E300 Receiver
Quick Start Guide
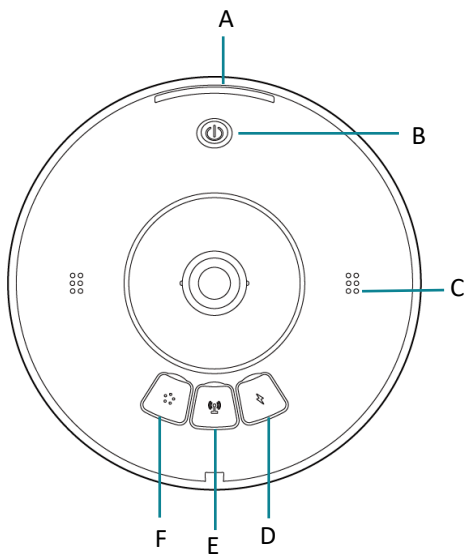
Contents

01 | E300
GNSS RECEIVER

1.1 E300 receiver host component

A. Indicator light

B. Power button

C. Speaker

D. Data / Power / SIM card slot

E. Internal radio antenna interface

F. 5PIN interface

1.2 E300 LED indicator

The E300 indicator is a revolving lamp. The user can judge the working status of the device by the color and dynamic graphics of the indicator.

Indicator	Status	Color	Introduction
	The indicator light gathers from the sides to the middle	Blue	Bluetooth is connected, data link reception status
		Green	Bluetooth is not connected, data link reception status
	The indicator light diffuses from middle to the sides	Bllue	Bluetooth is connected, data link transmission status
		Green	Bluetooth is not connected, data link transmission status
	The indicator is normal on	Red	Receiver self-test error

1.3 E300 power indicator

The power indicator is the power of the E300 receiver. The user can determine the power status of the device based on the status of the indicator.

Indicator	Status	Introduction
	Green light is normal on	Battery level >30%
	Green light is flashing	Battery level 10%-30%
	Red light is normal on	Battery level <10%

1.4 E300 Button

| Button	Introduction	
	Turn on the receiver	Press and hold the button for 1 second, the power indicator will be on, LED indicator will indicate the working state of each module of the receiver, and the receiver will be turned on.
	Turn off the receiver	Press and hold the button for 3 seconds, the host voice prompts "Power Off", and press the power button again to confirm to turn off the device.
	Status checking	Press the power button for 1 second under the working state of the device, and the device will broadcast the current working state of the device.

1.5 E300 SIM

The E300 receiver has a built-in all-network 4G network module, and users can place the SIM card in the device to use the network for 1+1 differential data transmission or network CORS access.
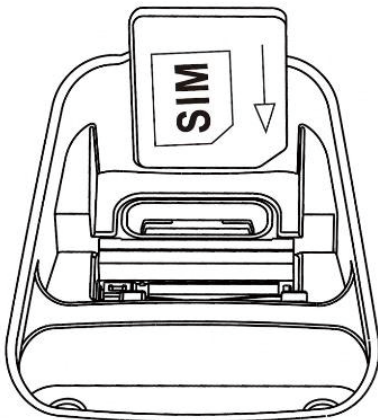
- Open the protection cover of device power supply and data transmission port.

- Insert the SIM card as prompted.

- Restart the receiver to use the network module.

> ☞ The SIM card of the E300 does not support hot swapping. The user needs to place the SIM card in the off state, or restart the device to use the network module normally after placing the SIM card.

1.6 E300 charging

Insert the USB-TypeC power cable into the E300 receiver and the charger of the standard configuration, connect the charger to the power supply, and the LED indicator of E300 will provide the charging progress. When the LED indicator is always on, and the charging is completed.

1.7 E300 data transmission

Insert the USB-TypeC data cable into the E300 receiver and computer respectively, turn on the receiver, and the device prompts "Connect to the computer". Press the power button to confirm the computer connection mode within 5 seconds. The user can use the USB mode to download data.

1.8 E300 WebUI operation

The E300 receiver supports the WebUI mode. Users can use WiFi to connect to the receiver and use the WebUI to set up the receiver, download data, and upgrade the firmware.

