



## **OckamSoft 5 Quick Start Guide**

This document describes how to become familiar with OS5 without the need to hook up to live instruments. We will use the driver's simulator to provide synthetic data to make Race/Vision react like it would on a real boat (well, mostly).

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OckamSoft 5 manual

Downloading Charts

## Starting the driver and simulator

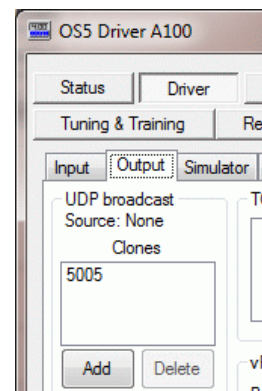
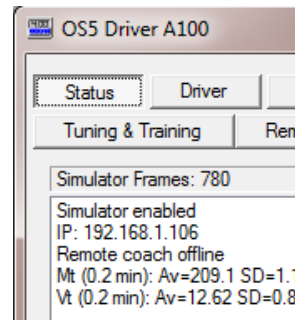
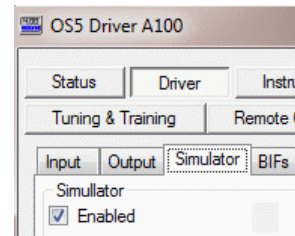
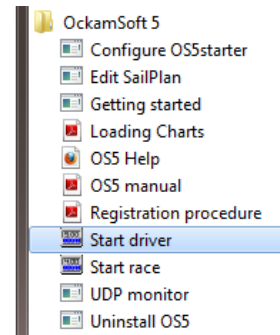
Be sure your computer is in contact to a router. This ensures you won't have a problem communicating the simulator data. If you are going to do the charting section, you will also need an Internet connection. For detail on this, refer to OS5.PDF.

- Start the driver.
- On the driver, press the 'Driver' button
- Select the simulator tab.
- Check Enabled.
- Confirm that the frame count is increasing.

Check that there is a UDP broadcast defined. For details on this subject, refer to OS5.PDF.

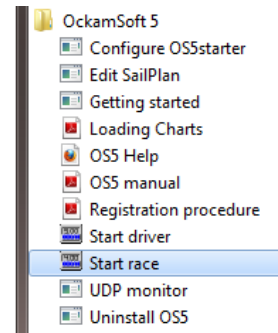
- Click the Output tab, and check that there is a 'Clone' listed.
- If not, press Add, enter 5005 for the port number and press Create.
- After you are done, and there was no port listed, you should delete the clone.

The OS5 simulator automatically sails round and round the course by itself (we'll take control later in the [Driving around](#) segment). The default course (WL or windward-leeward) consists of 'floaters', or marks which are defined by range and bearing instead of having a fixed location. This type of course can be rotated around the starting line so the first leg is to windward.

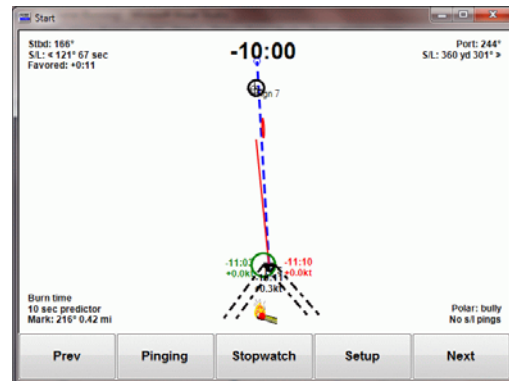


## Starting and setting up Race

- Start Race

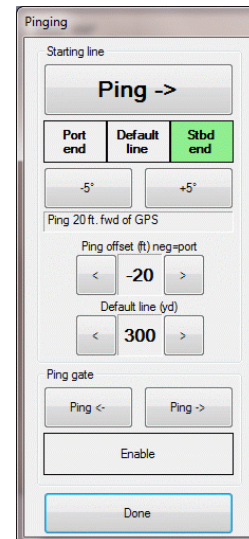


- Navigate to the Start page. If it is not present, you will have to create it (see [Creating pages](#)).

