



Determine if a new unit will fit your helm without major surgery.

Even a VHF radio upgrade is no longer a matter of four screws, an antenna connection and 12 volts. You have to obtain a Maritime Mobile Service Identity number, program that into the radio (a simple process) and connect the radio's position input to your GPS/chart plotter's data output (no standardized cable or color code). Additionally, if you want the position of your buddy's boat to show up on your plotter when he calls your VHF you'll have to connect the data output of your VHF to the input of your plotter and turn on the data port on the plotter. All of this information is in the VHF's installation guide or online, so this can be a DIY project. However, getting all of the bells and whistles to operate will take a little more time than those four screws and two wire crimps.

My advice is to contact your marina manager. Marina and boatyard crews have plenty of experience taking care of basic installations and they know when to get a certified installing dealer involved.

Q&A WITH DAVE LASKA, ELECTRONICS EXPERT

What are the major considerations consumers should weigh when thinking about upgrading their electronics?

Start by asking yourself a few questions. Why am I updating the helm? Maybe the existing helm doesn't meet your needs because something is defective or unreliable. Maybe the helm is more than 10 years old and the technology too old. It could be that the existing helm is not user-friendly. Any of these are good reasons to consider an upgrade.

What is my budget? There may be components of the existing helm that you are satisfied with and don't necessarily need to be replaced, which can reduce costs.

What size units will fit on my boat without major reconstructive work? Not all manufacturers make the same size units, so you might have to consider a model change.

Is the upgrade something I can accomplish myself, or will I need to hire help? The factory service techs that attend boat shows are a good source for information on how involved a particular upgrade might be. These techs aren't paid on sales commissions, and their greater function is to make problems go away, not add to them.

When is it time to call in a professional for an electronics installation?

Each year, marine electronics get easier to install, but the programming and interfacing of the equipment gets progressively more difficult. Today's GPS/multifunction display units are communicating to their sensors via NMEA 0183 at 4,800 baud, NMEA 0183 at 38,400 baud, NMEA 2000, Ethernet and a variety of proprietary communication protocols such as Raymarine's SeaTalk NG or Simrad's SimNet.

Manufacturers are packing as much information as they can into their manuals and offering YouTube videos to assist do-it-yourselfers with the installation of basic single-node helms. Information on how to self-install a larger and more complex helm is available, but the reality is that if you are planning on a helm upgrade that involves integration — any data page or sensor data available seamlessly at any display in the system — the learning curve is steep without specific manufacturer experience.

What do you tell customers when asked which brand is "best"?

Every manufacturer has its strengths, and every manufacturer has a product (or two) that it prefers not to talk about. If a retailer jumps in and starts recommending a product without knowing your particular needs, chances are the salesperson has never been boating or is familiar with only the brand of electronics he or she was trained on.

Asking which brand of electronics is the best is like asking which auto-maker is the best. It's more relevant to ask which manufacturers are the leaders, which are responsive, which offer a product within your budget and which make a model that will fit your helm.

If Dave Laska were redoing the electronics on his helm, what pieces of equipment would we find there?

I'd start with dual redundant multifunction displays that are capable of chart and waypoint sharing, but can function independently with separate GPS antenna sensors in case of a unit failure. I'd also have a radar antenna interfaced with a heading sensor to allow radar overlay to the chart plotter and a well-behaved autopilot — one I have confidence using at 6 or 46 knots.

The VHF radio with digital selective calling will be properly programmed with an MMSI number. The Coast Guard's Rescue 21 system is finally operational. The least we can do is program the MMSI number into the radio and position-connect it to the GPS/chart plotter to help rescuers locate us if a mayday is sent. The radio will be connected to a very good antenna. If a good VHF is connected to an economy antenna, the radio's signal will not perform as expected. Conversely, if you install a good VHF antenna on an economy radio, the radio's performance will be above-average.

I'll take the extra time to compensate my helm compass after all of the electronics have been installed and while they are all turned on. A small BEP battery monitor will allow me to check the condition of each of my starting batteries and the house battery while at anchor, the output of each of my outboard's alternators while under way and what I am drawing off of each battery bank. By knowing my usual current draw, I have been able to remedy a stuck bilge pump float and an open freshwater spigot long before my ears alerted me to the problem.

The last item is an EPIRB. With prices in the \$500 range, I view an emergency beacon as an essential component of my navigation suite.

Dave Laska is president of L&L Electronics in Branford, Conn., which he runs with his brothers Rob and Jim. Laska holds various FCC licenses, including radar and GMDSS endorsement, as well as a senior grade technician certification from the National Marine Electronics Association. His company is one 10 in the country that has achieved master dealer certification by the NMEA. www.LLelectronics.com