

FJD Trion P2

Quick Start

202510

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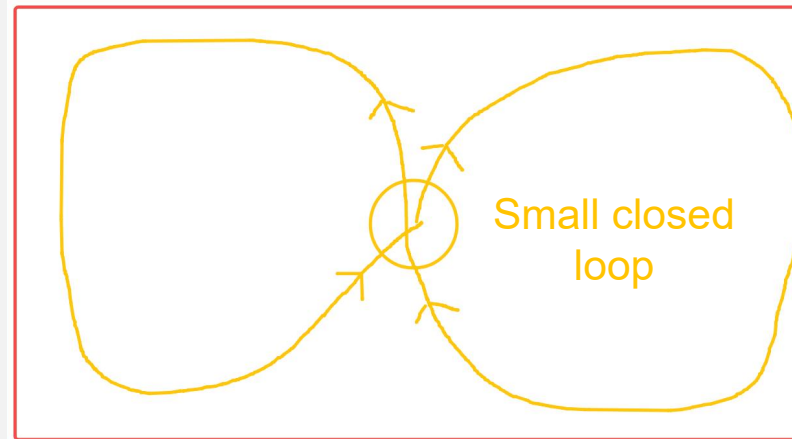
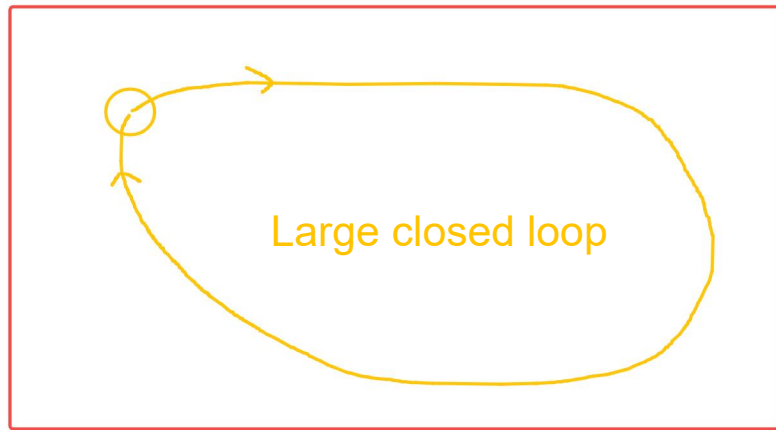


On-site Survey

Define Scanning region

Define the project's scope &
Arrange Scanning Tasks

1. Confirm the scope of the scene to be scanned, and reasonably arrange the scanning times/paths. The arrangement can be divided by floors, indoor/outdoor areas, or difficulty levels.
2. Adjust some objects in the scanning scene to avoid affecting scanning accuracy (e.g., easily movable doors that are open, moving pedestrians, etc.).

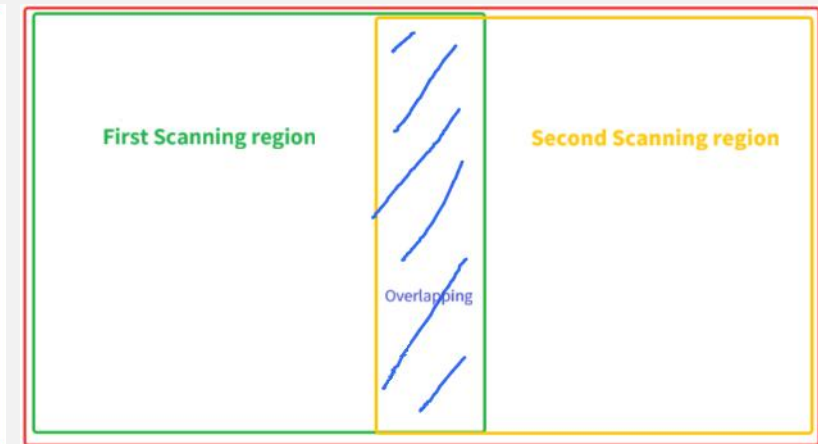


Route Planning



The route must include at least one closed loop to eliminate SLAM cumulative errors (RTK not involved). When RTK is involved and the signal is good, a closed loop is better.

