

Quick introduction to Deckman for Windows



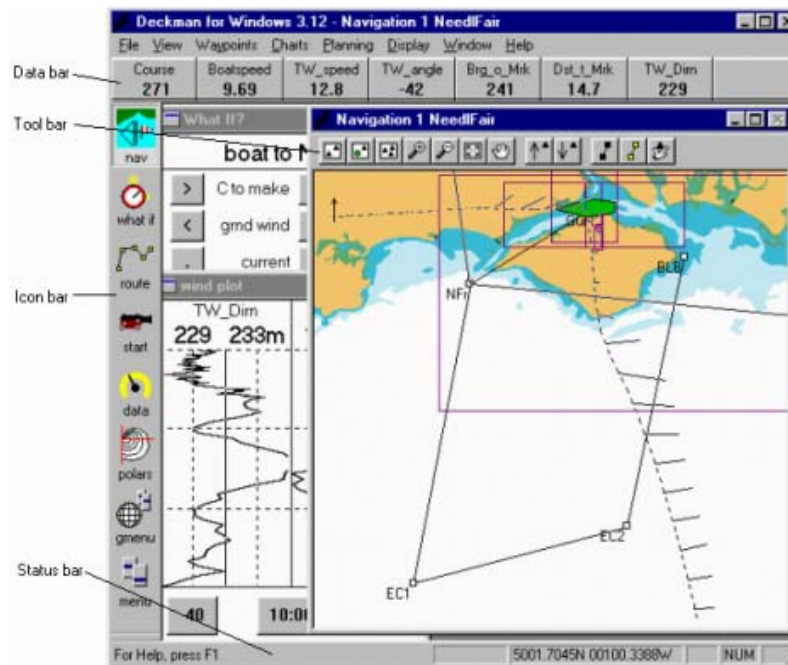
This is only a brief introduction to Deckman for Windows (DfW) and therefore does not cover all of the functions—for more information see the Owner's Manual or the online Help. There is no substitute, though, for sitting down and trying things out for yourself.

Installation

Select **DfW.EXE** from your CD-ROM drive and then follow the prompts in the setup dialogs. You will be given the option of which drive you wish to install the program—either accept the default or choose an alternative by clicking Browse. When Setup is complete, the program will appear on your Start button under **Programs** or **All Programs>Sailmath>DfW**.

Simulation mode

When Simulation is running DfW generates its own random wind direction and speed so that you can practice running software. Only the boat's heading can be changed—everything else is calculated from this and the wind information. Choose **gmenu>instruments control** and then click in the box containing the compass heading. A numeric keypad will appear where you can input the new heading, followed by Enter to confirm. If the program does not start in Simulation mode choose **gmenu>change instruments** and then check the Simulation box



Selecting a route

To create a route select **menu>waypoints>make route** or click the button shown above on the tool bar. When you open the display you see the names of all the waypoint areas and below a list of waypoints in the area selected; click over the name to move to a new area. To make a route click on the waypoints from the lists in the order of the course beginning with the start mark. Those elected will then be displayed in the Route box on the right of the window; highlight them in the Route box and click delete to remove. Also shown will be a letter P or S indicating the direction of rounding—highlight a waypoint and click **switch rnd** to change this. If the start and finish are the same you do not need to select the finish because DfW treats the waypoint list as circular: when it gets to the end it goes back to the beginning again.

Quick route

Selecting **menu>waypoints>quick route** or clicking the icon shown allows you to set a route by setting marks using the position of the mouse. Once you make the selection the cursor will display a box containing the range and bearing of the position of the cursor from either the boat (if the first mark) or from the previous waypoint. Double click on the final mark and then choose save as route.

Moving the boat

Once you have a course select **menu>waypoints>set DR position>DR at WP** (Dead Reckoning at waypoint) to set the position of the boat to the current mark, which should be the start. You can then alter the boat's heading to go towards the next mark. Once you reach a mark, clicking on means all calculations are made with respect to the next mark.

Triangular courses

The Triangle marks allow you to setup a windward/leeward or Olympic style course—the marks are set by bearings and distances from the start or each other. Select marks from the **Triangle** sector as outlined above (in Selecting a route), then choose **menu>waypoints>set waypoint>to boat** to put the first mark selected at the boat's present position. Click the next mark icon to move to the next mark, then then **menu>waypoints>set waypoint** to set the position—as a triangle from lee to set the windward mark as a range and bearing from the leeward (will also set the position of the mid and gybe marks, if selected), or as a range and bearing (RB) from either the boat or the previous waypoint.



What If?

This facility allows you to look at the effects different conditions would have on each leg. The display shows distance and course to mark, wind strength and direction, and current rate and direction. Clicking on any of these boxes allows you to input a value to see how this affects the leg; the right hand box in the row will change from 'A' (information is being automatically updated by the instruments) to an 'F' (value fixed by you). Click on the box to switch between the two. The three buttons down left of the display allow you to view the next, previous and present legs of the course respectively. At the bottom of the display is

information about the currently selected leg: course to sail, track, estimated boat speed, apparent wind speed and angle, true wind speed and angle, followed by the distance and time to the mark, or layline if a tack or gybe will be required.

