Support Bulletin

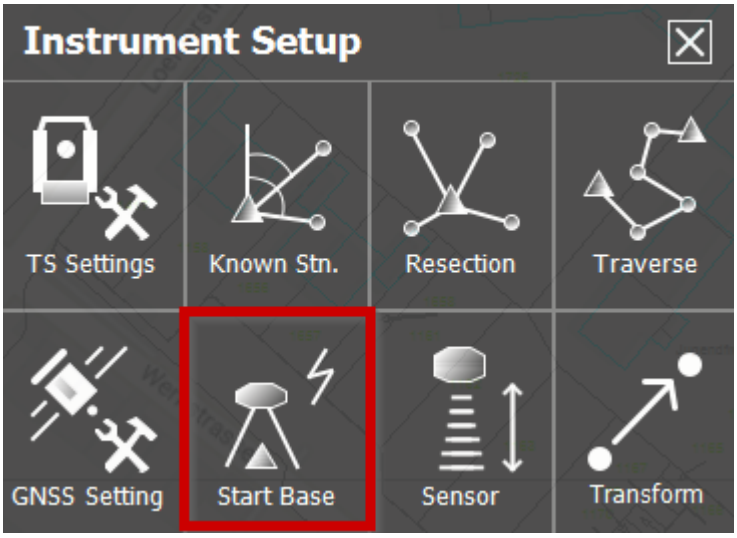
April 2020

Penmap - Set up Base - Rover

NOTE: Requires Penmap for Windows version greater than or equal 11.2.0.8498

Base receiver settings/Start Base

Go to **Setup >> Start Base**

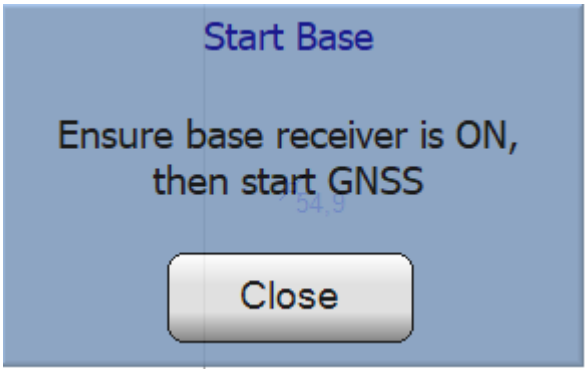


Click "**Start Base"** and enter base pole height. Please press acknowledge to continue.

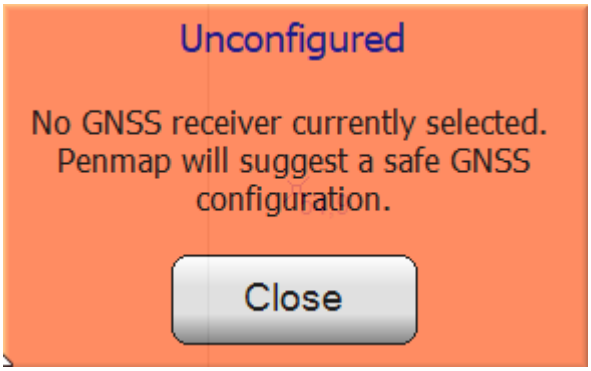
*NOTE: The antenna offset is predefined for each antenna type. To view the antenna offset details, in the GNSS Method menu tap **GNSS Settings / GNSS Receiver** and then tap **Test**.*

*Penmap uses the method **Bottom of antenna mount** for the antenna height measurement; make sure you measure to the bottom of the antenna mount*

Ensure base receiver is on and close the message box.

