



LeoRegius[™]
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User Manual

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iGPS is software for backing up and restoring the waypoints and routes in Garmin GPS devices.

The backup files created by iGPS contain a complete and exact copy of the waypoint and route data as it exists in the GPS.

All GPS waypoint and route data can be completely restored or you can select specific waypoints or routes and restore them individually.

Waypoints and routes can be restored to different Garmin GPS models without being limited to just restoring to the original GPS.

iGPS can also export waypoints and routes in GPX format for use in other applications.

All Garmin marine, aviation and handheld GPS models with a serial interface are supported.

iGPS is a Mac OS X Universal application.

System requirements

- An Apple computer running Mac OS X 10.2.x or later.
- A Garmin GPS with a serial interface.
- The appropriate serial cable for your Garmin GPS.
Refer to your Garmin GPS User's Manual to find the part number of the cable.
- A USB to Serial adapter* to connect the Garmin serial cable to your Mac.
* A Keyspan USA-19HS USB to Serial adapter is recommended.

Before installing iGPS

Check the USB to Serial adapter manufacturer's website to verify that you have the current version of the adapter software. If necessary, download and install the latest version of the adapter software.

Setting the GPS communications protocol

iGPS uses the Garmin protocol to communicate with the GPS. Refer to your Garmin GPS User's Manual for instructions on how to set the GPS to use this protocol.

Installing iGPS

Install iGPS using a Mac OS X account with administrator rights.

After downloading iGPS, you will have a disk image file named iGPS.dmg.

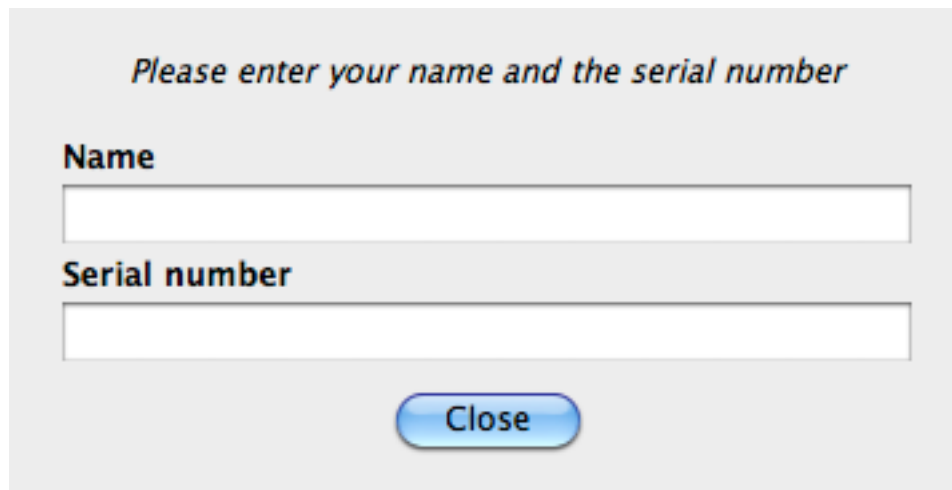
1. Double-click on the iGPS.dmg file to open it.
2. After reading the iGPS Software License Agreement, click on the Agree button.
3. Drag the iGPS folder from the disk image to your Applications folder.

Entering the iGPS serial number

If you have licensed iGPS, your email receipt will contain a registered name and serial number. The name and serial number need to be entered into iGPS. To do this, start iGPS, click iGPS on the menu bar and select Enter Serial Number.

The best way to enter the information is to copy and paste. Copy the name from your receipt and paste it into the Name field and then copy and paste the serial number.

If you enter the information by using the keyboard, be sure that the name and serial number are exactly as in the email receipt. The name and serial number are case sensitive.



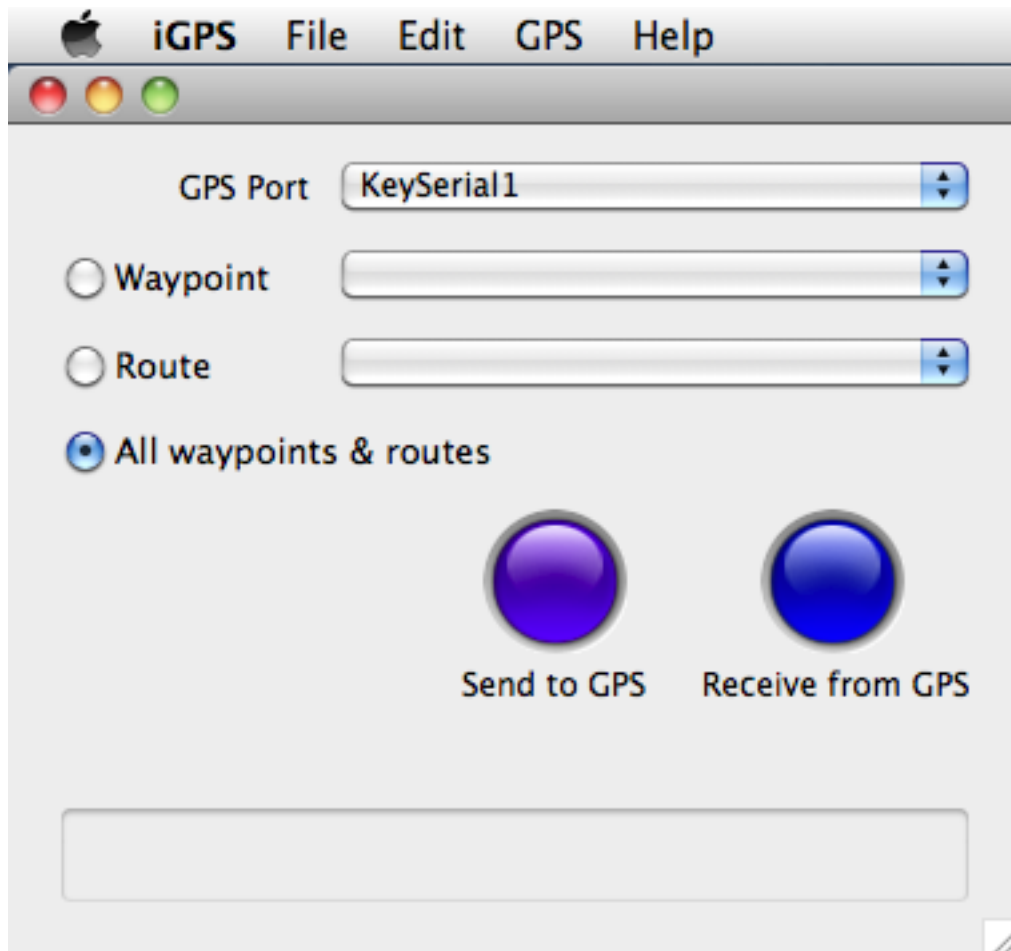
The image shows a dialog box with a light gray background. At the top, it says "Please enter your name and the serial number" in a blue, italicized font. Below this, there are two text input fields. The first field is labeled "Name" and the second is labeled "Serial number". At the bottom center of the dialog box, there is a blue button with the word "Close" written on it.

