

Setup and User Guide for a SonarMite Echo Sounder with VRS GNSS & Trimble Access

This guide will tell you everything you need to know when it comes to the physical and Trimble Access setup for a SonarMite Echo Sounder attached to a GNSS pole to measure depth within water.



Things you will need

- SonarMite BTX single beam Echo Sounder
- Smart P66 depth transducer c/w 5m cable
- GNSS pole
- Transducer pole mount
- SonarMite charger (SM NiMh battery charger)
- Controller w/ Trimble Access software



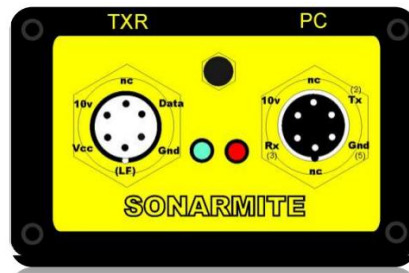
(SonarMite SPX single beam Echo Sounder)

Charging the SonarMite Echo Sounder

Prior to setting up and connecting the Echo Sounder, you first need to make sure it is fully charged. The top of the SonarMite has two led indicators. One led light is for the status of TXR information/battery, and the other is for Bluetooth connection. (Please see diagram below for Led Light meanings)

solid blue		Bluetooth Connected
solid red		Low Power
flash red		Txr fault
flash orange		Txr data bad
flash green		Txr data good

When attempting to charge, connect the charger cable (**6 way female connector**) to the SonarMite (**6 way male connector**). When the charger is connected to the SonarMite and plugged in, the charger will **flash green**. This indicates that the SonarMite is not fully charged. When the charger shows **solid green**, it indicates that the SonarMite is fully charged and ready for use. (See images below)



Connecting Transducer to GNSS pole

Next, take the Transducer mount and screw it to the GNSS pole. Place the Transducer onto the mount like shown below.



Connecting the Transducer to the SonarMite

The Transducer cable has **6 way female connector**, connect this to the **6 way male connector** on the SonarMite device. You will see a blue led light when it is connected to controller (See images below)

