XGRIDS
Lixel L2 Pro-16/120
Globe Flight

XGRIDS Lixel L2 Pro-16/120 Globe Flight User Manual

Contents

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Specifications

- **Product Name:** Lixel L2 Pro-16/120
- **Product Type:** Handheld 3D reconstruction device
- **Integration:** Highly integrated and lightweight
- **Algorithm:** 3D real-time reconstruction algorithm
- **Feature:** True color point cloud generation
- **Real-Time Results:** Calculated in real-time for immediate viewing and use

Product Overview
Lixel L2 PRO is a highly integrated and lightweight handheld 3D reconstruction device. It utilizes a 3D real-time reconstruction algorithm to directly generate true color point clouds. The results are calculated in real time, allowing immediate viewing and usage.

Product Usage Instructions

Operation Battery Installation

1. Open the lever.
2. Insert the battery into the bottom of the device along the guide dovetail slot. Ensure correct positioning.
3. Press the lever back to lock the battery securely.

Function Button Operations

- **Open:** Long press for 4 seconds – Indicator light changes from slow blinking blue to steady green.

- **Close/Start Scanning:** Long press for 4 seconds or double click – Indicator off/start scanning.
- **Stop Scanning:** Double click while scanning – Indicator changes from slow flashing green to steady green.

Note:

1. Place the device on a flat table before scanning.
2. The device can be moved for scanning only after lidar rotation begins.
3. Scanning initiation takes about 30 seconds.
4. If the indicator blinks green quickly during the scanning stop, scanned files are being stored. Power-off may lead to file loss.
5. After stopping the scan, file storage waiting time varies based on scene size.

