

# NMEA Autoswitch NSW-1

Automatic selection of the highest priority NMEA device, for your multiple GPS, depth sounder and more...

The Actisense™ NMEA Autoswitch allows the data from up to four NMEA (National Marine Electronics Association) input devices to be switched to a single NMEA output, by determining the highest priority device with good data.

The NSW-1 is factory preconfigured for simple plug and play installation - just wire it in and it's ready to go.

Electrical spike protection is provided on all four input channels using opto-isolators to protect any connected equipment from most system faults; a particularly valuable benefit as equipment requiring the most data, such as a PC or chart plotter, is often the most expensive.

The buffered NMEA 0183 output boosts the signal current, allowing parallel connection

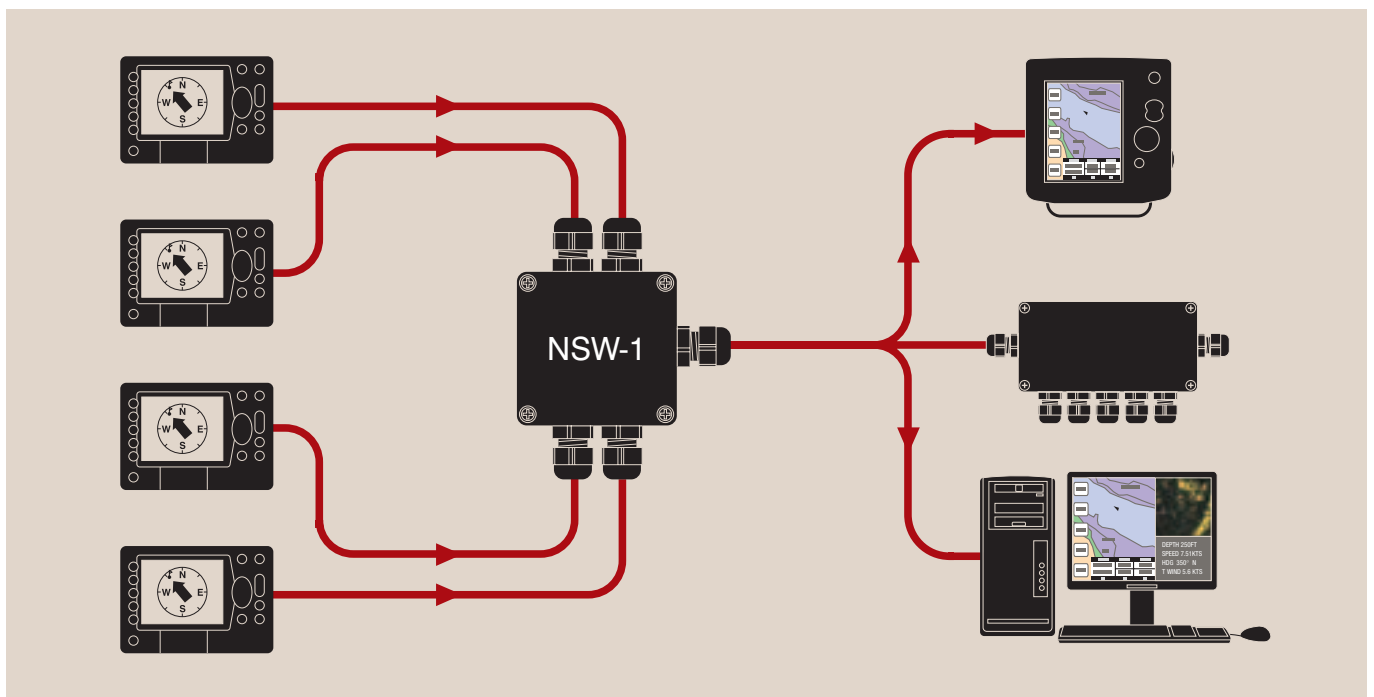
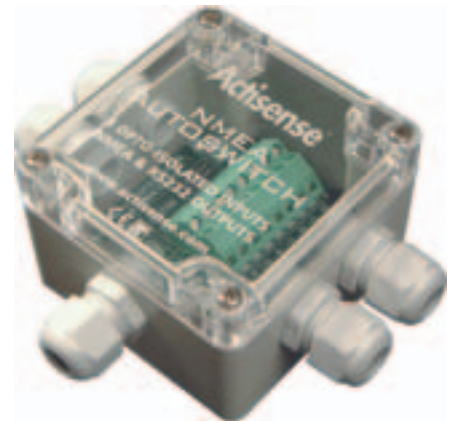
to many bridge instruments at the same time, removing the need for a separate NMEA buffer.

