Quick Start Guide

DST-2

Depth, Speed & Temperature Module

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Actisense® Award Winning NMEA Specialists

Important Notices
The device to which this manual relates complies with the Electromagnetic Compatibility requirements according to EN60945. The unit should always be used in conjunction with appropriately approved, shielded cable and connectors as per NMEA 0400 to ensure compliance. A declaration of conformity is available for download at www.actisense.com.

If the device to which this manual relates is to be installed within five metres of a compass, please refer to the 'Compass Safe Distance' section in the 'Technical Specifications' table.

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Product Registration
Please register your product via the online form at:
http://www.actisense.com/product-registration/

Your product package includes a unit serial number. The serial number is six digits long and can be found below the barcode on the label. Your registration will assist Actisense Support to link your product to your details, simplifying any future assistance you may require.

Product Disposal
Please dispose of this product in accordance with the WEEE Directive. The product should be taken to a registered establishment for the disposal of electronic equipment.

Technical Accuracy
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Product Guarantee
This product comes with a three year 'return to base' guarantee. If you suspect that the unit is faulty please refer to the Troubleshooting Section of the User Manual before contacting support.

It is a requirement of the guarantee that all installations of electronic equipment follow the NMEA 0400 specification. Any connection to a battery or power supply must meet the mandatory essential safety requirements that may be imposed by local regulatory agencies.

Actisense products are intended for use in a marine environment, primarily for below deck use. If a product is to be used in a more severe environment, such use may be considered misuse under the Active Research Ltd guarantee.

Introduction & Features
The five NMEA 0183 inputs can be routed to any of the two NMEA 0183 outputs, as well as the serial and Ethernet ports providing a highly customisable network. The bi-directional serial port and Ethernet port also allow for simple configuration and diagnostics using Actisense software.

Industry leading isolation is provided on all inputs and outputs as standard, so that connected devices safely avoid hazardous ground loops, the number one cause of product failure in NMEA 0183 networks. This makes the DST-2 robust enough to handle any NMEA 0183 installation.

Before getting started
The wire colours used in this quick start guide are in accordance with the NMEA 0183 specification (v.4.10, June 2014) and are for illustration purposes only. Please ensure you check the wiring colours in the installation instructions for the device you wish to interface to the DST-2.

Powering the DST-2

The DST-2 can operate between 10 and 16 VDC and will typically use 110mA at 12 VDC. The power supply should be connected to the DST-2 in accordance with the diagram below. Operation between 16 and 28 VDC is not recommended and may cause damage.
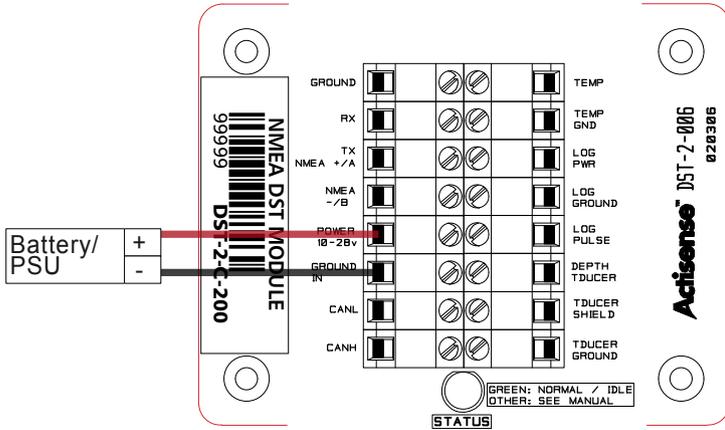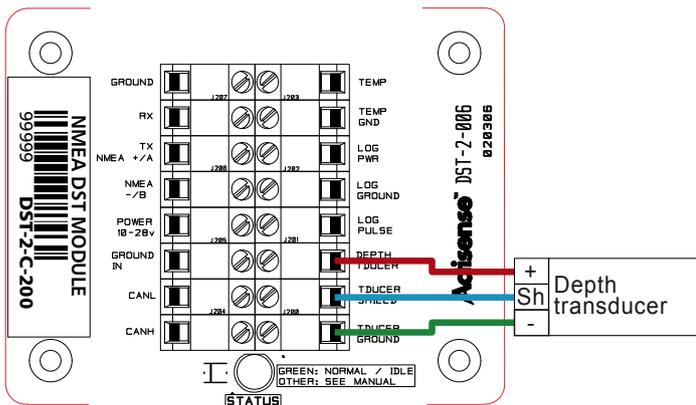

Connecting a Temperature Transducer

Connect the 2 wires from the temperature transucer to the DST-2 in accordance with the diagram below.

