

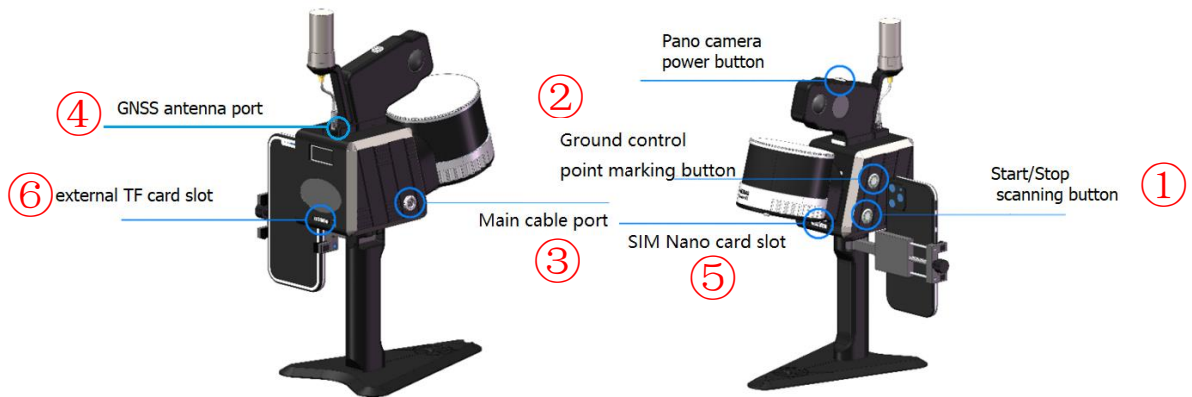
Quick guide to RobotSLAM

1. Unboxing



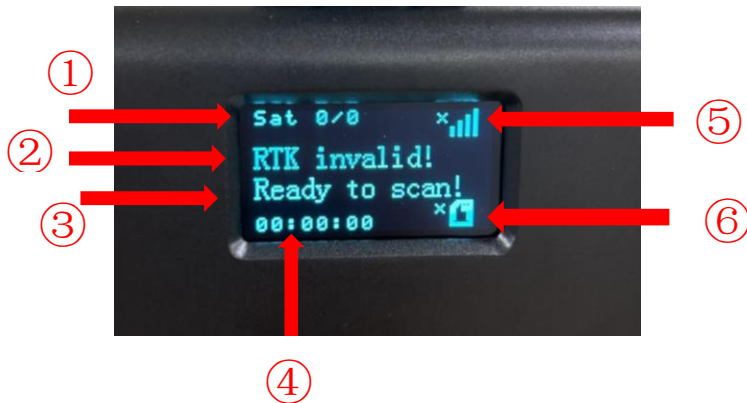
ID	Part Name	Quantity
A	Handheld (include handheld grip and target base)	1
B	GNSS antenna and cable (for built in GNSS module)	1
C	Smartphone Holder	1
D	Shoulder strap	1
E	Main cable	1
F	Battery compartment	1
G	Rechargeable battery	2
H	Battery charger	1
I	Ethernet cable	1
J	USB flash drive	1
K	External TF card	1
L	SD card reader	1
M	Cleaning cloth	1
N	Hand-carry case	1
O	Panorama camera (optional)	1
P	Fill-in light	1





2. Hardware



ID	Port Name	Functions	descriptions
1	Start/Stop scanning button	Start/Stop scanning	the button is to control the device to start scanning or stop scanning; if RTK function works, the button color is blue, if not, the button color is purple;
2	Ground control point marking button	press once to record the current ground control point location	place the device on the ground control point marks, and press the button shortly one time to record the GCP location
3	Main cable port	DC 12V ~ 16.8 V	please use the standard battery
4	GNSS antenna port	OOS signal	please use the standard GNSS antenna
5	Nano SIM card slot	SIM card	used to access local CORS via Nano SIM card
6	External TF card slot	TF card	If use the external memory, it is a must to insert the external TF card

3. LED screen

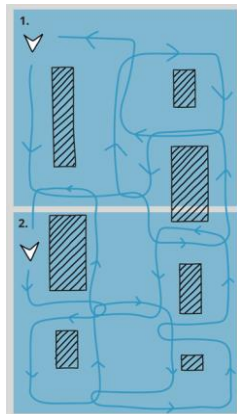


ID	Item	Content	Description
1	Satellites status	N1/N2	Number of locked satellites/number of searched satellites
2	Data recording status	Storing	Recording...
		Unstore	Stop recording
		Cam data download	Camera data is downloading, please wait...
3	RTK Positioning status	RTK invalid	No GNSS signal
		Single	there is GNSS signal, but it doesn't reach differential solution; Solution: please check the RTK account settings, if RTK settings is correct, the satellite signal is weak;
		Float	Not fix, the accuracy is between meter and centimeter
		Fixed	1~3cm positioning accuracy
4	Collection tie	h: m: s	Collected time
5	Network access		SIM card loaded
			No SIM card
6	External storage		Not detected TF card
			TF card detected
		If there is O on the left of the TF card sign	External storage works

4. Field data capture workflow

1. Plan Route

PLAN the scanning **ROUTE** first;



2. Assembly RobotSAM system and Pano camera

ASSEMBLY RobotSLAM like this, if need colorized point cloud,

INSTALL the Pano camera too.



3. Power on RobotSLAM

POWER ON RobotSLAM;



4. Power on Pano camera

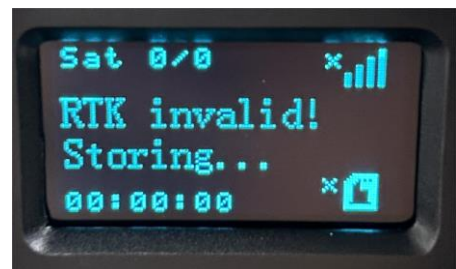
When the RobotSLAM LED screen lights, **POWER ON** Pano camera;



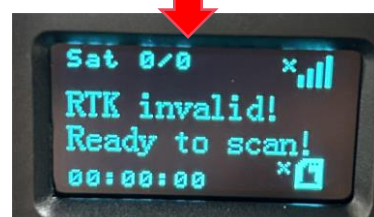
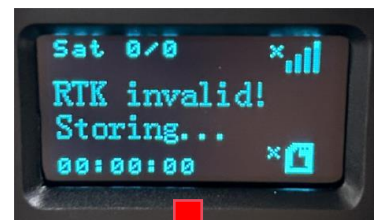
When the screen changes from "Connecting cam!" to "Ready to scan!", the system is ready to work;

7. Finish scanning

When scanning completes, go back to the starting point (to make a closure loop), **put the RobotSLAM on the ground**, and **KEEP** the device **STILL for 40s for finalizing**, press the stop scanning button (shows below), the screen shows "Storing...", and the scanner stops rotating.



RobotSLAM will save the scanner data and camera data **automatically**, just wait for it, the screen will change from "Storing..." to "Ready to scan!", and then it will change to "Saving image..." to save camera data, when seeing "Ready to scan!" again, we finish storing data.





5. DATA CAPTURE

Press the **start scanning button** to **start initializing**, the scanner starts rotating and the system starts initializing;



6. Initializing

Keep the device **still for 30-40s** for initializing, and the screen shows "Initializing..." , when "Recording..." appears, both the scanner and the camera starts recording, hold RobotSLAM handheld grip and stand up to start scanning.



Notes:

1. Make sure the device and the pano camera has enough internal memory before work;
2. Hold the handheld grip first, and then stand up.
3. It is better to make a closure loop for the scanning, that means starting point and ending point should at the same location or close to each other;