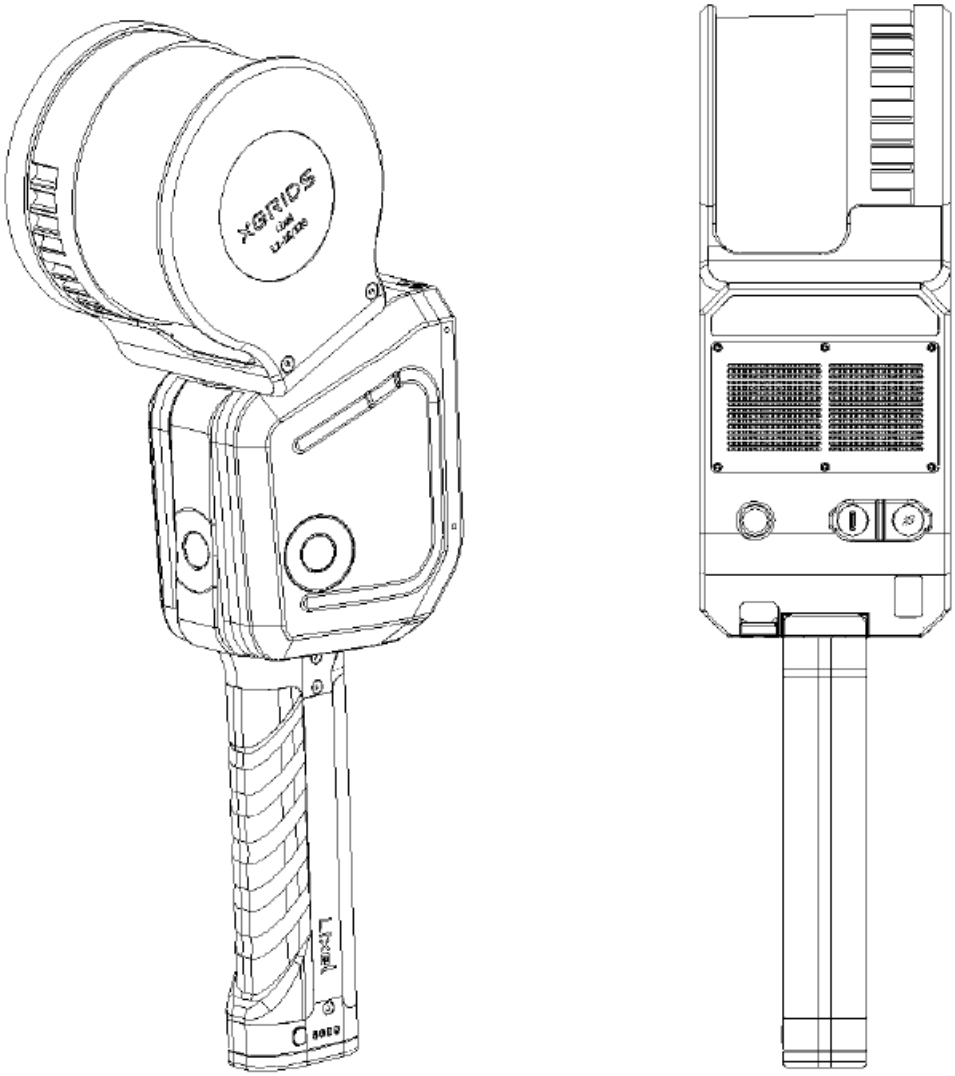
FAQ

Indicator Light Description
The indicator light changes colors to signify different states of the device. Refer to the user manual for detailed descriptions of each indicator state.

Product Overview

Lixel L2 PRO, is a highly integrated and lightweight handheld 3D reconstruction device. With the 3D real-time reconstruction algorithm, Lixel L2 PRO can directly obtain the true color point cloud. The results are calculated in real time and can be viewed and used immediately.

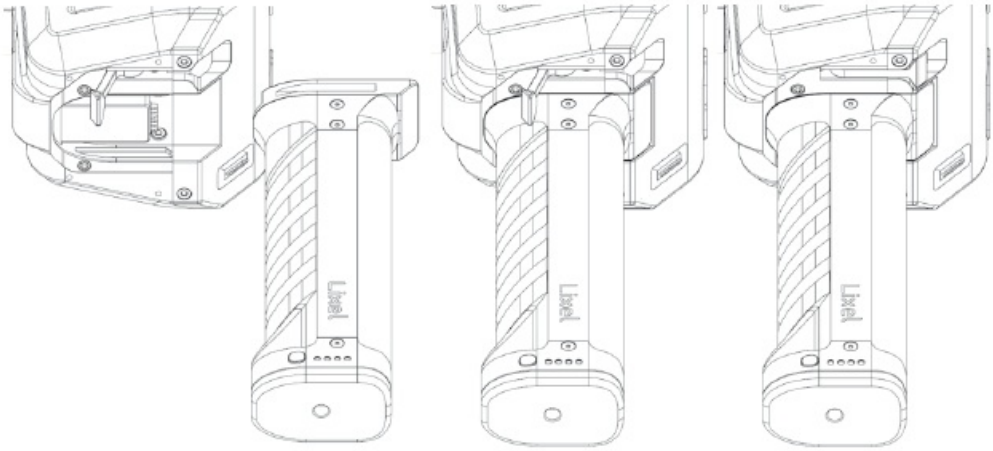
About Lixel L2 Pro-16/120



Operation

Battery installation

1. Open the lever.
2. Insert the battery into the bottom of the device along the guide dovetail slot. Ensure that the battery is inserted into the correct position.
3. Press the lever back and lock the battery tightly.



Note: An unsecured battery may cause the device to slip.

Function Button

Function	Operation	State
Open	Long press 4 seconds	The indicator light turns from slow blinking blue light to steady green light;
Close	Long press 4 seconds	Indicator light off;
Start Scanning	Double Click	When the device is in standby state, double-click the indicator. The indicator status changes from steady green to blinking green at short intervals and then to blinking green at long intervals. And the lidar starts to rotate, that is, the scan is started successfully.
Stop Scanning	Double Click	When scanning, double click the button, the indicator state will change from green slow flashing to green quick flashing and then to steady green. Meanwhile, the lidar will stop rotating and the scanning will be stopped successfully.

