How to use Ardusimple products with Android smartphones/tablets

- *2020-01-20*

In this step by step tutorial we will explain how to use your Android device with Ardusimple products.

1. Make sure your device supports Bluetooth 2.0 or has USB OTG capabilities
2. Make sure your Android language is set to English, since some users reported compatibility problems with other languages.
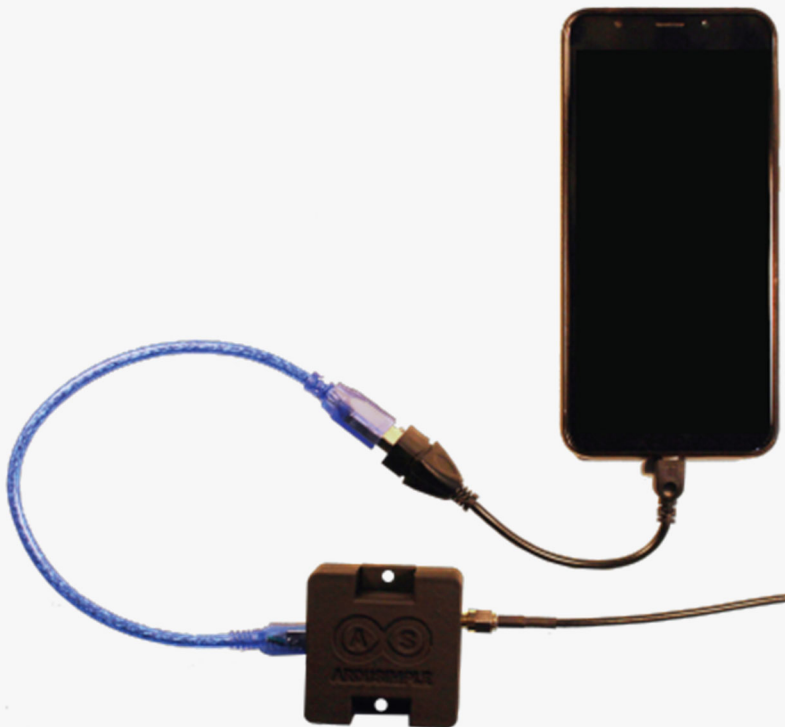3. Download [SW Maps](#) app from Google Play and install it in your device.
   There are many applications which are compatible with our devices, but SW Maps is our preferred one: supports u-blox F9P modules, has an integrated NTRIP client, it is light and free
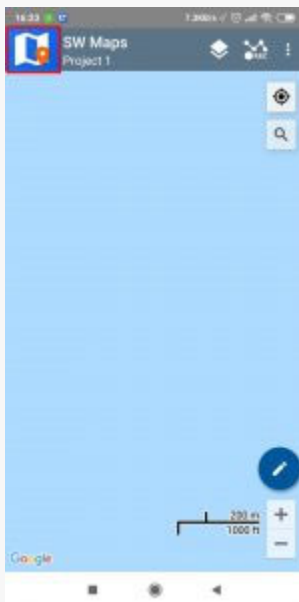
CONNECTION VIA USB OTG
The best option (if your device supports it) since you can power and communicate with it at the same time

4. Connect the GNSS antenna to your device, in a location with **good view of the sky**, or near a window for testing the functionality
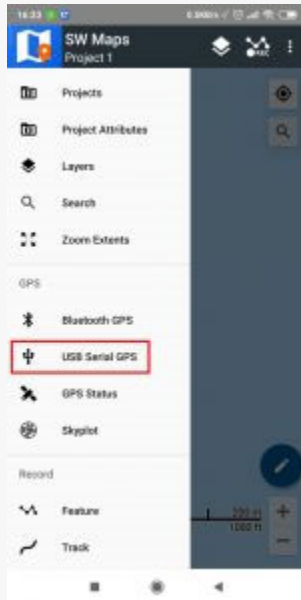
5. Connect the USB cable to your Ardusimple board, together with the USB OTG cable and your device

6. Open SW Maps app and give permissions (first time only)
7. Click on the SW Maps icon to show the app menu

8. Select *USB Serial GPS*

9. Under *Devices*, you should see **FT232R USB UART**.
   Set *BaudRate* to **38400**bps.
10.   Set *Instrument Model* to **u-blox RTK**.
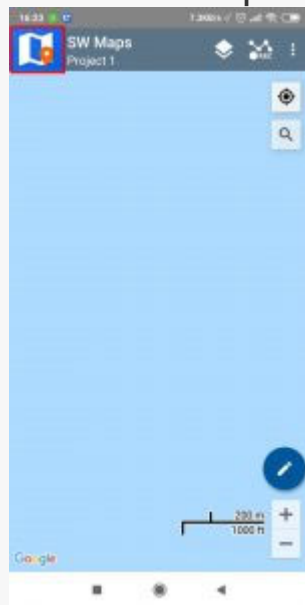11.   Click **CONNECT** button.
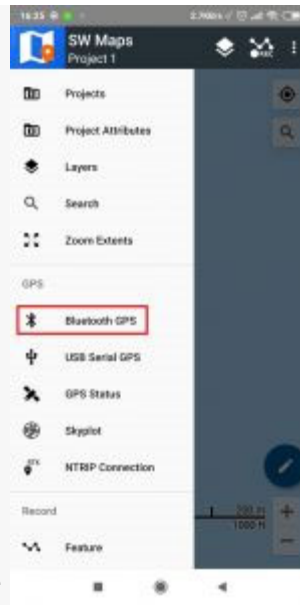   *When you click the CONNECT button, grant permissions (if*

asked).

