

# Quick Start Guide For RTK15D Series Products



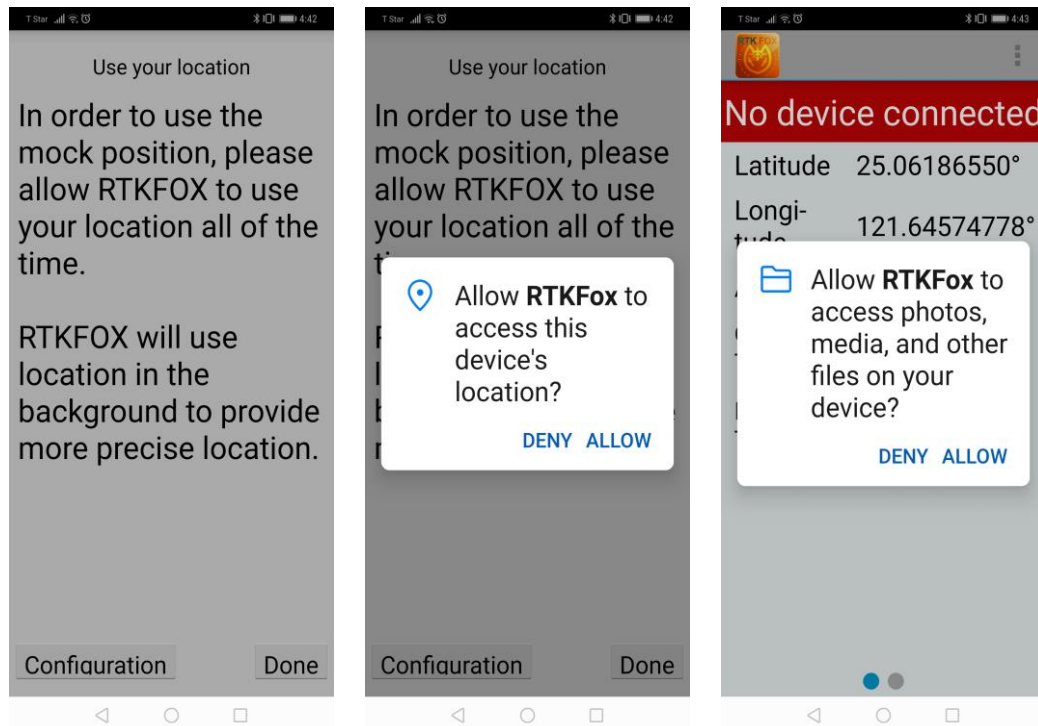
## 1. Introduction

RTK15D series products are compact portable devices that can quickly equip smartphones with centimeter-accurate RTK. They are easy to use and do not require any complicated wireless or Bluetooth pairing and connection operations. For the first time use, just install the mobile APP on your smartphone, enter NTRIP settings, and you are ready to use. After that, as long as the device is plugged into the smartphone, the APP will automatically pop up and start high-precision RTK positioning.

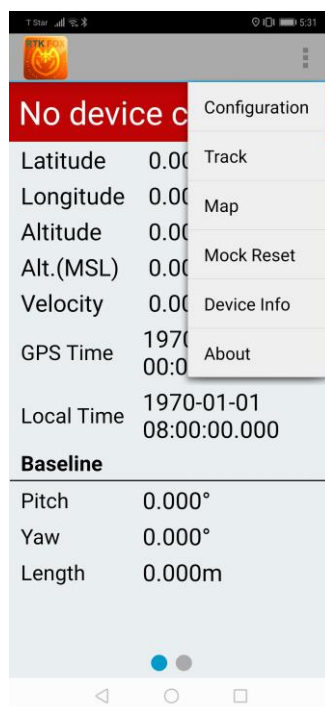
RTK-15D which support GNSS frequency L1+L5.