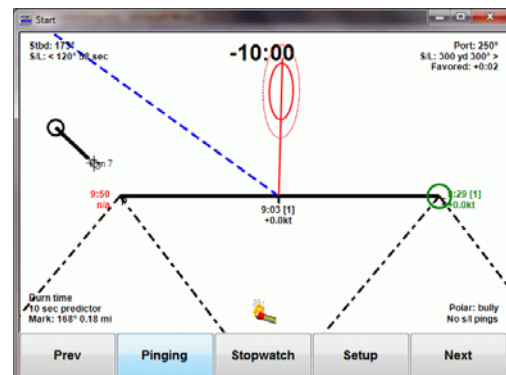


- Press the 'Pinging' button to bring up the ping dialog.
- Press the Ping -> button. This causes the port end of the line to be placed where the boat is.
- If the new line is over 1000 yards long, Start will perform an automatic 'Default line'. Otherwise, select and press 'Default line' to set the line to the default length, perpendicular to the wind.

In this tutorial, we will use Default line to simplify line creation. In the real world, of course, you would ping both ends.

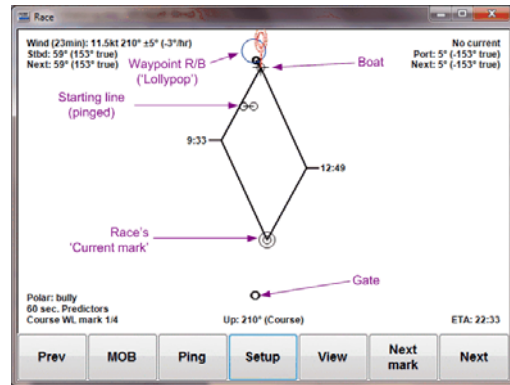


With the starting line set, we see the simulator sailing away toward its windward mark, which is probably in a different place from where Race thinks it is (note the blue line which points to the simulator's current mark, is not perpendicular to the line).



- Switch to the Race page. If it is not present, you will have to create it. (see [Creating pages](#)).

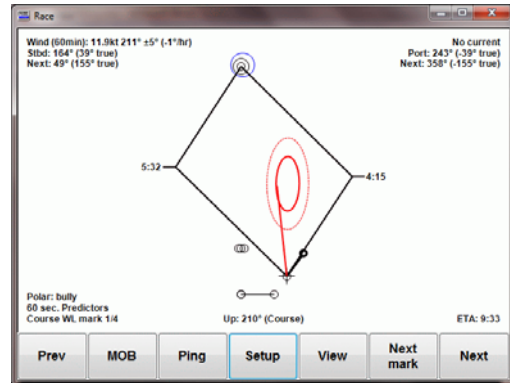
The simulator outputs Waypoint R/B of where it is going (the 'Lollypop'), the actual current mark. Here we see Race's floater marks out of position, e.g. current mark is to leeward.



- Bring up the racecourse setup.

Here we will 'Reset floaters', which will move the floater marks to the correct location – 1 mile at bearing 210 from the starting line.

Marks are now in their correct places. Note that the Lollypop now encircles the windward mark as it should.



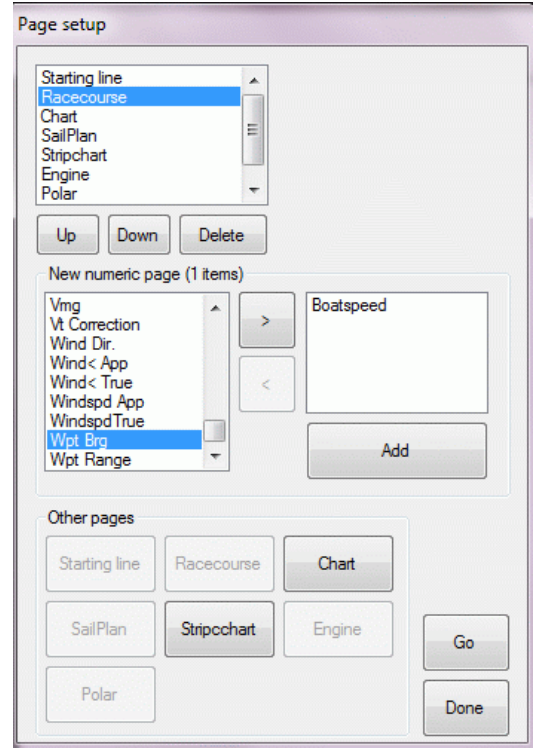
## Creating pages

One of the first tasks in setting up Race/Vysion is to create required pages. There are 11 different page types.

