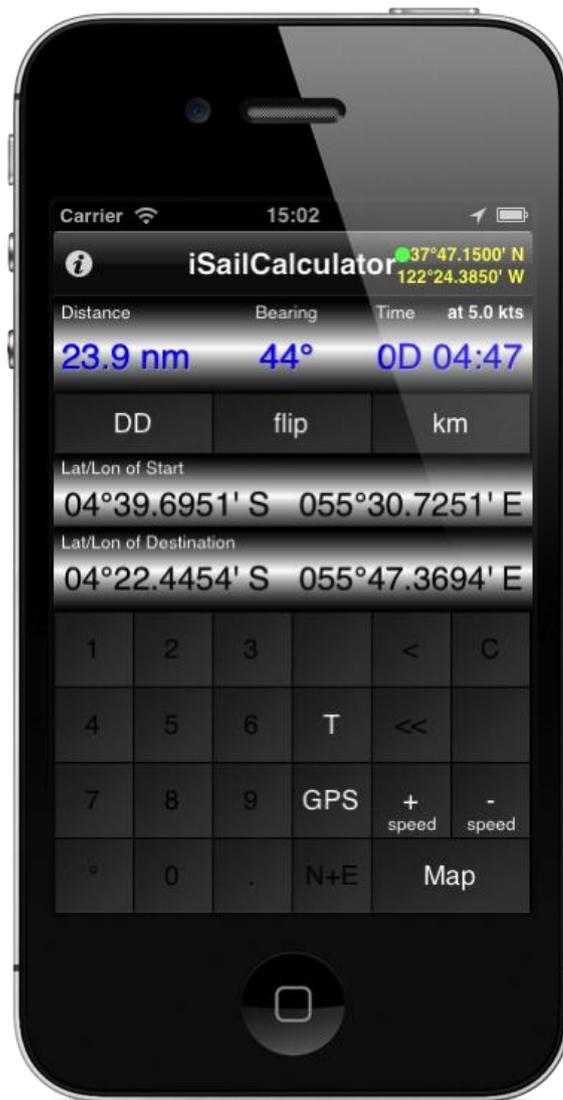




iSailCalculator

User Manual





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Programm purpose

The program helps to execute fastly simple nautical calculations. The entry can be done via the surface of a calculator or via map view.

The following values can be calculated on the basis of the entered positions:

- Distance start and end point
- Route from start to end point
- Time needed for the calculated route at given speed

The following conversions are possible:

- Conversion of the entered positions in different formatting
- Conversion of the distance and speed in different measurement units

General considerations

The program runs at iPhone 4 iPhone 4GS and iPhone 5.

Handling of the Program

The handling of the program is based on the standards described in by the Apple Human Interface Guidelines.

Title bar

On the right side of the title bar, the current position and the current accuracy of the position are displayed. The quality of accuracy can be identified by the colour of the dot next to the position.

red	Accuracy worse than 50m
yellow	Accuracy between 50 m and 15 m
green	Accuracy better than 15 m

Via the button (i) the Info-Dialog can be opened, where the Users' Manual can be displayed.



Calculator Mode

On the upper display the calculated values for distance and route between start and end point as well as the time needed at fixed speed are displayed.

Entry of the position via keypad

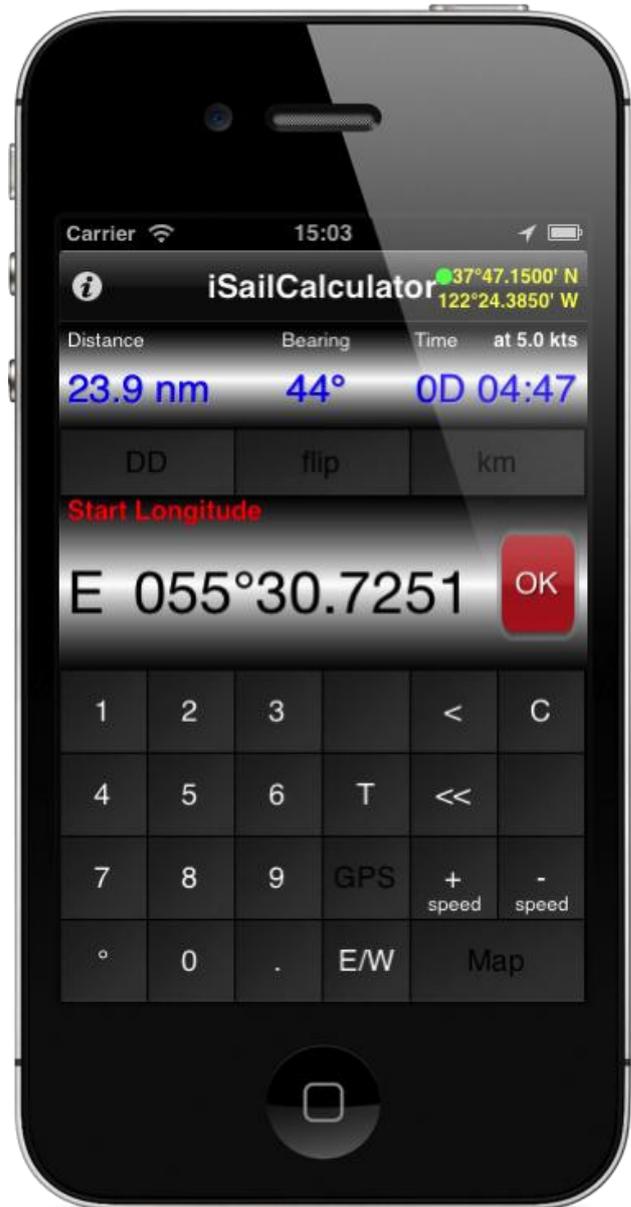
The two fields in the middle show start and end point of the calculation. The entry of the position is done via tipping on the corresponding position (Latitude or Longitude separately). When tipping, the field goes to the entry mode; the buttons for entering the values on the keypad are now activated.

