CHC® i80 GNSS Receiver QuickTour with FieldGenius

(Internal UHF Base Mode)

1.Prerequisites

Hardware: CHC i80 Base with internal radio Kit, Controller Kit,UHF Bar Antenna (450-470 MHz), Lithium Battery, Extension Pole, Tribrach with optical plummet, Auxiliary H.I. Tool, H.I. Tape, Tribrach adaptor, Tripod, LT30 handheld

Software: FieldGenius8

2.Steps to set i80 working as base in internal UHF mode with FieldGenius

2.1 Base installation

Set up base on known point or unknown point as shown in follow figure and screw **bar antenna** on base receiver.

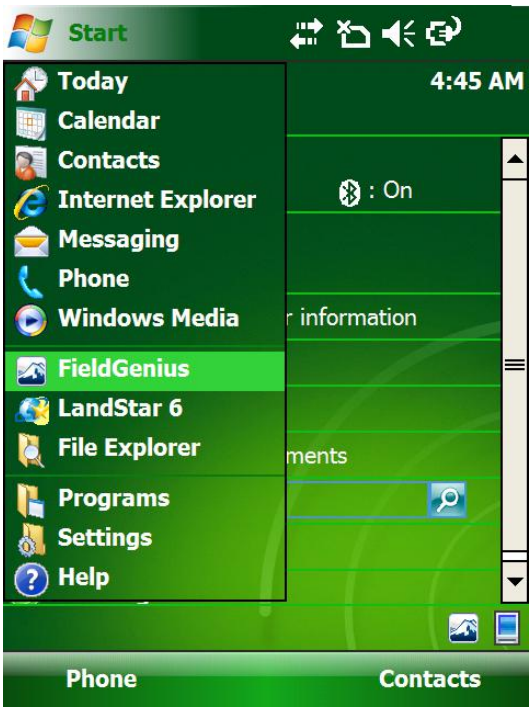
Note: The recommend firmware version of i80 is 1.3.36 or higher. If not, please contact local dealer or CHC Support for latest firmware.

2.2 Base setting in FieldGenius

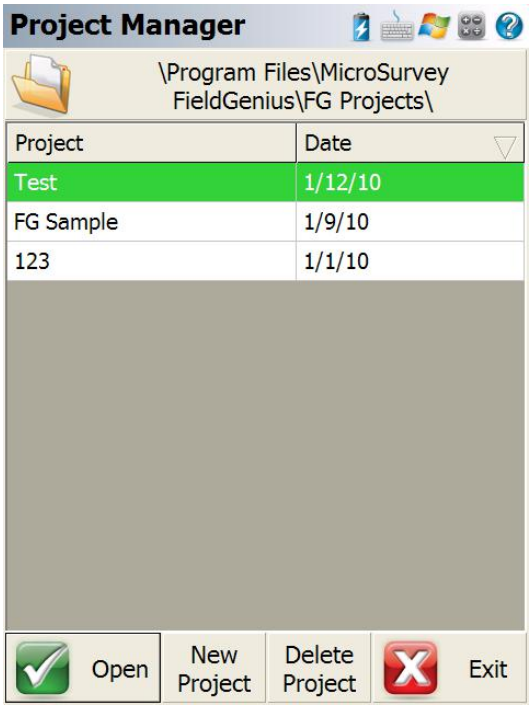
1. Power on the receiver

Long press the i80 power button until the green and blue LED lights are on.

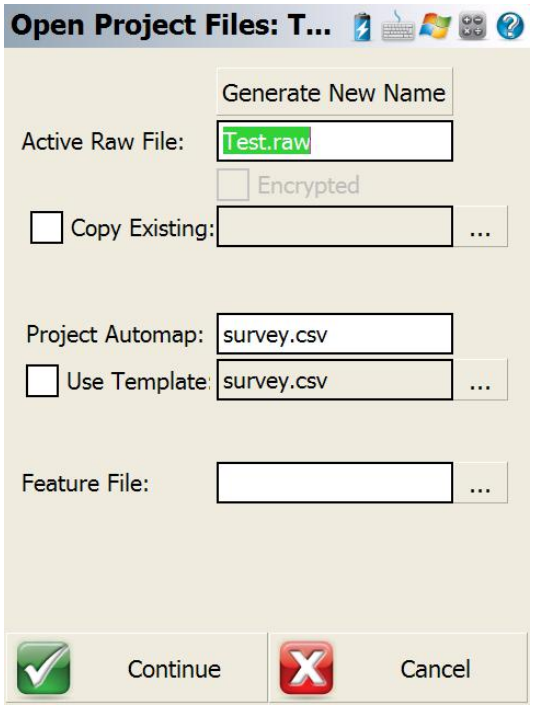
2. Click on **[start]** and then FieldGenius.