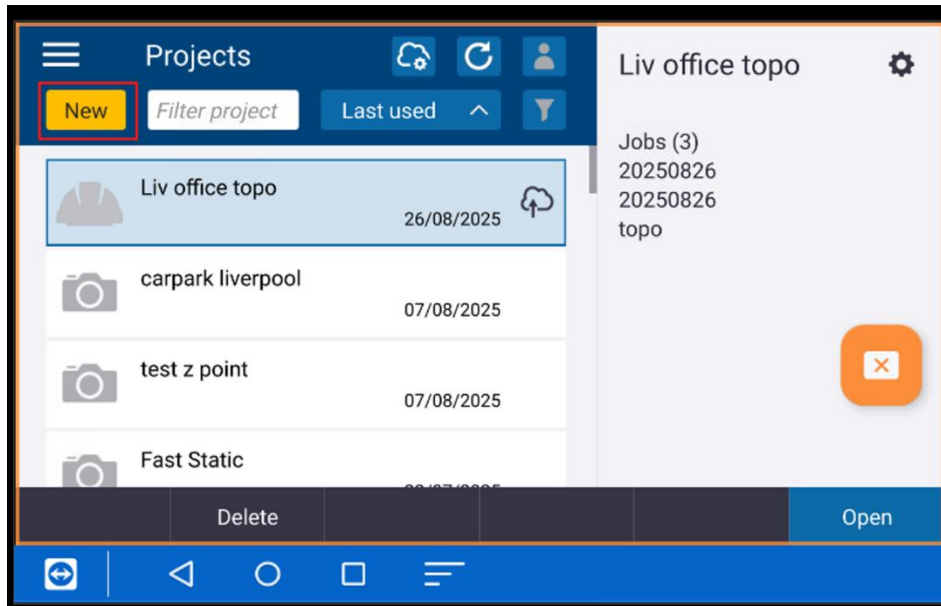


The full physical setup is now complete

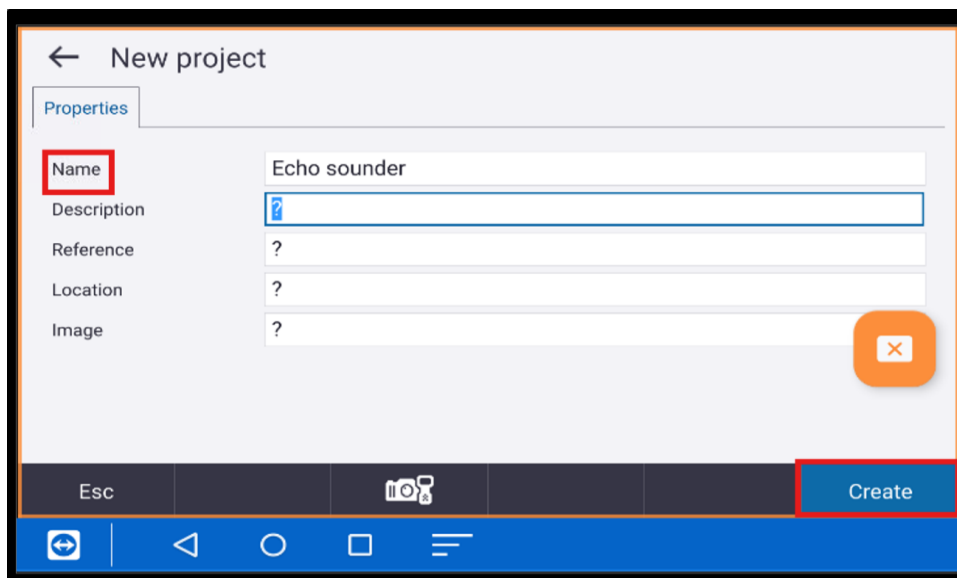


How to connect and set up a SonarMite Echo Sounder Survey Style

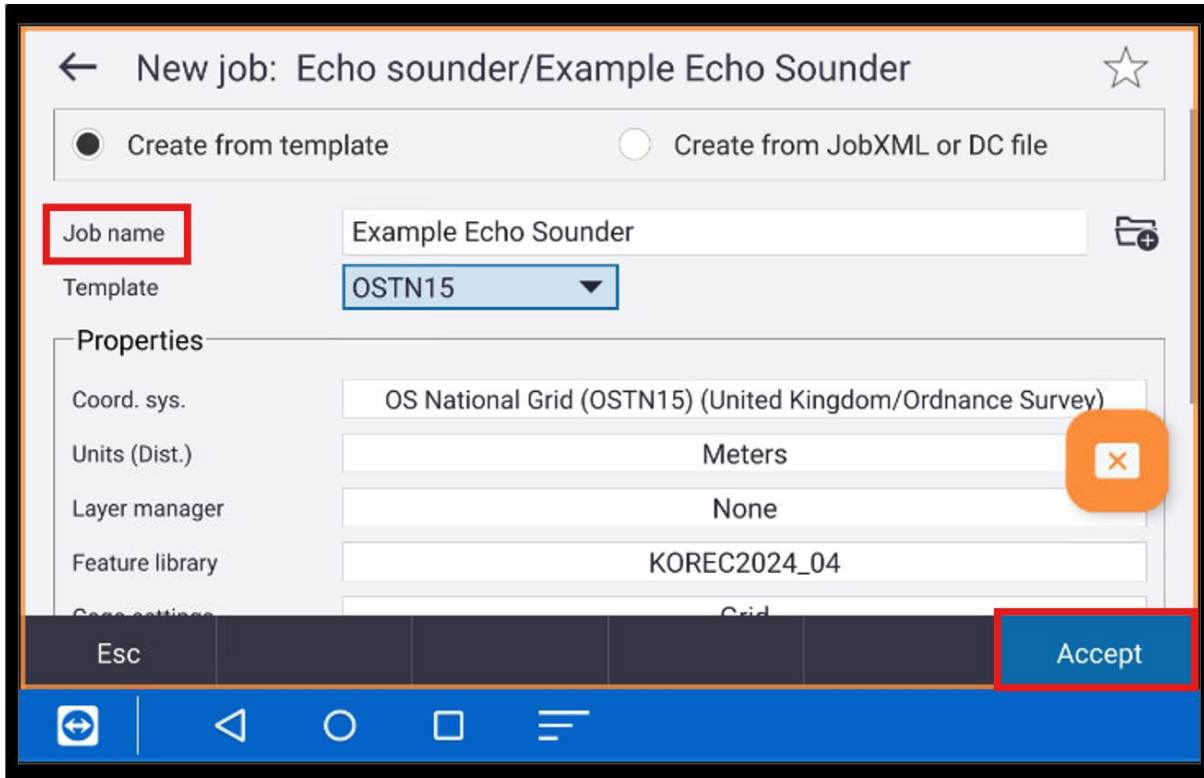
Open Trimble Access and select **New** to start a new project.



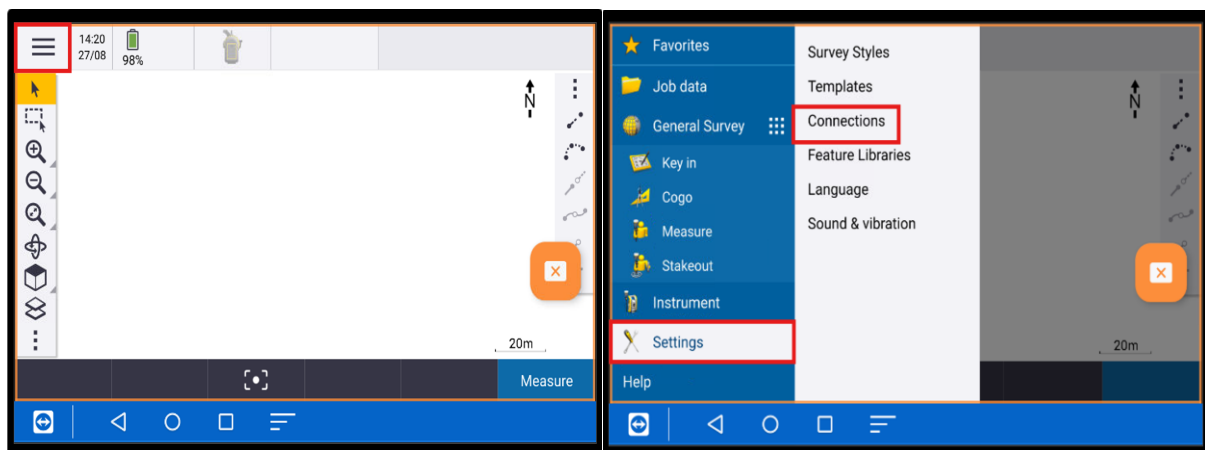
Then you will give your project a **name**, press **enter** and then **create**.



Enter a **Job name** and press **enter** then **accept**.

