

Neptune C-Map Planner Quick Start

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QUICK TOUR

The complete manual is installed in the Help File from within the program and the outline passage plan on your hard disk.

The program is designed to be as intuitive as possible, most of the program options are available from the Menu Bar on the top of the screen.

Above the Menu Bar is the **Screen Banner**, Neptune uses this to display status information, such as Chart and Waypoint File in use, date and time, route distance (when in route edit mode), whether a prediction is for now or in the future. The left mouse button is used for most of the work and selections, the right mouse button is normally for panning and route editing.



A C-Map chart comprises of many different layers that can be turned on and off easily, right click on the chart and press the D key to toggle between the default views.

To view the chart boundaries that are available press the B key on the keyboard. To zoom in to an area position the cursor to the point of interest and press the I (for in) and key or O (for out). On the demonstration chart zoom in on Calais to see the detail available. For a full list of keyboard shortcuts see page 2 of the manual. With tidal versions of the software the screen will be seen to blink every 30 seconds as the tidal vectors are calculated and the screen is refreshed. The base of the tidal vector arrow is the charts tidal stream.

Setting up a Single Leg

Mouse Move The coordinates of the mouse are displayed in Lat – Long as DD.MM.DD ie decimal parts of minutes

Left Click Click 1 creates a 'Start' position for a simple route. Subsequent clicks generate the waypoints along the proposed route.

If only 2 points are clicked the program will allow either a Course to Steer or Route calculation to be performed (use either the Leg or Route menu). The screen will show the vector plot and the results table will show the tidal streams encountered for every hour of the passage together with the reference port's times for the tidal streams that underlay the calculation.

If multiple points are laid down then these are interpreted as a route and the program will only allow the route menu calculation to be active. (Clear a leg or route with either the Esc key or the Route Menu and Clear item).

(Optionally a route can be completed and left on the screen by pressing 'F' on the keyboard) after this subsequent left mouse clicks are ignored.)

Right Click Chart pans to mouse position

Clicking with the Left mouse button at any point will leave a red marker on the screen with the word Start beside it denoting a Start position and the Latitude and Longitude of the position will appear under the Course settings. Now move the cursor around on the screen and watch how the range and bearing from the Start position changes.

Move the Cursor elsewhere on the screen and click the left mouse button again, a Blue circle appears with the word Destination beside it. Latitude and Longitude will also be written to the Course Box together with the range and bearing between the two points. Press the Esc Key (or the Route Menu and select Clear) and the course will be cancelled, clicking the left mouse button will begin the process again by setting up a start position.

Notice a dropdown box appears on the course banner which displays the leg or route distance, course details can be reviewed here, after reviewing these details it may be necessary to RIGHT click on the chart area to regain chart focus.

Calculating Course To Steer for a Single Leg

Set up a single leg between two points and then click the **Leg Menu** and select **Course for Leg**. A Course Set-up window will be shown, for the moment accept the default values, ignore Wind and click the **Calculate** button. After a slight delay the Course to Steer results will be displayed.



Examine the contents of this screen, use the scroll bar to roll the data up, the course, time taken, distance over ground, tidal streams, reference ports tides and other information is displayed in order for the navigator to cross check their calculations.



Pressing OK closes this screen, the Vector Plot (red construction) and predicted Course Over Ground (COG) is now displayed (green circles).

The Copy button copies the results box contents to the PC's Clipboard.

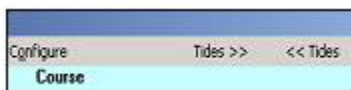
Effect of varying Departure Times on the Course Over Ground

On the Menu are the **Tide Roll buttons**.

Pressing **Tides>>** will advance the time to the next half hour and recalculate the Tidal Streams. If a single leg has just been calculated the Course to Steer and Course Over Ground will be recalculated and updated.

On the Screen Caption (very top bar) the departure time and Course to Steer will be displayed. If a calculation of COG for a fixed heading was last then the COG is updated. To decrease the departure time press **<<Tides** item.

Note that the Tide Roll buttons have no effect on multi-leg route calculations.

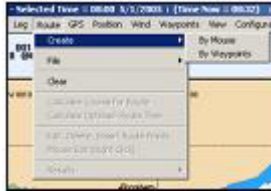


Creating a Multi-Leg Route

Create the route by mouse clicks on the screen (a maximum of 99 points area allowed).

There is no need to finish the route if a simple calculation is required, just selecting the Route menu and pressing Calculate ends the route creation process.

If you wish, after entering the last point, press F on the keyboard to finish the route and it will remain on screen and not be affected by subsequent mouse clicks.