Five page types are single instance (only one copy allowed); start, race, SailPlan, engine and polar. Three page types can have multiple instances; chart, strip and numeric.

There are three pages that can only be created remotely from the driver; web page, web image and screen capture. Once a web page or item is created, Race/Vysion will maintain it. Screen capture sources from the driver only.

- Press Setup, then Main, then Page Setup.
- For all other pages except numeric, press the appropriate button.
- To create a numeric page, select an item in the left list and press '>'. To remove an item, select it and press '<'. When the list is complete, press 'Add'.



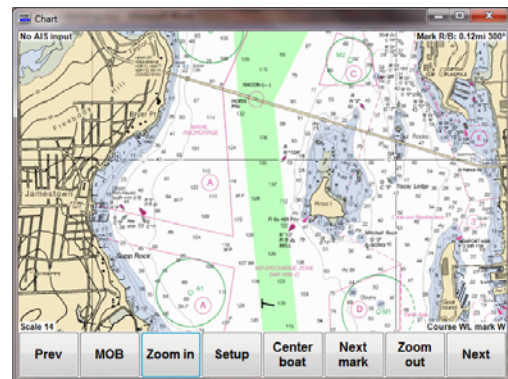
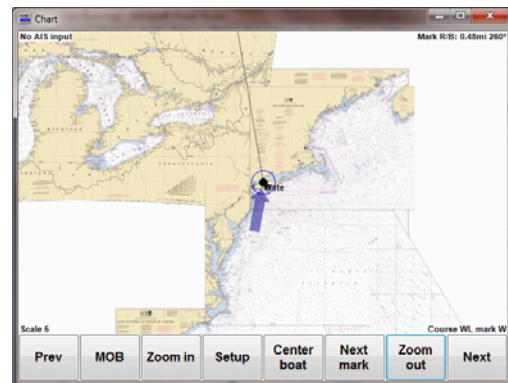
## Setting up marks and courses

- Navigate to the Chart page. If it is not present, you will have to create it (see [Creating pages](#)).
- Open setup and check 'Enable downloads'.

Only scale 5 is present when OS5 is installed. The fastest way to get charts for your venue is to zoom in on it and have Race download the chart tiles as needed. There are other ways which are covered in more detail in [Downloading Charts](#).

Here we've zoomed in on Newport RI. We are going to drop some fixed marks on top of the chart marks.

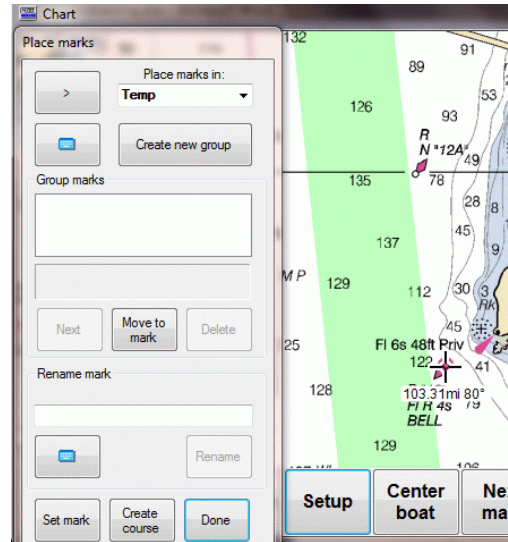
These marks will become part of the OS5 mark database, and can be used to create "round the buoys" courses now or in the future.



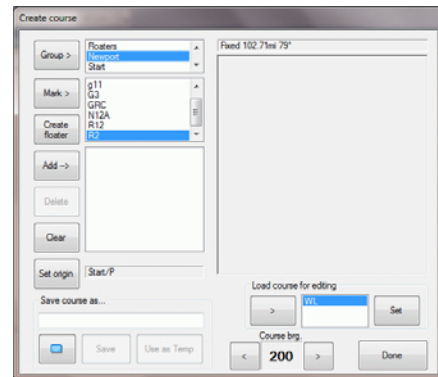
- Press Setup, then 'Place marks'.

The dialog comes up, and places the 'puck' on the chart. Here we've dragged the puck onto R12. Before we save it, we should create a named mark group to keep it in.

- Click on "Temp" and type in Newport. Then press 'Create new group'.
- Press 'Set mark'. Race names it 'Mark 1'.
- Rename mark to R12 and press Rename.