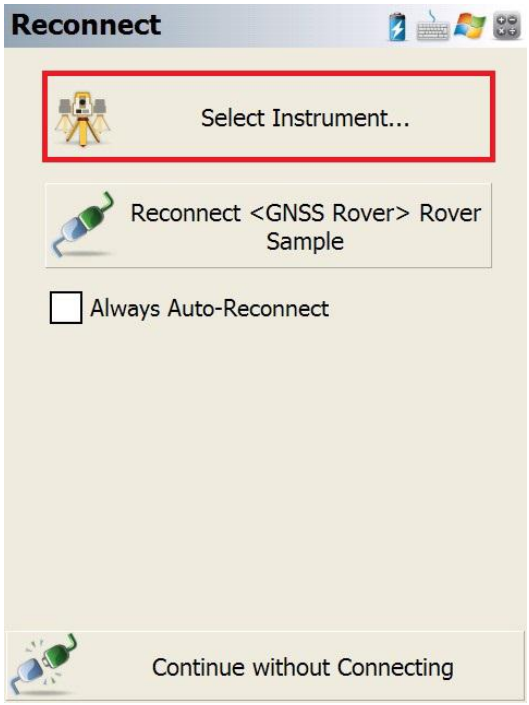
3. Click **[New Project] to create a project or Click [Open] to open one exist project.**



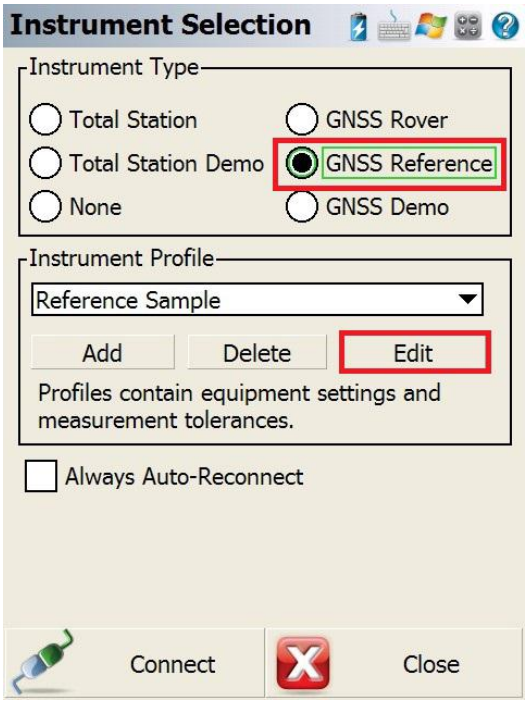
4. A project file should be selected then click **[Continue]** for next step.



