

Connecting Two NMEA 0183 Devices at Different Baud Rates (VHF and Chartplotter)

NMEA 0183 runs at either 4800 or 38400 baud. 4800 is used for communications with a VHF radio but 38400 is used for AIS communications between a transponder and chartplotter.

If a vessel has a chartplotter, such as a Raymarine classic, that only has a single 0183 input and output speed (they are tied together) then it must be set to 38400 baud so it can overlay AIS. But that means it won't have a 4800 baud output to send to the VHF.

The WatchMate 850, XB-8000 or WatchMate Vision each have a separate NMEA 0183 input and output. They can be run at different speeds, but there is only one output. Set that to 38400 baud to overlay AIS onto the chart plotter. This doesn't leave a 4800 baud feed for the VHF.

If the chartplotter supports NMEA 2000 then with an XB-8000 or WatchMate Vision it can easily feed the chartplotter via NMEA 2000 and that leaves the 0183 output available at 4800 baud for the VHF. But if the chartplotter has only 0183 and not NMEA 2000 then it will need an 0183 multiplexer. One that many of our customers have used is made by Brookhouse:

http://brookhouseonline.com/nmeamux_ais.htm