Button OK Entry is valid; values are calculated and will be displayed.

Button C Cancellation of the entry without changing the existing value.

Button << Deletes all entries

The entry has to be done in the DD-DMS-DMQ format; the keys of the entry field are adapted accordingly.



Function keys

DD-DMS-DMG switches the displayed format for positions sequentially between

00°00.0000' N 000°00.0000' E (DMQ)
+00.000000 +000.000000 (DD)
00°00'00" N 000°00'00" E (DMS)

flip interchange of start and end point



km-mi-nm	changes the displayed format of the distance and speed values sequentially between metrical, statical and nautical miles or km/h, mph and kts. The values are converted correspondingly.
T	Tracking Mode: The current position serves as starting point and all values (Distance, route, and time) are based on this position. While „Tracking“ is activated, the starting position is labelled with a blue flashing dot, the colour of the starting position is also blue.
GPS	The current position can be appointed to be starting or end point. The inquiry for starting or end point will be done in a separate dialog.
+speed / -speed	The speed for calculating the time needed for the route can be changed in 0.5 -value-steps.
Map	Calculator switches to map mode.

Display of Bearing to Destination

The calculation of the bearing to destination is based on great circle-navigation. This causes that with increasing distance, there is a substantial change of bearing between initial and final bearing. When the difference between initial and final bearing is less than 5° , the average of the two values is calculated and displayed. When the difference exceeds 5° , both values are displayed.



Map mode

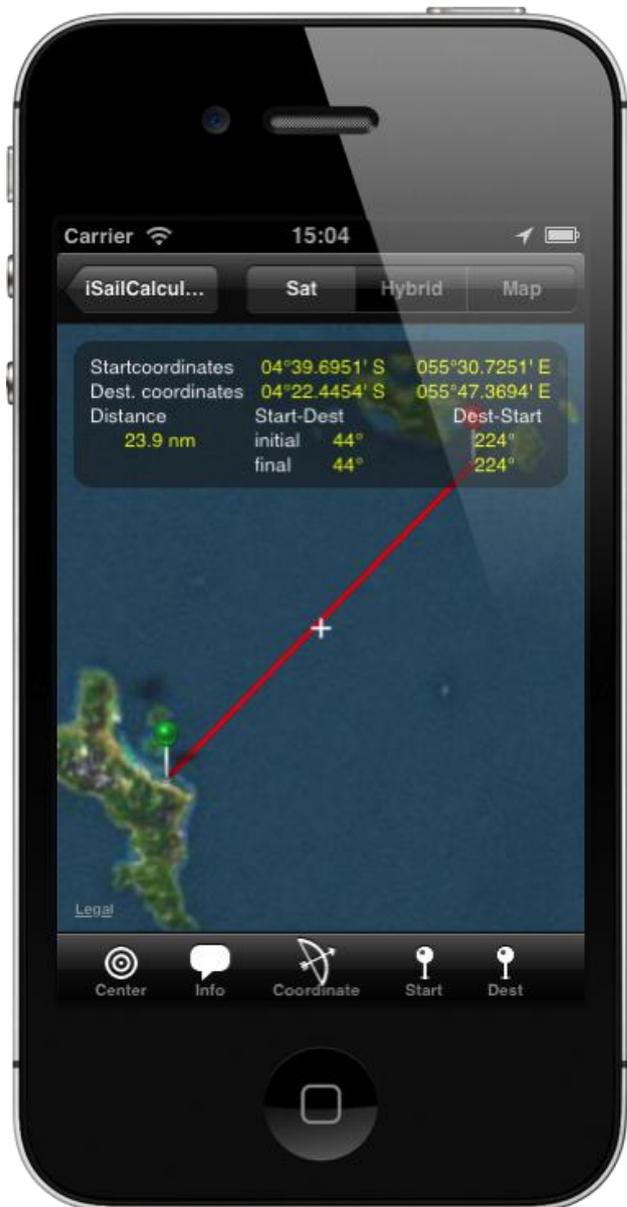
In this mode, the entered positions are displayed by pins. Starting and end point are connected by a line. This line shows the great circle between the two points.

The positions can be changed via drag and drop of the pins.

Via buttons in the title bar, the display can be switched from map mode to sat mode and hybrid mode.

Via the tool bar at the lower frame, the following functions are available:

- Center** Display is adjusted in a way that starting and end point are both visible and the map is centered between those two points.
- Info** Shows the calculated values as a map overlay
- Coordinate** Displays the position of the end point
- Start/Dest** Put the starting or end point on the position which fixes the end point (+).





About



Shows Information on the device and the program version as well as on the producer of the app.

The „Help“ button in the upper right of the screen opens the document you are looking at in this moment.



Help



Display of the PDF-file of the Users' Manual.

The „Help“ button opens the document you are looking at in this moment. When running on an Operating System as of iOS 4.2, this document can be AirPrint (ed) by tapping the right button on the tool bar.