Planning

Planning will predict the optimum route from the given wind and current information and can be run a number of times to see how that route changes in different conditions. DfW contains a tidal database—for some popular areas—for which all that is needed is to input the times and heights of high water for the period around when you wish to run the Planning facility. Choose

menu>planning>edit high water and then input the values for the ports near to where you are sailing.

The screenshot shows a window titled 'What If?' with a sub-header 'boat to windwd_mk'. It contains a table of sailing parameters and a detailed table of port and starboard data.





	port	stbd
C to make	7.07	44
grnd wind	11.4	59
current	1.6	267
C to sail	102	7
track	105	358
Est VS	11.17	11.17
AS	19.4	19.4
AA	23	23
TS	10.0	10.0
TA	48	48
distance	5.26	6.46
time	32:48m	35:10m

Select **menu>planning>setup plan** to prepare all the rest of the variables. Select the leg of the course from the box at the top of the window. In Which Wind? you can choose between GRIB wind forecasts (you will be prompted to select the correct file) or a wind table (you predict wind—direction and strength at particular times). Similarly, Which Current? gives you the choice between DfW's tidal database or your own predictions. In each of these, clicking over a value allows you to change it; click in the left hand column to insert new entries.

Selecting **configure** from the bottom of the window allows you to set further variables. Starting from the course set in **direction of left hand side of fan** Planning will calculate the route for all the bearings at intervals equal to the value set in **angle between steps in fan** and will do the number of calculations set in **number of steps in fan**. This should usually be set so that the Planning calculation goes to a bearing that is at least as far to the right of the course to the mark as the start of the fan is to the left.

Below this you can set the date and time of the start of the Planning calculations. You can also select the time interval between steps of the plan and the number of these time steps, which should obviously be at least as long as the leg is expected to take and also be a sensible value given the length of time you expect the leg to take.

Once you have setup your plan hit **OK**, and then choose **menu>planning>do isochrones**. You will then see DfW draw all possible routes, with the optimum shown in red (heavy

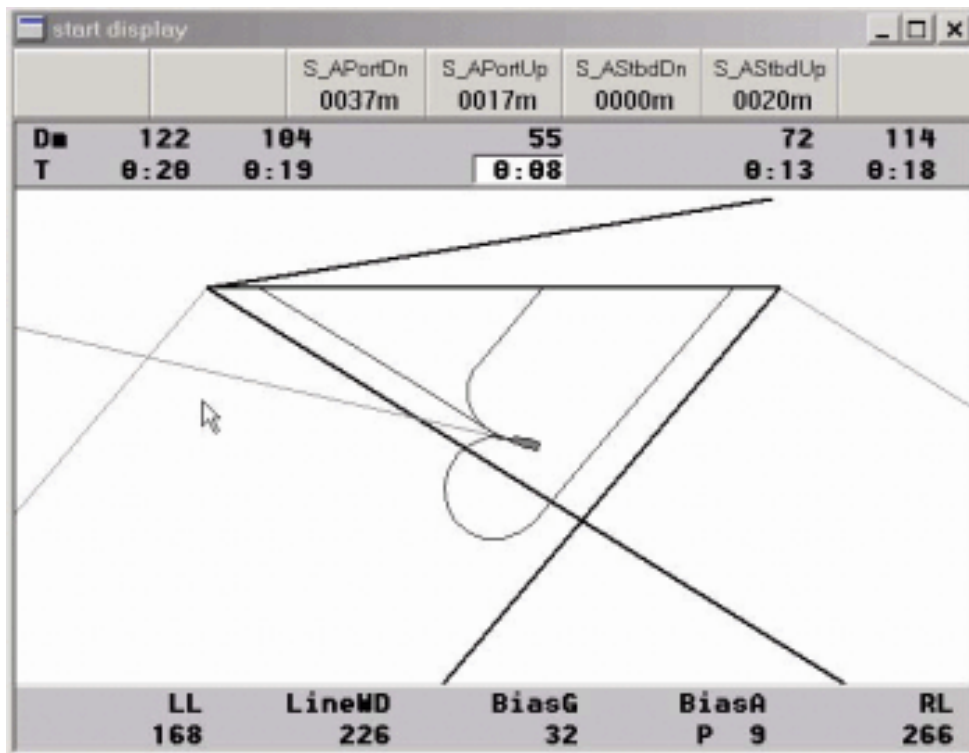
black line in the diagram left) You can then choose to view any or all of wind , current  and isochrones  by clicking on the icons on the tool bar. Choosing  allows you to view an animation showing how either wind or current changes as the leg progresses.

Charts

By using the zoom out tool to view the whole world you can see the locations of the installed demonstration charts. You can then zoom in to see the detail of particular areas.

The Start Display

Click on start on the icon bar to open the starting display. The port and starboard ends of the line have to be set—this is done from menu on the icon bar, which has options specific to the start display—and the start diagram will then be drawn. The direction of start is always from the bottom of the display to the top.



The line above the start line indicates the present line bias—it is drawn from whichever end of the line is favoured.

In the start display choosing menu allows you to access options relevant only to this function—setting ends of line, changing 'units' of time (see diagram above), and so on.