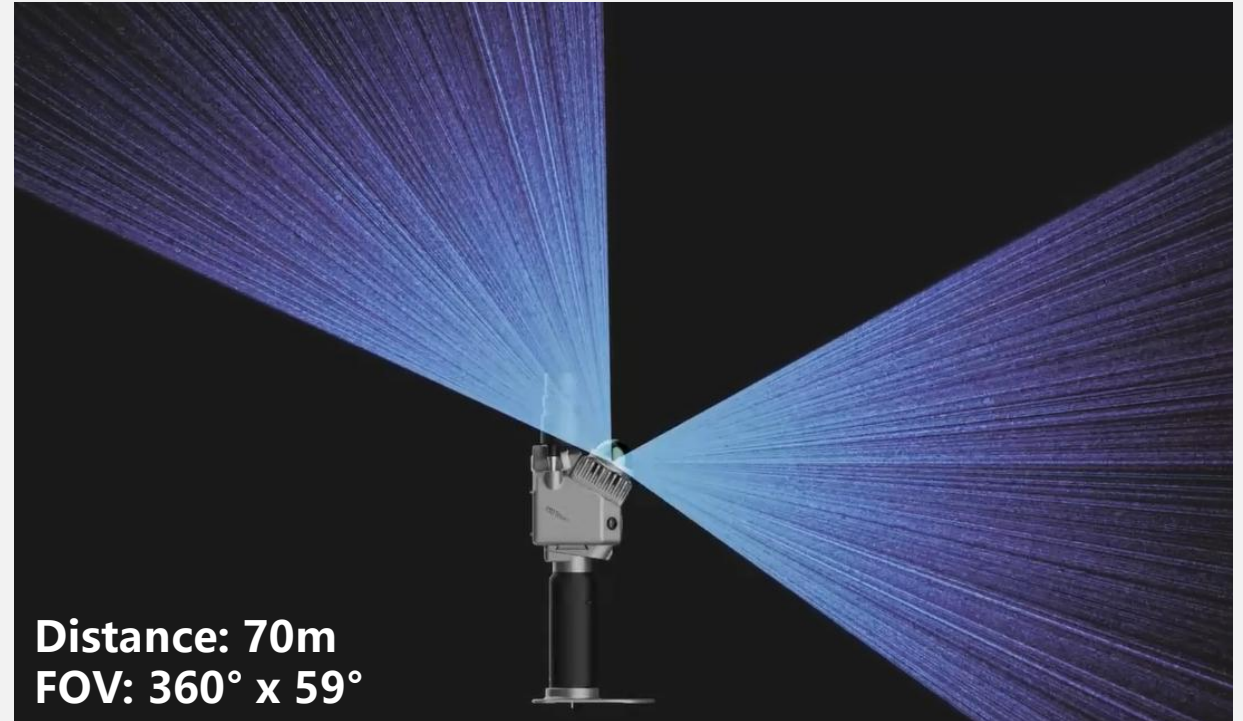
1. It is imperative to ensure the closure of a large loop (i.e., start and end scanning in the same area and face the same direction).
2. If the scene is large, it is necessary to plan small closed-loop paths or perform scanning in batches.
3. For batch scanning, ensure there is an overlapping area between two consecutive scans.



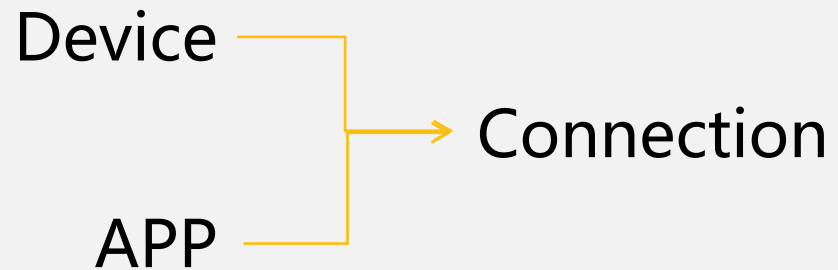
Notes on Scanning



1. The duration of a single scan should not exceed 20 minutes.
2. During data collection, avoid having a large number of moving objects within the scanner's field of view. Meanwhile, accompanying personnel should walk behind the operator as much as possible.
3. Try to avoid violently shaking the device during scanning.
4. During the scanning process, make every effort to aim the scanner at the target area to ensure the data density of the measured area.
5. When switching rooms or turning, the slower the better.



