

## NDC-4 NMEA Multiplexer



### Safely drive up to six NMEA Listeners, with power distribution for the connected Talker.

The NDC-4 provides complete access to all NMEA 0183 data sources, configurable filters to remove unwanted data, as well as enabling an on-board PC to read and add to the combined data stream.

The NDC-4 and NDC-4-USB allow up to five OPTO-isolated NMEA 0183 sources to be multiplexed into a single stream\*.

Separate ISO-Drive™ outputs allow two different downstream Talker baud rates to be created.

Factory pre-configured versions enable the NDC-4 to be used out of the box for AIS operation (NDC-4-AIS) or as an Autoswitch (NDC-4-ASW).

The NDC-4 has a very low power consumption which is an advantage in small vessel installations.

Unwanted data can be filtered out at the NDC-4 inputs using NDC Control Centre which is supplied on the CD and available via the Actisense Website. This will prevent outputs from becoming overloaded in installations where large amounts of data are being transmitted meaning essential data (such as GPS) will not be lost.

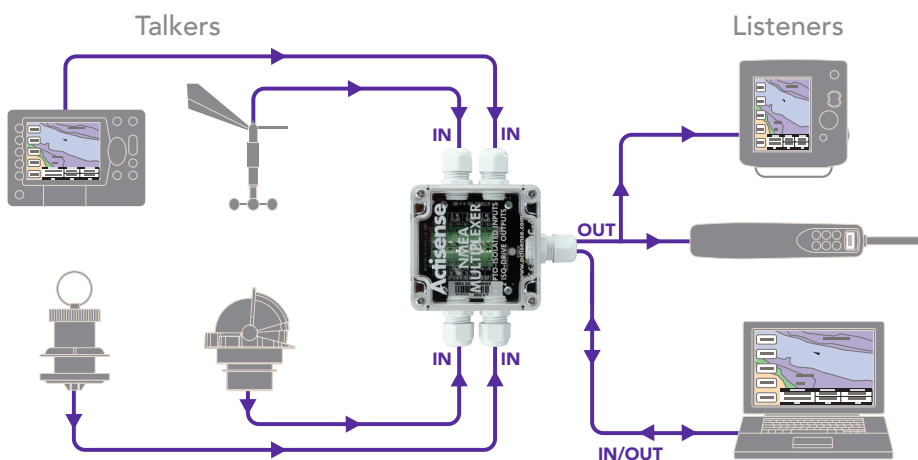
A PC RS232 or USB port can connect with the NDC-4 to view the NMEA data on a laptop or PC. The NDC-4 also enables the PC to talk back to connected marine hardware, allowing it to control on board equipment from "virtual cockpit" or chart-plotter software.

### Benefits

- Combine up to five NMEA 0183 data sources into one stream
- Filter unwanted data
- Change data to a different baud rate
- Preconfigured versions for AIS and Autoswitch operation
- Connect to a PC with optional USB Kit.

### Features:

- Five OPTO-isolated inputs
- Two ISO-Drive™ outputs
- Intelligent multiplexing software
- Flexible NMEA filtering
- Configurable baud rates and port priorities
- PC configuration software
- AIS compatible
- Up to 115200 baud
- 1500V isolation on inputs & outputs



