



Connecting new computers to your instruments

As many of you may have noticed, most laptops (and even desktops!) don't come with a DB9 connector for RS-232 serial anymore. That's a problem, since so many pieces of electronic equipment use RS-232 as means of communicating with a computer. USB has pretty much supplanted RS-232 in the PC world, but I doubt it will ever do so in the industrial and wider electronic world due to several design considerations (I'll leave that discussion for another day).

So how do you get RS-232 data into a computer that doesn't have an RS-232 port? Currently, the simplest way is to use a USB to RS-232 adapter. These are widely available, but you've got to be sure to get a quality adapter for use on a boat. Don't just pick up any old adapter from Radio Shack and expect it to work - my experience is that they don't! I've assembled a list of adapters that have worked well for me in the past:

- Edgeport** <http://www.digi.com/products/usb/edgeport.jsp> For several years, Edgeport was the only way to go. Their adapters are mounted in robust housings, the electronics never seem to fail, and the software and drivers provided with the units are excellent. Other companies have caught on to the idea that a USB to RS-232 adapter needs to be well-made, but I'd say that Edgeport is still the best for multi-port adapters.
- Sea Level** <http://www.sealevel.com> Systems Although tailored towards the industrial end of the market, Sea Level Systems makes an excellent product. I have seen their products used extensively on board some very high-end yachts with stellar results. It's not as common to find their products on your typical racing boat, but I see no reason no to consider them.
- Keyspan** <http://www.keyspan.com> If you only need one USB to RS-232 adapter, you can't beat the USA-19HS for price. It's the one I use myself. You can usually find these online for a bit less than the list price.
- ShipModul** <http://www.shipmodul.com/en/index.html> The products from ShipModul require a little more effort to install (they use bare wires), but are capable of some pretty neat stuff. They can filter out unwanted data based on port, and some have Bluetooth connectivity.

Regardless of the type used, you should try to get the software driver for the adapter to always assign the same COM port number to the adapter. This way, you don't have to reassign the connections each time you use the adapter.

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