Product Installation

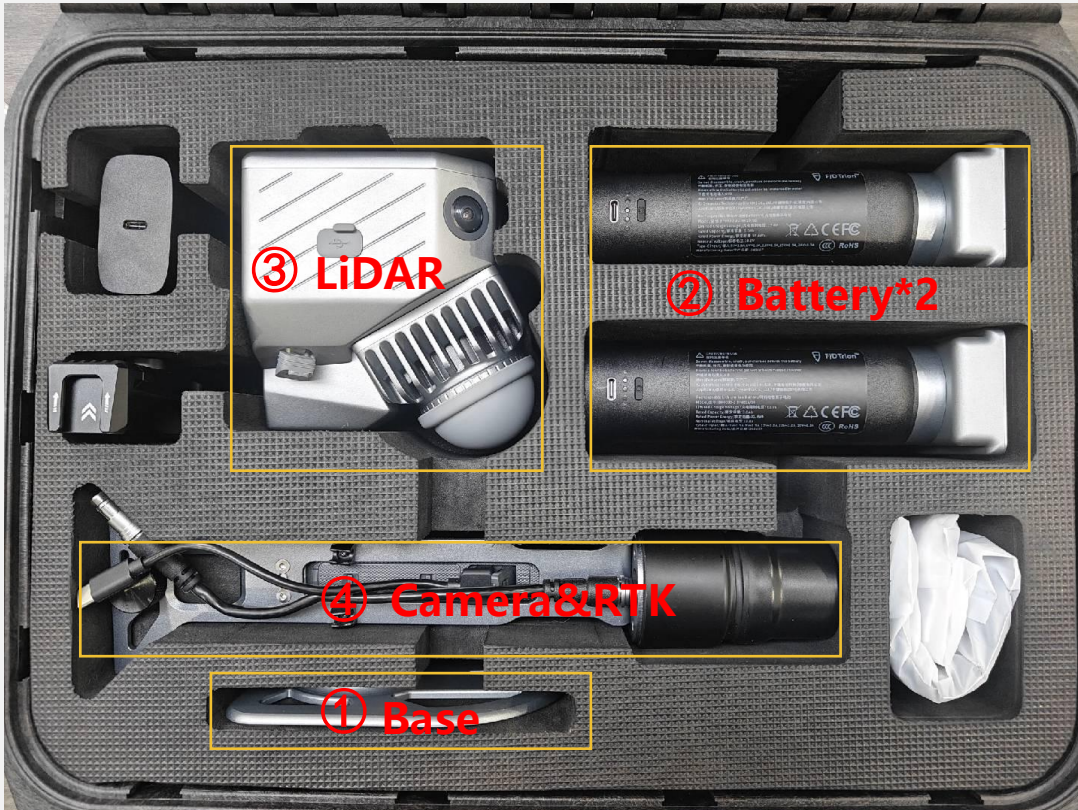


Equipment Assembly (FJD Trion P2)



Assembly the scanner

1. Open the case and take out: ① base ② handle battery
③ LiDAR ④ camera & RTK
2. Please charge the device in advance to ensure sufficient battery power.

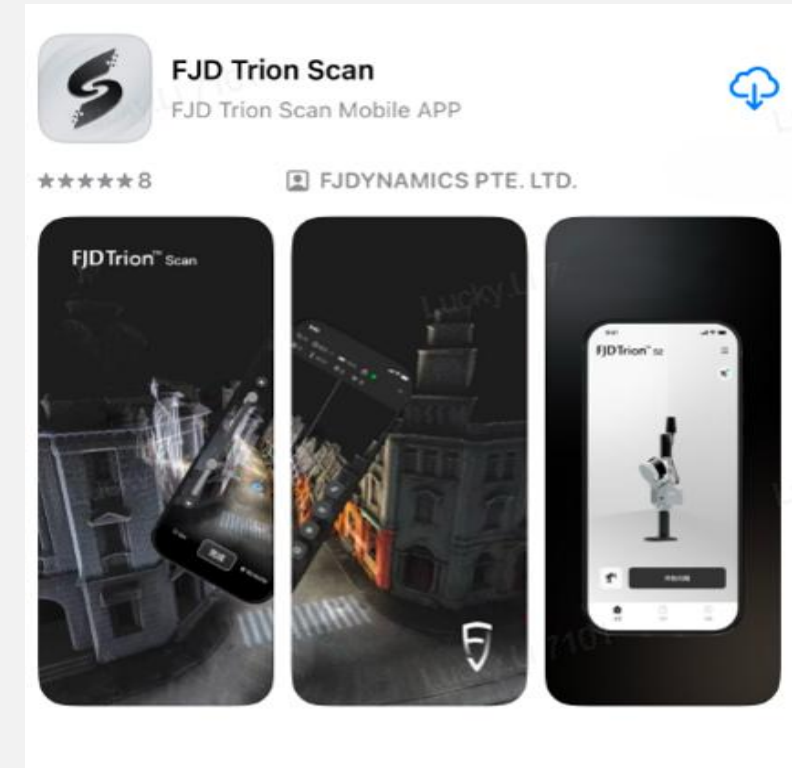


Download APP (FJD Trion Scan)



Scanner acquisition control and project file management must be operated in the APP, and the APP needs to be downloaded before scanning.

