



Basic Configuration of the SonTek M9 HydroSurveyor

By Cristhian Bemudez

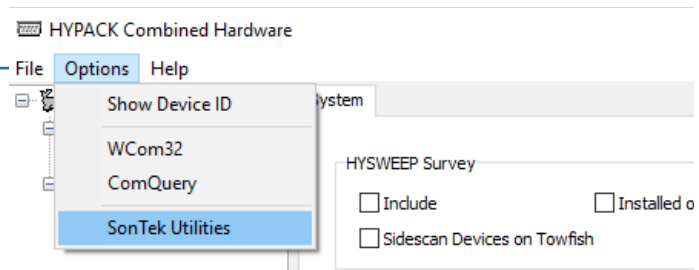
Last year, I had the opportunity to integrate two SonTek M9 HydroSurveyor systems. In this article, I am going to explain the basic configuration of this device in HYPACK®.

NOTE: The driver was created for the HydroSurveyor version; *RiverSurveyor is not supported.*

1. Before starting with the configuration, **check whether the M9 is the HydroSurveyor model**. To do that, you can use SonTek Utilities in HARDWARE:
 - a. In HARDWARE, select **OPTIONS-SONTEK UTILITIES**.

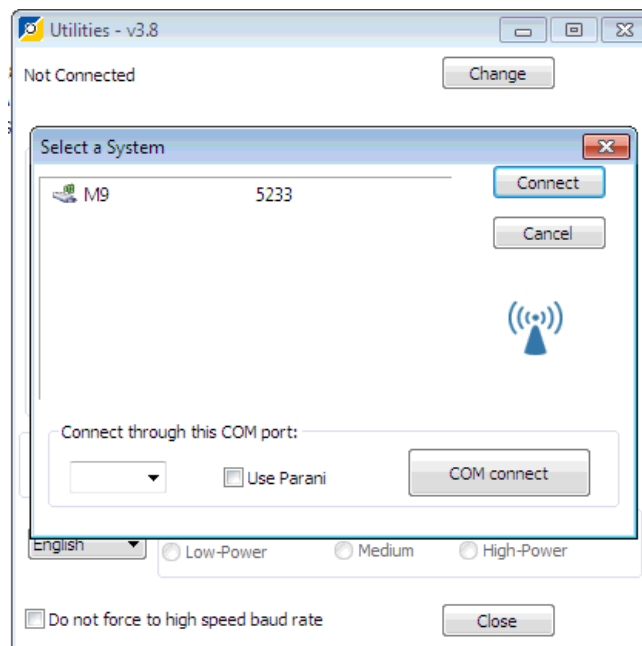
FIGURE 1. Combined Hardware – SonTek Utilities Option

The SonTek Utilities automatically opens its Select a System dialog, which lists the COM port of the USB radio.



2. **Select the COM port for the USB radio and click [Connect]**. In most cases, SonTek Utilities searches for connected devices on the different COM ports.

FIGURE 2. Selecting the M9 connected.