- Turn on the WiFi mode of the E300 receiver.

- Search for the hotspot of the E300 receiver number on the mobile terminal and connect it.

- On the browser page, enter: 192.168.10.1 to enter the E300 WebUI settings page.

- Enter the management password: "password" to set up the receiver, download data, and upgrade the firmware.

02 Instrument set-up

2.1 Base station
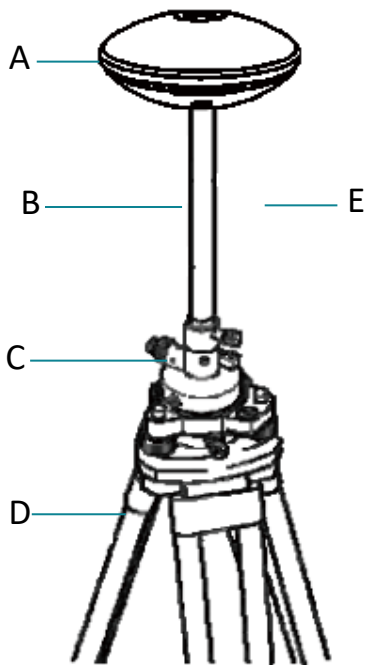
A. E300 receiver

B. Support rod

C. Tribrach

D. Tripod

E. Built-in radio antenna

☞ Tribrach and tripod are not standard configuration accessories, users can purchase separately.

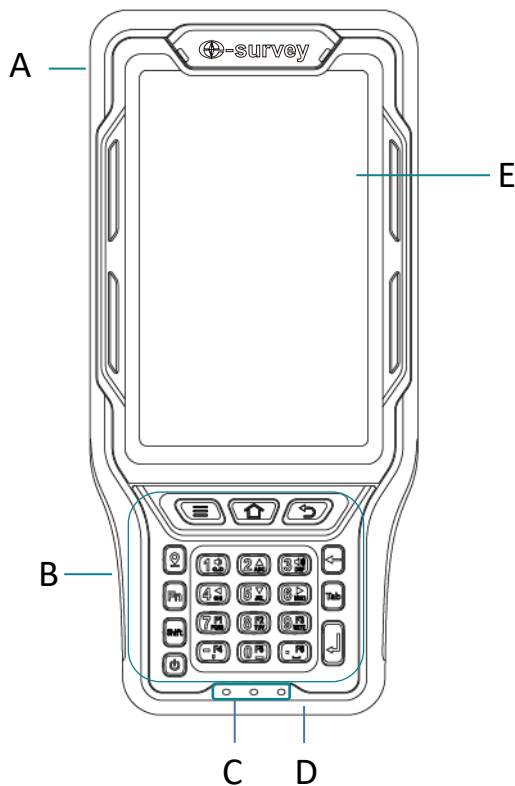| Step	Introduction
1	Set up a tripod.
2	Mount the tribrach on a tripod (you can also use the disc to place the support rod directly).
3	Place the E300 receiver on the extension pole.
4	Press and hold the power button for 1 second to turn on the receiver.
5	Open the SurPad surveying and mapping software via the controller.
6	New engineering operation.
7	Bluetooth connects to the base station receiver.
8	Set the acquisition mode, data link and difference format of the base station coordinates.
9	Check if the LED indicator is in base station transmit mode.
10	Complete the base station settings.
☞	Users can choose the type of data link according to the working environment, such as using the external radio.