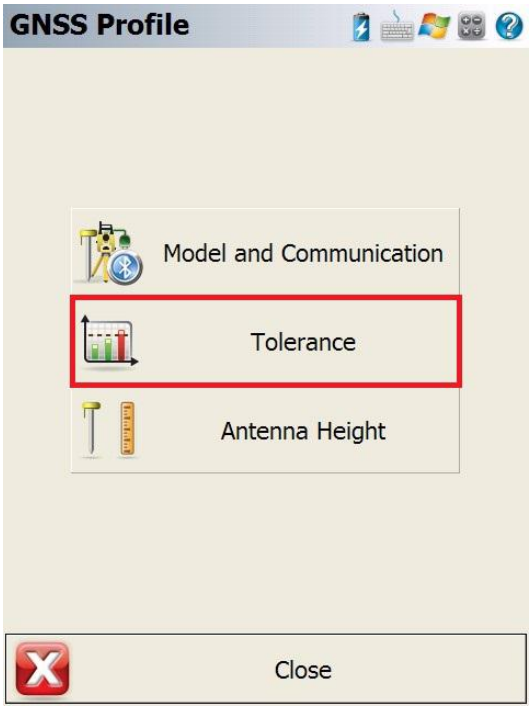
5. Click on **[Select Instrument]**

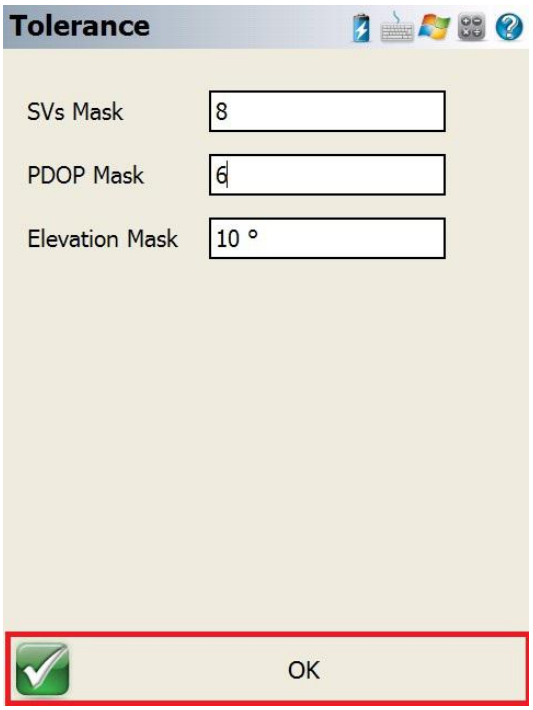


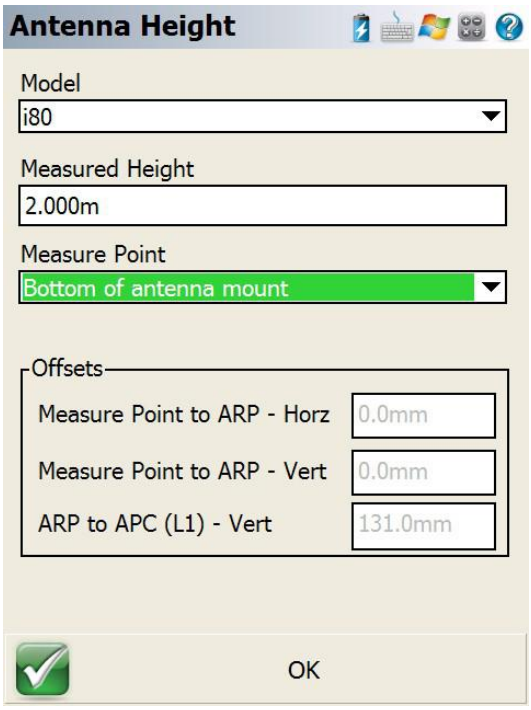
6. Select **[GNSS Reference]** option then click **[Edit]** to select device and linking method



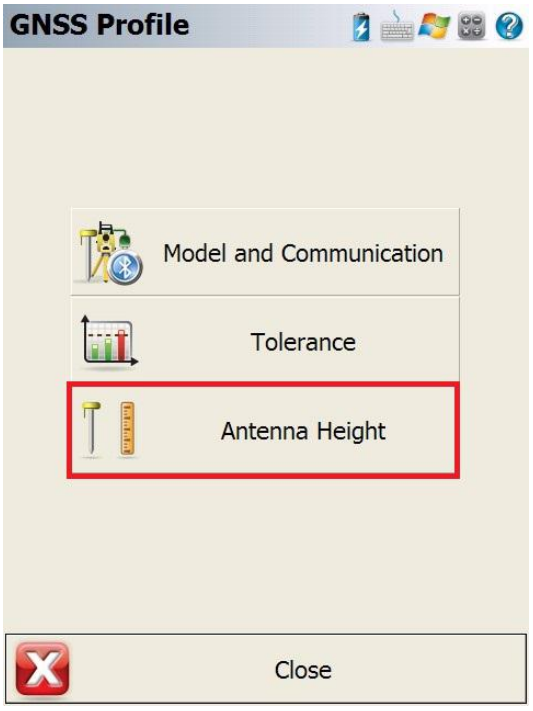
7. Click **[Tolerance]** tab to set base station satellites mask, PDOP mask and elevation mask.