- Android users: Search for "FJD Trion Scan" on Google Play to download and install the APP.
- iOS users: Search for "FJD Trion Scan" on the App Store to download and install the APP.
- ❖ For users who have already installed the APP: Simply click "Check for Updates" in the APP settings to complete the download and installation of the new version.



Equipment Assembly (FJD Trion P2)

1. Align the ① base screws with the bottom holes of the ② handle battery, then twist and tighten them firmly.
2. Connect the ② handle battery to the bottom of the ③ LiDAR, align the two parts properly, and snap them into place until secured.
3. Connect the ④ camera & RTK mount to the ③ laser head, then twist and tighten to fasten. Next, connect the camera cable and RTK cable—please refer to the circled area in the diagram for the connection positions.
4. Assembly is complete.



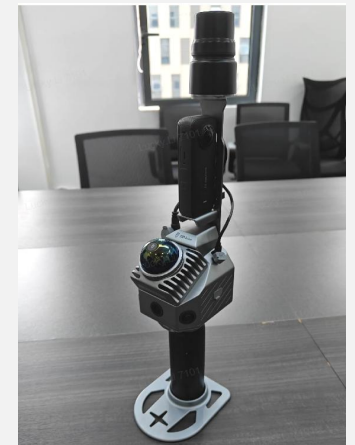
Step 1



Step 3



Step 2

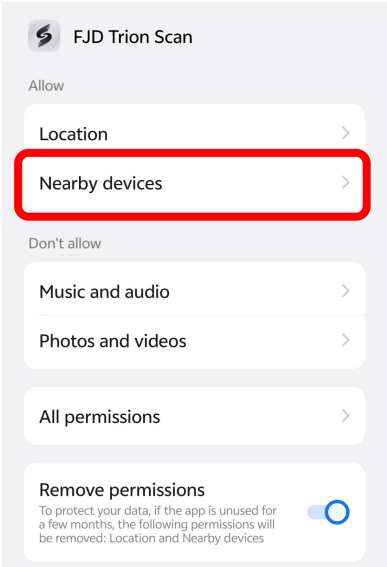
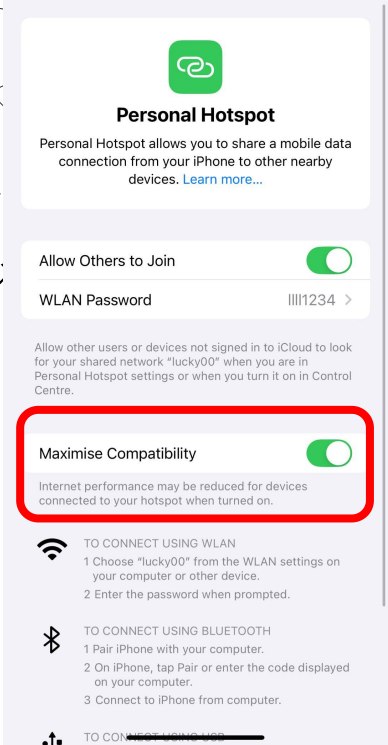
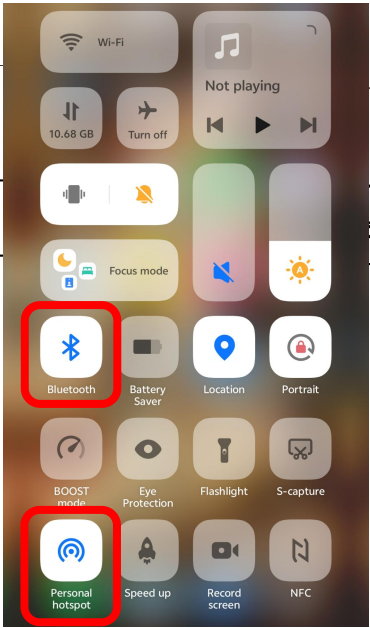
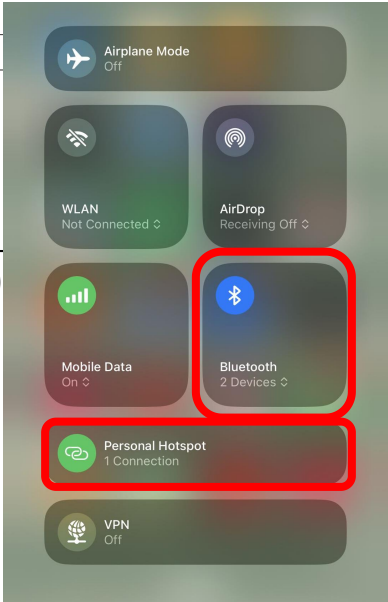


