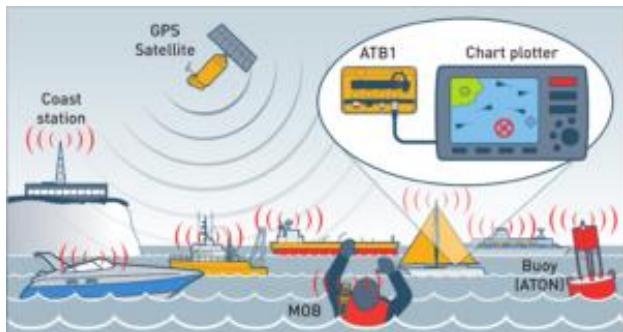


Ocean Signal ATB1 and ACR CB2 with NMEA Multiplexing.

Why have we done this? What can we do with this?



Nearly everybody thinks of AIS transponders as simply a device that sends and receives AIS information. Connect the NMEA 0183, NMEA 2000 or Wi-Fi output from an AIS transponder to a modern chart plotter, computer or mobile device and you'll see AIS targets on your screen.

All good but, based on feedback, more marine data is what's needed!! Many apps and computer navigation programs can take additional marine data such as heading, wind, depth and show that information within the application.

And now: multiplexing!!

In telecommunications and computer networks, multiplexing (sometimes referred to as muxing) is a method by which multiple analogue or digital signals (such as NMEA 0183 and NMEA 2000) are combined into one signal over a shared medium (Wi-Fi).

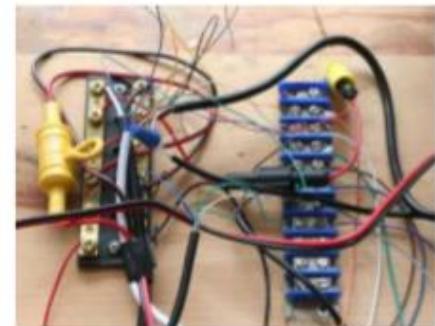
Traditionally you needed to buy a “network-enabled multiplexer”, such as the ShipModul Miniplex-3. A device like this is able to convert NMEA 2000 data into NMEA 0183 data (which is more commonly used in mobile devices) and transmit this over the shared medium (Wi-Fi). These types of devices are sometimes referred to as gateways.

eg: If all your marine devices are on an NMEA 2000 backbone, you would need a product (Actisense W2K-1 NMEA 2000 to Wi-Fi Gateway) to grab the data on your NMEA 2000 network, convert it to NMEA 0183 and output it over Wi-Fi to Tablet, Phone, Laptop etc.





All good except you would need to buy another product, connect, program (and quite often pray) that it all works. These types of installations are often quite complicated. Since this is part of your essential navigational equipment you would need to have the confidence to have it work without the need to consult your installer or manufacturer.

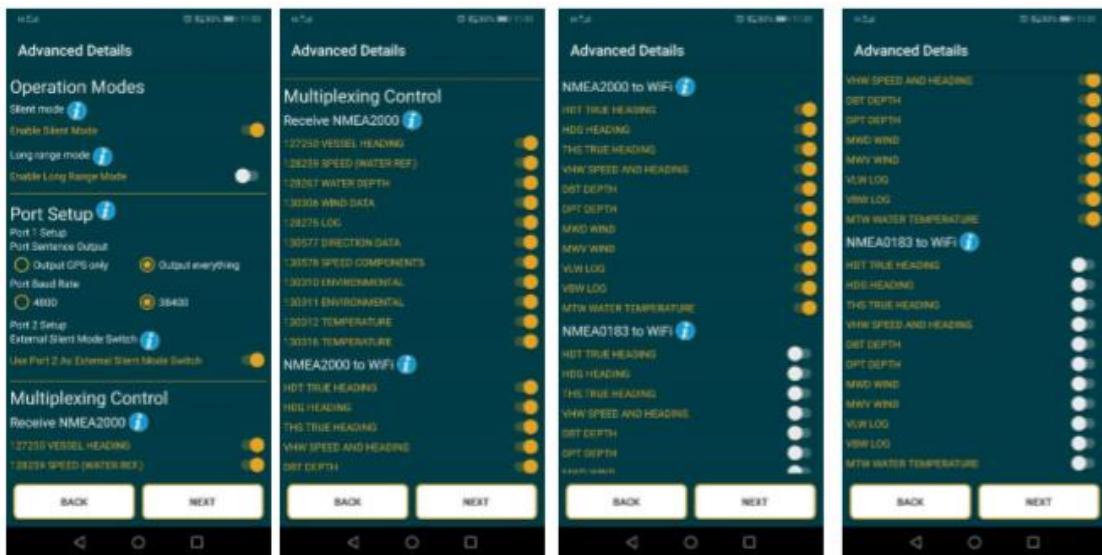


And now the solution:

The Ocean Signal ATB1 and ACR CB2 support the multiplexing of data found on NMEA0183 interfaces as well as taking data from an NMEA2000 network and converting it to NMEA0183 sentences. All of this data is then combined (multiplexed) together with the transponder's GPS and AIS data and then all the data is output on Wi-Fi. Easy to set-up (no extra wiring) and configure (via the free supplied app for Android and IOS) in any way you would like.

Essentially you have a built-in Multiplexer / gateway integrated within your AIS.

How does this look on your Phone/Tablet?



Configuration can't be made simpler: just turn on or off the desired Marine Data information.

Written by:

Kris Nieuwenhuis, Technical Business Development Manager

Kris.nieuwenhuis@oceansignal.com Date:13/11/2020