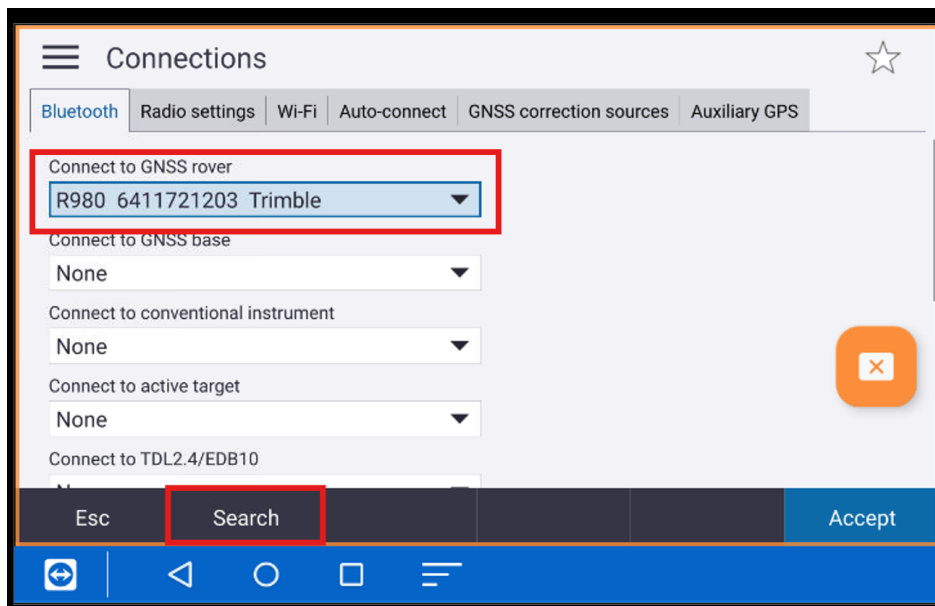


Once the job is open, click on the **Hamburger sign**, then **Settings** and **Connections**

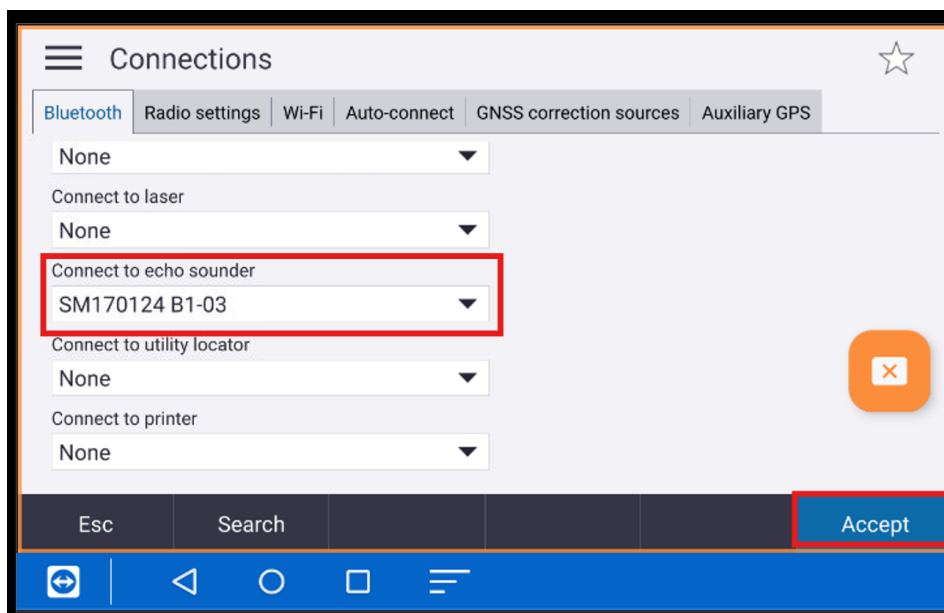


When you are in the **Connections** page, you must connect your **Rover** and your **Echo Sounder** to your controller. If either device has been previously

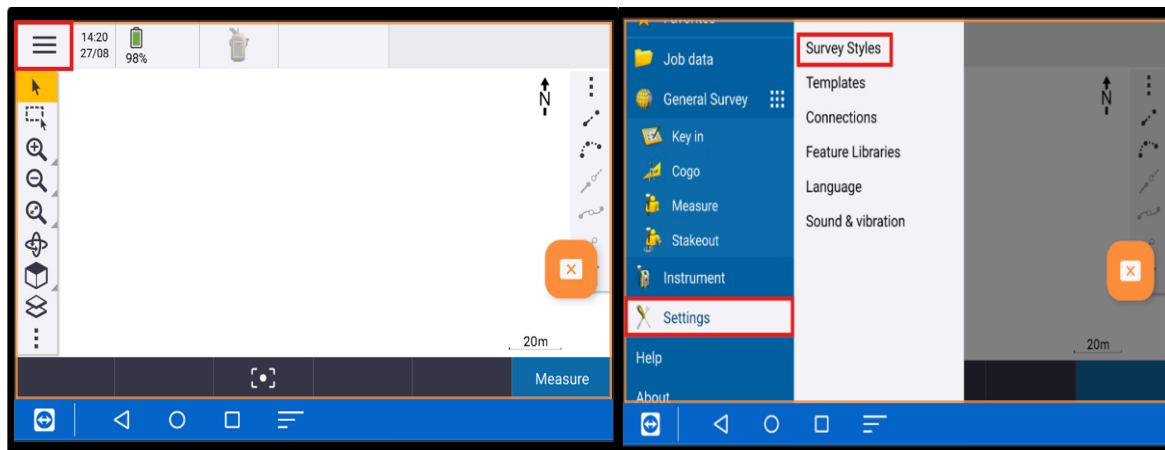
connected, **serial number** will be in the drop-down box. If it is connecting to the controller for the first time, you will need to select **Search** and locate your device within the list.