Step 4

Method 1: Hotspot Connection (Recommended)



1. P O O S S ; S P V O O L = P / O O O O .
2. P O O S S S P V O O L = M O O



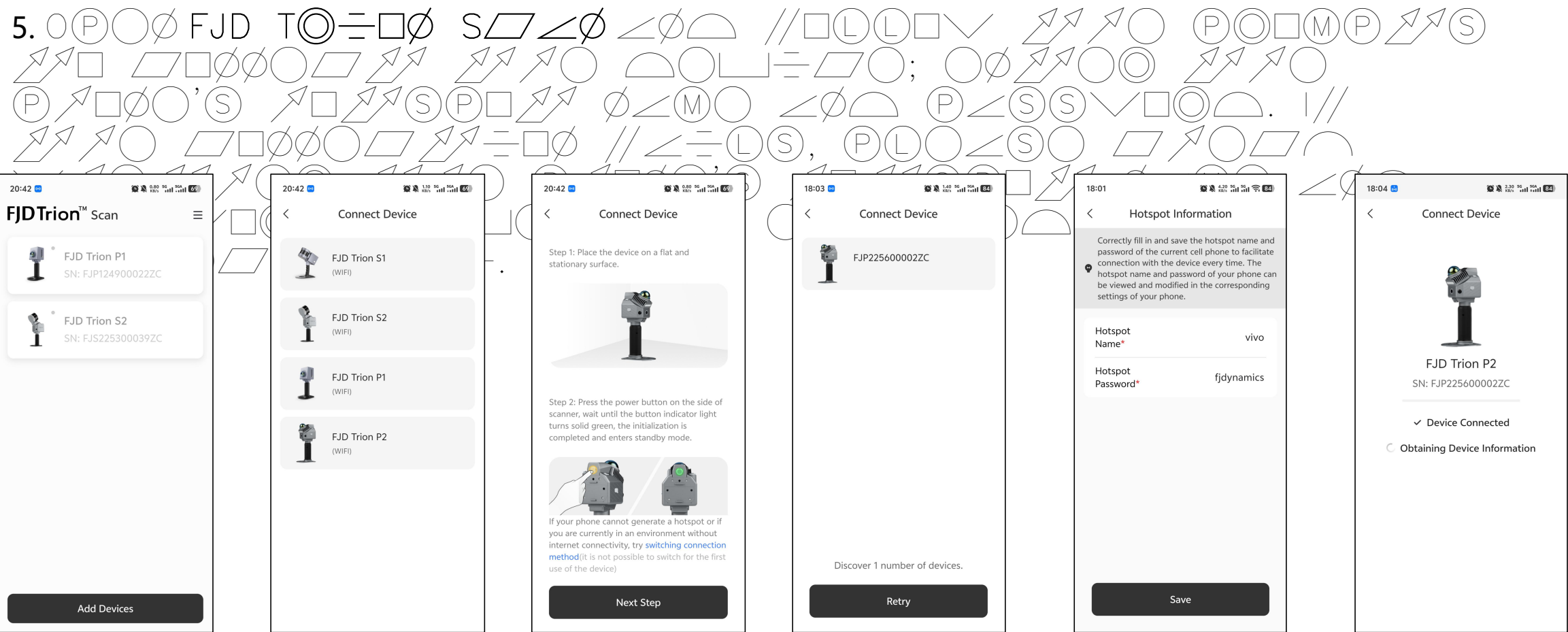
Step 1

Step 2

Step 3

Step 4

Method 1: Hotspot Connection



Method 1: Hotspot Connection

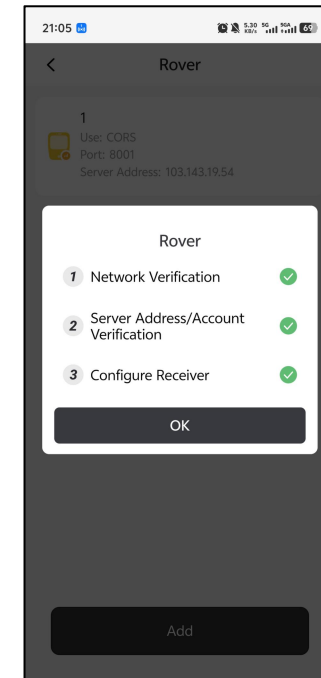
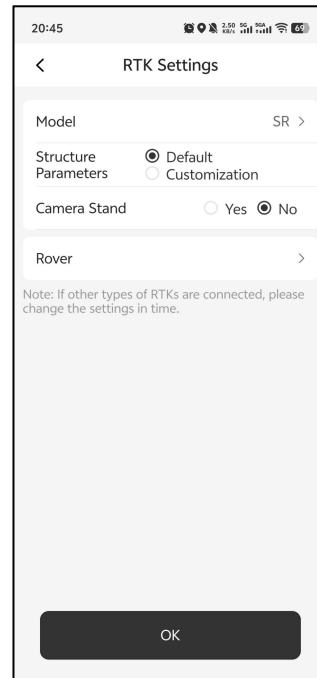
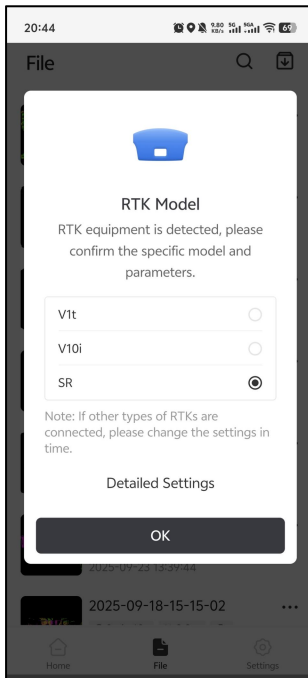


For RTK Settings:

Select the RTK model;

Configure the rover station information (name, server address, port, username, password);

PS: The Ntrip account needs to be purchased separately.

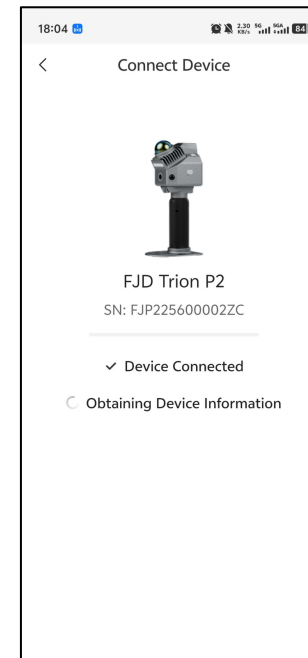
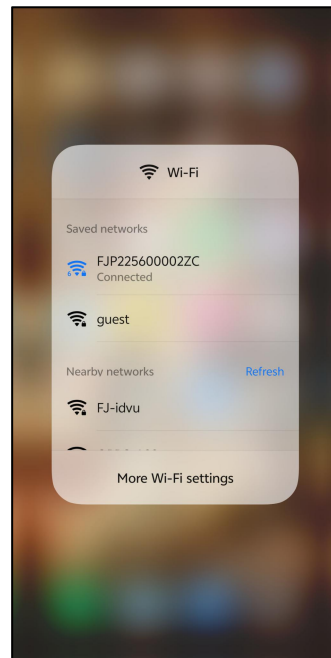


Step 6

Method 2: WIFI Connection (No network, for scenes without RTK)



1. When the green light is already on, briefly press and then long-press the scanner's power button; the indicator light will turn from blinking blue to solid blue.
2. Enable the phone's WIFI and connect to the WIFI named "device SN (FJP2****C)"; Password: fjdtrionp2