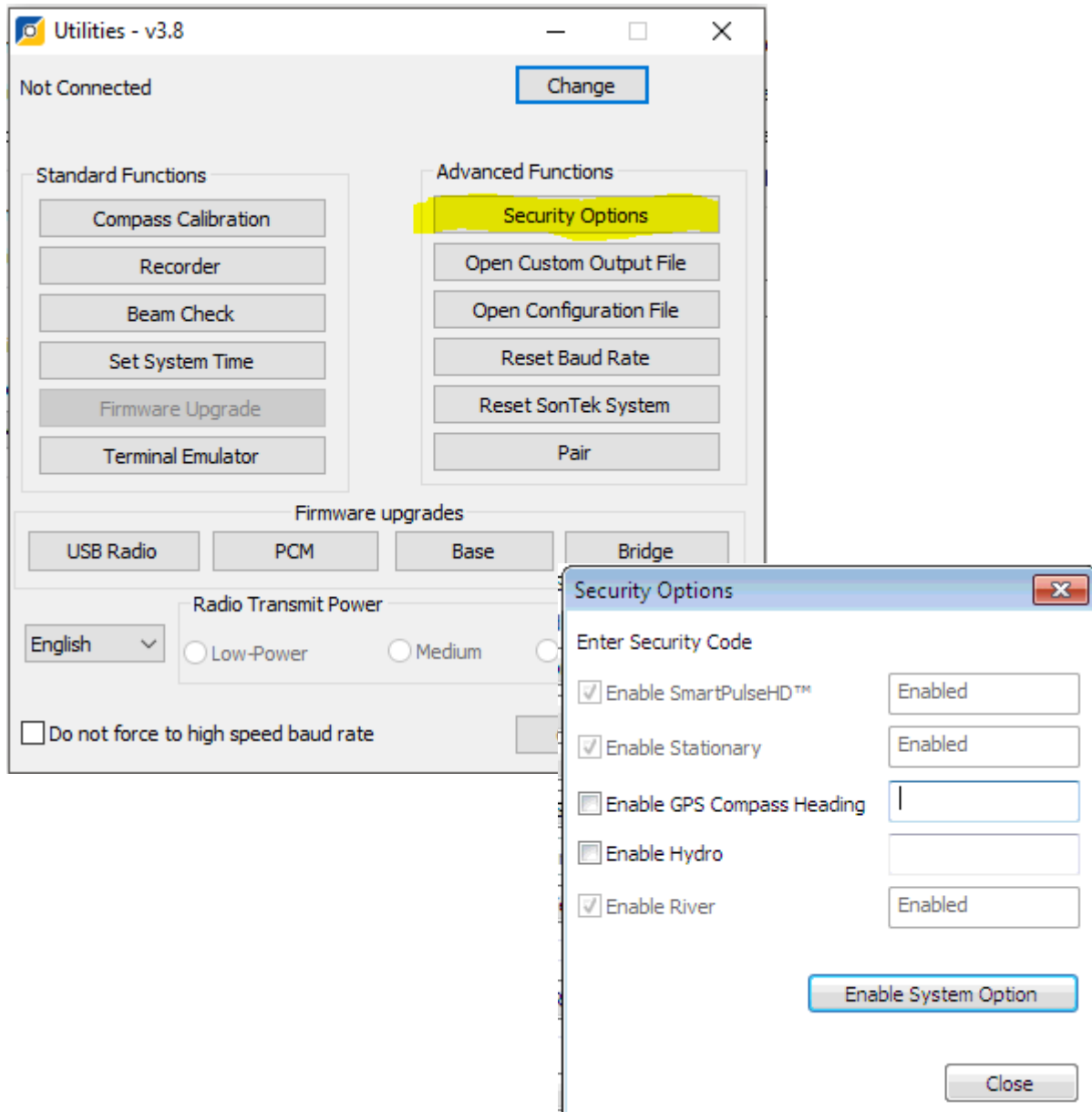


When you press connect, SonTek Utilities will show several buttons.

3. Click **[Security Options]** and confirm that your M9 has the Hydro Surveyor included in the license. You will see which licenses are enabled. If “Enable Hydro” is enabled and grayed out, the HydroSurveyor license is installed.

