

LiDAR Scanner

Quick Start Guide

■ August 2025 | Rev. 1.0

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Revisions:

Version	Date	Description
1.0	2025.08	First release

Read Before Use:

Operate in strict accordance with this guide and associated manuals.

Improper use may cause device damage and poor performance.

If you have any questions during use, contact the customer service.

Disclaimer:

- The purchased products, services, and features are stipulated by the contract. All or part of the products, services, and features described in this guide may not be within the scope of your purchase or usage. Unless otherwise specified in the contract, all the content in this guide is provided "AS IS" without warranties of any kind, express or implied.
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- This guide only provides guidance for use of this product. Every effort has been made in the preparation of this guide to ensure accuracy of the content, but no information in this guide constitutes a warranty of any kind, express or implied.

Preface

Thank you for purchasing this LiDAR Scanner ("P2"). Before use, ensure that you have read this guide carefully and followed the instructions herein to better understand and operate the product.

Technical Support

Starting from the date of purchase, users are provided with the technical support and upgrade services from FJDynamics.

Contact FJDynamics by any of the following methods:

Tel: 1833-330-6660 (United States)

Tel: 496-931-090-130 (Europe)

FJDynamics official website: <https://www.fjdynamics.com>

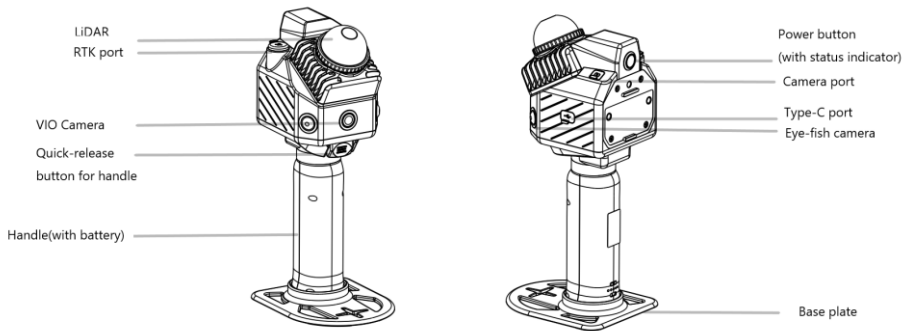
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1 Safety Instructions

1. This device satisfies the requirements of the following standards regarding the laser safety: IEC 60825-1:2014; 21 CFR 1040.10 and 1040.11, except for deviations (IEC 60825-1 Ed.3) pursuant to Laser Notice No.56, dated May 8, 2019.
2. Although the device complies with Class 1 safety standards, do not use a microscope, a magnifying glass in any form, or other magnifying devices to look directly at the lasers.
3. For maximum self-protection, do not look directly at the running LiDAR.
4. Do not block or interrupt the LiDAR when it is rotating.
5. Do not plug and unplug the connecting cables repeatedly.
6. Use the device at normal ambient temperatures and avoid exposing it to extreme temperatures. Otherwise, the battery life will be shortened or unpredictable risks may occur.
7. The device contains sensitive electrical and mechanical components. Do not forcibly bend or pull the connecting cables, and do not insert unrelated objects into the connectors.
8. Do not immerse the batteries in water. Store the batteries in a cool and dry place when they are not in use.
9. Do not use or place the batteries near heat sources, such as fire and heaters.
10. Use only the original charger during charging. Third-party chargers are strictly prohibited.
11. Do not reverse the battery's positive and negative terminals.
12. Never insert the battery directly into a power outlet.
13. Prohibit metal objects from touching both battery terminals.
14. Recharge the battery every 3 months if unused to prevent deep discharge.
15. Do not disassemble the battery casing, weld it, or puncture it with sharp objects.
16. Charging temperature: 0–35°C; Discharge temperature: -10–45°C (45°C applicable only when integrated with devices).
17. Avoid unplugging or reconnecting the battery's Type-C port while the device is in use.

