

# 9

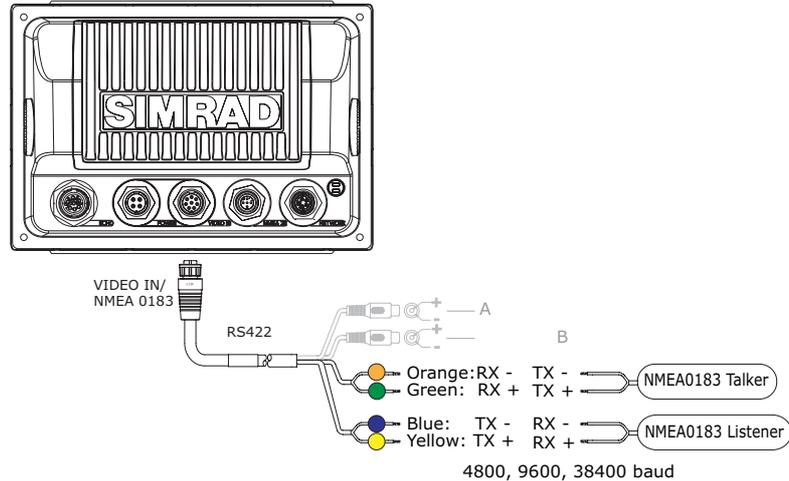
## NMEA0183

To exchange NMEA0183 data, the NSS display has a NMEA0183 serial port, providing both an input and an output.

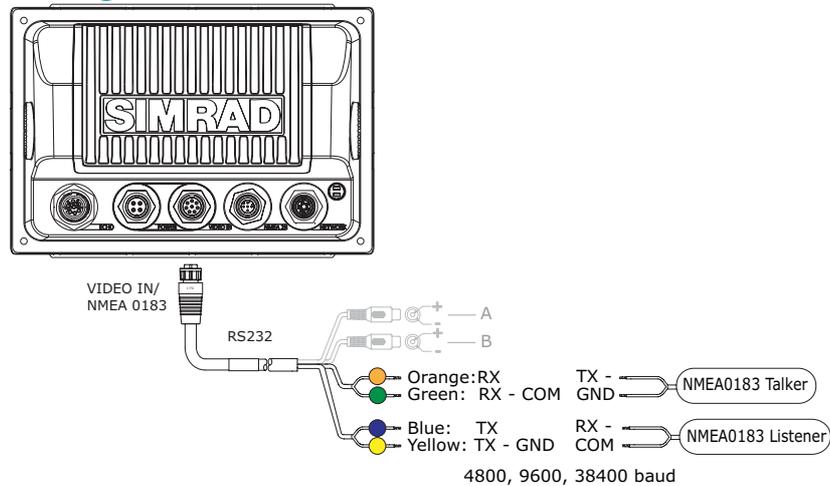
The port uses the serial RS422 (balanced) and RS232 (single ended) standards and can be configured in the software for different baud rates, up to 38,400 baud. NMEA0183 sentences output by the NSS can be individually turned on or off.

Refer to NMEA0183 Supported Sentences on page 62 for a complete list of sentences.

### Wiring NMEA 0183 for RS422



### Wiring NMEA 0183 for RS232



→ **note:** when connecting to a DB-9 plug for interfacing to a PC, combine Rx - COM, and TX - GND from the NSS, and connect to pin 5 (PC GND). Rx is connected to pin 3, Tx to pin 2.

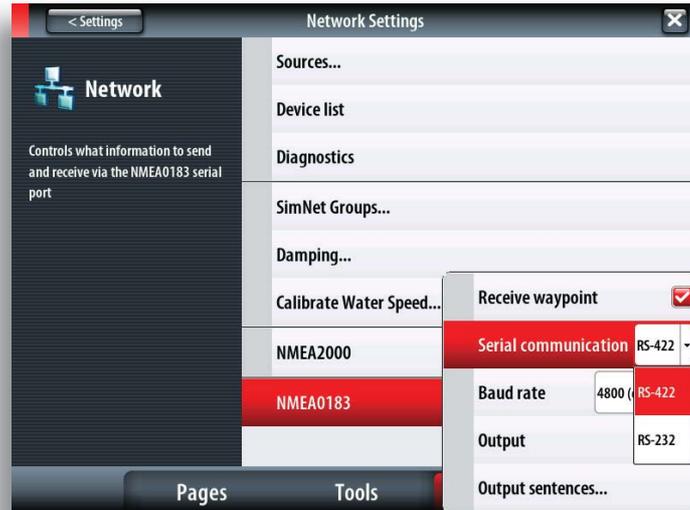
### Talkers and Listeners

Do not connect multiple devices outputting data (Talkers) on to the input (Rx) of the NSS. The RS422 protocol is not intended for this type of connection, and data will be corrupted if more than one device transmits simultaneously. The output however may drive multiple receivers (Listeners). The number of receivers is finite, and depends on the receiving hardware. Typically three devices is possible.



## Serial port setup

NMEA 0183 setup is done from the Network Settings page.



### Receive waypoint

Select this option to allow device capable of creating and exporting waypoints via NMEA0183 to transfer directly to the NSS.

### Serial communication

This should be set according to correspond with devices connected to the NMEA 0183 input and output. RS422 is the default setting.

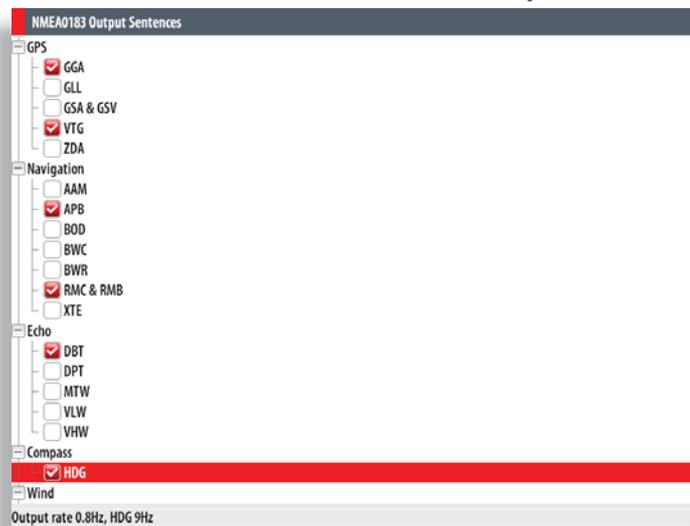
### Baud rate

Baud Rate is set simultaneously for the input and the output, it can not be set at a different speed for each. It should be set to match the speed of the device connected to it. Most NMEA 0183 devices send data at 4800 baud.

- **Note:** AIS transponders typically operate at NMEA0183-HS (high speed), and will require the baud rate to be set to 38,400.

### NMEA0183 output

To enable data output, select the **Output** option, and then select which sentences the NSS needs to transmit to other devices from the **Output Sentences** list.



All NMEA0183 sentences are unchecked by default.