Note:

1. Please put the device on the flat table before starting the scan. After starting the scan, the device can be moved for scanning only after the lidar rotates.
2. It takes about 30 seconds to start scanning.
3. During the scanning stop, if the indicator blinks green quickly, scanned files are being stored. If the power is off at this time, files may be lost or saved incompletely.
4. After the scan is stopped, the waiting time for stored files may be long, it's depending on the size of the scene being scanned.

Indicator Light Description

- Indicator blinking status Significance
- None The device is not started.
- The green light blinking slowly about 30s Scanning
- Greenlight is normally on The device is in standby mode
- Blue light normally on USB disk mode
- The yellow light is normally on The device is not activated
- Red light normally on Serious device failure
- The blue light blinks slowly about 30 s) The device is starting up.
- White light normally on Switching between standby mode and USB disk mode
- The green light blinking fast The scan is being started/stopped

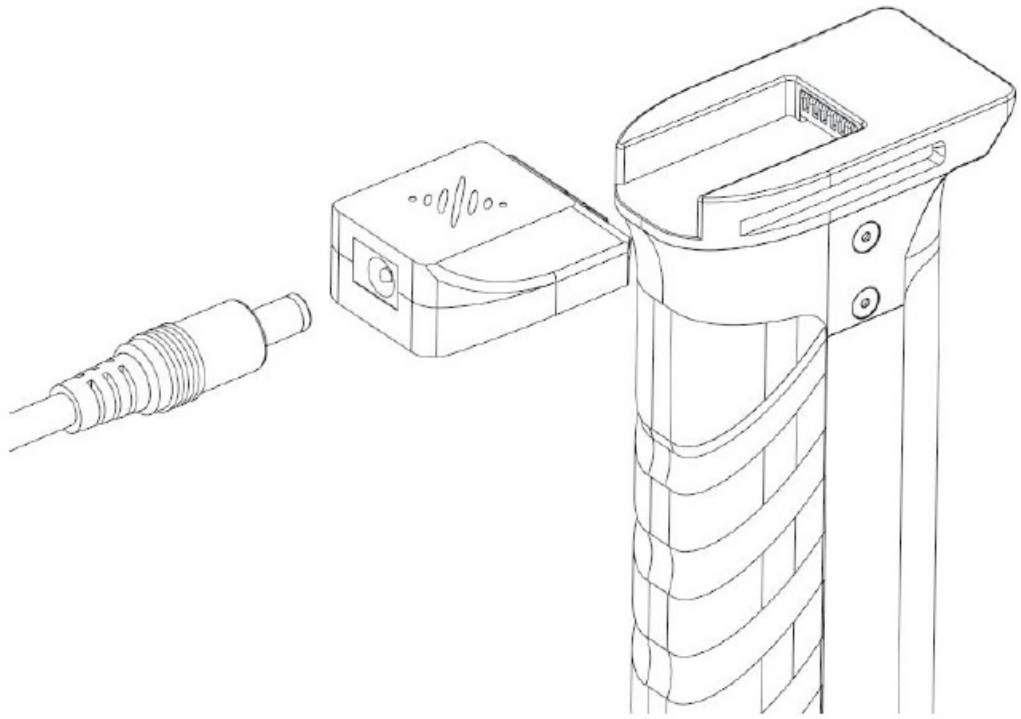
Data Copy Description

Use the USB 3.1 cable that matches the device. Connect the device to the computer in standby mode and turn on the USB mode in the App. After identifying the device, the data can be copied.

Note:

1. The USB mode is automatically disabled after a restart.
2. After turning on the USB mode, you need to manually turn off the USB mode if you want to continue scanning without shutting down or powering off.
3. Using a non-standard USB cable may cause slow data copying. Or may cause forward insertion can be used, but reverse insertion can not be used.

Battery



- Use the standard charging cable and connect the charging adapter to the battery to charge the battery.

