

## Configuring the GS10/GS15 to output NMEA

### Notes:

For NMEA out to be activated, you will need to purchase the relevant license. Contact your local Spatial Technologies representative Toll Free on (877) 252 0070 for more information and pricing. To check if the GS sensor is licensed for NMEA, connect with a CS, then go to user -> 'About Leica Viva' -> 'GS Sensor', then scroll down to NMEA out. It will say 'yes' is licensed.

It is recommended that the Leica GEV160 Lemo to 9 pin serial (DB9) cable is used to connect to the PC. If the computer has no DB9 port, purchase a DB9 to USB adapter from your local electronics store for use.

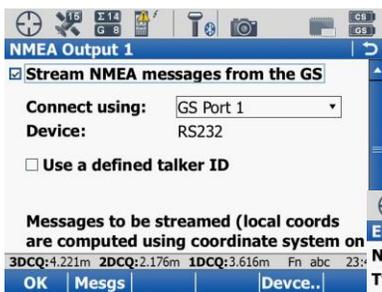
It is helpful to have Hyperterminal installed on your computer to test the communication. Windows 7 does not have this included but it can be found on the internet @ <http://toolbox.davisnet.com/downloads/Weather/Misc/Hyperterminal/> (download all files and place in a folder on C:), or through Chris Landvogt at the Spatial Technologies Vancouver office.

### Concept:

The GS10/GS15 needs to be set up as per usual base & rover configuration. The NMEA output will run in the background of any SmartWorx Viva applications. The following steps outline the various configuration settings required for this to work.

### Settings:

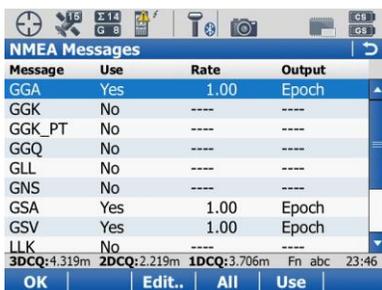
Go to 'Instrument' -> 'Connections' -> 'All other connections' -> 'GS connections'. Then toggle down to 'NMEA 1', and then select F4/edit.



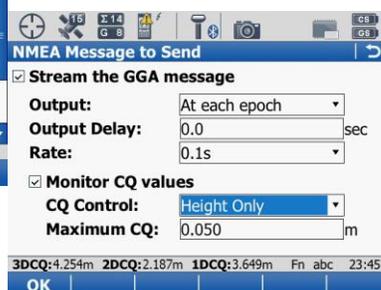
In this menu, you need to check the 'Stream NMEA messages from the GS' then set the 'connect using' to 'GS Port 1' (or relevant port if the connection is via Bluetooth or port 2).



Hit F5/Devce.. select 'RS232', then F3/Edit to set the communication rates. Standard settings can be seen in the screenshot. Hit 'Store' and then 'OK' to save the settings.



Hit F2/Mesgs to configure the content of the NMEA stream, most software will only require a GGA message. Hit F3/Edit on GGA, and set the output rate (10hz in this example). You can also prevent output when the 3DCQ is too high by entering CQ limits.



If a GPGGA message is required, you'll need to select 'Use a defined talker ID' (look back at the first screenshot).

Hit OK when finished, and then connect the sounder to hyperterminal on a PC, making sure to match the baud rate. A nmea stream will appear on screen to confirm the output. For technical support contact Chris Landvogt in the Vancouver office on (604) 214 9453.