2 Overview



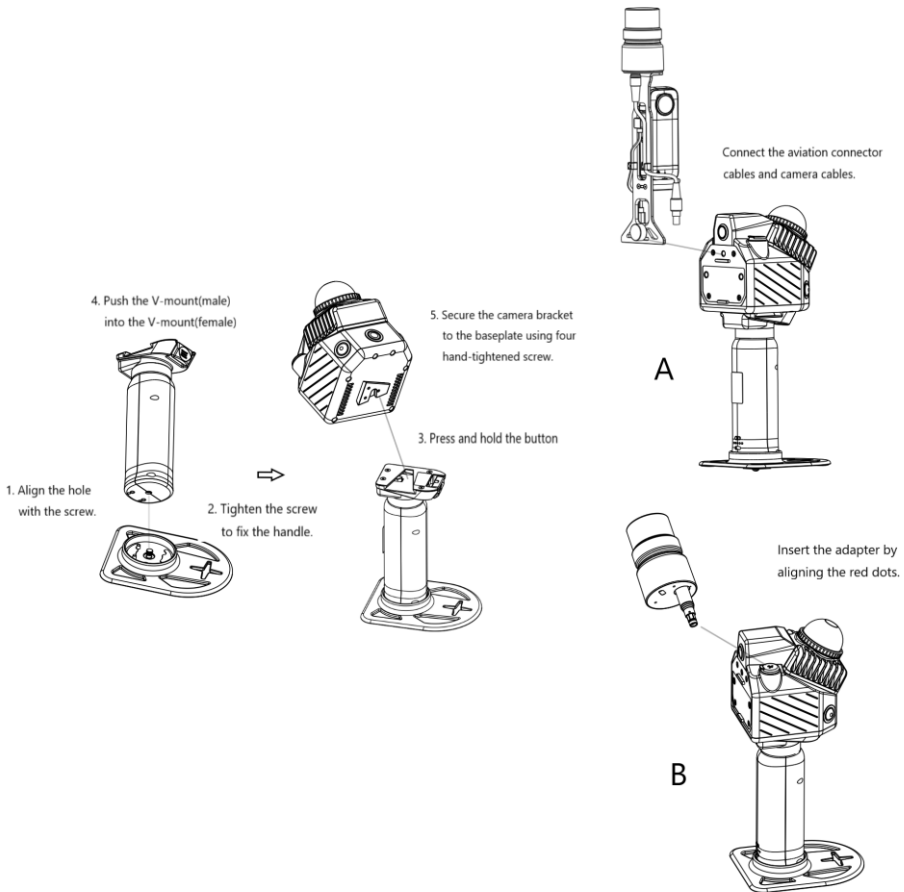
Specifications			
Weight	1 kg (excluding the camera module and base plate)	Dimensions (excluding the camera module)	87×90×270 mm
Accuracy	2 mm to 20 mm	Laser wavelength	905 nm
Scanning range	40 m (10% reflectivity) or 70 m (80% reflectivity)	Laser class	Class 1 eye safe
LiDAR FOV	360°×59°	LiDAR	1
Point cloud processing	Real-time	Points per second	200,000
Point cloud display	Real-time preview on a mobile terminal	Power supply	Battery
Supply voltage and current	10.8 V, 3 A	Charging port	Type-C
Data transfer	USB-2.0	Power consumption	14 W
Battery life	2 h (excluding the camera module)	Wi-Fi	2.4 GHz
Operating temperature	-10°C to 45°C	Storage	512 GB
Eye-fish Camera FOV	285°×150°	Eye-fish Camera pixels	12M × 2
VIO Camera FOV	74°×47°	VIO Camera pixels	1080P
Point cloud colorization	Real-time+Postprocessing	RTK Fusion	Real-time

3 First Use

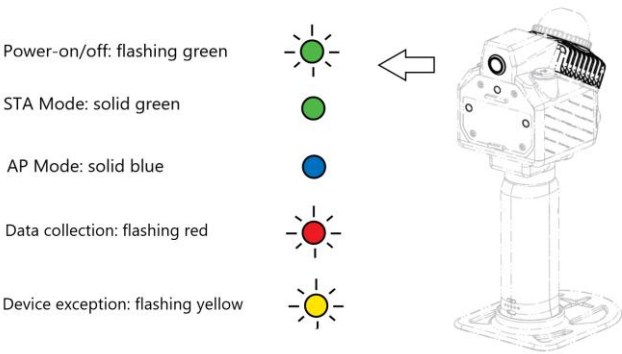
3.1 Assembly and Connection

P2 LiDAR Scanner System Configurations:

- Option A: Panoramic external camera + RTK module integration.
- Option B: RTK module standard package.



