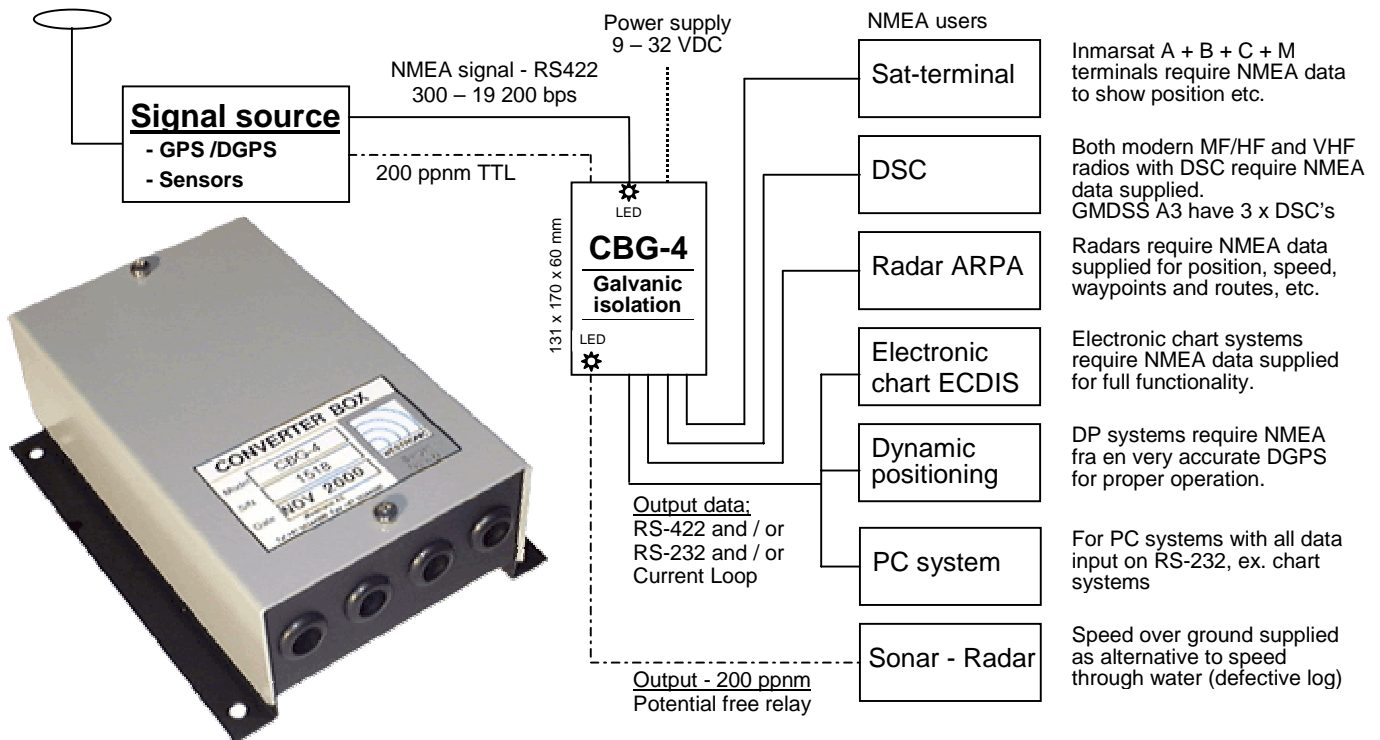


Westronic NMEA converter CBG-4 / CBG-4MX



When electronic equipment is connected to your sensor, the sensor might be damaged due to overload or problems caused in the connected cabling. Such problems can be currency variations in the cable network, unwarranted earthings, short circuiting or disturbances from other cabling systems.

CBG-4 is the best "insurance" to avoid overloads or problems and to ensure problem free signal distribution. CBG-4 ensures that expensive and vital equipment like GPS and other sensors are not destroyed if errors occur on equipment connected to the signal port (data port). At the same time enables CBG-4 that more signal users can be connected to the same signal source without overloads.



Galvanic isolation

CBG-4 gives galvanic isolation between output port on signal sensors and connected equipment. Such signal sensors might be GPS / DGPS or other NMEA / signal source. Due to this CBG-4 is the best guarantee that electronic sensors are not damaged if faults or errors occur on the connected equipment of in the cabling system

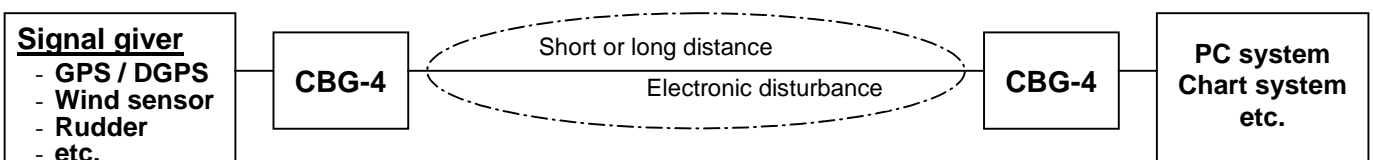
More NMEA users connected to the same signal source

With CBG-4 installed will the same signal sensor be able to supply NMEA signals to a number of systems at the same time, ex. GMDSS installations. CBG-4 is further designed so that more CBG-4 can be operated in parallel so there will not be any limitation on number of systems connected to same signal source.

