GR-903
SPPRTK Android APP
User Guide for
OTG USB Connection

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1. Introduction

This guide demonstrates how to use the SPPRTK application with the Navisys GR-903 device.

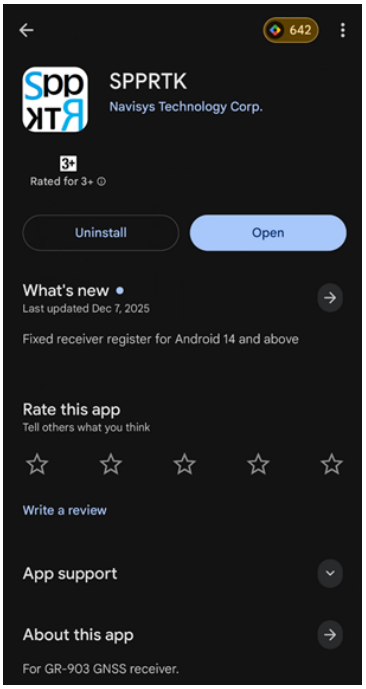
1.1 Preparation

Before using SPPRTK, ensure you have the following items:

- Navisys GR-903 device
- Android phone with wireless network capability
- USB-C to USB-A (Female) OTG adapter or cable

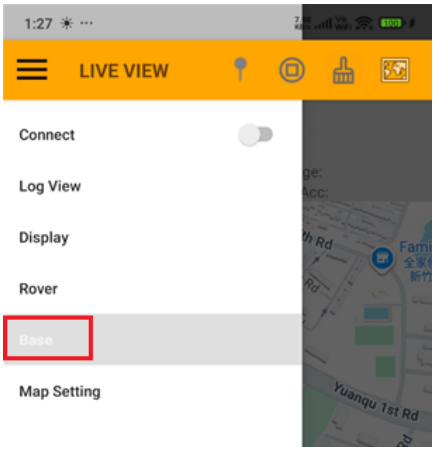
2. How to Use

1. Download the SPPRTK application (freeware) from Google Play.

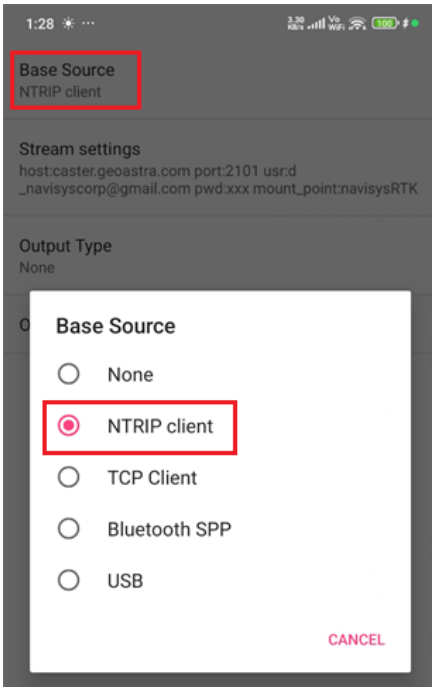


2. Open the application and tap the menu icon in the top-left corner to display the main menu.

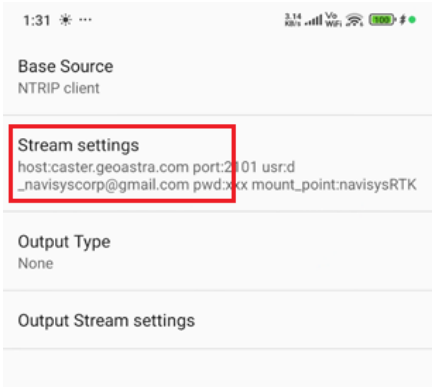
3. Select “Base” from the main menu to access the Base setup screen.



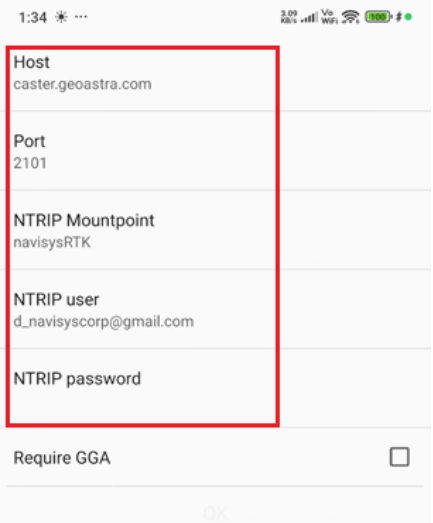
4. Tap “Base Source” to select your base source. The example shown below demonstrates the “NTRIP client” option.


1:28
Base Source
NTRIP client
Stream settings
host:caster.geoastra.com port:2101 usr:d
_navisyscorp@gmail.com pwd:xxx mount_point:navisysRTK
Output Type
None
Base Source
None
NTRIP client
TCP Client
Bluetooth SPP
USB
CANCEL

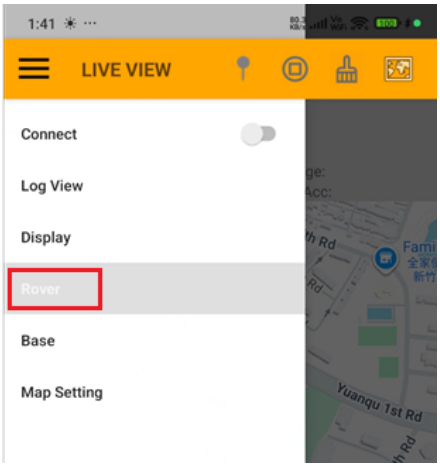
5. Choose on “Stream settings”.