## 2. Getting started

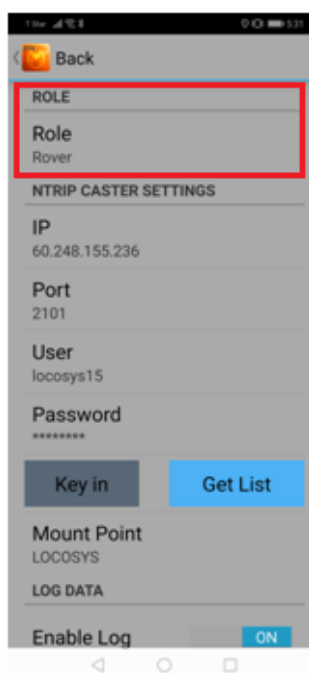
1. Download the mobile APP named RTKFox-15D from Play Store and install.
2. Open RTKFox-15D APP, touch "Configuration" button, allow it to access data as below pictures.



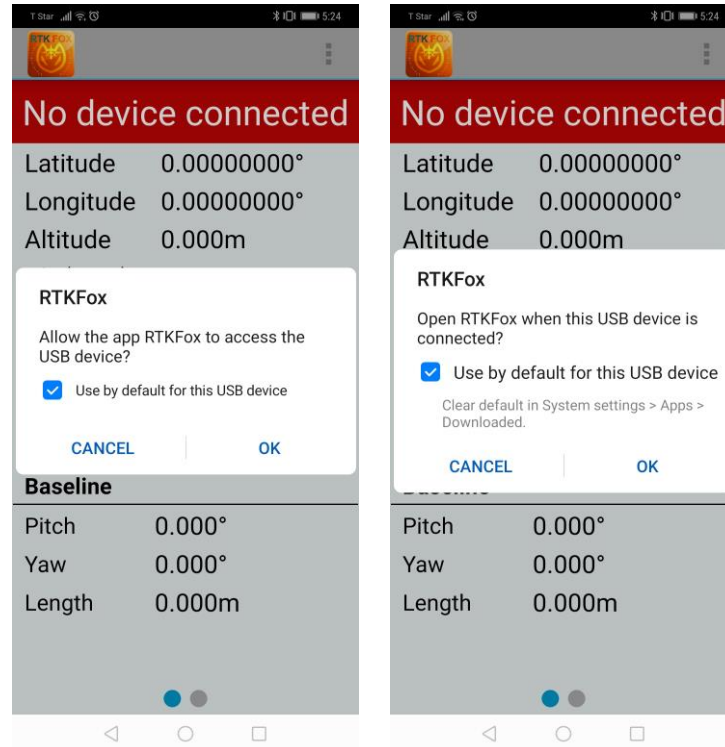
3. Touch the button  in the upper right corner. Then select "Configuration".



4. Select Role as Rover. Enter NTRIP settings including IP, Port, User and Password. Then touch "Get List" button and select "Mount Point". You can touch "Key in" button to enter Mount Point, too. If you want to log data of RTK position and GNSS raw data, turn on the switch of "Enable Log". The data will be saved to the smartphone in the directory "Local storage>Device Storage>RTKFox-15D". After finishing the settings, touch the button "Back". All settings on this page will be saved.



5. Connect USB cable to both the device (RTK15D series product) and your smartphone. Check the items and press OK as below pictures. These operations allow APP to automatically pop up and start RTK positioning when the device (RTK15D series product) is plugged into your smartphone.



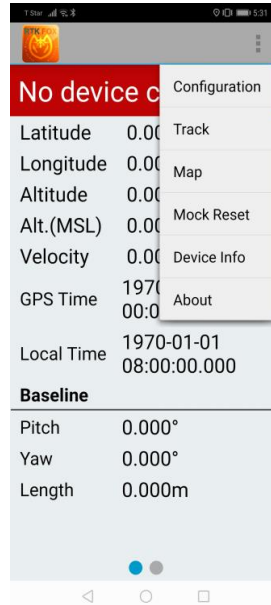
6. Now you can go outdoors to get centimeter-accurate RTK position.