CONNECTION VIA BLUETOOTH

4. Connect the GNSS antenna to your device, in a location with **good view of the sky**, or near a window for testing the functionality
5. Power your Ardusimple board using its USB connector. *Use a USB power bank, power wall adapter, smartphone, laptop, …*
6. Enable the Bluetooth connection on your device
7. Pair the Ardusimple board in the Android Bluetooth menu. When searching for devices, you may see only the MAC address, but once paired the name will update to simpleRTK2B. Password is *1234*
8. Open SW Maps app and give permissions (first time only)
9. Click on the SW Maps icon to show the app
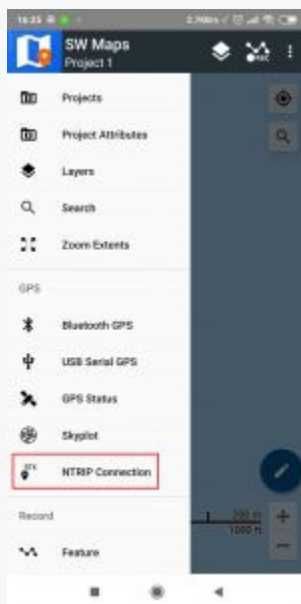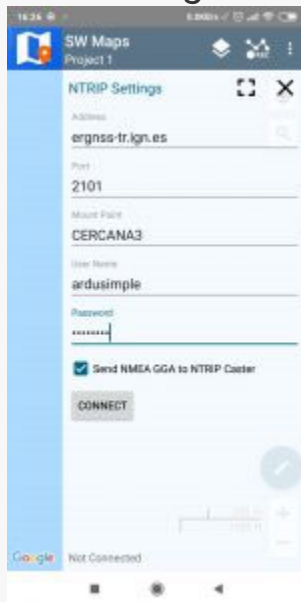

menu

10.   Select *Bluetooth GPS*

11.   Under *Devices*, you should see **simpleRTK2B,** select it.
Set *Instrument Model* to **u-blox RTK**.
Click **CONNECT** button. *When you click the CONNECT button, grant permissions (if asked).*

11.   Since you have a RTK capable GNSS receiver, let's connect it to a NTRIP server to get cm accuracy.
Go back to SW Maps menu and select *NTRIP Connection*
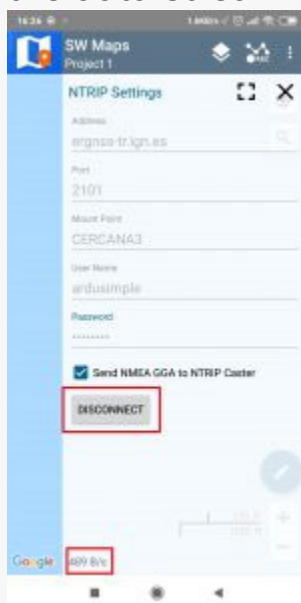

12.   Fill all the fields with your NTRIP provider data.
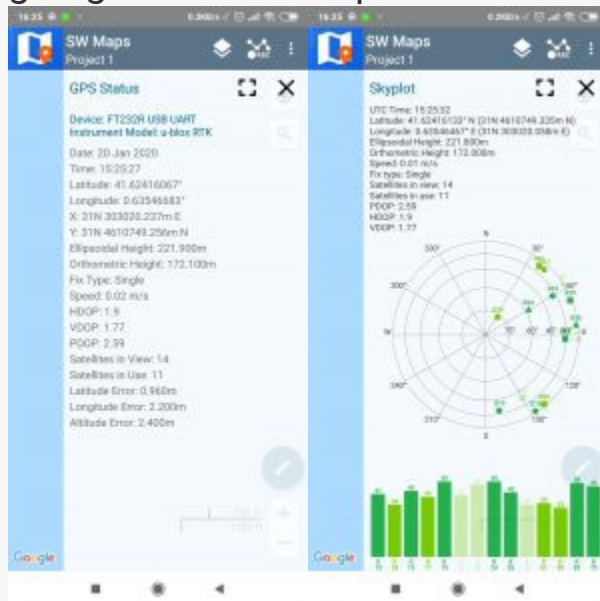Make sure to check *Send NMEA GGA to NTRIP Caster* if you are

connecting to a VRS.

13.   When you click *CONNECT*, if everything worked, you will see the data stream alive

14. You can see some details of your Ardusimple receiver by going to the SW Maps menu and selecting *GPS Status* or *Skyplot*

15. In the main screen, you can click the button shown in the below picture to make the app center the map in your receiver location.
The pointer showing your location will change its color depending on the fix status of your receiver.
You can change the map layer, add points, tracks, export/import recorded locations and much more.

16. You can get used to the SW Maps app by trying the different options, but if you are looking for a manual you can find it here: http://swmaps.softwel.com.np/