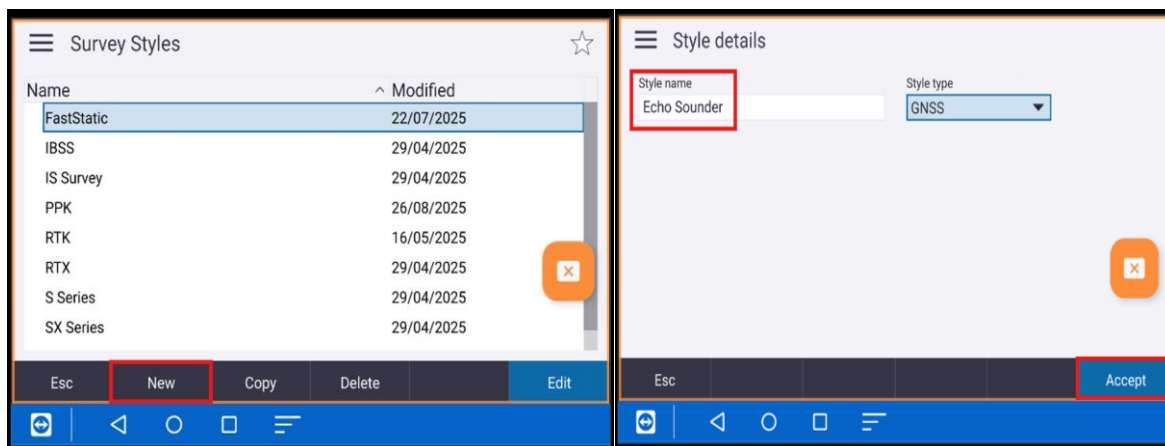
Once you have populated both boxes with the correct **serial numbers**. You then need to press **Accept**.



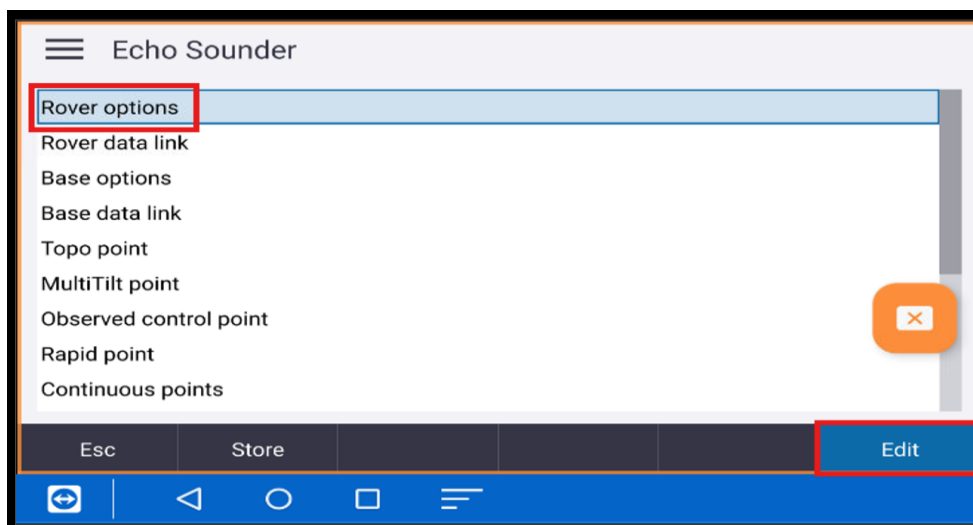
Next, press the **Hamburger sign**, navigate to **Settings** and **Survey Styles**.



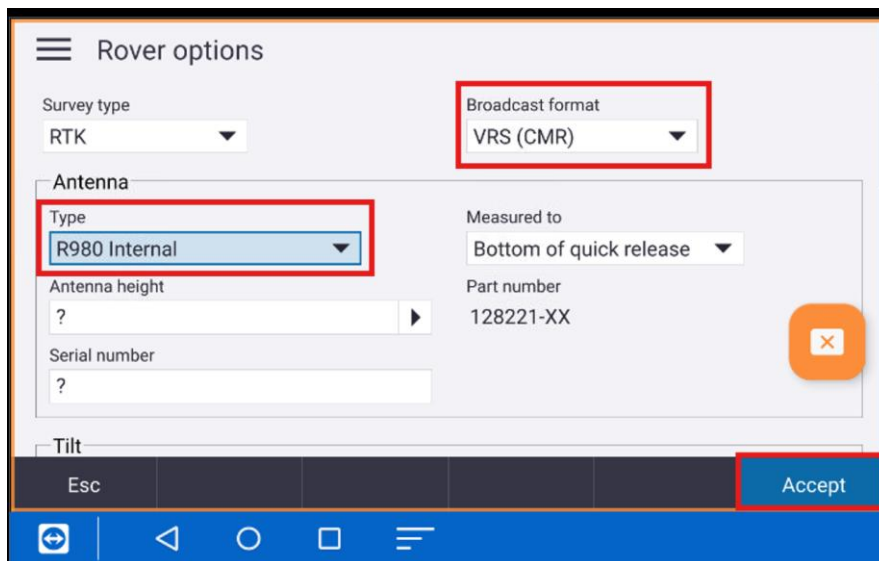
When you are in **Survey Styles**, press **New** and give your Survey Style a name. Press **Enter** then **Accept**.



The new Survey Style has now been corrected. Click on **Rover Options** and **Edit**.

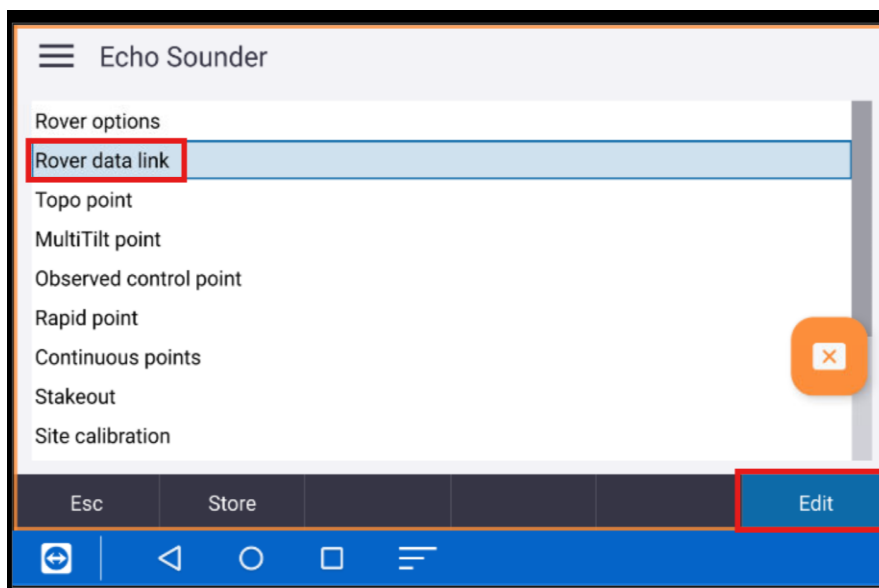


In **Rover Options**, change **Broadcast Format** to **VRS(CMR)** and make sure you populate the Antenna **Type** with the correct GNSS receiver you are using and press Accept.



