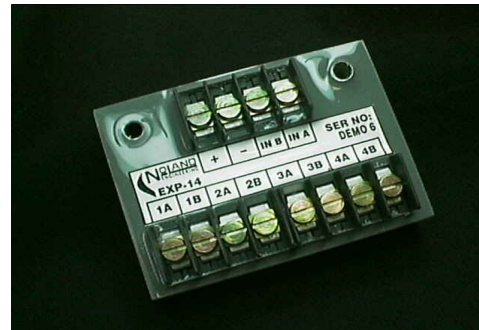




<http://www.nolandengineering.com>
email: info@nolandengineering.com



XP14 NMEA 0183 Expander

The XP14 expander is a NMEA 0183 problem solver for certain installation and will increase the reliability of any installation with multiple listeners. It provides a single opto-isolated input and four independent NMEA 0183 (RS-422) differential outputs. Although it is intended for 4800 baud operation per NMEA 0183, it will also operate at 9600 baud.

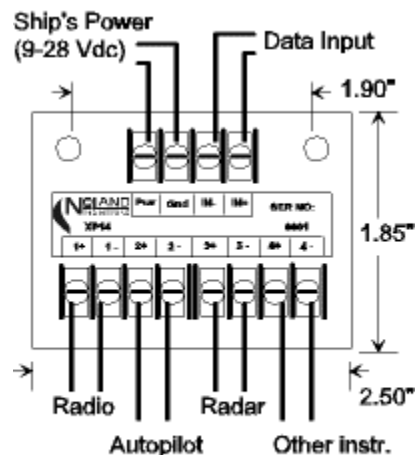
Many electronic instruments, although being compliant with the NMEA 0183 standard, do not provide sufficient drive capability for multiple listeners. To overcome this, the XP14 has four outputs, each of which can drive multiple listeners if needed. The XP14 Expander solves installation problems by providing an opto-isolated NMEA 0183 input and four independent NMEA 0183 outputs. All four outputs are differential drive (RS-422) and isolated from each other.

The XP14 provides an additional benefit of isolation between multiple listeners so that one or more can become shorted without affecting the others. Short circuit protection is also designed into this unit, but shorted outputs may cause premature unit failure (overheating) if left connected indefinitely.

The XP14 can operate on any DC voltage from 9-28 Vdc. When operating in 24 Vdc vessels, take care to ensure the unit is not getting too warm during operation. A unit, which is quite warm to the touch, may have too many listeners connected to it or one of the output terminals may be shorted to ground. Disconnecting the outputs one-by-one until the unit gradually cools down will isolate the problem output.

XP14 Specifications

Supply Voltage	9-28 Vdc
Supply Current	100ma. max.
Input Isolation	5000 V. min.
Input impedance	1K ohm min.
Output voltage	4.0V typ into 500 ohm
Output current	50 ma/chan, 100ma max
Data Rate	9600 baud max.
Size	2.0 x 2.5 x 0.875 in.
Weight	2 oz.
Warranty	2 year replacement



TYPICAL INSTALLATION