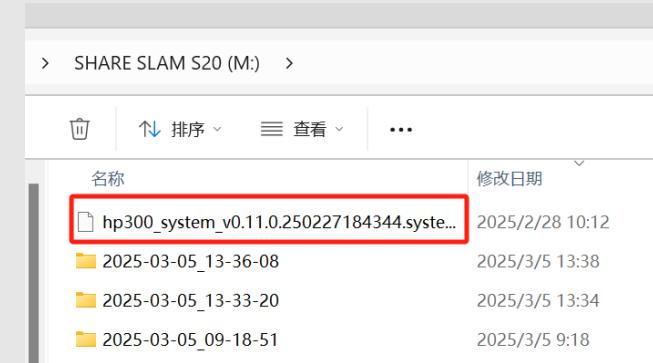
Notes: Only SHARE SLAM S20 devices have System Firmware.



## Step 1 System Firmware Download:

When there is a new system firmware, an icon will pop up. Click **"Go to Upgrade"** to jump to the SHARE official website or enter the following link in your computer browser to download the corresponding **system firmware**(system.sbin).

Link: <https://server.shareuav.cn/api/share-admin/openapi/system-firmware/latest?source=1000>



## Step 2 Before Upgrading:

Eject the device TF card and connect it to your phone or computer, copy the downloaded **"system firmware"** file to the **root directory** of the TF card, and then insert the TF card back into the device



Important Notes: Ensure the device battery level is above 50% before upgrading.

### Step 3: System Firmware Upgrade:

- a. Power on the device. When the firmware file is detected, The LED light on the top of the device will **stay on yellow**, indicating it has entered upgrade status.
- b. Wait for the system firmware upgrade to complete. The entire process takes approximately 5 minutes.
- c. After installation, the device will automatically delete the firmware file from the SD card and reboot. The LED light on the top of the device will display **red, yellow and green flowing lights**, indicating the device is loading the new firmware.
- d. Once the new firmware is fully loaded, the LED strip will show **a steady blue light**, indicating the device is ready. The upgrade process is now complete.



## 07 Contact Us



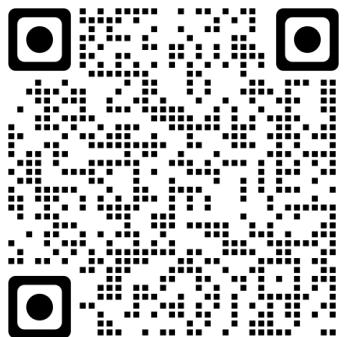
Officials Website



LinkedIn



YouTube



Facebook

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