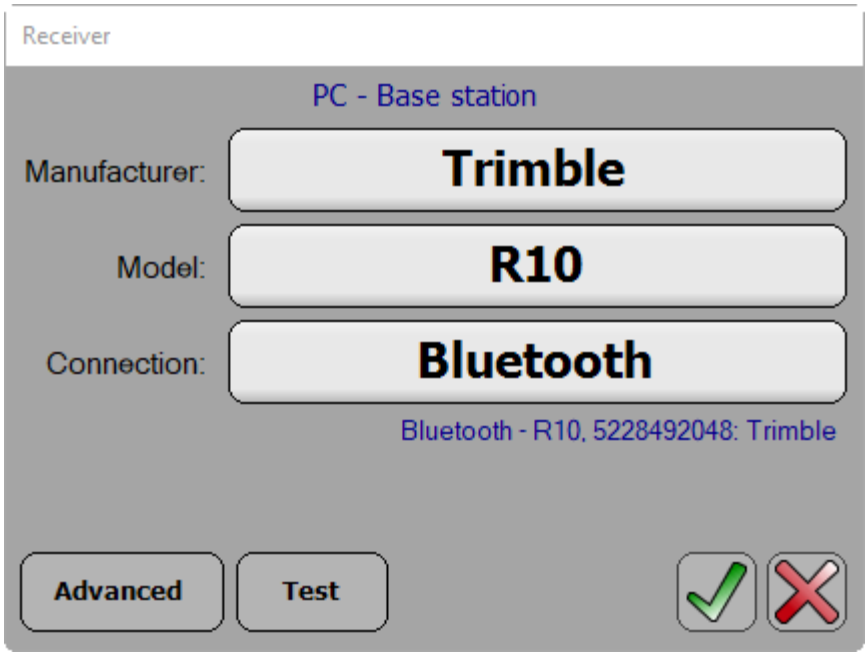


At the first time you'll get an information message and have to set the base receiver.



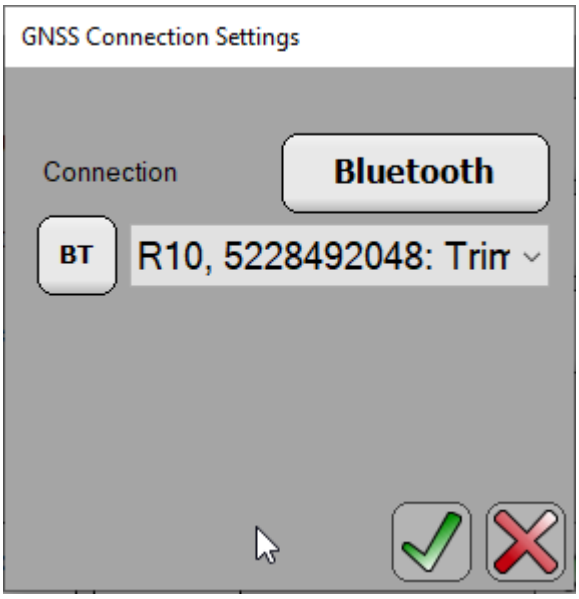
Close the dialog.

Set/acknowledge the receiver settings for the base.

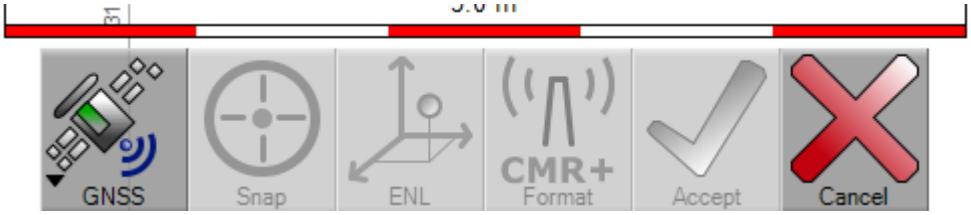


The settings will be stored and shown up at **Start Base** next time.

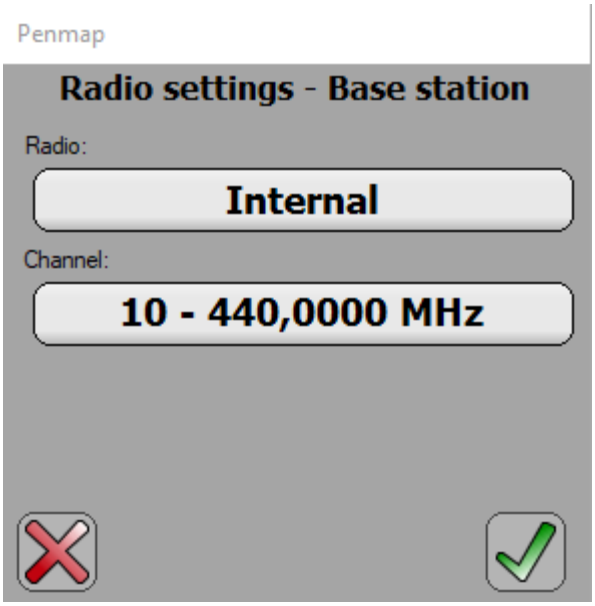
Please select Bluetooth and press **BT** to search the device.