Calculations on a Multi – Leg Route

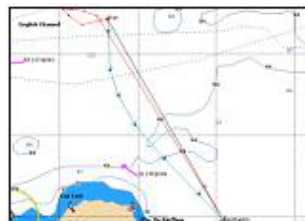
After creating a route, **Course for Route** and **Optimum Route Time** are active on the Route menu.

Course for Route brings up a window that allows editing of details such as Leg Speed, Waypoints, Latitudes, Longitudes and Time. If Wind is pressed, a screen appears allowing you to set the wind speed and direction. The Tack button will calculate if the wind is coming from port or starboard and once this is set leeway can be applied. Click an entry for further editing and then click **Accept** for any changes made. Select **Departure Time** and finally click **Calculate**.



Results of Multi-leg Calculations

A window appears at the end of the calculation showing the expected waypoint to waypoint departure and arrival times, Course to Steer and distances. Note that the Copy button copies the results of this window to the clipboard for pasting into other applications such as the Neptune Outline Passage Plan found under the Neptune C-Map Planner Program Group.



When the results box is cleared the COG points are displayed as a series of hourly waypoints, look at these waypoints for any bunching that may occur, this indicates where vessel is losing ground against the tidal stream.

Wind Menu

The Wind menu has 3 options.

Wind Conditions & Calculations

Allows the wind speed and direction to be set up, it can be changed at any time and the last settings are retained for the next session.

Display Wind

Shows the wind direction and no sail area on the screen whenever a leg or route waypoint is entered.

True and Apparent

Given true wind calculates apparent and vice versa



Wind Entry

Select the appropriate Sail Plan and then either click on a wind direction and speed or manually type in a direction and speed in the appropriate boxes.

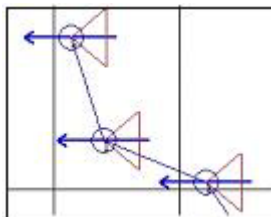
If this screen has been reached from the single leg calculation the boat heading field will contain an entry, pressing the **Estimate Boat Speed** button causes the software to read the Polar Plot, estimate the boat speed and enter this into the leg calculation set-up screen.

(Polar plots are described in the manual).



Display Wind

Checking this menu item shows the wind direction with the no sail area drawn in as a red triangle either side of the wind arrow. It becomes obvious using this visual guide if your proposed passage cannot be sailed for the wind conditions anticipated. In the illustration below sailing between waypoint 2 and 3 is not possible.



Editing Multi Leg Route Waypoints

If it is apparent from the wind conditions that a waypoint is inappropriate it can be moved by selecting **Mouse Edit** from the **Route Menu**. (This will 'Check' the menu item). With the program in this mode position, the mouse near the waypoint to be moved by a Right Click. The nearest waypoint will jump to the mouse position. When the wind is displayed planning tacks or deciding when to motor is very much simplified.

To add an extra waypoint to the end of a route hold down the SHIFT key and RIGHT click the mouse. During editing the route distance is displayed on the screen banner. When route editing is complete remember to uncheck the Mouse Edit option.

Vessel speed from Polar Plots (Multi leg routes only)

Once a route has been created select the **Calculate** menu and press the **Wind** button to display the Wind Calculation Screen, you will note that the route details panel is now filled in. To make the software read the Polar Plot and estimate the boat speed, you must select the appropriate leg speed entry in the list and double click. The vessel speed will be updated.

If a change in wind conditions is expected enter the new wind speed and direction prior to double clicking the leg. Closing this screen will return to the Route set-up box. On exiting this screen the Route will be redrawn on the screen with the appropriate wind directions on each waypoint.

SOLAS Passage Plans & Neptune

Production of a passage plan prior to departure is a legal requirement. Neptune Passage Planner and Neptune Tides assists in the preparation of passage plans by allowing you to copy results and route setups to the clipboard. These results can subsequently be pasted into a plan that may be under preparation within Word, WordPad or Excel.

Neptune also provide a blank passage plan document, this is easily found from the Windows desktop using **Start** then **Programs - Neptune C-Map Planner -Outline Passage Plan**. This Word document can be edited and modified as desired for your own use but cannot be distributed as it is the copyright of Neptune Navigation.

POINTS TO NOTE

Neptune's software is a secondary navigation tool relying on predicted tidal information and data entered by the user. Bearings, soundings and other normal navigational procedures should always be used together with tools of this nature. Courses presented are intended to be used as a check on the navigators manual calculations and if they are used in their own right as a primary calculation then this is done entirely at the navigators own risk.

The authors acknowledge and the user accepts that programs such as this may produce errors from time to time. It is the users responsibility to validate results before use.

The authors (Neptune) and their agents accept no responsibility whatsoever for any damage arising from the use of its products no warranties are made and Neptune disclaim any implied warranties as to the merchantability, quality or fitness of its products and documentation for any particular purpose. Please read the additional documentation within this package.

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