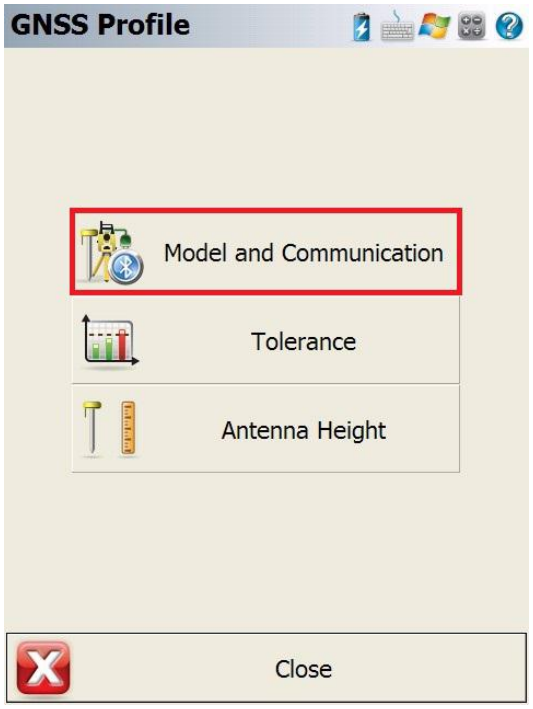


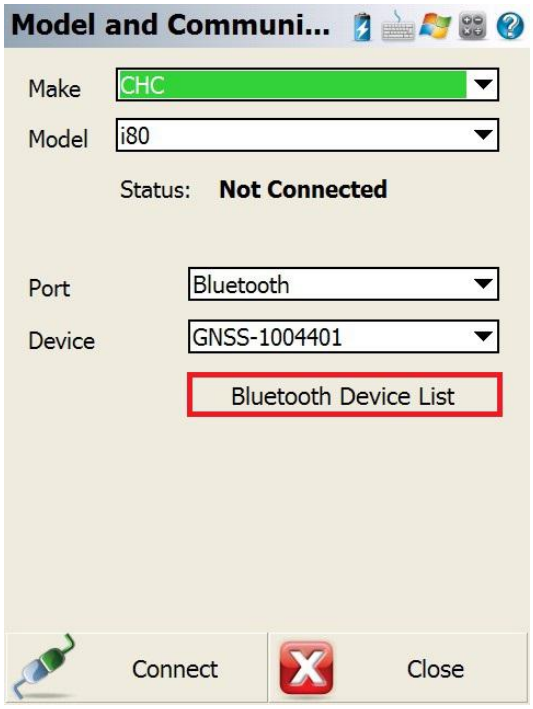
8. Click **[Antenna Height]** to set the base antenna height



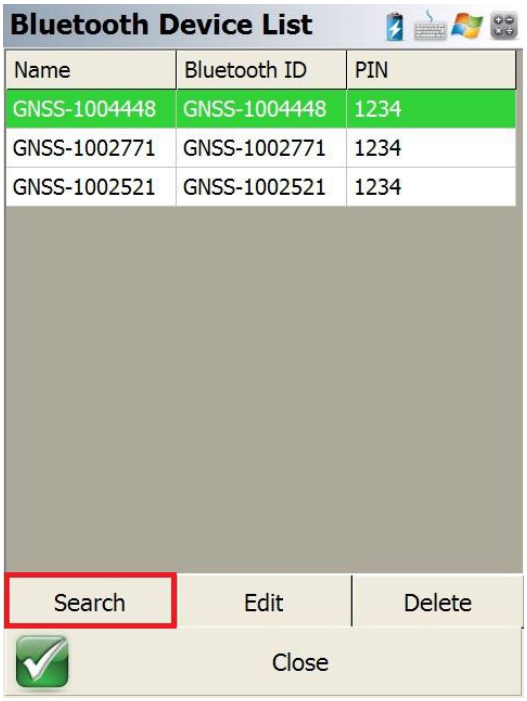
Note: if you want to measured the slant height of i80,please refer to the follow figure.