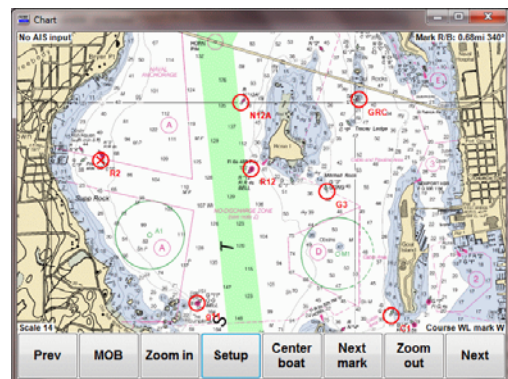


- After putting down marks, press 'Create course'. The new dialog comes up.
- Select the mark group, then the desired mark, and press 'Add ->'. You can create a course containing any mark in any mark group.



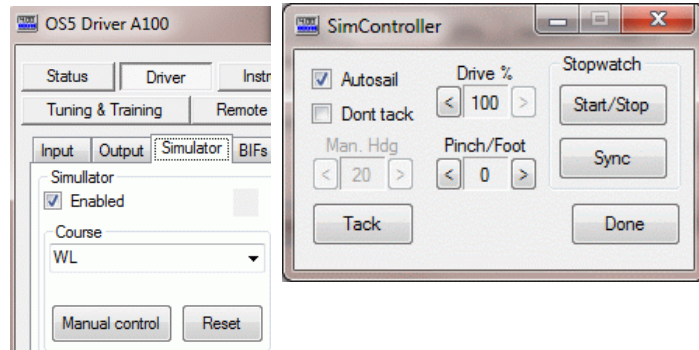
As you select mark groups, the marks in that group are circled (if they're on the chart). The selected mark will also have an X thru it.

- When done, enter a name and 'Save as'.



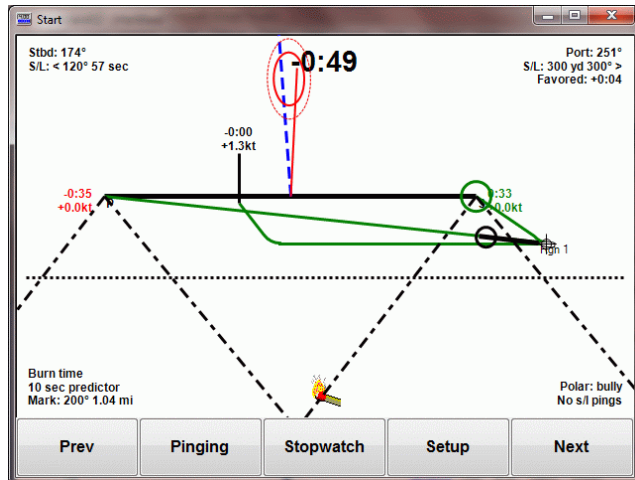
## Driving around

- Access the driver.
- Driver button, Simulator tab.
- Press 'Manual control'.
- When in Autosail, the boat steers and tacks by itself. You can force a 'Tack', and change drive (i.e. sheet), pinch or foot and mess with the stopwatch.
- When you turn off Autosail, heading is controlled by the 'Man Hdg' spinner.



One of the best uses of manual control is to become familiar with the various features of Start.

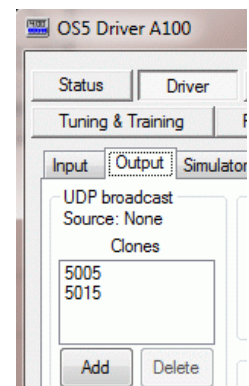
Here you see a dogleg start in progress, showing an intercept at a speed above target by 1.3 knots.



## Communicating with Expedition

Expediiton can use the same UDP broadcast as Race. However, in order to have both running on the same machine, each application needs its own port. Therefore, we're going to add a second Clone on port 5015.

- On the OS5 driver, go to the Driver Output tab.
- Add a clone; enter 5015 and Create.



In Expedition, bring up the Instruments, Serial and network ports.

- If there is no Network shown, set number of network ports to 1.
- Set Instruments to Ockam.
- Set connection to UDP Tx & Rx.
- Check Use position fix.
- Set Port to 5015.
- Press OK.

Check that Expedition is receiving the data.