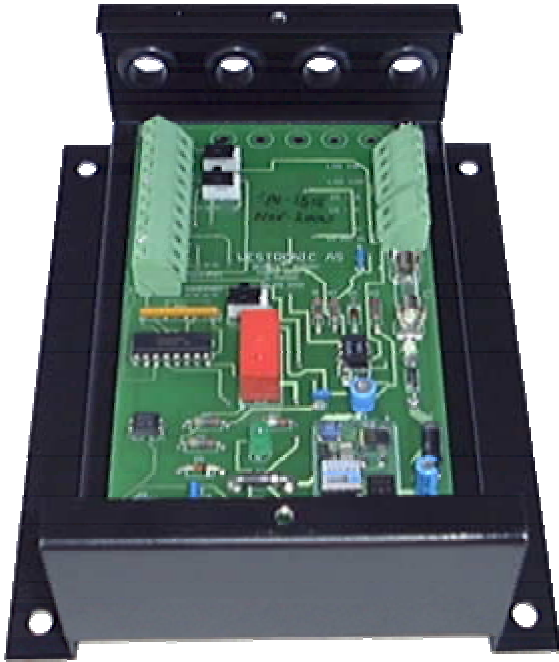
Transport of signals over long distance and / or through electronic disturbance.

The attempt to transport electronic signals as indicated above on either RS-422 or RS232 requires either special cables or expensive solutions. Electronic noise along the line requires further attention to ensure good result.

The logic solution is to connect one CBG-4 in both end of the transmission line. This will secure problem free transmission with standard cables as indicated below with the use of the build in function of the CBG-4 (Current Loop).



Westronic NMEA converter - CBG-4



CBG-4 has rugged cable terminals for quick and safe connection of cables from sensor and external systems

Description

NMEA

- ◆ 1 input NMEA0183 (RS-422)
- ◆ 4 output NMEA0183 (standard RS-422)
 - With the use of switches on card 1 to 2 output ports can be changed to output RS-232
 - With the use of switch on card 1 output port on card can be changed to output Current Loop
- ◆ Max. currency load by Current Loop" is 250 mA.
- ◆ Input and output ports are galvanically separated by opto coupler.
- ◆ One blinking light diode (LED) indicates that data is received by CBG-4.

200 PPNM

(Used a. o. to produce log pulses for radars, sonars etc.)

- ◆ 1 input from GPS – 200* PPNM TTL.
- ◆ 1 output - 200 PPNM potential free connector (relay).
- ◆ Input and output port is galvanically separated by opto coupler.
- ◆ One blinking light diode (LED) blinks every time the potential free output port closes (relay connects).

* If input signal is 100, 200 or 400 ppm the output signal copies this.

Technical specifications

Input voltage:	8 – 32 VDC (Max. 3 W)
Temperature:	0 – +50 °C
Data input:	1 x NMEA0183 - RS422 Isolation by opto coupler 1,5 kV Currency level: 1,9V-15VDC Pulled power 1mA-20mA
Data output:	1 x RS-422 – 20 mA
Switchable	1 x RS-422 / RS-232 (see below)
Switchable	1 x RS-422 / RS-232 (see below)
Switchable	1 x RS-422 / Current loop/250 mA) RS-232 output has 1,5 kV ESD protection on all pins.
Data speed:	RS-422/RS-232 300 – 19200 baud
Current Loop	Max. 4800 baud
200 PPNM input:	4,0 – 12,7 VDC
200 PPNM output:	Max. 2A
Dimension (LxWxH)	131 x 170 x 60 mm

Dealer:

Option: CBG-4MX with plug and cable



CBG-4MX delivered with multiport plug and cable for special connection to GPS / DGPS navigators as:

- Leica MX400, MX400B, MX412, MX412B
- Litton LMX400 series
- Philips Mk 10 GPS and Mk 10 DGPS
- Kelvin Hughes MX400 series
- Other plus and cabling arrangement can be delivered upon request.

Westronic AS

Damsgårdsveien 163
5162 LAKSEVÅG - Norway

Tel: +47 55344990 – Fax: +47 55344890
E-post: mail@westronic.no
WEB: www.westronic.no



Specifications might be altered without further notice.