



## NMEA Interconnection Chart Notes

The GPS VHF Radio interconnection chart was provided by the National Marine Electronics Association (NMEA), who defined and control the NMEA standards. Although most DSC radios and GPS units adhere to the NMEA 0183 standard, that standard only describes the electrical characteristics and the data structure of the language that the units use to speak to each other. It does not include any specification for the manner that units are interconnected, such as standardized wiring, connectors, etc. Although future standards, such as NMEA 2000 address those issues, it will be several years before consumer units comply with that standard. Currently, there is no mandatory standard for recreational vessel equipment. Compliance with NMEA 0183 is voluntary for recreational vessels.

The current version of the NMEA 0183 Interface Standard, published in January 2002, is Version 4.00, which cancels and replaces NMEA 0183 V 3.01. According to NMEA, Version 4.00 is, in theory, backward compatible to version NMEA 0183 2.00. However, many GPS manufacturers include special messages in addition to the standard NMEA set in their products for maintenance and diagnostics purposes. These extended messages are not standardized at all and are normally different from vendor to vendor. These can cause incompatibilities, even among units of the same manufacturer.

Accordingly, there are many potential pitfalls for boaters wishing to interconnect their DSC radios and their GPS units. Included among these pitfalls is the fact that the NMEA 0183 standard has evolved over the years. **That is why we suggest that boaters may wish to employ the services of a qualified technician to interconnect their GPS and DSC radio.**