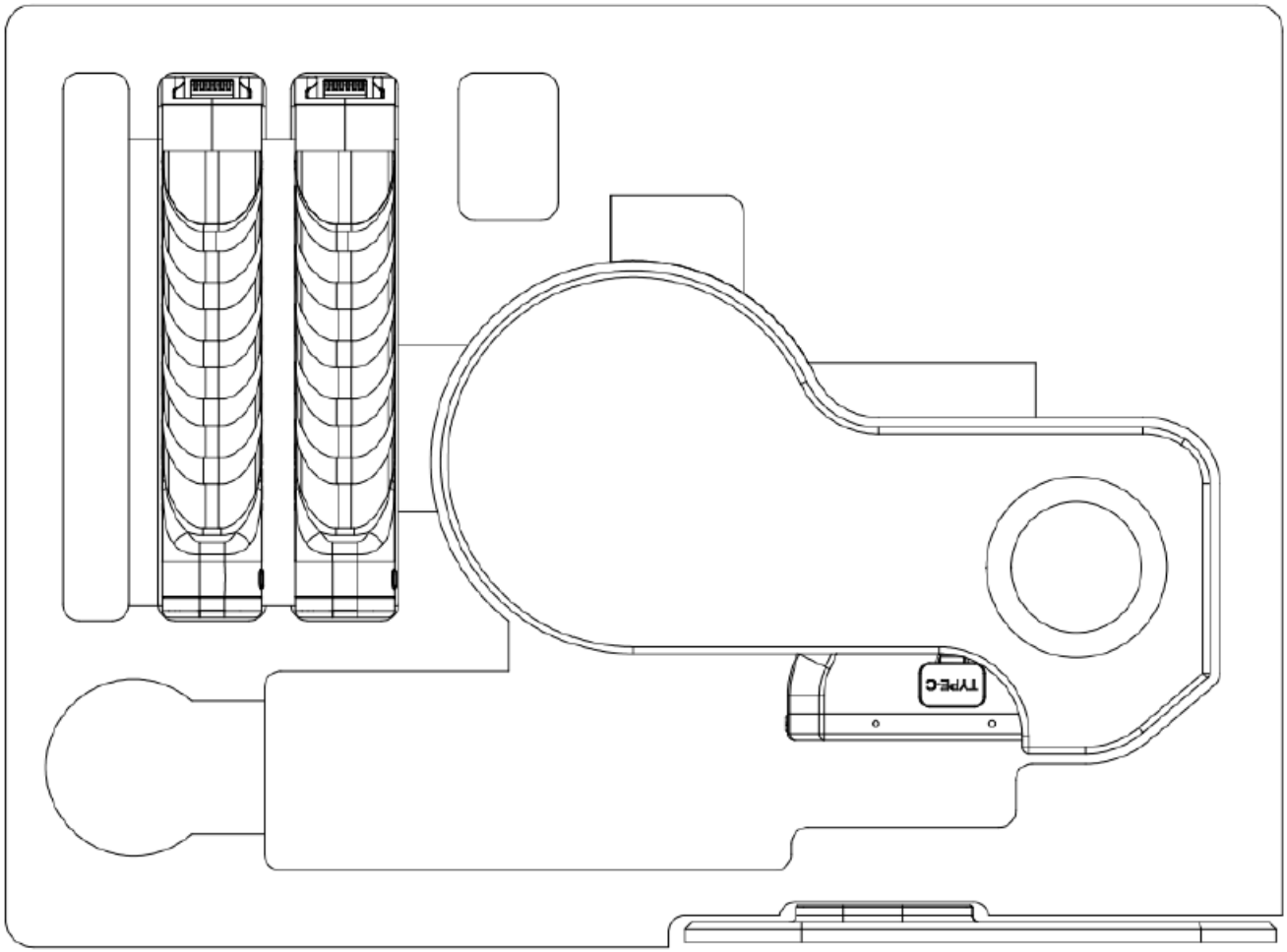
Charging time:
about 2 hours. During the charging process, the indicator light will show the current electric quantity. Please refer to the following table for details.

- Indicator blinking status electricity
- Only one green light on 0-24%
- Two green lights on 25%-49%
- Three green lights on 50%-74%
- Four green lights on 75%-99%

Maintenance

The storage status of the device is shown in the figure below. After use, remove the battery and put it back into the storage box according to the figure.