Press GNSS to connect to the base receiver.

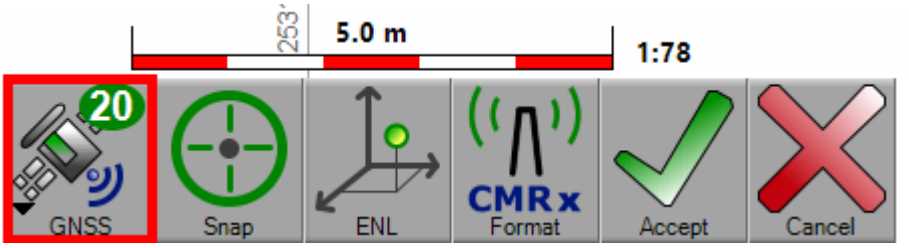


Select channel/frequency to stream correction data

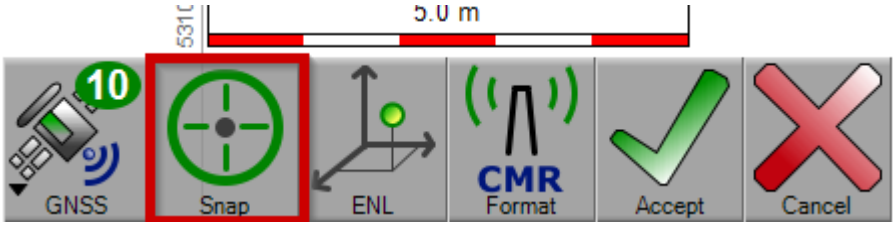


Measure the current position

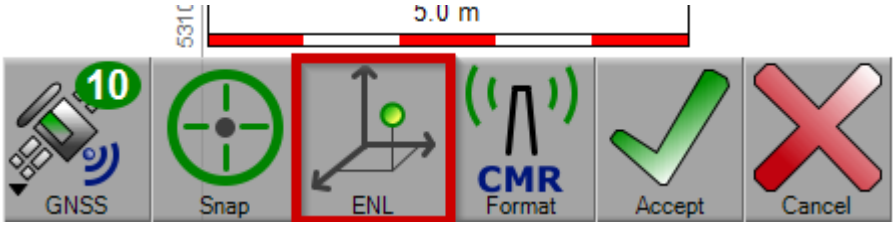
NOTE: This measurement is independent from the quality setting. Uncorrected GNSS measurement is possible.



Snap a node for the base station position

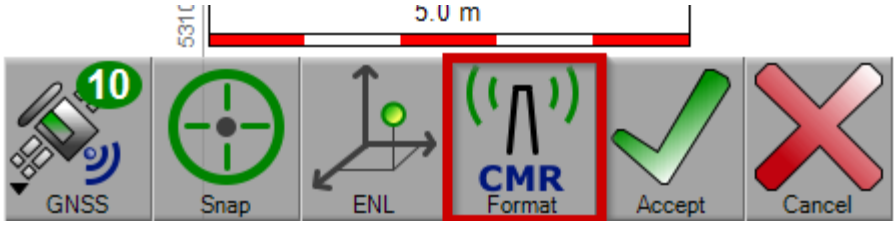


or enter a coordinate, this is set as base coordinate automatically then.

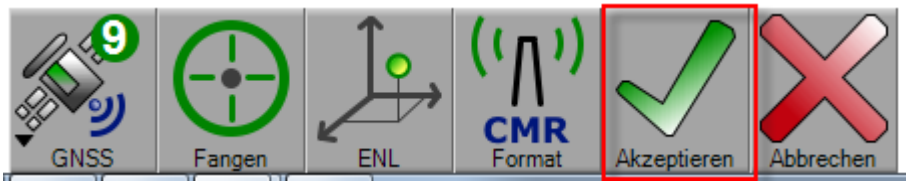


Define the correction stream format. Click Format-Button to change the stream type.