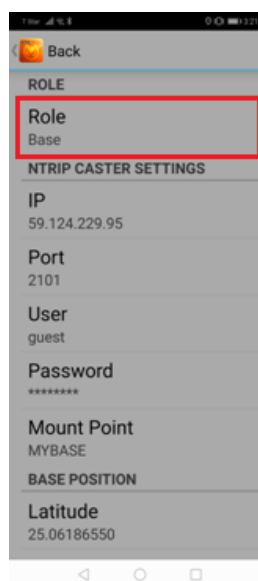
### 3. How to configure the device to be a base station?

In addition to be a rover that provides RTK positioning, RTK15D series products can also be configured to be a base station. The steps are as follows.

1. Touch the button  in the upper right corner. Then select "Configuration".



2. Select Role as Base. Enter NTRIP settings including IP, Port, User, Password, Mount Point. Scroll down and enter Latitude, Longitude and Height of the device's (RTK15D series product) antenna location. Note that it must be the actual correct location of the device's antenna. If you want to log GNSS raw data, turn on the switch of "Enable Log". The data will be saved to the smartphone in the directory "Local storage>Device Storage>RTKFox-15D". After finishing the settings, touch the button "Back". All settings on this page will be saved.



- Now the device performs as a base station. The location shown below is what you entered in step 2 above.



Please note GNSS antenna of the base station should be mounted where a 360° unobstructed clear view of the sky (at 10° angle from the horizontal) is available. And away from motors and high-power transmitters, such as telecommunication base stations and radar antennas.

#### 4. Service of NTRIP caster

If you have two devices (RTK15D series products), you can configure one as the base station and another as the rover. Then use LOCOSYS's free service of NTRIP caster to link them. Below is the information of LOCOSYS NTRIP caster.

|             | For base station | For rover     | Remark                                                                                                                                                                            |
|-------------|------------------|---------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| IP          | 59.124.229.95    | 59.124.229.95 |                                                                                                                                                                                   |
| Port        | 2101             | 2101          |                                                                                                                                                                                   |
| Mount Point | V8DM7C8z2cnD     | V8DM7C8z2cnD  | The user enters Mount Point named by himself. In order to work correctly, the name must be different from others. Mount Point of the base station and the rover must be the same. |
| User        | guest            | guest         | Any text is acceptable.                                                                                                                                                           |
| Password    | 1234             | 1234          | It may change over time. Please contact us for the active password.                                                                                                               |



After completing the settings, the rover can receive the correction data from the base station to get RTK positioning.

Please note the entered location of the base station must be the actual correct location of its antenna. RTK fix rate of the rover may decrease with the distance between the rover and the base station.

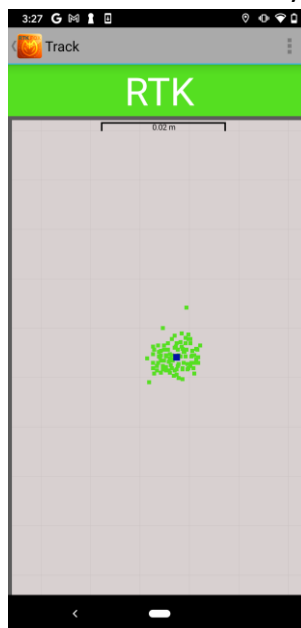
## 5. Satellites Information

Satellites information shows the satellites signal strength and satellites number. Upper left corner provides a combo box to switch rover or base satellites information. The histogram shows the signal strength in each satellite. The L1 satellites signal strength shows by solid lines. The L5 satellites signal strength shows by dotted lines. The number of “VIEW” means how many satellites data is received by RTK15D. The number of “USED” means how many satellites data is used by RTK algorithm.



## 6. Track

To track position trajectory in centimeter level map. It' help you realize the distribution situation of fixed position point. Each point is a fixed position point. When you are in static status, you can see the point distribution like a circle around you.



## 7. Map

Open google map to display the current position on the map.

## 8. Mock Reset

Reset the android mock location.

## 9. Device Info

Display device model and firmware version.

## 10. About

Display application version and other information about application.