Note:
It is a precision device, and not storing it as required may cause damage to the device.



Matters needing attention

1. Lixel L2 PRO is a precision device. Falling or being hit by external forces may damage the equipment and result in abnormal or inaccurate accuracy.
2. Ensure that after Lixel L2 PRO is turned on, lidar rotation is not blocked by external forces.
3. Try to avoid using tripod support devices for initialization as much as possible, and use the metal base that comes with L2 PRO to effectively ensure the accuracy of device initialization; Additionally, avoid initializing on uneven surfaces as it may result in initialization failure or an increase in mapping thickness.
4. Lixel L2 PRO waterproof grade is IP54, do not use in the environment beyond this protection grade. Use a soft dry cloth or standard cleaning cloth to clean the device. Keep the lidar and the camera clean, do not touch it directly.
5. The device will generate heat during use. Please do not touch the fuselage to avoid burns.
6. Do not cover or touch the heat sink during use. The device may automatically shut down when the temperature is too high.

Specification

L2 PRO	Item	Content	Remark
Overall performance	Operating Temp Range	-20℃~50℃	
	Power	<30W	
	Data socket	USB 3.1 Gen2	
	Internal storage	1T SSD	
	Single usage duration	1.5h	
	weight	<1.9kg	
	Size	180mm×130mm×400mm	
	Wireless module	wifi Bluetooth 802.11a/b/g/n/ac, 2.4~2.4835Ghz 5.15~5.85Ghz	
	Scan effective distance	0.5m~120m 0.5m~300m	
	Laser Level	Class 1 / 905nm	
	FOV	360°×270°	
	Point cloud frequency	320000 points/s 640000 points/s	

	Rated voltage	14.4V	
Lidar	Capacity	46.8wh	
	Input	100V~240V,50 ~ 60 HZ 1.5A 80VA	
	Output	16.8V 2.0A	
	Rated power	34W	
Battery	Rated voltage	14.4V	
	Capacity	46.8wh	
Charger	Input	100V~240V,50 ~ 60 HZ 1.5A 80VA	
	Output	16.8V 2.0A	
	Rated power	34W	

CE Maintenance

1. Risk of explosion if the battery is replaced by an incorrect type. Dispose of used batteries according to the instructions.
2. The product shall only be connected to a USB interface of version USB3.0.
3. EUT Operating temperature range: -20° C to 50°C.
4. **Adapter:**
    - The plug is considered as the disconnect device of the adapter Input: AC 100- 240V, 50/ 60Hz,1.5A
    - Output: 16.8V 2A

Declaration of Conformity
SHENZHEN XGRIDS-INNOVATION CO., LTD hereby declares that this Lixel L2 Pro-16/120 complies with the essential requirements and other relevant provisions of Directive 2014/53/EU. This product is allowed to be used in all EU member states.

- Bluetooth Frequency range:2402-2480MHz, Maximum E.I.R.P: 7.27dBm
- 2.4GWi-Fi Frequency range: 2412-2472MHz, Maximum E.I.R.P: 9.85dBm
- 5.2G Wi-Fi Frequency range: 5150-5250MHz, Maximum E.I.R.P: 12.69dBm
- 5.8G SRD Frequency range: 5745-5825MHz, Maximum E.I.R.P: 12.09dBm

The Lixel L2 Pro-16/120 is used at 0mm from the body.

FCC STATEMENT

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:
This equipment has been tested and found to comply with the limits for a Class B digital device, under 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 under 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 the receiver.
- Connect the equipment to 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.

Any changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

The device has been evaluated to meet general RF exposure requirements.

Product after-sales information
Please check the XGRIDS website **www.xgrids.cn** for the latest after-sales information.

Documents / Resources

	XGRIDS Lixel L2 Pro-16/120 Globe Flight [pdf] User Manual 2A9PI-LIXELL2PRO, 2A9PILIXELL2PRO, lixell2pro, Lixel L2 Pro-16 120 Globe Flight, Lixel L2 Pro-16 120, Globe Flight, Flight

References

- XGRIDS - Lixel- - - - SLAM- -
- User Manual