

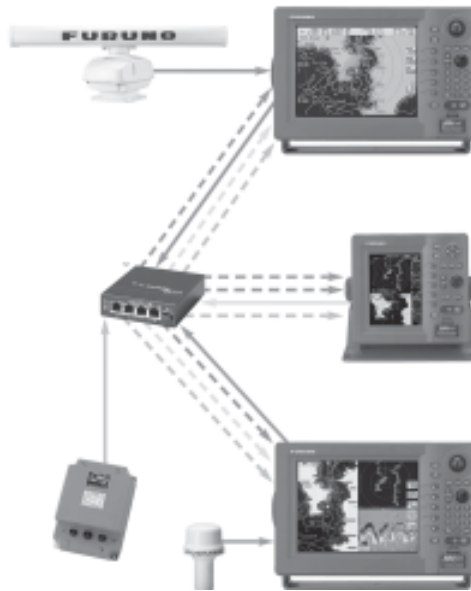
With the advent of new technology, there are new wrinkles in the perennially untidy business of networking marine instruments.

Most marine electronics hardware is NMEA 0183 compatible and uses a standard communications "grammar" for all marine electronic devices so that equipment from the same and different vendors would work together. Some marine electronics devices are "talkers" while others are "listeners" and still others are both. A talker's NMEA 0183 "sentences" contain information about its device type and status as well as the critical information that it was designed to provide—such as latitude, longitude, etc. NMEA 0183 sentences are transmitted over PC serial connections as well as through internal communications paths.

Ethernet, on the other hand, is a standard for electronic communication that can be seen in virtually every location where computers are networked together. It is mechanically simple, using cables that are similar to modular telephone connectors, and extremely flexible, allowing literally hundreds of instruments (like NavNet) and computers to talk with each other using inexpensive hubs, switches, and routers to manage signals.

USB—universal serial bus—is related to the serial port, but more flexible and robust. You name it—printers, mice, cameras—there's a USB version available. Marine equipment, however, with the exception of RADARpc, is not directly USB-compatible. USB is important, however, because it is the most simple, reliable way to add serial ports for radio or satellite e-mail and navigation. Often, computers do not have even a single port from the factory.

FURUNO NAVNET RADARS Simple integration with ethernet



Introducing NavNet vx2 Radar/Chart Plotters: marine instruments that support integration with standard ethernet hardware and software. You have the flexibility to create a variety of bridge configurations—up to four stations—and you can add NavNet vx2 sounders, GPS, depth instruments, or even a computer and MaxSea through a single cable. All units also support NMEA 0183 electronics, too.

Furuno NavNet vx2 systems are fully modular, and there are endless possibilities for system configuration. Here's one of the most popular:

NIISYS	<i>NavNet vx2 Complete System</i>	\$7149.00
<i>Includes:</i>		
NN2104	<i>NavNet vx2 Radar System 4 KW/24" Radome with 10.4" Color Display</i>	\$3979.00
NN1720	<i>NavNet vx2 GPS Plotter Includes 7" Color Display</i>	\$1869.00
ARP11PG	<i>NavNet Heading Sensor/ARPA</i>	\$ 939.00
235DST	<i>Depth, Speed, and Temp SmartSensor</i>	\$ 229.00
144423	<i>NavNet Ethernet Cable, 10 M</i>	*
116603	<i>NavNet Heading NMEA Cable, 5 M</i>	*
033407	<i>NavNet SmartSensor Y Cable</i>	*

*Cables included in vx2 Complete System but also available individually; e-mail for pricing

For the ultimate in radar chart plotting flexibility consider Furuno's NavNet vx2 "Black Box" systems. They feature the same quality and integration as standard NavNet vx2 systems but allow you to choose the display you want—whether it's one of Furuno's sunlight-bright waterproof displays or any standard computer monitor. Call for details.

Additional cables and ethernet hubs may be necessary to complete your system. Please call (510) 814-8888 or e-mail info@hfradio.com for options, pricing, and specifications.

See p. 18 to order C-Map chart cartridges with your system.