# RTK Base Station Safety Notice

 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.

- This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.
- Please take attention that changes or modification not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

## **Product overview**

EAV-BAS30 is a high-precision satellite signal receiver, which can receive BEIDOU, GPS, Galileo, GLONASS, and other satellite signals. Equipped with the wireless data transmission radio, the built-in high-precision RTK module, and the surveying tool, it ensures the autonomous operations of the drone in areas with weak or no network.

# List of items



①Main Body ②Extension Rod ③Tripod

(1)GPS Antenna (2)Status LED (3)GPS LED (4)Power Switch (5)Battery Level LED (6)2.4G Antenna





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# LED description



Base	Station	UI

	LED Signal	Description
	Off	Power off
Status	Solid Blue	Working
	Flashing Blue	Base Station Align Mode
LED	Solid Red	Initializing
	Flashing Red	Fault
DPGS LED	Off	Power off
	Solid Yellow	Initializing
	Flashing	Receiving Signal (Number of Satellites
	Flashing Blue	GPS Mode
	Solid Blue	RTK Mode

### Assemble and use

Set the mobile base station in an open area and keep it horizontal. Make sure there's no obstruction between the remote controller and the base station, and the GPS antenna is unobstructed. Make sure nothing obstructs the area within 120° above the main body of the base station. Set the base station higher for better transmission distance when surveying and operating in hills and mountains.



- (1) Base station assembly, power-on, power-off, power check
  - a) Extend the tripod to set the base station to an appropriate height.
  - b) Assemble the 2.4G antenna and make sure it's tightened firmly.
  - c) Press and hold the power switch for 3s until the battery level LED flashes, then press to power on.
  - d) Press the power switch to check the battery level. Users can only power on the base station after the battery level LED shows the power and is off.
  - e) Press and hold the power switch for 3s until the battery level LED flashes,

then press to power off.

- (2) Ready for work
  - a) Make sure the status LED is normal after powering on the base station.
  - b) It takes about 90s for the base station to enter RTK mode in an open area.
  - c) The base station is ready for work when the status LED shows solid blue and the DGPS LED shows solid blue.

#### (3) Surveying tool connection

- a) Mount the surveying tool to the remote controller.
- b) Enter EAVISION Smart AG Pro app and tap Device.



c) View the connection status of the surveying tool. Make sure the Status shows normal.

×		Device		
×	Drone 143	Surveying Tool		
ę	Base Station	Name	Surveying Tool 4.0	
-	Surveying Tool	Status	Normal	
0	APP (12(662)			
Ċ	Controller			

- (4) Base station status check
  - a) Tap Base Station, then the dropdown button to choose the type.

×		Device		
Ħ	Drone	Base Station	千寻基站 Ntrip	n not be removed randor soving the base station
φ	Base Station	Base Station Type	EAV-BAS-30	Align
	14.5	Base station ID	25 13	
m	Surveying Tool	Base station version	Uisconnect	
_		Satellites	27	
0	KOOMMON *	Latitude	31.343085	
6	Controller	Longitude	120.813354	
~		Operation status	Normai	

b) Choose EAV-BAS30, tap the icon of the base station and it will be automatically connected. One base station can be connected to multiple remote controllers to offer centimeter-level positioning service for multiple EAVISION drones.



c) After connecting to the base station, its information can be viewed on the

×		Device	
×	Drone	Base Station	Note: base station can not be removed randor Please restart after moving the base station to another place.
Ŧ	Base Station	Base Station Type	EAV-BAS-30 -
		Base station ID	30053
m	Surveying Tool	Base station version	V1.0.6
~	4.000	Satellites	27
0	ALTIGHT:	Latitude	31.343085
èté Controller	Longitude	120.813354	
9		Operation status	Normal

app.

### (5) Operations

 a) Surveying: enter Survey view, tap Setting to check the RTK connection status of the surveying tool. Start surveying when the RTK connection is normal. Make sure there's no obstruction between the remote controller and the base station to avoid losing the position information.



- b) Operations: enter Operate view, tap Setting to check the RTK connection status of the drone. Start operation after the drone is ready to receive tasks without warning prompts.
- c) Make sure there's no obstruction between the remote controller and the base station, and nothing obstructs between the remote controller and the drone during the operation. Otherwise, the signal at any end may be blocked which may lead to the loss of the RTK positioning signal.



d) Make sure the location of the base station in operation is the same with that

of the base station in plot surveying, and the error shall be less than 0.5m, or the operation accuracy will be decreased.

- (6) Firmware upgrade
  - a) Connect the base station with the remote controller through Type-C data cable.



- b) Tap Upgrade on Device view.
- c) Choose the corresponding firmware, tap Upgrade.
- d) The firmware will be upgraded automatically.



e) The system will indicate the upgrade status after that, and the remote controller will restart automatically. Use the base station after the status

LED shows solid blue.



(7) Base station location management

Current location data can be kept in the base station, and there's no need to realign next time in the same location. Tap Manage Base Station Location, choose the previous location data, tap Use the Location, and then Save Base Station Location to apply the location data.