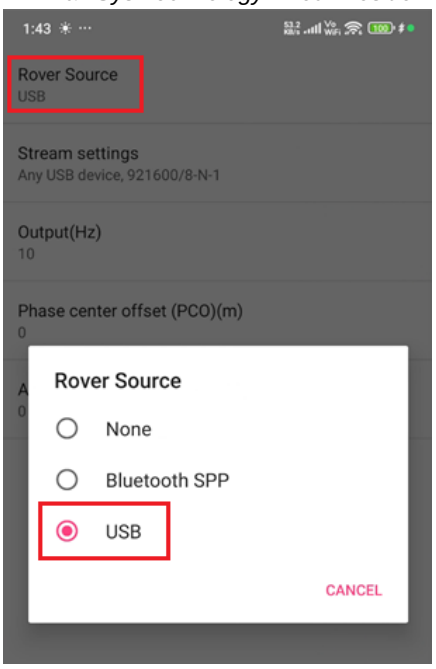
6. Enter the Host, Port, NTRIP Mountpoint, NTRIP User, and NTRIP Password for the Base source. Select the Require GGA checkbox if GGA is required for your Base source.



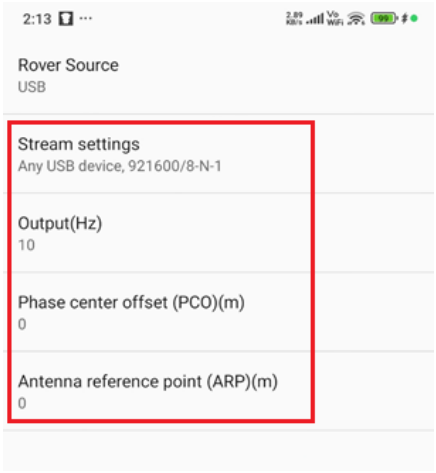
7. Return to the main menu and select Rover to configure the rover settings.



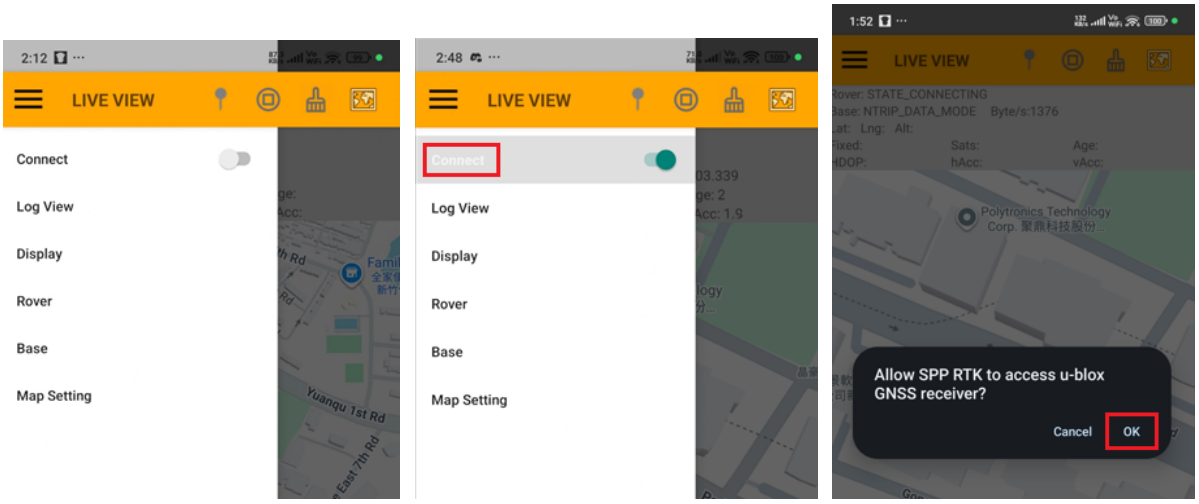
8. Select Rover Source to choose the rover source. This example uses USB.



9. **Stream Settings**: Configure the baud rate. Select **921600**.
   Output (Hz): Sets the data update rate.
   Phase Center Offset (PCO) (m): Sets the phase center offset.
   Antenna Reference Point (ARP) (m): Sets the antenna reference point.



10. Return to the main menu. Connect the GR-903 to your Android phone via the OTG adapter. Select **Connect**. When prompted with "Allow SPP RTK to access u-blox GNSS receiver," select **OK**.



11. When the **people** icon in the center turns green, the RTK fix has been successfully established.
Parameter Descriptions:

- **Rover**: Status of the rover
- **Base**: Status of the base station
- **Byte/s:** Data transmission speed
- **Lat**: Latitude
- **Lng**: Longitude
- **Alt**: Altitude
- **Fixed**: Fix mode (options: DGPS, FloatRTK, RTK)
- **Sats**: Number of satellites used in position fix
- **Age**: Age of RTCM correction data in seconds
- **HDOP**: Horizontal Dilution of Precision
- **hAcc**: Horizontal accuracy (m)
- **vAcc**: Vertical accuracy (m)