9. Click **[Model and Communication]** tab→select Make as **[CHC], Model as [i80], Port as [Bluetooth]** → click **[Bluetooth Device List] to add bluetooth device**

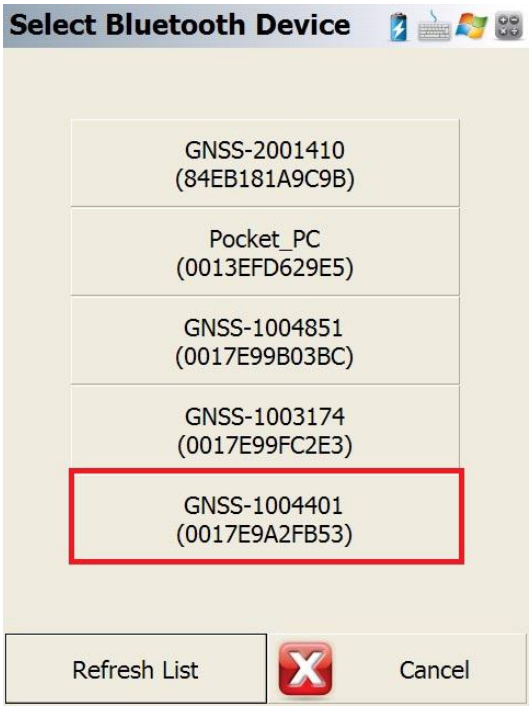




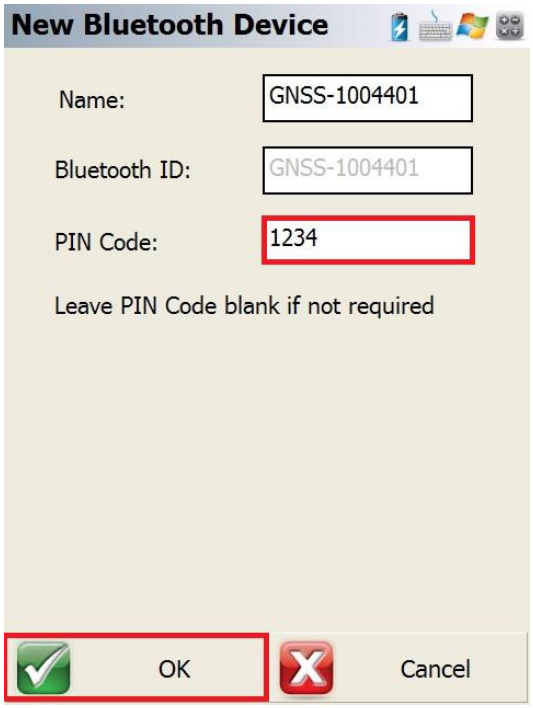
10. Click **[Search]** to search the around Bluetooth device.



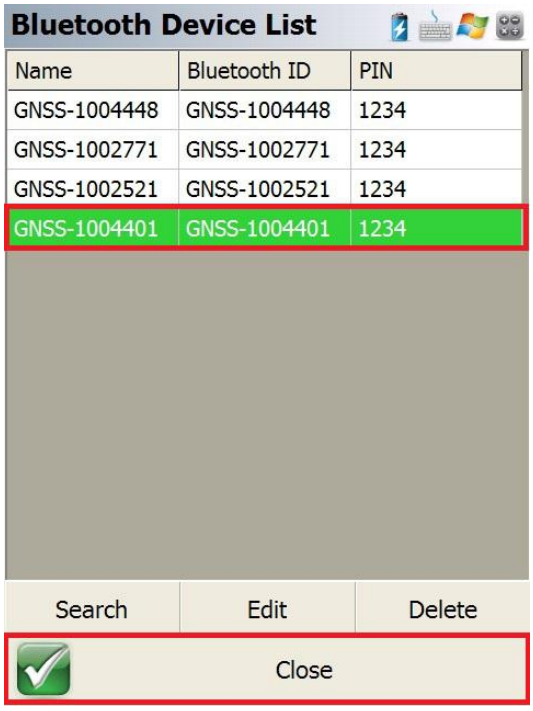
11. Click on the device that matches your device serial number, then click it