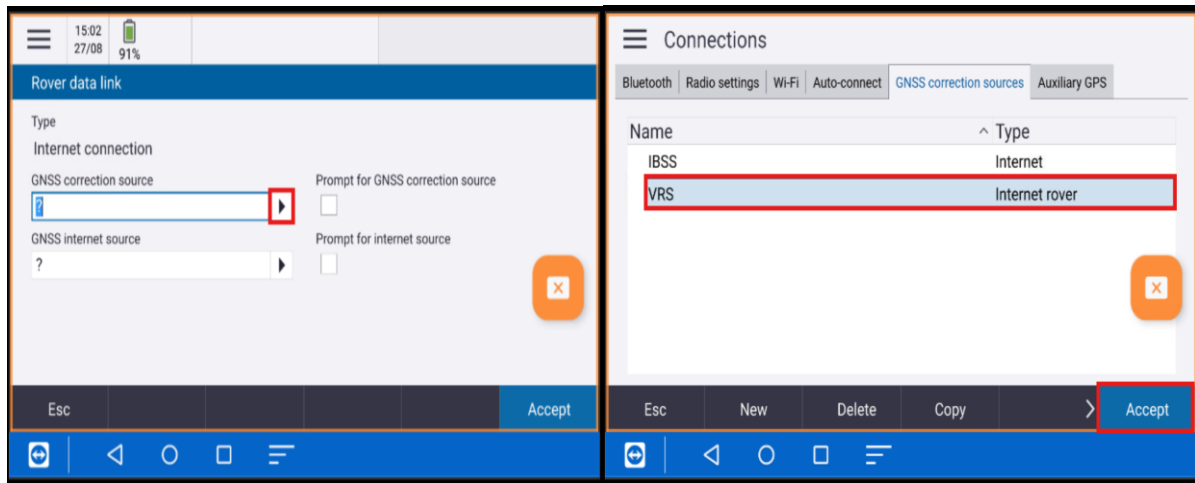
The screenshot shows the 'Rover options' screen. The 'Survey type' is set to 'RTK'. The 'Broadcast format' is set to 'VRS (CMR)'. The 'Antenna' section is expanded, showing 'Type' set to 'R980 Internal', 'Antenna height' set to '?', and 'Serial number' set to '?'. The 'Measured to' is set to 'Bottom of quick release' and the 'Part number' is '128221-XX'. There is an orange 'X' button on the right. At the bottom, there is an 'Accept' button. The screen has a blue header bar with navigation icons.

Next click on **Rover Data Link** and **Edit**.

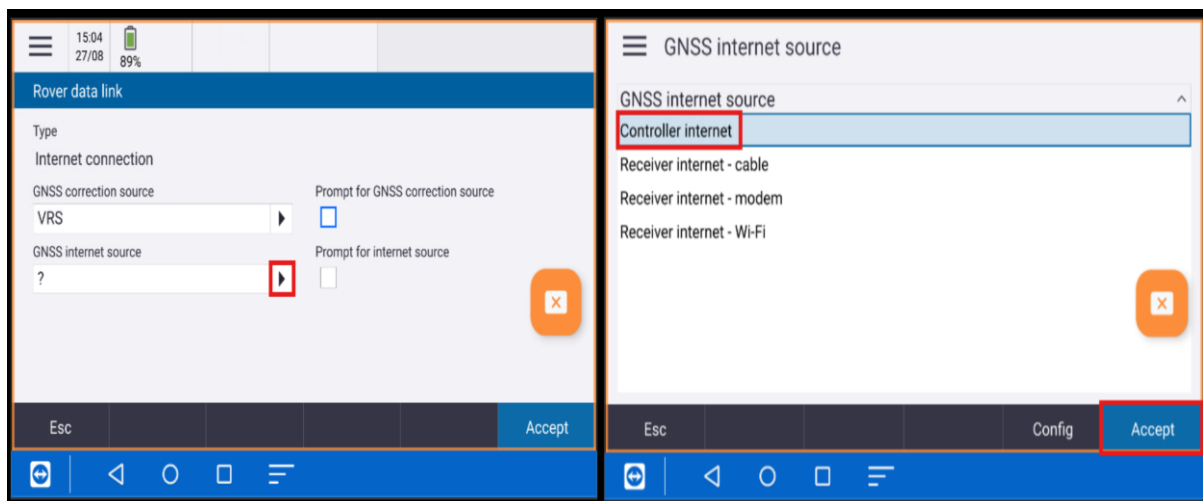


The screenshot shows the 'Echo Sounder' screen. The 'Rover options' section is expanded, showing 'Rover data link' selected. Other options listed are 'Topo point', 'MultiTilt point', 'Observed control point', 'Rapid point', 'Continuous points', 'Stakeout', and 'Site calibration'. There is an orange 'X' button on the right. At the bottom, there is an 'Edit' button. The screen has a blue header bar with navigation icons.