3. In the app, select "Add Device - P2" and the device will connect automatically.



Scanner Connection



- Device configuration and connection are only required **the first time** the scanner is used.
- If neither the phone nor the scanner is changed, there is no need to reconfigure for subsequent operations. Simply power on the scanner, enable the corresponding Bluetooth, hotspot, or WIFI, and tap the corresponding device SN to connect.
- If you replace the phone, device, or change the hotspot name, etc., you will need to reconfigure the connection.
- Note: Since RTK operations require network access, the hotspot connection method must be used; in WIFI connection mode, the device has no mobile data access.

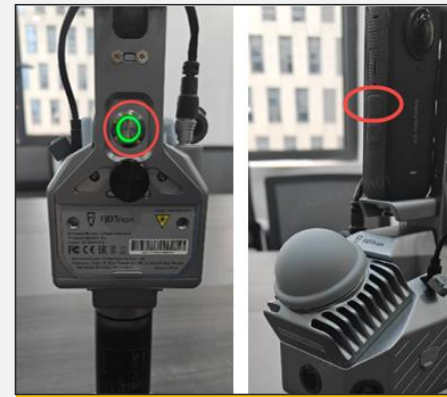
Scanning Work

Initializing → Scanning → Checking → Downloading

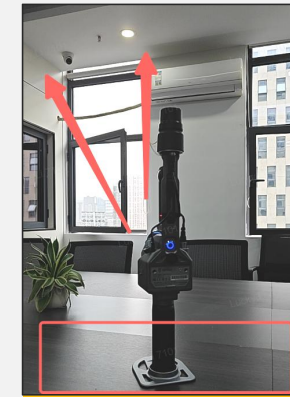
Initializing

To ensure the accuracy, initialization is required at the start of scanning to allow the scanner to match sufficient features.