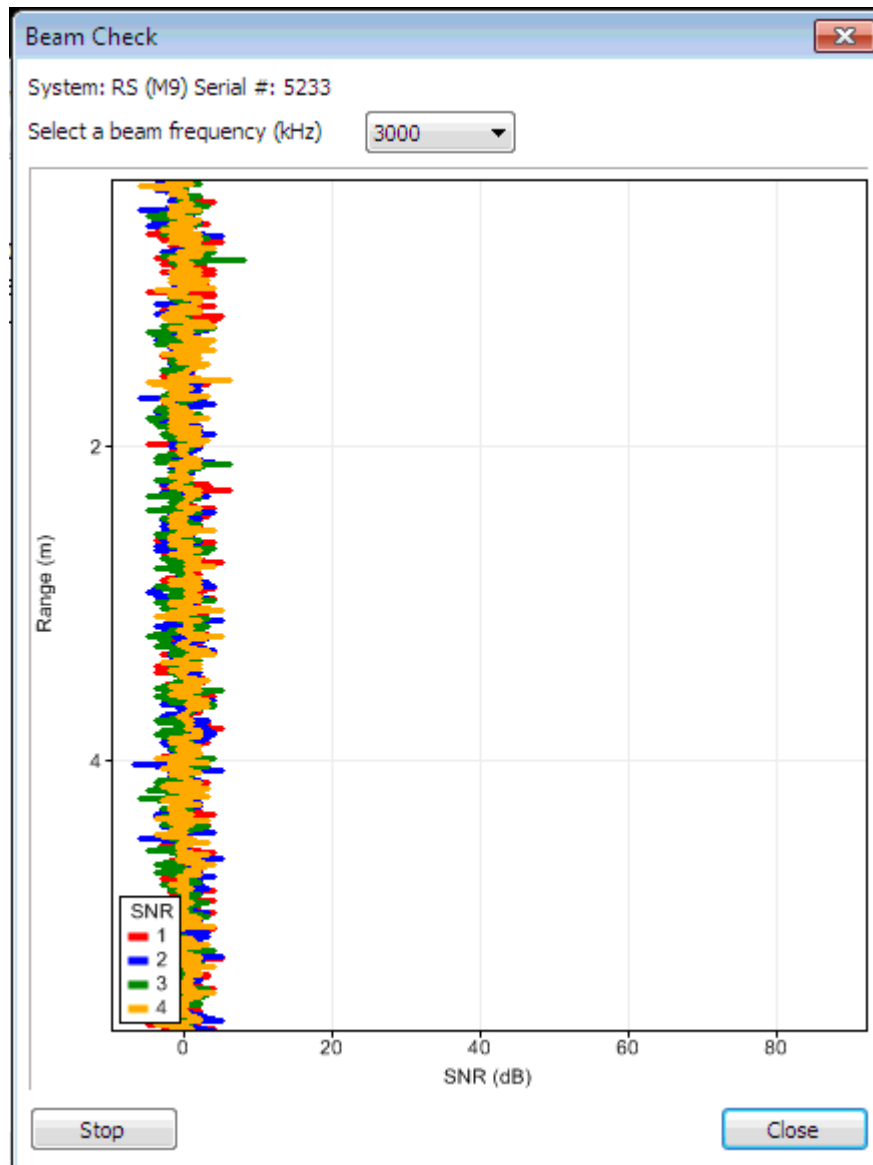
NOTE: If it is not installed and you want to add the HydroSurveyor license, please contact SonTek.

FIGURE 3. SonTek Utilities—Security Options. In this figure, the HydroSurveyor license is not included.



In SonTek Utilities, you can also verify whether the system is sending data by clicking [Beam Check].