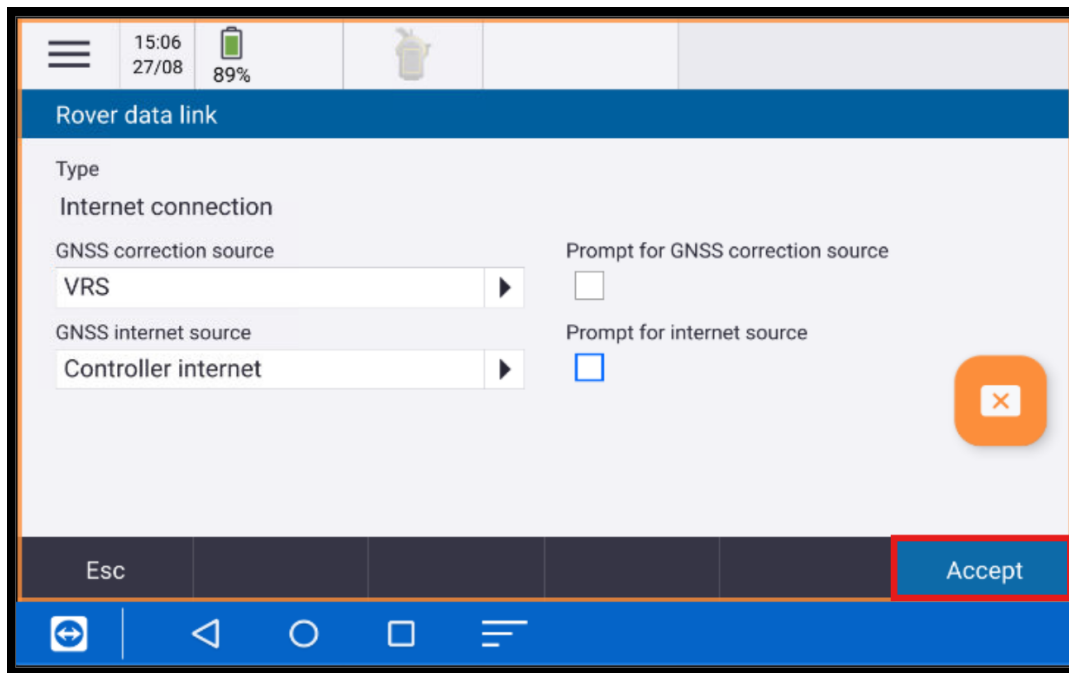
When you are in **Rover Data Link**, click the arrow next to the **GNSS Correction Source** and select the VRS correction source you are using and press **Accept**.



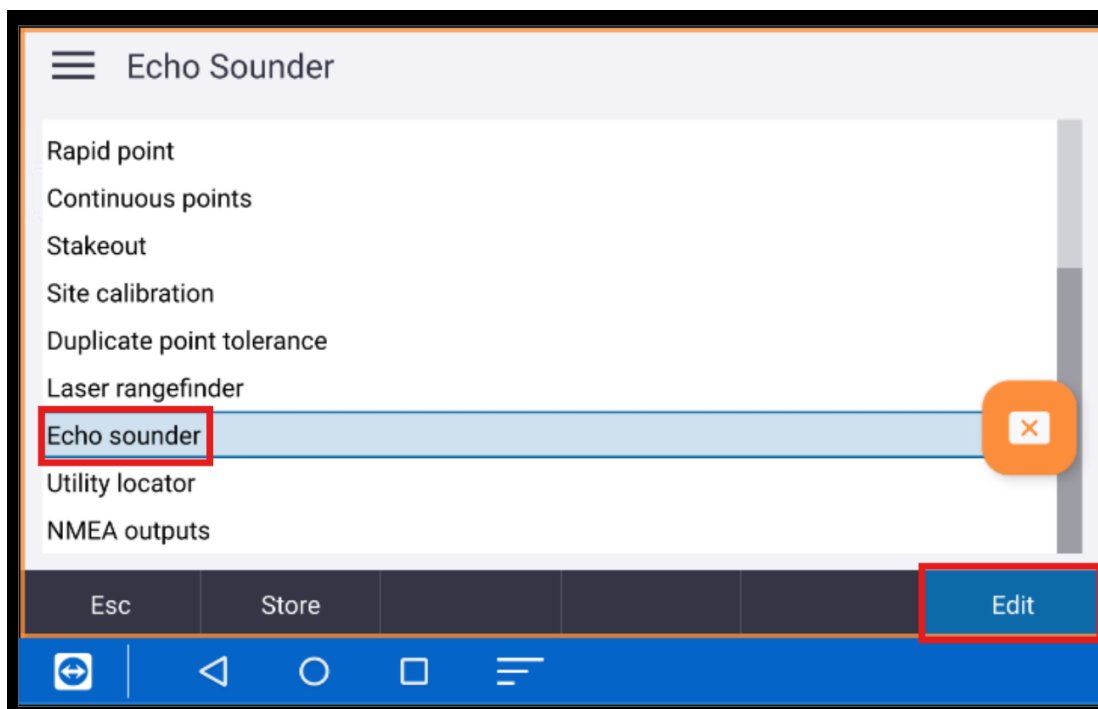
Then click on the arrow **GNSS Internet Source**. Select **Controller Internet** and press **Accept**.