1. Short-press the camera power button + short-press the scanner power button to turn on the devices.
2. Place the scanner on a stable surface, and aim it at an open area with relatively abundant features.
3. Ensure there are no moving objects near P2.
4. On the top of the home page, check the device status: whether the storage space is sufficient, whether the battery level is adequate, and whether the camera and RTK are connected properly.
5. After confirmation, click **Scan** at the bottom.
6. Customize the project name and click **OK**.
Wait the initialization to complete.



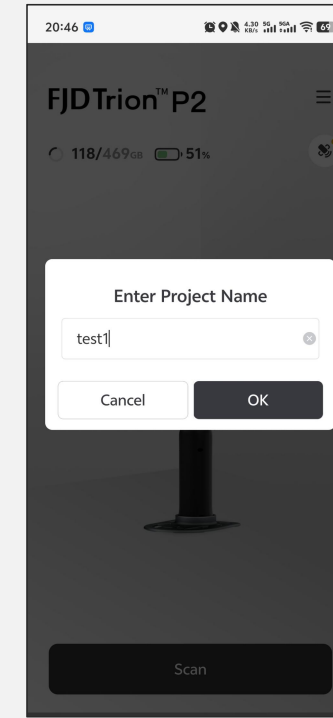
Step 1



Step 2



Step 3



Step 4



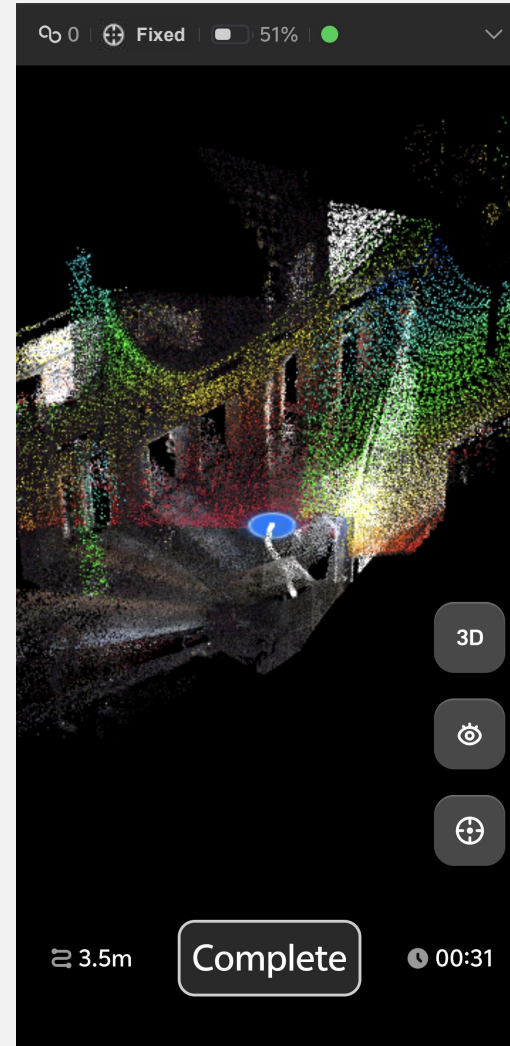
Step 5

Scanning

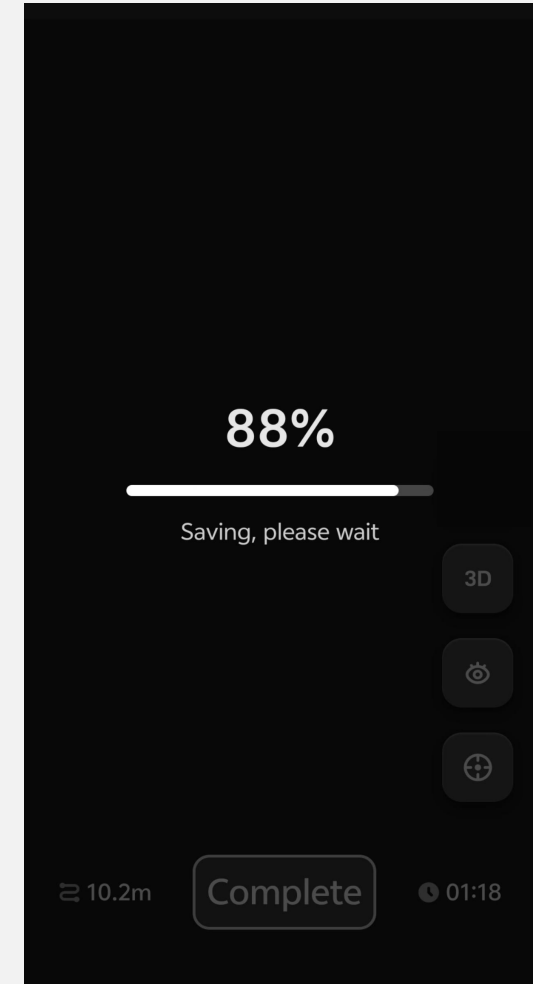


During the data collection process, scan the site using a LiDAR scanner to acquire laser point cloud, images, and RTK data.

1. After initialization is completed, hold the device and walk normally to collect point cloud.
2. During the scanning process, pay attention to the real-time point cloud data displayed on the mobile app interface, the RTK signal, and the prompts; timely adjust the scanning method and path as needed.