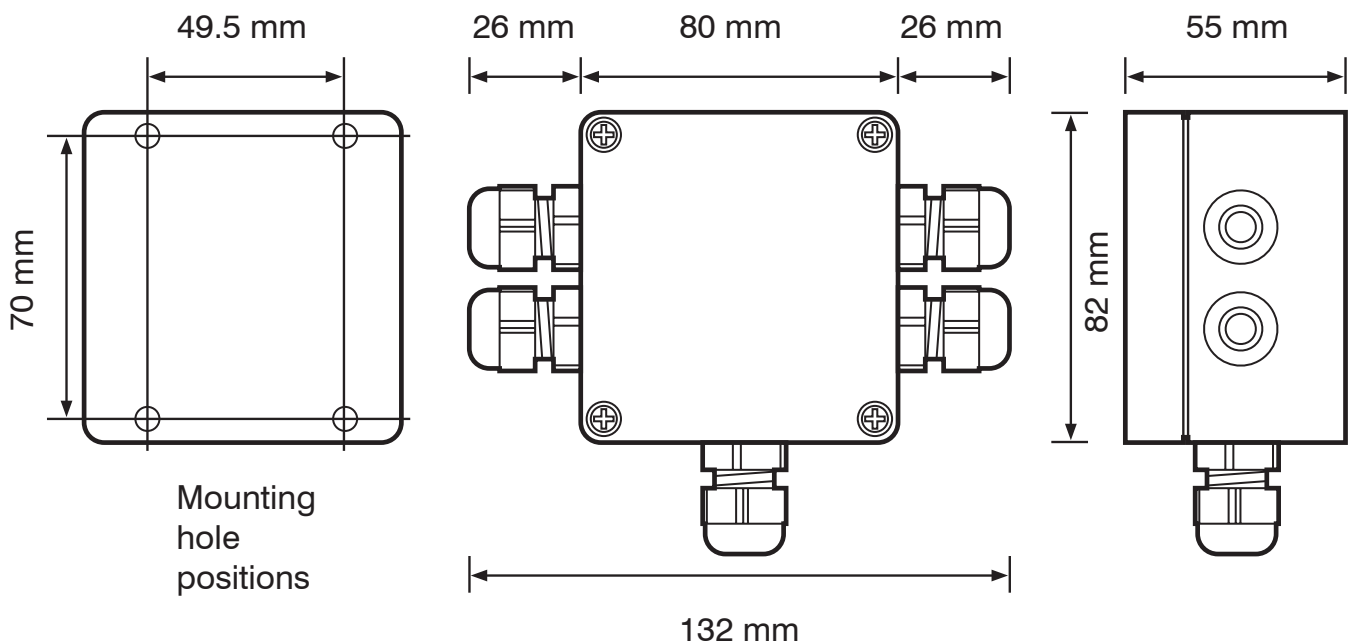
\*Four inputs on the USB version, as the USB interface acts as the fifth channel, overriding the fifth OPTO input.

# NDC-4: Specifications



Supply ("BATT")		
Voltage		8-35 V
Current		40 mA max @ 12V DC under no load
Supply (USB)		
Supply voltage		4.75-5.25 V
Supply current from USB (see note 1)		75 mA max
Opto-isolated Flexible Input		
Input voltage between +/-	Logical '1'/stop bit	-15-0.5 V
	Logical '0'/start bit	4-15 V
Input current	Maximum is under +35v overload condition, Min @ 2.0v input level	1.6-9 mA
Differential input voltage	Required level for NMEA to be detected	1.8-2 V
Galvanic isolation	Between input & output	2500 V
Overdrive protection		40 V
Input Baud rate (ports 0 & 1 + USB)	Configurable Baud rate	4800-115200 bps
Input Baud rate (ports 2 & 3)	Configurable Baud rate	4800-57600 bps
Input Baud rate (port 4)	Fixed Baud rate	4800 bps
ISO-Drive™ Flexible Output		
Output voltage between ISO Out +/A and ISO Out -/B (under no load)	Logical '1'	-4.6 to -5 V
	Logical '0'	4.6-5 V
Output current at max load of 100 ohm	At maximum load, differential drive voltage reduces to 2.1v	21 mA
Output short circuit current (note 2)	Due to short circuit protection	50-55 mA
Galvanic isolation	From Opto input and (USB) ground	1500 V
Output Baud rate (ports 0 & 1 + USB)	Configurable Baud rate	4800-115200 bps
Data propagation delay	Under no-overload conditions	1-100 ms
General		
Ambient temperature		-20-70 °C
Guarantee	Extended Actisense guarantee	3 Year
Gland clamping range	Cable diameters accommodated	4.5-10 mm
IP Rating		IP66

## Product Dimensions.



All specifications are taken with reference to an ambient temperature of 25°C unless otherwise specified.

All specifications correct at time of print.