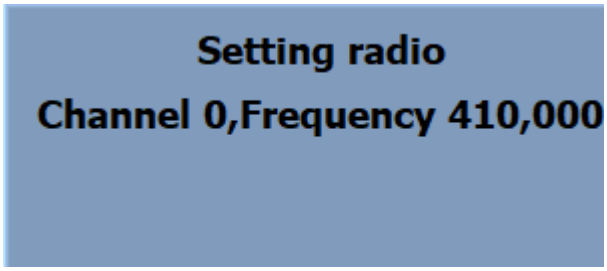
Choose between **"CMR/RTCM/CMR+/CMRx" Stream** - this has to match the real-time correction setting for rover receiver.



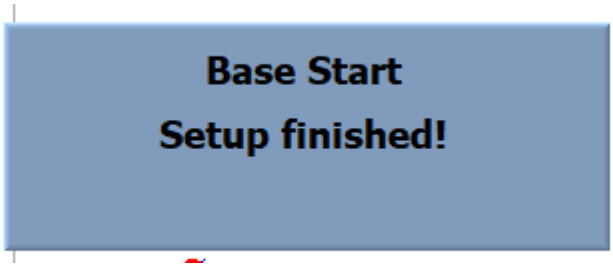
Press "**Accept**"



The used channel and stream is shown shortly

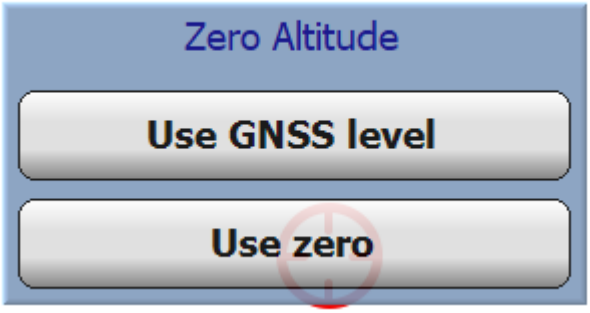


With this the Base station setting is complete



Penmap will disconnect the base receiver. Base is still running and sending a correction stream.

NOTE: If you have snapped a node with no height e.g. from dxf (0.00) Penmap need a decision for base level:



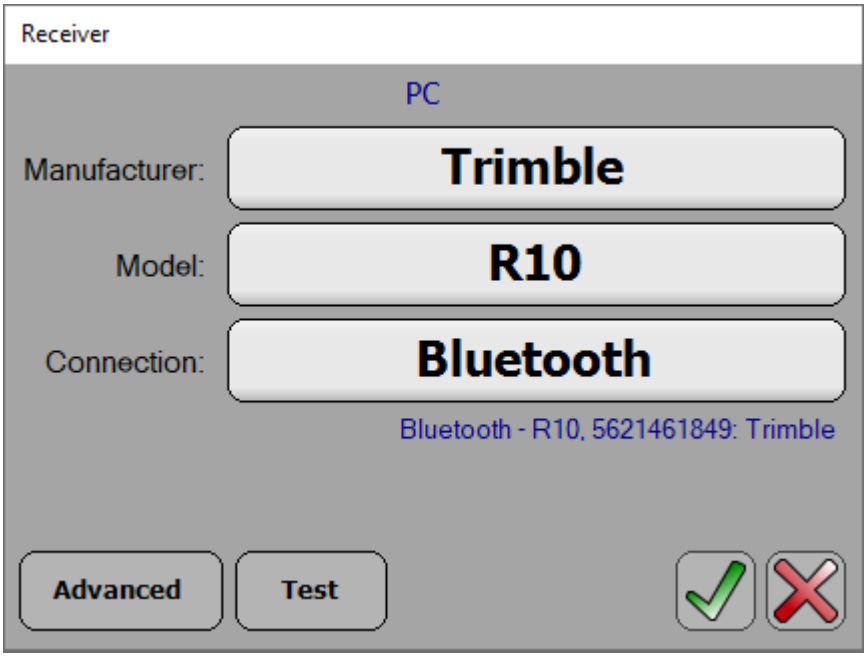
NOTE:

If you later want to power off the base station please do this directly at the receiver.