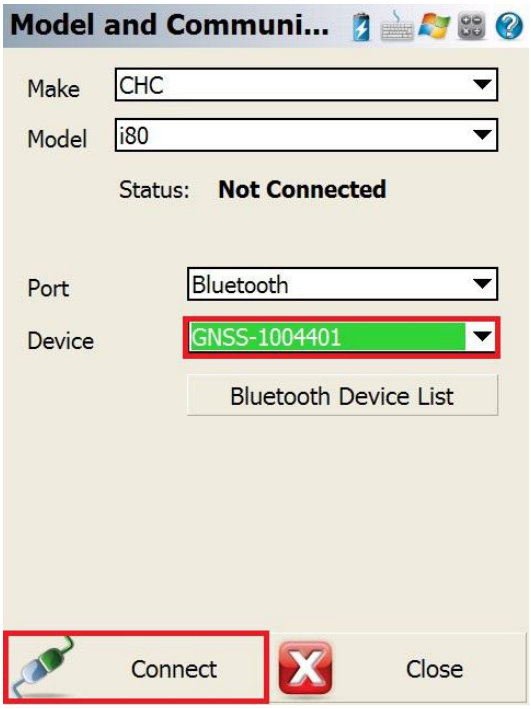
12. Type in the **PIN Code of the bluetooth** then click **[OK]** button to finish the device edit.



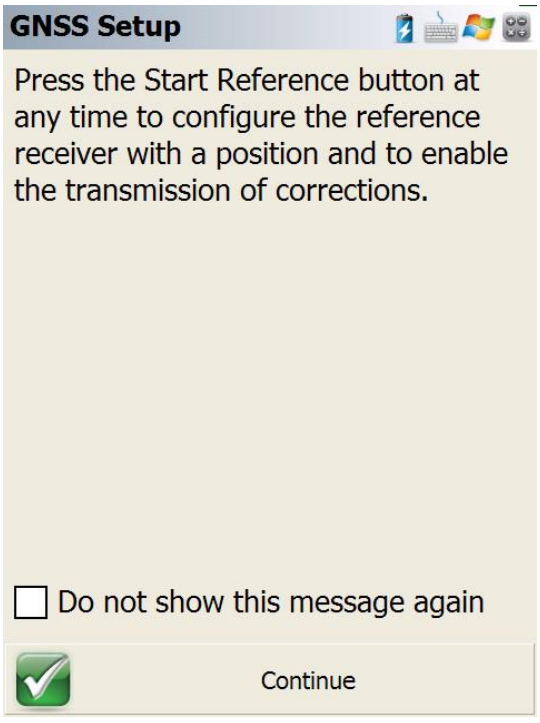
13. Then our target device can be selected in the bluetooth device list. Click [OK] button back to **[Model and Communication]** interface.



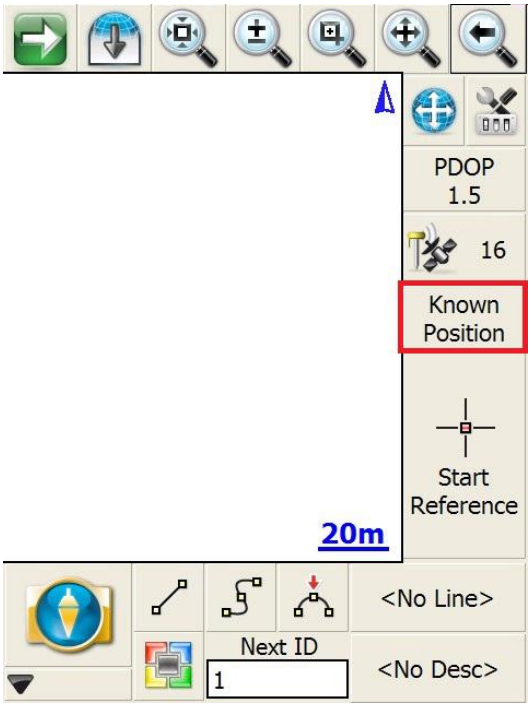
14. The target device can be selected in the drop-down box then click **[Connect]** button. The software will build the connection to your device