The autoswitch contains intelligent software that determines the highest priority device based on one of two reasons - either a complete failure to send any NMEA data, or if the validity flag(s) contained within the received NMEA data indicate that this data is not valid and should only be used with caution.

The NSW-1 has very low power consumption which is an advantage in small vessel installations.

The PC Interface RS232 port can be used to reproduce the NMEA data on a laptop or PC.

Easy reprogrammability is assured through the NSW-1's built-in "flash memory" that can be updated with the latest changes in interfacing standards using free update software available from the Actisense™ website.



# NMEA Autoswitch NSW-1

## Specifications

### NMEA Input system

- Each channel fully opto-isolated
- Exceeds all NMEA 0183 input voltage specifications
- Capable of receiving 1.8v differential signal levels
- Current limited (protects from cable short circuits)
- Over voltage protected
- Will also receive RS232 signal levels
- Full galvanic opto-isolation (between all 4 inputs and outputs) offering up to 2000v DC protection
- Fixed 4800 Baud rate

### NMEA Output system

- Exceeds all NMEA 0183 output voltage specifications
- Capable of driving up to 20 NMEA 0183 compliant instruments. Typical maximum drive is 8 instruments
- Short circuit protected
- Static discharge protected
- Fixed 4800 Baud rate

### RS232 Interface

- Standard PC bi-directional connection
- Short circuit protected
- Static discharge protected
- Fixed 38400 Baud rate

### Data Latency

- Input to output data delay maximum is 0.1 seconds

### Power supply

- Supply Voltage range: 8 to 35 volts DC
- Power Consumption under no-load conditions : 360mW
- 30 mA @ 12v DC
- 16 mA @ 24v DC

### Environmental

- Recommended operating temperature: -20°C to +70°C
- Sealed case and grommets provide IP66 protection

### General

- Weight: 200 grams
- Dimensions: see diagram
- Guarantee: 2 years

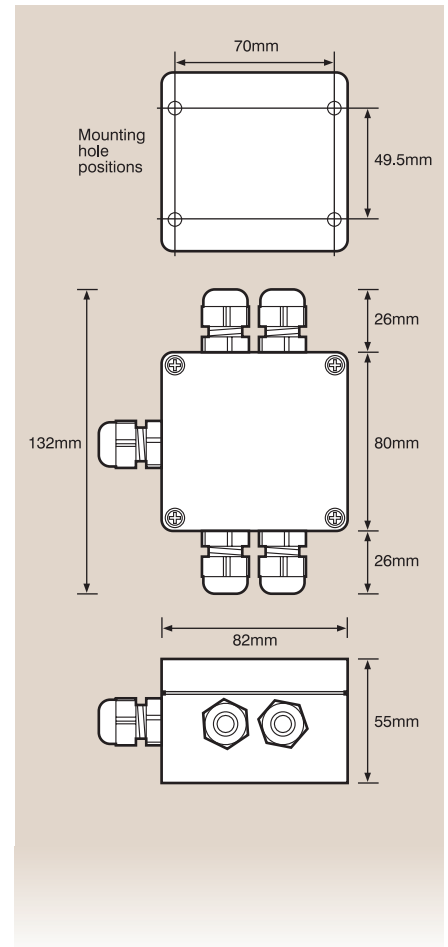
### Built-in Firmware / Software

- Free software updates available on Actisense™ website
- Simple one button reprogramming utility
- Future-proof design
- Custom programming service available

### Part number

- NSW-1

## Dimensions



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