The DST-2 will tranmsit NMEA 0183 temperature sentence (MTW) once a signal from a temperature transducer have been detected.
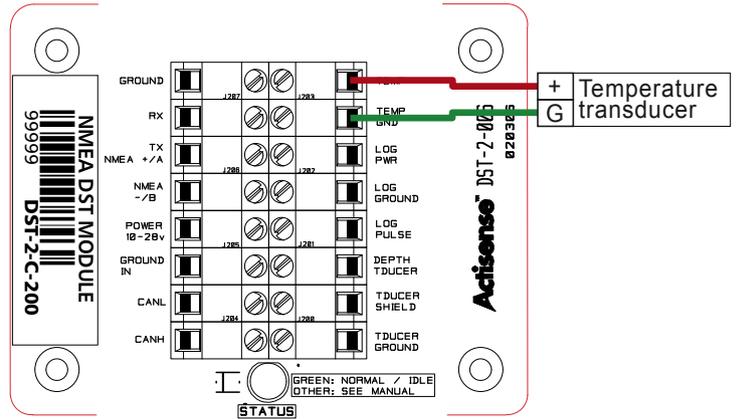
Connecting a Depth Transducer

Connect the 2 wires and optional shield from the depth transucer to the DST-2 in accordance with the diagram below.
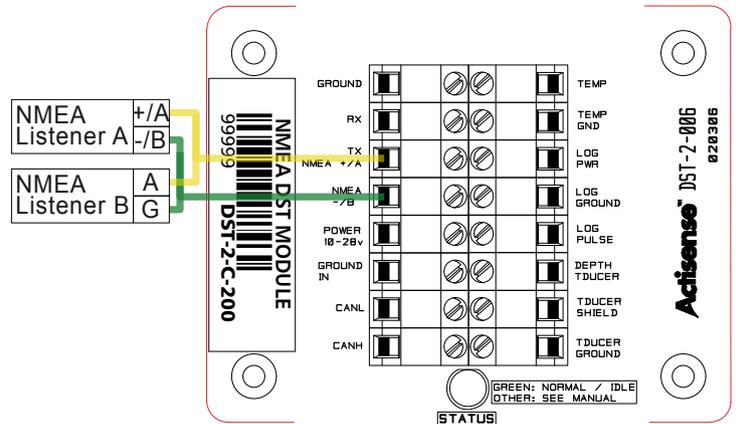

Connecting to NMEA 0183 Listeners

Connect the DST-2 to the NMEA 0183 Listener in accordance with the diagram below.

'Listener A' represents a differential (RS422) connection for devices that have an 'A/+' and a 'B/-' connection.

Listener B' represents a single-ended (RS232) connection for devices that have an 'A/+' and a 'GND' connection

Connecting a Speed/Log Transducer

Connect the 3 wires from the speed/log transucer to the DST-2 in accordance with the diagram below.

The DST-2 will tranmsit NMEA 0183 speed sentences (VHW & VLW) once a minimum of three pulses from a speed/log transducer have been detected.
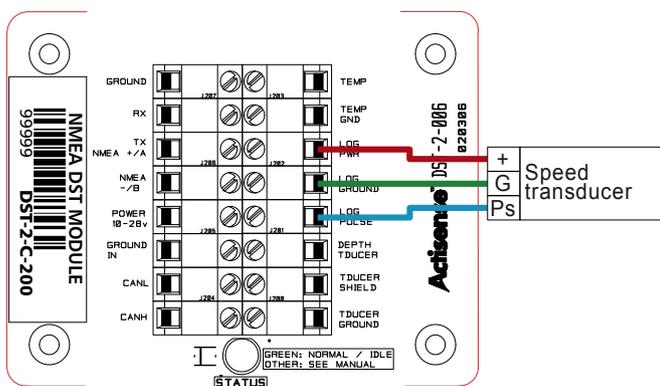
Connecting to a PC

Connect the wires from the DST-2 to the NMEA 0183 Listener in accordance with the diagram below.

DST-2 Label	RX	GROUND	TX NMEA +/A
Standard RS232 label	Pin 2	Pin 5	Pin 3