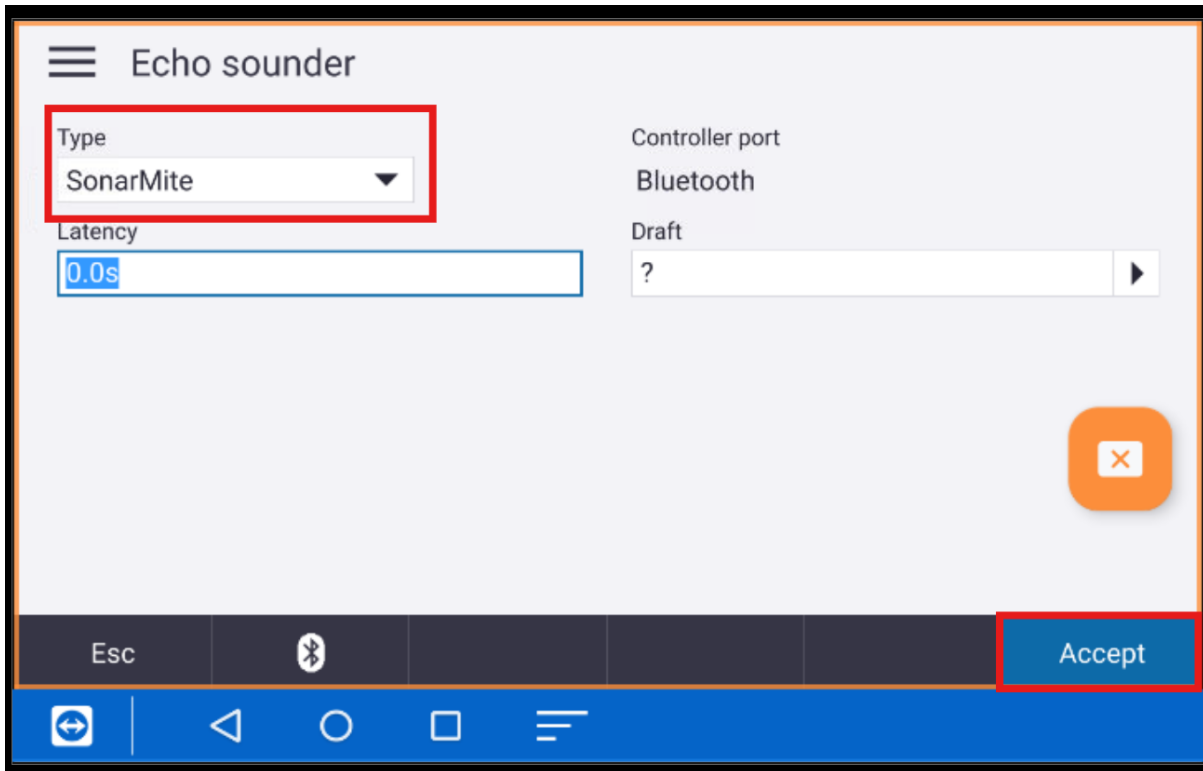
Once both boxes are populated with the correct information, Press **Accept**.



Scroll down to **Echo Sounder** and Press **Edit**.



In Type, click the drop-down box and select **SonarMite** and press **Accept**.



Echo sounder

Type
SonarMite

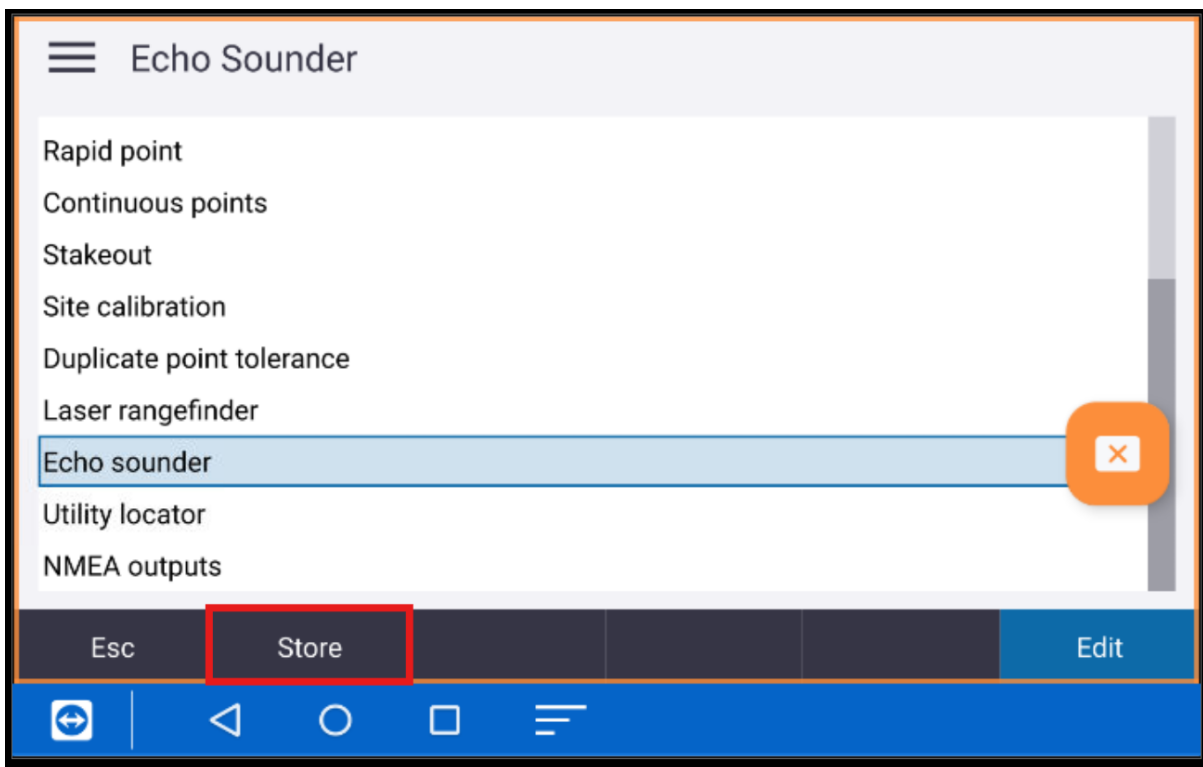
Latency
0.0s

Controller port
Bluetooth

Draft
?

Esc Bluetooth Accept

Next press **Store**.