3. After completing data collection, click the **Complete** button to end and save.



Notice Interface

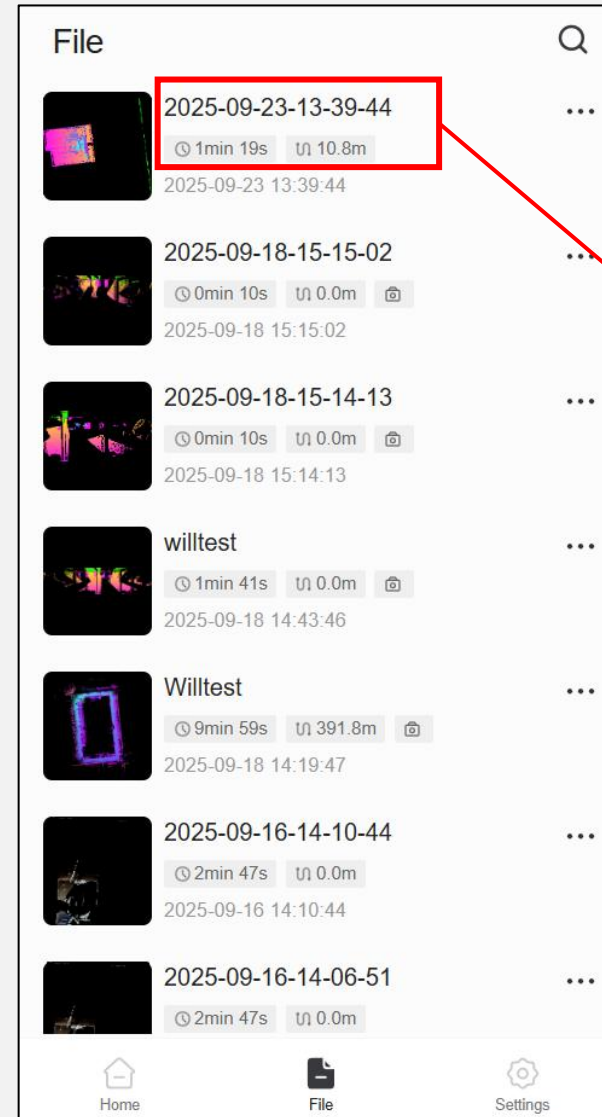


Complete

Checking

Check the on-site data to avoid rework due to data issues.

1. In **File** page, click the point cloud project for preview, and conduct a preliminary analysis of the data—check whether there is layer separation or missing areas that have not been collected.
2. Promptly perform supplementary scanning on forgotten areas and incorrect areas.



Downloading

download the data to the computer and Trion Model for post-processing to obtain the final point cloud data.

Method 1: PC WiFi Download (Recommended)

1. Switch the scanner to AP mode (see Device Installation - Connecting the Scanner for details).
2. Connect the computer to the scanner WiFi (SSID is SN; password is "fjdtrionp2").
3. Open a browser and enter the URL: 10.33.68.254. You will then access the "FJD Trion Scan" page to download the data.

Method 2: PC Cable Download

1. Connect one end of a USB-C data cable to the USB-C port on the side of the scanner, and the other end to the computer.
2. In the address bar of the computer's File Explorer, enter \\10.33.68.254 to connect to the scanner and download the data.