FIGURE 4. SonTek Utilities—Beam Check



HARDWARE CONFIGURATION

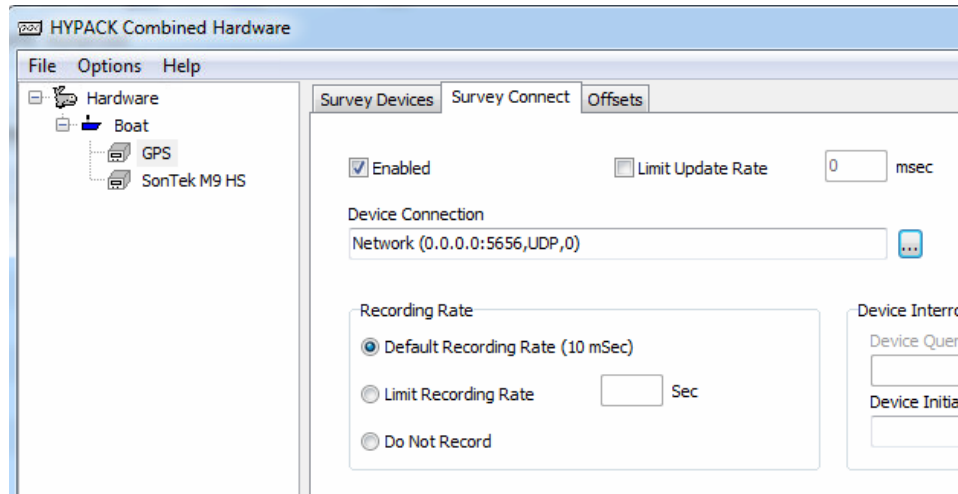
You have to include two drivers: one to receive the GPS data, and another to receive the M9 data.

For the GPS (GPS.dll):

- Select the Position function (at least).

- In the Survey Connect tab, configure the network connection using UDP with port 5656 (the default port the M9 driver sends the GPS data).
- In gps.dll driver setup, enable GGA message.

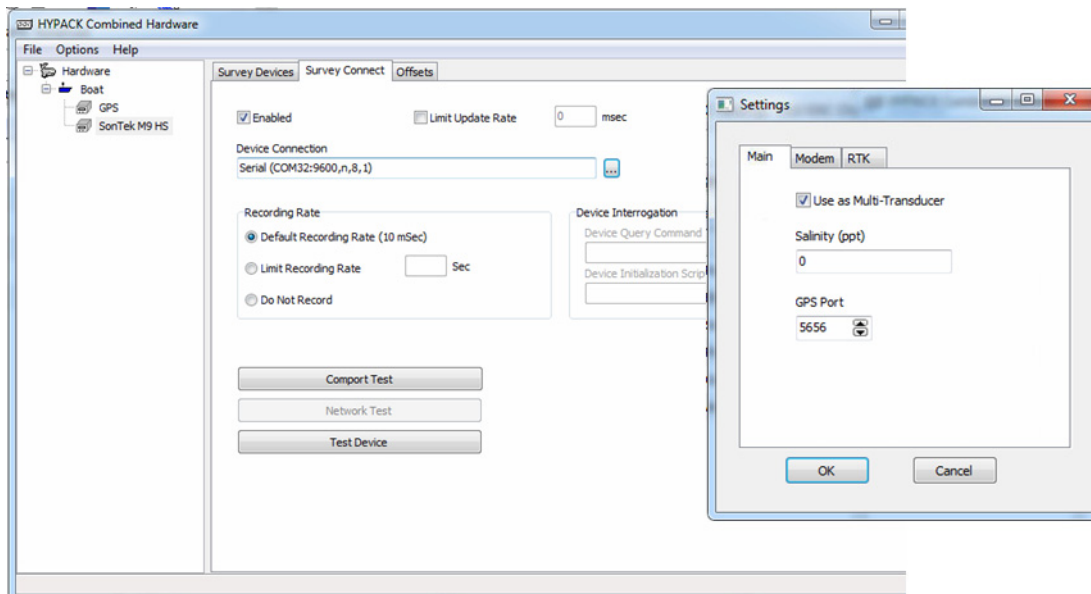
FIGURE 5. GPS Survey Connect Tab Configuration



For the SonTek M9 driver:

- In the Survey Connect tab, select the COM port where the USB radio is connected.
- In the driver setup window, you can choose the port where the messages are going to be forwarded. That is the same port that you configure in GPS Survey Connect Tab.

FIGURE 6. M9 Survey Connect Tab Configuration and Driver Setup.



Once you have everything configured, you will see data coming into HYPACK® SURVEY.

FIGURE 7. SonTek M9 Windows