2.2 Rover station
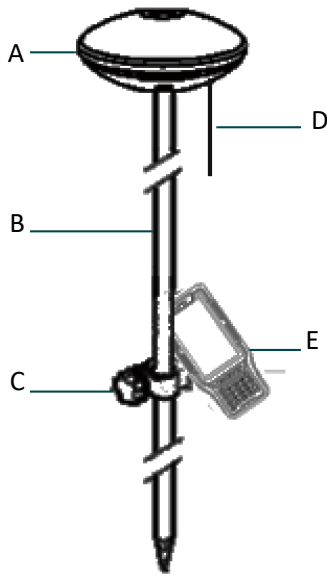
A. E300 receiver

B. Ranging pole

C. Controller bracket

D. Built-in radio antenna

E. P9II Controller

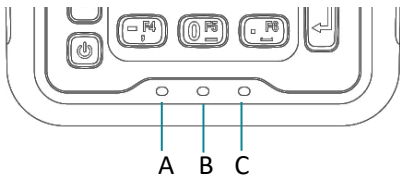| Step	Introduction
1	Fix the controller bracket on the ranging pole.
2	Place the controller in the controller bracket and tighten the screws.
3	Place the E300 receiver on the ranging pole.
4	Press and hold the power button for 1 second to turn on the receiver.
5	Open the SurPad surveying and mapping software via the controller.
6	New engineering operation.
7	Bluetooth connects to the rover station receiver.
8	Set the data link and differential format of rover station.
9	Check if the LED indicator is in the rover receiving state.
10	Complete the rover station setup.
11	Perform known point calibration and solve the conversion parameters.
12	Surveying/stakeout operations.
☞	Users need to ensure that the type of rover station data link and the differential data protocol are consistent with the base station.

03 | P9II Controller

3.1 P9II Controller component

A. Custom function keys

B. Keyboard area

C. Indicator

D. Charging / data interface

E. Touch screen

3.2 P9II Controller indicator

A. WiFi/Bluetooth indicator

B. Controller built-in GNSS indicator

C. Power indicator

| Indicator	Status	Introduction
WiFi/Bluetooth indicator	Constantly green	WiFi is on-state, Bluetooth is off-state
	Constantly blue	Bluetooth is on-state, WiFi is off-state
	Light blue	Bluetooth and WiFi are on-state
Built-in GNSS light	Constantly green	Controller built-in GNSS is on-state
Power light	Constantly red	Battery level <15%
	Constantly red/green	Battery power is between 15% and 90%
	Constantly green	Battery level >90%

3.3 P9II Controller charging

Use the standard charger and charging cable, plug one end into the power/data inter-face, plug another one end into the power adapter, and connect the power. The user can lightly press the power button to light up the screen to check the charging progress.

3.4 P9II Controller data transmission

The P9II controller uses the Google Android 5.1 operating system. Choose the "Media Device (MTP)"mode in the P9II controller after the data link connects controller and computer, user can find the P9II controller in "my computer".

04 TRU35 digital radio

4.1 TRU35 digital radio component
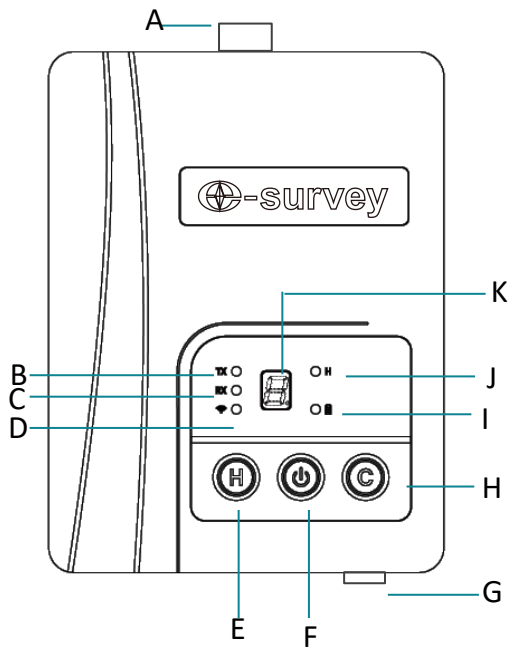
A. Radio antenna interface

B. Radio transmission

C. Radio reception

D. Bluetooth

E. High and low power switching

F. Power button

G. Power/data interface

H. Channel switching

I.   Power status

J. High power mode

K. Channel indication

4.2 TRU35 digital radio indicator

Indicator	Status	Introduction
TX	Flashing green	Transmitting data, default is off
RX	Flashing green	Receiving data, default is off
📶	Constantly blue	Bluetooth connection status, default is off
H	Constantly green	Constantly green is in high power mode and off is in low power mode
🔋	Constantly green	Normal voltage, flashing is low voltage alarm or high temperature alarm