

NMEA Data Multiplexer NDC-2

Connect multiple NMEA devices to your PC, Plotter, Radar, Autopilot and more...

The Actisense™ NMEA (National Marine Electronics Association) Multiplexer/Combiner allows connection of four opto-isolated inputs into one output.

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 PC Interface RS232 port can reproduce the NMEA data on a laptop or PC. The multiplexer also enables the PC to talk back to connected marine hardware, allowing it to control onboard equipment from “virtual cockpit” software.

Easy reprogrammability is assured through the multiplexer’s built-in “flash memory” that can be updated with the latest changes in interfacing standards using

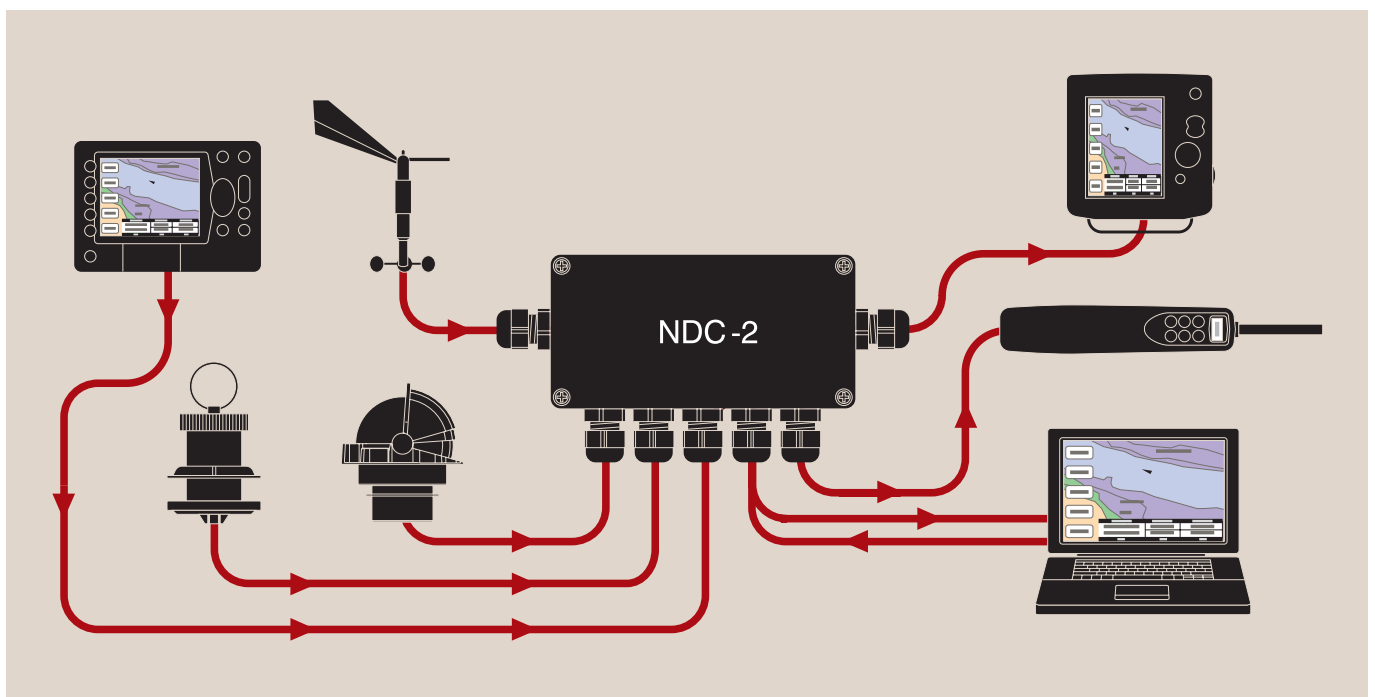
free update software available from the Actisense™ website.

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.

Free configuration software is provided that allows users to set up filters on the NMEA input channels to prevent unwanted data reaching the combined NMEA output channel and crowding the network. This reduces the risk associated with conventional NMEA multiplexers of delaying or losing important information when the NMEA network is running at over 50% capacity.

Configurable port priority can further reduce the possibility of important NMEA data being lost.

The low power consumption is also an advantage in small boat installations.



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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
- NMEA input to output protection: 2000v DC
- Baud rate selectable (2400-38400)

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
- Baud rate selectable (4800-38400)

RS232 Interface

- Standard PC bi-directional connection
- Short circuit protected
- Static discharge protected
- Baud rate selectable (19200-115200)

Data Latency

- Input to output data delay maximum is 0.1 seconds

Power supply

- Supply Voltage range: 7 to 29 volts DC
- Power Consumption: 100 mA @ 12v DC / 1.2 W

Environmental

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

General

- Weight: 500 grams
- Dimensions: see diagram right
- Guarantee: 2 years

Built-in Firmware / Software

- Free software updates available on Actisense™ website
- Simple one button reprogramming utility
- Totally re-configurable to meet users requirements
- Future-proof design
- Custom programming service available

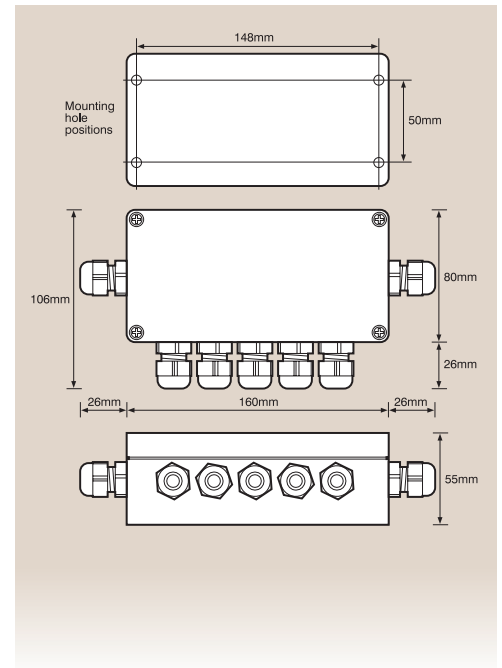
Configuration Software

- Freely available on the Actisense™ website
- PC Windows OS software (95/98/ME and NT/2000/XP)
- Controls the set-up of filters on the input channels to prevent unwanted NMEA data reaching the combined NMEA output channel and crowding the network
- Defines the input channel priority order
- Provides diagnostic aids to help in setting up, testing and monitoring of the Actisense™ NMEA NDC-2 in your system. Displays useful information such as the amount of data entering each channel, and percentage loading of the output channels

Part number

- NDC-2

Dimensions



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