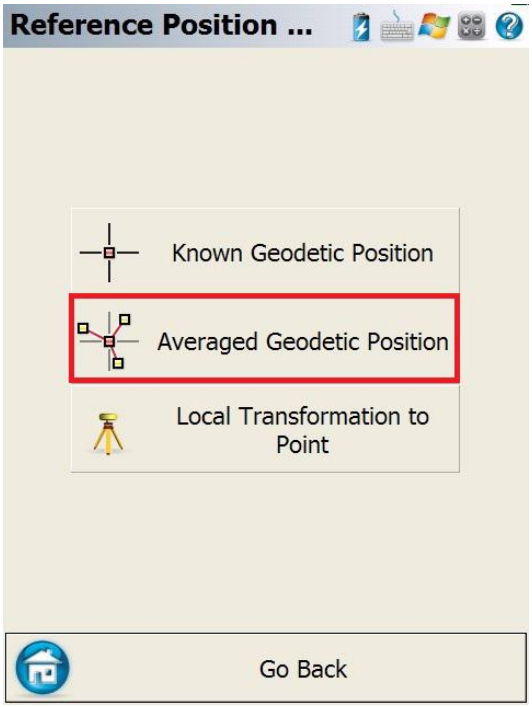
15. After successful connection, FieldGenius will display the following hint, please click [OK] button



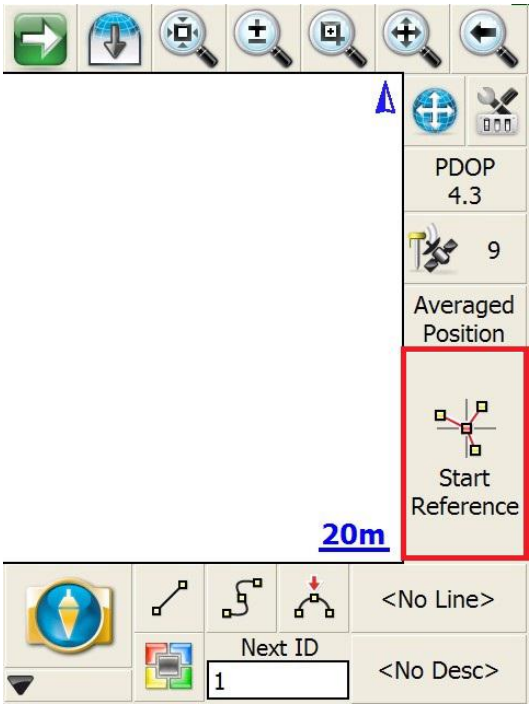
14. Click the [Known Position] icon to switch the method of starting base



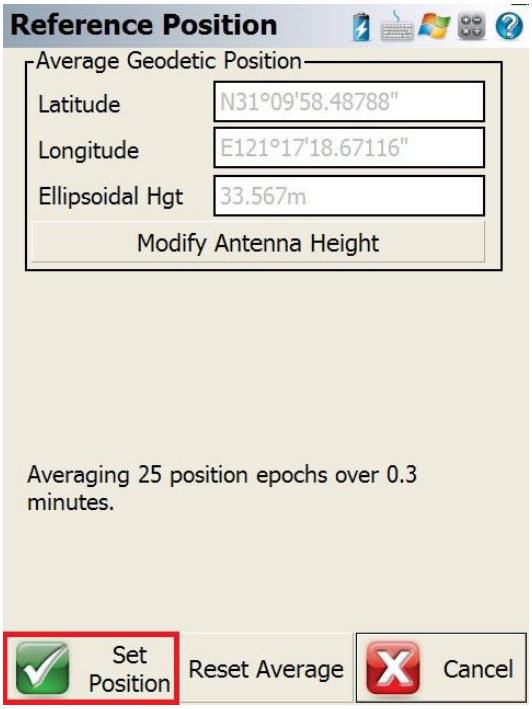
Users can start base with known points by clicking **[Known Geodetic Position]**, unknow position by clicking **[Averaged Geodetic Position]** and local coordinates by clicking **[Local Transformation to point]**