3.2 Indicator Status

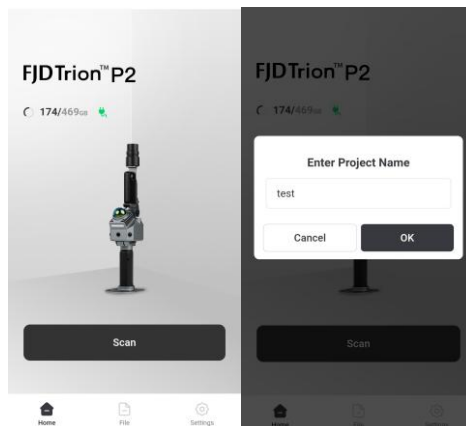


3.3 Powering On and Off the Device and Establishing Communication

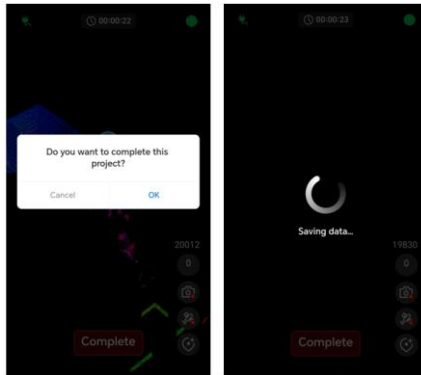
- Place P2 on a flat surface.
- Press and hold the power button for 1s to 2s to power on P2. Wait for 15s to 20s, and P2 is on standby.
- STA Mode: The device defaults to STA mode upon power-up. Activate smartphone's hotspot and Bluetooth simultaneously, then launch the **Scan**. Follow the on-screen prompts to establish a connection with the P2 scanner.
- AP Mode: Briefly press and then press and hold the power button until the blue indicator transitions from blinking to solid, activating AP mode. Turn on Wi-Fi on your phone, find the Wi-Fi network named the device SN, and enter the password "fjdrtrionp2" to connect to the network.
- Press and hold the power button for 2s to 3s. Wait for about 5s, and P2 is powered off.

3.4 Collecting and Downloading Data

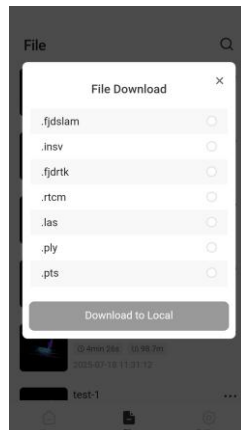
- Tap **Scan** in Trion Scan, enter the project name, and then tap **OK**.



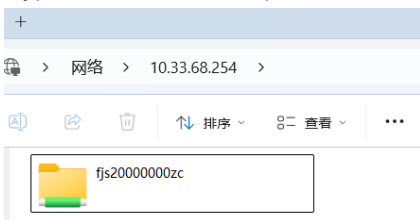
- Tap **Complete** and then **OK** to save data. The status indicator of the power button double flashes blue.



- Tap **Data** at the bottom, tap **Download** on the required data, select the format on the pop-up, and then tap **Download**.

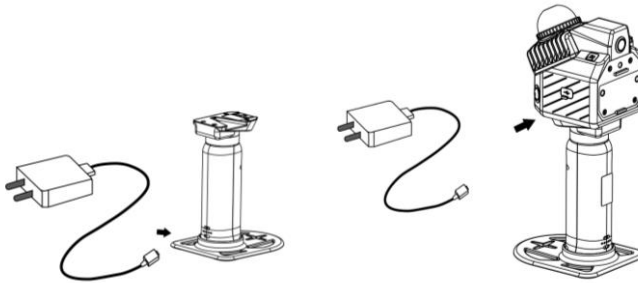


- **LAN Download Method:** PC connection to device hotspot, or connect the device Type-C (🔌) to your PC using a USB cable. Open File Explorer, in the address bar, type \\10.33.68.254 and press Enter.



