



# VESSEL TECHNOLOGY

## Dynamic Positioning Signal Simulator



The DPSS® is an easy to use tool which allows vessel crew to simulate complex Dynamic Positioning (DP) signals for use in DP system testing.

Complex testing of DP systems is now made easy and quick without the user having in depth knowledge of the software needed to simulate these signals. The DPSS® puts the ability to easily simulate the signals into the hands of the user.

The DPSS® aids crew to fault find with the DP system, allowing for the source of the fault to be pinpointed and potentially resolved by the crew. **The DPSS® reduces the need for callouts to service engineers, reducing downtime and expense whilst increasing the confidence of the crew.**

**The DPSS® allows for signals from 11 different reference systems and sensors to be sent into the DP system** to test for an appropriate response. For example, as part of DP trials, a faulty NMEA wind signal can be sent to the DP system to test that the DP system will correctly recognise the signal as faulty and reject it.

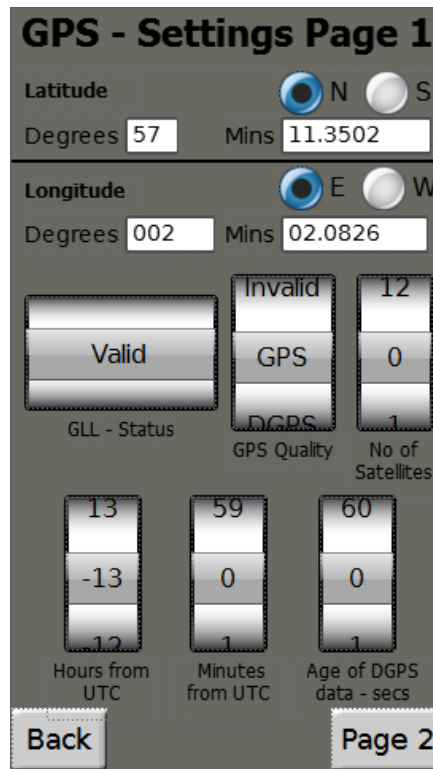
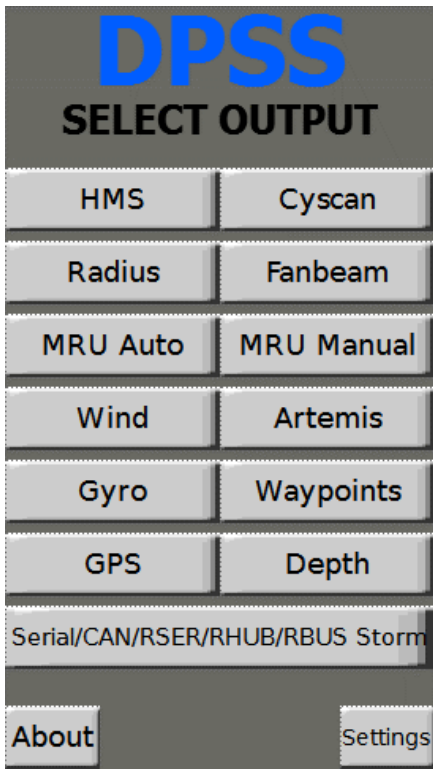
The DPSS® also allows for jabber testing to be carried out on RS232, RS422 and CAN bus communication links. This can be used as **an independent test on board.**

### Applications

- Fault finding tool
- FMEA proving trials and annual trials
- DP training tool
- RS232, RS422 and CAN bus jabber testing

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Example DPSS screenshots

### DPSS Signal Types

- GPS – GGA, GLL, ZDA, GNS and GST
- Wind - MWV
- Depth - DPT
- Fanbeam – MDL + Checksum, MDL, BCD, Nautronix
- Radius – PSXRAD, ABB
- MRU – manual and simulated mode - PSXN
- Artemis – ADB, BCD0.01, ASCII - 16, ASCII-17, ASCII-22
- Gyro - HDT
- HMS – Temperature, Humidity and Pressure - XDR
- Waypoints – RTE, WPL
- Serial/CAN bus storm – RS232/RS422/CAN bus
- CyScan – RLS
- RS232, RS422, CAN bus jabber

### SETTINGS

- Serial baud rates** 300, 600, 1200, 2400, 4800, 9600, 19200, 38400, 57600 and 115200 baud
- CAN bus speeds** 50, 100, 125 and 250 kBit/s
- Frequency** 1, 2, 5 and 10 Hz

### CAPABILITY

- RS232 & RS422** GPS, Wind, Depth, Fanbeam, Radius, MRU (manual and simulated mode), Artemis, Gyro, HMS (Temperature, Humidity and Pressure), Waypoints, CyScan, Serial jabber/storm ability
- CAN Bus** CAN bus jabber/storm – connect/disconnect termination resistor
- Software updates** Remote software update capability

### PHYSICAL

- DPSS unit weight** 1.05 kg
- DPSS + accessories + case weight** 5 kg
- DPSS only dimensions** 27cm x 12.5cm x 5.7cm
- DPSS case dimensions** 48.8cm x 38.6cm x 18.5cm
- Time to charge battery** Approximately 2 hours
- Typical battery life** Approximately 10 hours
- Operating temperature range** 0°C to 70°C
- Screen size** 4.3 inches

Specification subject to change

### STANDARD SUPPLY

- Standard supply** DPSS unit, RS232 cable, RS422 cable, CAN bus cable, Battery charger, Manual, 9 pin breakout board, Serial adaptors, Ethernet cable and USB to RS232 adaptor all supplied in a Peli case
- Optional** RBUS, RSER and RHUB communication storm testing modules  
Additional functionality available upon request



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