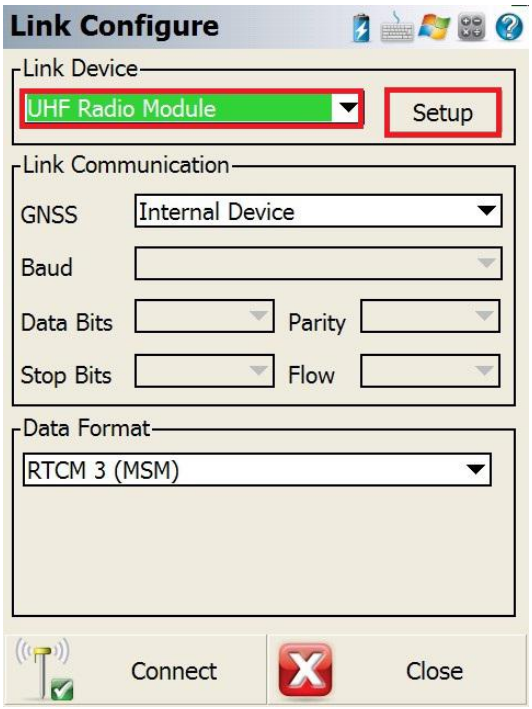
15. After select the starting method, please click **[Start Reference]** to start the base.



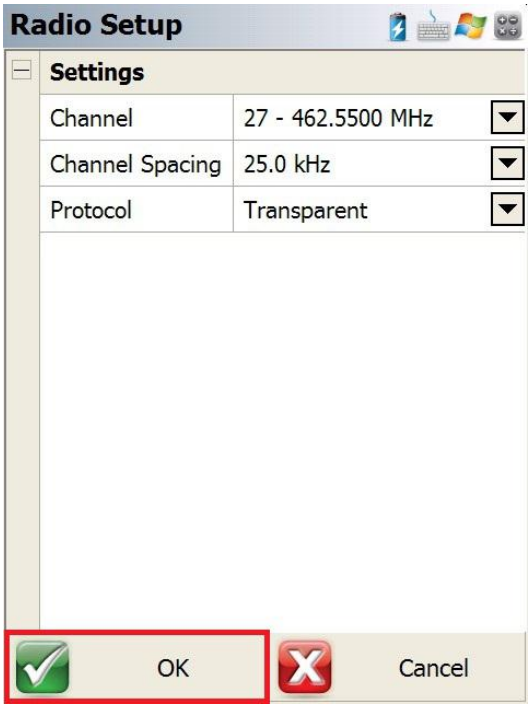
Please click [Set Position] to set the averaged result as base coordinate.



16. Select the **[UHF Radio Module]** from the drop-down box then click **[Setup]** button to set the radio protocol, working power and frequency.

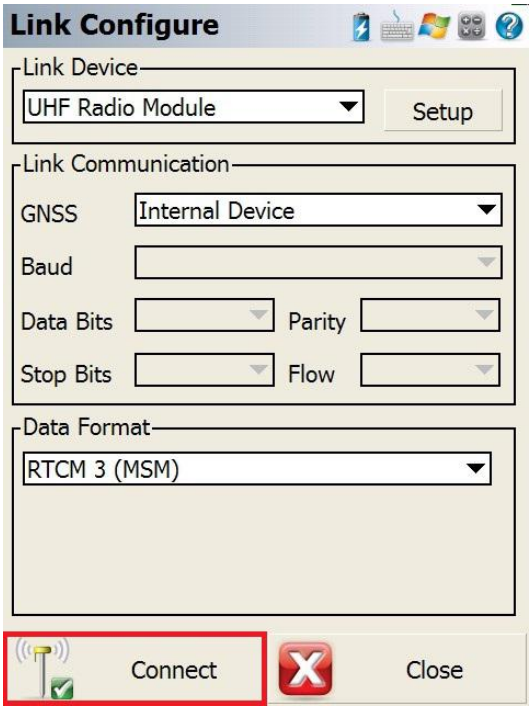


After setting the parameters, please click **[Ok]**



Note: the protocol and the frequency must be the same between Base and Rover.

17. Click **[Connect]** to finish starting base



18. Then the green LED will flash and the states will become [**Autonomous]** to **[float]** then to [**fix],**which means the rover is getting the correction data from base.

19. The survey work can be done with the i80