3.5 Charging the Battery

- **Charging the Battery Independently:** Plug one end of the charger provided into the Type-C port of the handle and the other end to a power outlet to charge the battery. It takes about 1.5 h to fully charge the battery. Press the button beside the Type-C port to check the battery level.
- **Charging the Battery While in Operational Mode:** Charging via Original Charger and USB-C Port 



CE:

RF exposure information: The Maximum Permissible Exposure (MPE) level has been calculated based on a distance of d=20 cm between the device and the human body. To maintain compliance with RF exposure requirement, use product that maintain a 20cm distance between the device and human body.

Operation Frequency	Max. EIRP
Bluetooth: 2402 MHz ~ 2480 MHz	9.94 dBm
WLAN 2.4G: 2412 MHz ~ 2472 MHz	19.93 dBm

This product can be used across EU member states.

EU Regulatory Conformance

Hereby, FJ Dynamics Co.,Ltd. declares that this device is in compliance with the essential requirements and other relevant provisions of Directive 2014/53/EU.



FCC statements:

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

NOTE: The manufacturer is not responsible for any radio or TV interference caused by unauthorized modifications or changes to this equipment. Such modifications or changes 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 SAR limit of USA (FCC) is 1.6 W/kg averaged over one gram of tissue. Device Types P2 (FCC ID: 2A2LL-FJDP2) has also been tested against this SAR limit.

The highest SAR value reported under this standard during product certification for use when properly worn on the body is 0.768 W/kg.

This device was tested for typical body-worn operations with the back of the handset kept 10mm from the body.

To maintain compliance with FCC RF exposure requirements, use accessories that maintain a 10mm separation distance between the user's body and the back of the handset. The use of belt clips, holsters and similar accessories should not contain metallic components in its assembly. The use of accessories that do not satisfy these requirements may not comply with FCC RF exposure requirements, and should be avoided.

EU Declaration of Conformity

Number

LiDAR Scanner_ P2 _of_ Doc

Name and address of the Manufacturer

FJ Dynamics Co.,Ltd.

21F, Das Tower, No. 28, 1st South Keji Road, Nanshan District , Shenzhen, China

This declaration of conformity is issued under the sole responsibility of the manufacturer.

Object of the declaration

P2 is a LiDAR Scanner

The object of the declaration described above is in conformity with the relevant Union harmonisation legislation

Directive RED: 2014/53/EU

and other Union harmonization legislation where applicable:

Directive RoHS: 2011/65/EU

Directive WEEE: 2012/19/EU

References to the relevant harmonised standards used or references to the other technical specifications in relation to which conformity is declared.

EN IEC 62368-1:2020+A11:2020;

ETSI EN 301489-19 V2.2.1;

EN IEC 62311:2020 ;

EN 55032:2015+A1:2020 ;

EN 61000-3-3:2013+A1:2019+A2:2021+AC:2022-01

ETSI EN 300 328 V2.2.2 ;

ETSI EN 301 489-1 V2.2.3;

ETSI EN 301 489-17 V3.3.1

EN 55035:2017+A11:2020 ;

The Notified Body

Name: Phoenix Testlab

Number: 0700

Performed

Applicable Modules: B+C



And issued the EU-type examination certificate

Certificate number:

This product can be used across EU member states.

Description of accessories and components, including software, which allow the radio equipment to operate as intended and covered by the DoC

Hardware version	v2.0
Software version	V1.1
Antenna	FPC Antenna
Adaptor	Model:FJ-GN265C67N; Input:100-240V~5060Hz,1.5Amax;Output:DC5.0V3.0A,Max,DC9.0V3.0A Max,DC12.0V3.0Amax,DC15.0V3.0Amax,DC20.0V3.35Amax; Mfr: HUIZHOU FUJIA APPLIANCE TECH.CO.,LTD
Battery1(for EUT)	BP0030-3, 3000mAh,10.8V; FJ Dynamics Technology (Fujian) Co., Ltd.
USB Cable	Model:NA, 100cm、80cm、17.5cm

Please note: In order to fix bugs or further enhance functionalities of your device. could release software updates after the launch of the product.

All software versions launched. are verified and compliant with EU regulations. All RF parameters (e.g. frequency range, output power) are not accessible to the end user, and thus cannot be changed or altered.

Signed for and on behalf of:

Shenzhen,2025-09-08

Place and date of issue

River Wang

River Wang, Certified engineer

Name, Function, signature