

Video is relatively easy to set up using common consumer electronics components. It's a flashy feature, and useful to some boaters. But do realize that video is a notorious hog of computer memory, bandwidth, and chart display area.

CHARTPLOTTERS AND BEYOND

At the highest level of instrument support, a chartplotter, multifunction display, or entire shipboard local area network (LAN) can be connected to your personal computer.

Chartplotter connectivity requires e-charting applications specifically engineered for high-speed, simultaneous networking. Computer/chartplotter data exchange is even more data-intense than computer/radar exchanges. In order for a computer and chartplotter to communicate, many different

types of data must be simultaneously sent and received. Typically this data is graphic-intensive, and in some cases involves data streams as large as the chart files.

RayTech RNS and Nobeltec Admiral MAX Pro are the software leaders in networking between a personal computer and chartplotter. RayTech RNS is specifically designed to integrate with its Raymarine E-Series and G-Series multifunction displays. The entire system connects with a simple Ethernet cable between a PC and a Raymarine SeaTalk network switch. Nobeltec's networking feature is called GlassBridge Network. GlassBridge sends data—including charts—across computers, chartplotters, and mirrored monitors.

Networking to a chartplotter or multifunction display is covered in more detail in each application's review (Chapter

Instruments and Sensors ¹	GPS	Autopilot	AIS receiver
SeaClear II	Yes	Yes	Yes
Software-On-Board	Yes	Yes	Yes
NavimaQ	Yes	Yes	Yes
MacENC	Yes	Yes	Yes
TIKI Navigator	Yes	Yes	Yes
Marine ENC	Yes	Yes	Yes
BoatCruiser	Yes	Yes	Yes
Coastal Explorer	Yes	Yes	Yes
The Capn	Yes	Yes	Yes
Nobeltec VNS	Yes	Yes	Yes
Chart Navigator Pro	Yes	Yes	Yes
RayTech RNS	Yes	Yes	No
MaxSea	Yes	Yes	Yes
Nobeltec Admiral	Yes	Yes	Yes

Software Comparison: The "Big Three" Connections

Instruments and Sensors ²	Wind	Depth	Water temperature	Radar	Heading sensor	Video camera
SeaClear II	Yes	Yes	No	Yes	Yes	No
Software-On-Board	Yes	Yes	Yes	Yes	Yes	No
NavimaQ	No	No	No	No	No	No
MacENC	Yes	Yes	Yes	Yes	Yes	No
TIKI Navigator	Yes	Yes	No	No	Yes	No
Marine ENC	No	Yes	No	No	No	No
BoatCruiser	Yes	Yes	Yes	Yes	Yes	Yes
Coastal Explorer	Yes	Yes	Yes	Yes	Yes	No
The Capn	Yes	Yes	Yes	No	Yes	Yes
Nobeltec VNS	Yes	Yes	Yes	Yes	Yes	Yes
Chart Navigator Pro	Yes	Yes	Yes	Yes	Yes	No
RayTech RNS	Yes	Yes	Yes	Yes	Yes	Yes
MaxSea	Yes	Yes	Yes	Yes	Yes	No
Nobeltec Admiral	Yes	Yes	Yes	Yes	Yes	Yes

Software Comparison: Standard Vessel Electronics; Heading Sensor; Video

The Dancing Mouse

Trust us, we didn't invent the name. Also called *The Jumping Mouse* or *Crazy Mouse*, the symptoms are a cursor bouncing around the screen, erratically moving independent of your mousing actions.

The problem is caused when Microsoft Windows confuses data from a GPS with data from a mouse.

Because you commonly have both a USB GPS and a USB mouse connected, the problem occurs more frequently than you would expect and across *all* Windows e-charting applications. It's even more common with a Bluetooth (wireless) GPS and a Bluetooth mouse.

Unfortunately, the solution is more alchemy than universal process. Sometimes, starting the program with the mouse connected, then plugging in your GPS, solves the problem. Other times, an application prefers the opposite sequence.

In our experience—with nearly 20 e-charting applications—the most universal cure is to shut down the computer, plug in both devices, and start the computer. When the computer has found the mouse, start the e-charting application and it will find the GPS.



Radar Overlay Capability: More and more e-charting vendors are interfacing digital radar to provide true overlay capability. Keep abreast of these developments by Googling, "Digital Marine Radar."