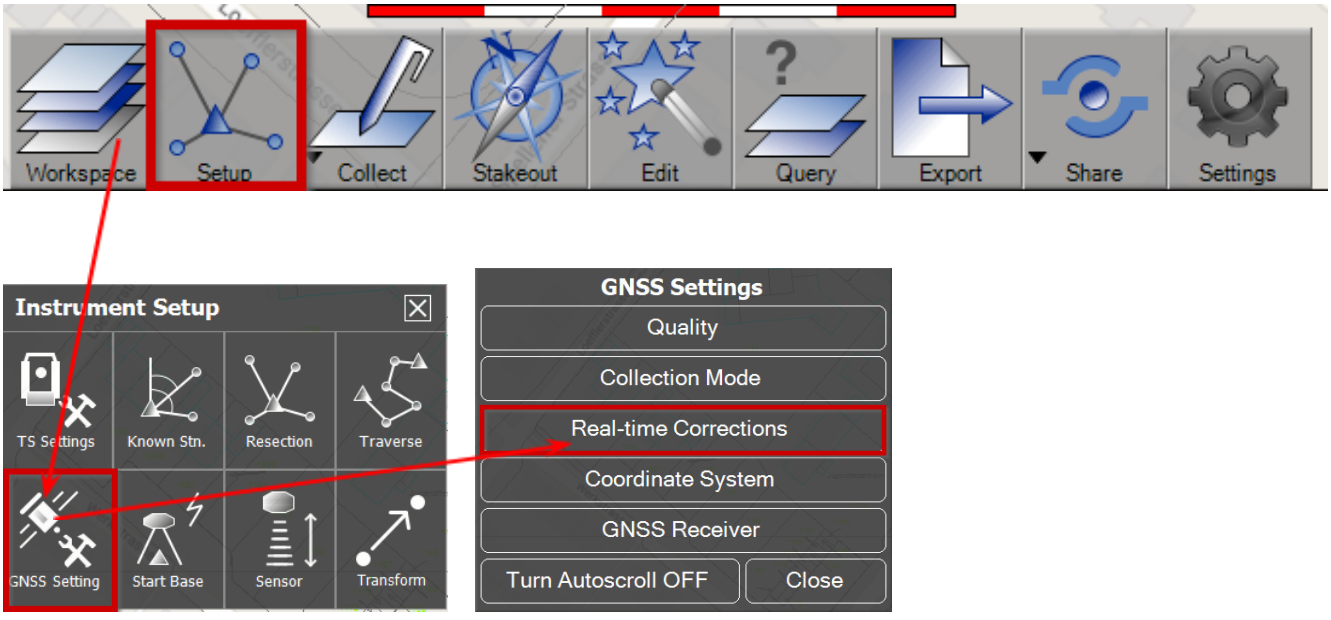
For changes in base station e.g. change frequency, please start the process to start base like described.

Rover real-time correction data settings

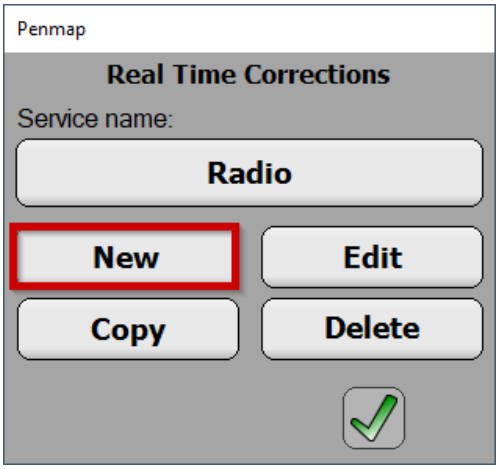
Set Com-Port and Receiver Type for Rover via **Setup >> GNSS Setting >> GNSS Receiver.** If you want to connect via Bluetooth select Bluetooth and press BT to search the device.



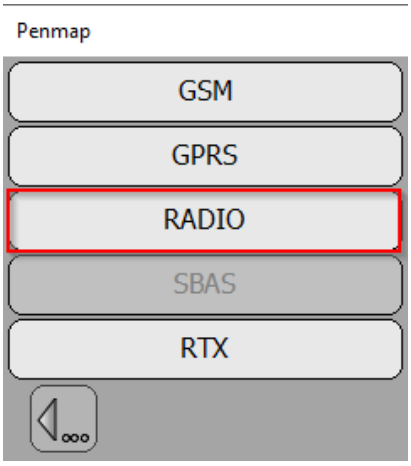
Open the real-time corrections via **Setup >> GNSS Settings >> Real-time Corrections.** This is the real-time correction stream which the rover should receive.