Echo Sounder

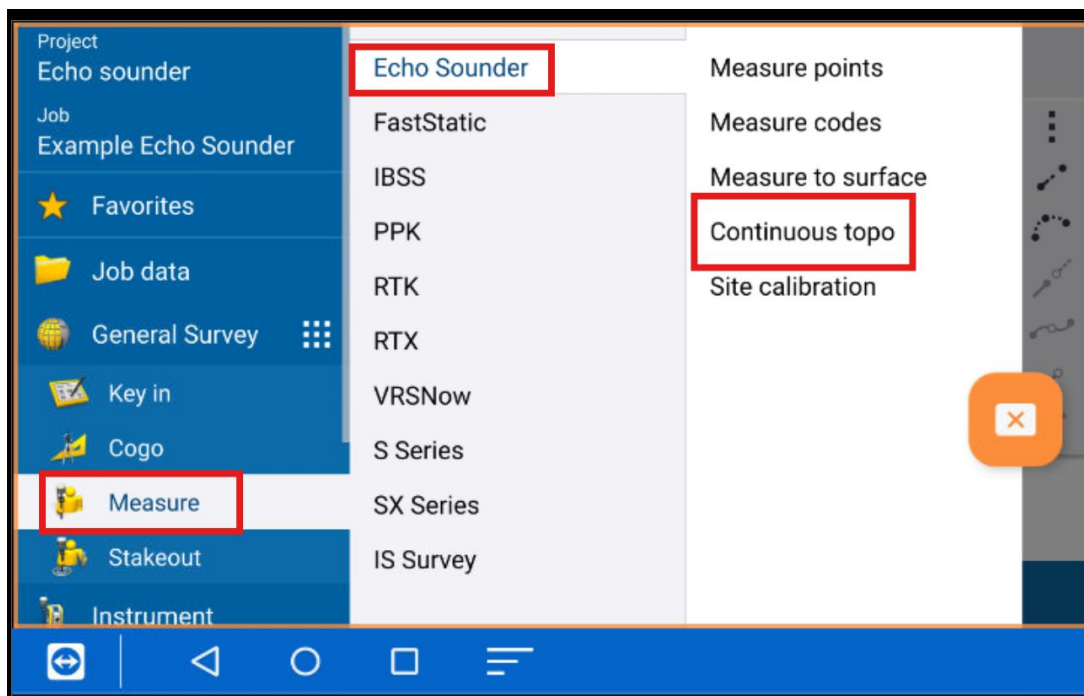
- Rapid point
- Continuous points
- Stakeout
- Site calibration
- Duplicate point tolerance
- Laser rangefinder
- Echo sounder**
- Utility locator
- NMEA outputs

Esc Store Edit

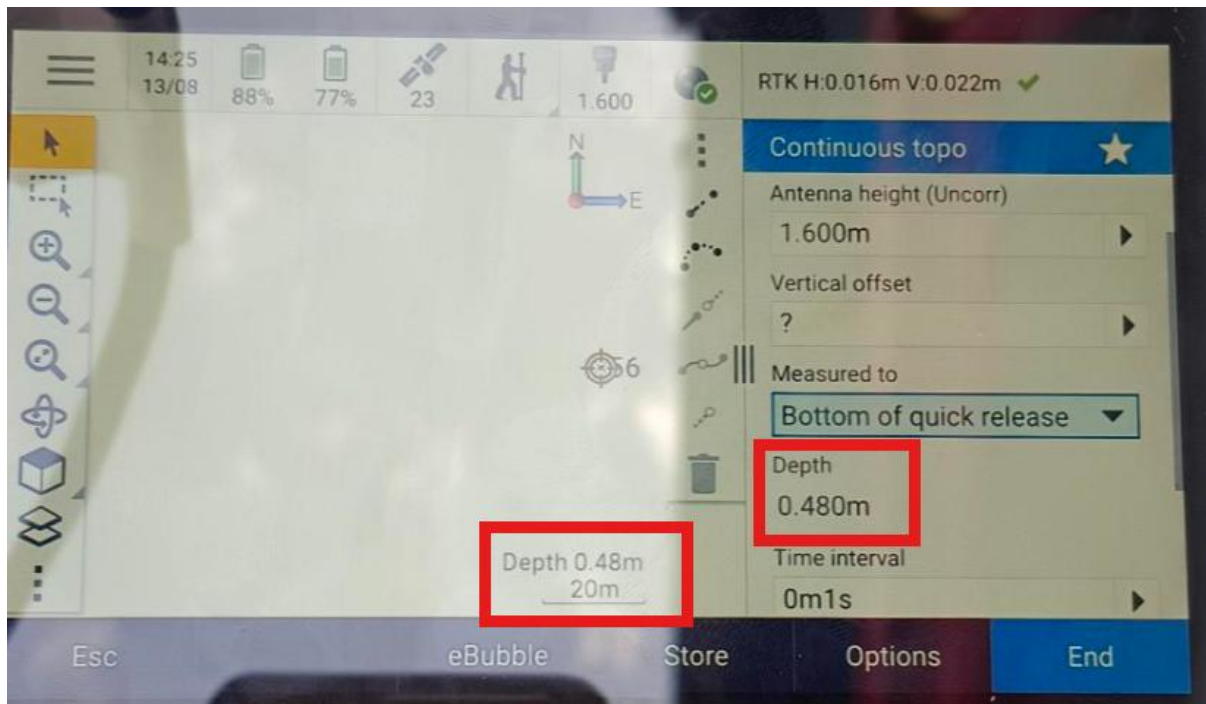
Next press the **Hamburger Sign**.



Press **Measure**, **Echo Sounder** and **Continuous Topo** to start your Survey.



Below is an image showing the **Depth** of a SonarMite Echo Sounder within Trimble Access.



Once the survey is completed tap **End**