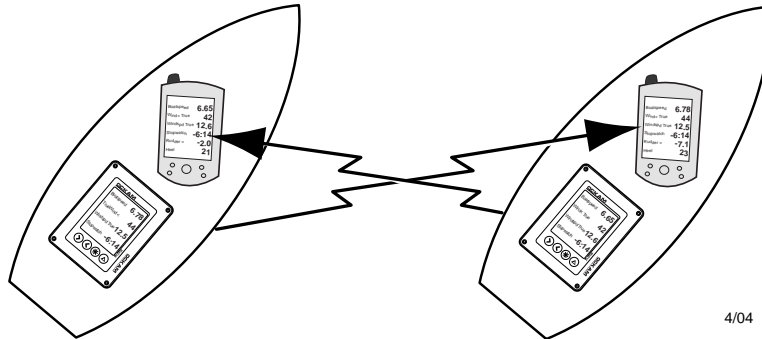


How to Use Eye for Coaching & Testing

In boat testing programs, it's good to be able to see the other boat's data to quickly get in sync and to detect differences in conditions, amongst other things (e.g. are they cheating?). With Eye, this is a fairly simple thing to set up, provided both boats have Ockam systems with PCs attached.



The way to do it is to have the two systems broadcast on different ports or Wi-Fi channels. Then, the Eye software can be set to listen to either system. It may also be possible to use a single wireless router for both systems!

The single router scenario:

In this scenario, both boats will be talking to a single wireless router using different UDP port numbers. For this to work, the second boat needs to have a PC with a Wi-Fi card that can hear the first boat's router.

1. Set the first boat system up connected to the router as described in <http://www.ockam.com/OS4/HowToEye.pdf>.
By default, this system will be sending data on UDP port 5005 (check the driver Comm port tab; be sure Enable data on Ethernet is checked, and the port is 5005).
Confirm that Eye PDA #1 can receive data correctly.
2. On the other boat, check that the PC can hear the router from the first boat. If not, or communications is spotty, you probably should go with the two router scenario.
3. In the OS4 driver, Comm port tab, set the port number to 5015, and check Enable data on Ethernet.

On Eye PDA #2, press Setup, and set the port to 5015. Confirm, and check that data from the second boat is being received correctly.

Two router scenario:

If using a single router provides spotty communications, then both boats should have routers broadcasting on different channels. This increases the usable range between the two boats.

1. Set up each boat as described in (1) above. Both boats will be sending on UDP port 5005, but on different channels.
2. Set the two PDAs to listen to their respective channels, and confirm correct reception of data.

When both PDAs are receiving their respective boat's data, swap the devices.