Set a new real-time correction service with **New**. Define the name of this service like **“Radio”.**

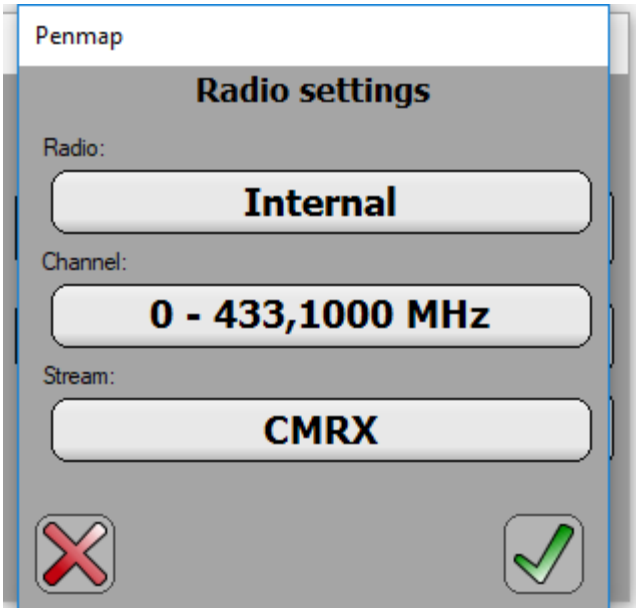


Select **RADIO**.



Select the channel and the used stream format.

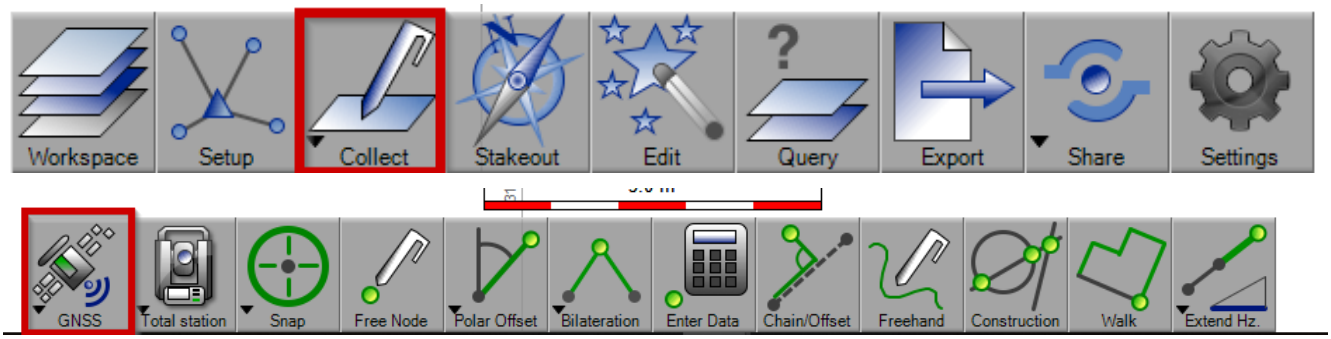
NOTE: Set same like base station.



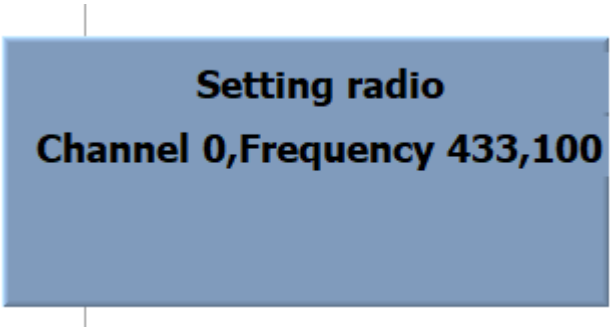
Confirm the real-time correction service with the green check

Start Rover

Go to **Collect** and Start the **GNSS** measurement



Information for the radio pops up



The connection is established

In the upper left corner is displayed that correction data is incoming, solution shows fixed 3D.

*NOTE: If the frequency doesn't match go back to **GNSS Settings >> Real-time Corrections,** if the receiver is connected you can see the used frequency. For example 410,000 Mhz.*