July 2006

SCS900 with Ohmex SonarMite Echosounder

Summary

This support bulletin describes the steps necessary to use depth measurements of an Ohmex SonarMite Echosounder in the SCS900 Software.

Hardware setup

The SonarMite transducer should be mounted beneath the GPS antenna to get the correct positions assigned to the depth measurements.

Measure also the vertical distance from the GPS antenna to the transducer. This will be the GPS antenna height.

Software setup

The SonarMite unit comes with a CD, which contains all necessary files.

TSC2: Copy the file SMTSC.exe to a new directory c:\sonarmite on your TSC2.

TCU: Copy the file SMTCU.exe to a new directory c:\sonarmite on your TCU.

On both: Copy the file SCSE_smtsc.dll into c:\program files\scs900 directory.

To connect via Bluetooth, establish a partnership with the Echosounder – a device like SM123456 should appear. Activate the "Serial Port" service for this device. In COM-ports create a new outgoing port (usually this will be port 8 or 9).
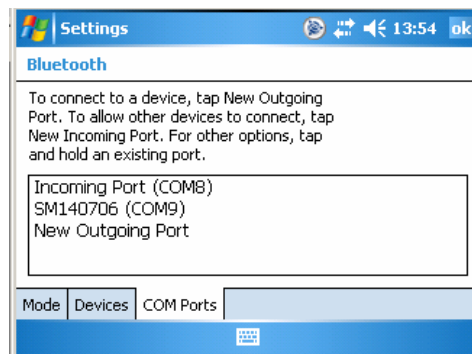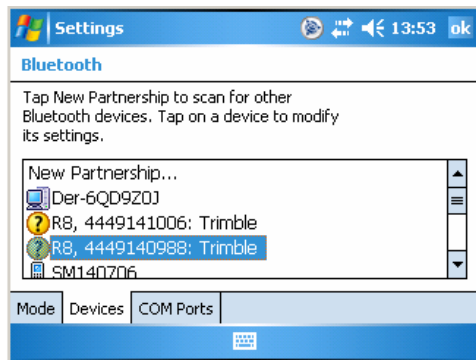
On the TSC2, use the file explorer to navigate to and start SMTSC.exe
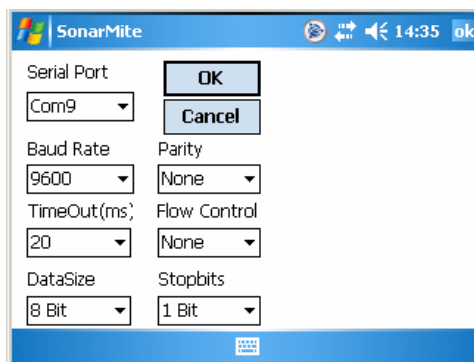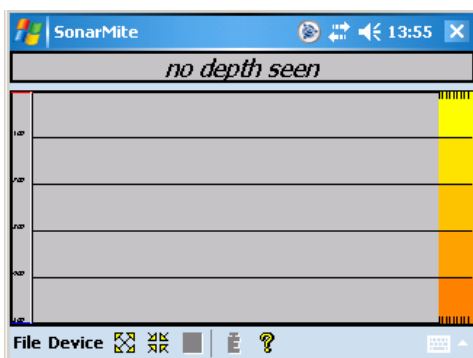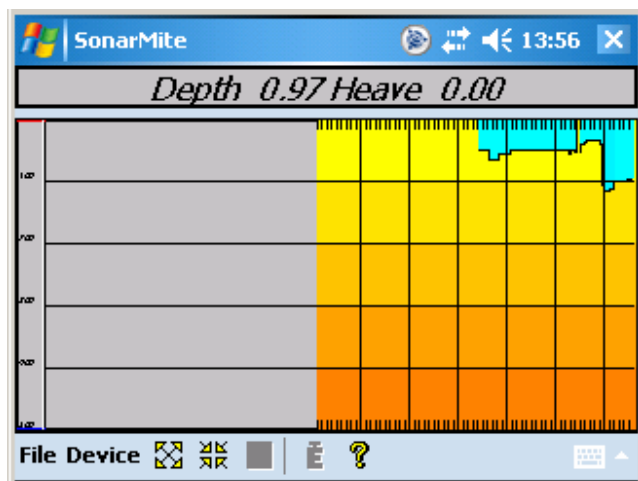

Select Device / SonarMite and the serial port.

When using the direct cable connection use COM1 , when using BT, use the created BT port for SM123456 (see above).

Once connected, you should see depth and heave output from the sensor together with a graph. Also, the green LED on the SonarLite will illuminate continuously.

Once this has been done start SCS900, setup the rover or total station. Then, goto 2 – Measurements, 3 - Measure Surface. Make sure the measuring mode is set to "vehicle" and enter the antenna height (vertical distance from the GPS Antenna to the transducer). In the Map Display Options enable "Point elevations".
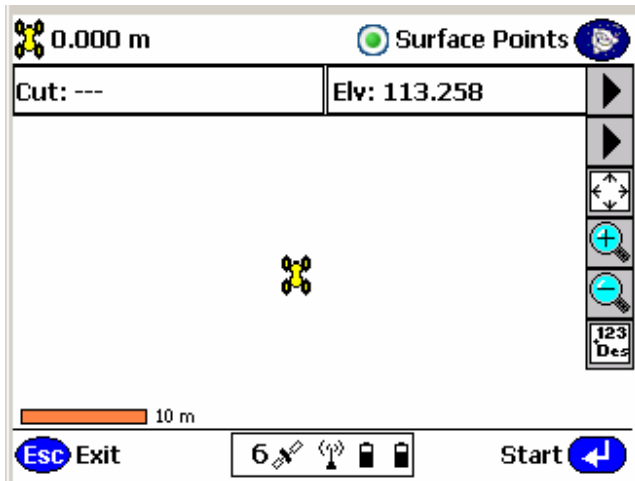
Now, when recording points, the combined elevation will be recorded and displayed.
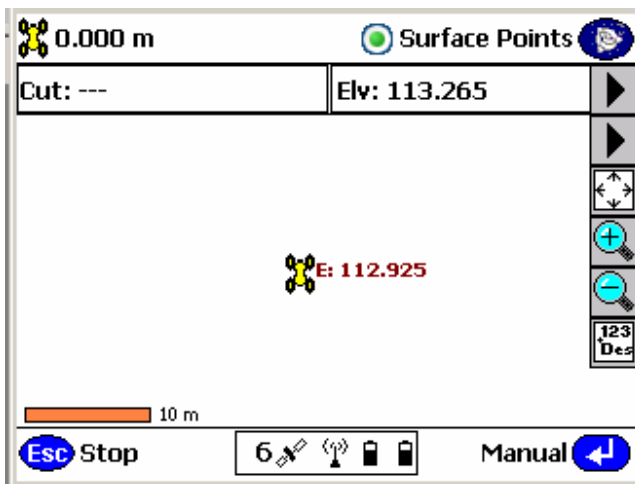
Notes on the SonarMite

The unit runs on an internal battery, which must be charged before use. It cannot be run on AC power while taking measurements, because the charger and the transducer are using the same connector on the unit.

The BT range is specified to be between 50 and 150m.

More information on the E/S can be found on the CD "SMHardware.doc".