Connecting a SonarMite TM Sounder with Leica Viva GNSS for data logging – a rough guide

1. Refer to instructions provided at http://www.seafloorsystems.com/pdf/sonarmite_viva.pdf to set up the SonarMite depth as an ASCII input within Leica SmartWorx.
2. Place the Sonarmite in water (a bucket is a handy) and connect the PC cable to the serial port of your computer (or pair your computer Bluetooth with the Sonarmite if you don't have a serial port)
3. If using Windows XP, you can use Hyperterminal (Windows Start -> Accessories -> Communications -> Hyperterminal to send settings to the SonarMite. If using Windows 7, you'll need to download 'Hyperterminal' or 'Putty' from one of the following links to be able to send settings to the SonarMite.
4. http://www.jesswatts.com/wp-content/uploads/hyperterminal.zip
   http://the.earth.li/~sgtatham/putty/latest/x86/putty.exe

5. In Hyperterminal or Putty, Create a new connection to the serial port in which the Sonarmite is connected to. You can either check the active port in 'windows device manager' or use a trial and error approach within Hyperterminal or Putty (there are usually only 4 or so ports to chose from). Make sure you use the following connection settings.

Settings for PC cable: Baud: 9600,   data bits: 8 , Parity: none,   stop bits: 1,   flow control: none

Settings for Bluetooth to PC: Baud: 115200,   data bits: 8 , Parity: none,   stop bits: 1,   flow control: none

6. Once connected, you should see a steady stream of data appearing on the screen.
7. If the stream shows a single line of depth measurements, that's okay, there's nothing more to do. If it shows a string of values like (1 0.48 0 0 0 8.9 115 0), you'll need to press CTRL F on your keyboard until 'Format 1 Simple ASCII mode' appears on the stream and is followed by a single line of depth readings, and then press CTRL S, this will save the settings into the Sonarmite.
8. Connect the Sonarmite to the VIVA GNSS using Bluetooth.
9. To set up the logging of auto points, go into the survey screen, press FN then F2 CONFIG, page across to Autopoints, then set the to the required distance/time interval. Also, press F2 CONFIG and change one of the spaces where it says 'line space full' to 'annotation 1'. This will allow you to see the depth from the survey autopoints screen.
10. Begin logging for a short while, and then download data into LGO to ensure that the depth is coming through in the SmartWorx raw files.

More information related to SonarMite can be found at the link below.

http://www.seafloorsystems.com/pdf/sonarmite_user.pdf