Save the email receipt containing your registered name and serial number. This information will be needed if you ever have to reinstall iGPS.

Using iGPS

Before starting iGPS, connect the GPS to your computer using the USB to Serial adapter.

Open the iGPS folder in Applications and double-click the iGPS application icon to start iGPS. iGPS will display its main window and menu bar as shown below.



Open the GPS Port pop-up menu to display all available serial devices and select the USB to Serial adapter that connects the GPS to your computer.

In the example above, the GPS Port pop-up menu shows 'KeySerial1' as the selected device.

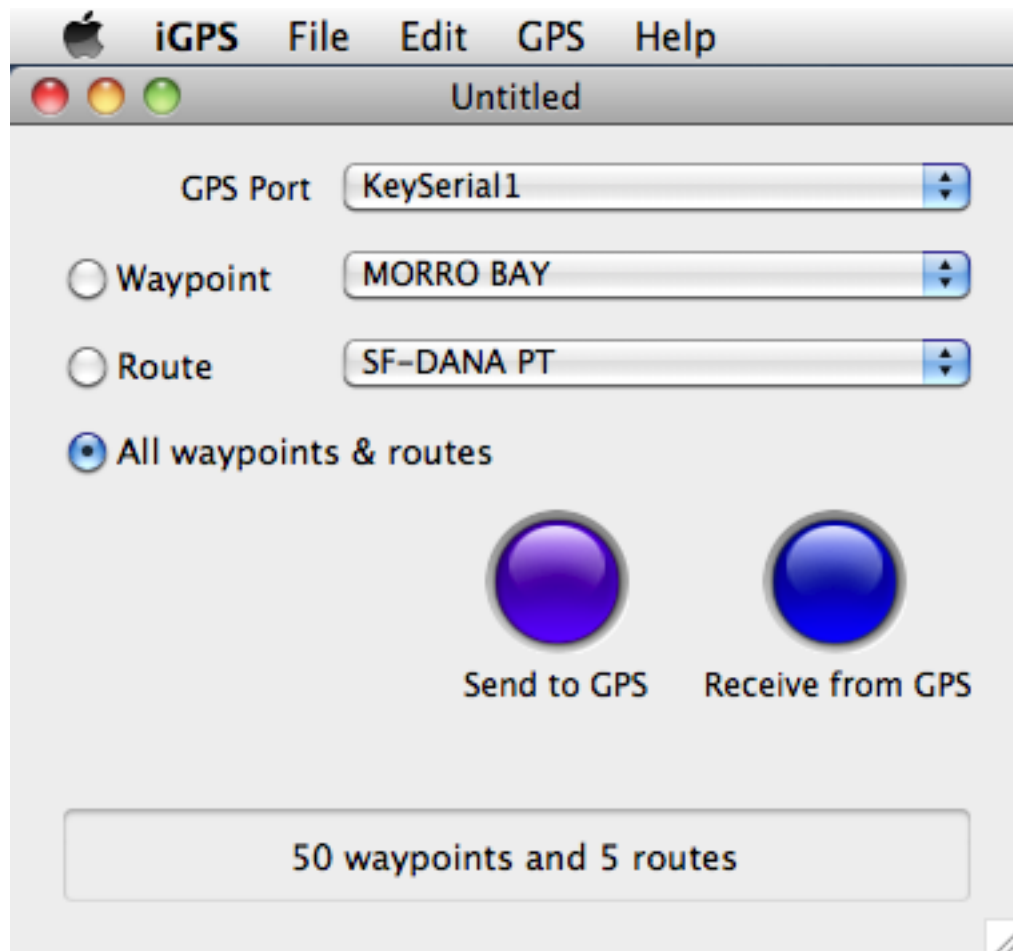
Receiving waypoints and routes from the GPS

Click the blue button named 'Receive from GPS' and iGPS will receive all of the waypoints and routes stored in your GPS.

As the data is being received, a progress bar will be displayed below the blue button.

When the transmission of data from the GPS is complete, the number of waypoints and routes that were received will be displayed at the bottom of the iGPS window.

An example of the iGPS window after receiving waypoints and routes is shown below.



The title bar of the window in the example above displays 'Untitled' indicating that the received data has not been saved to a file.

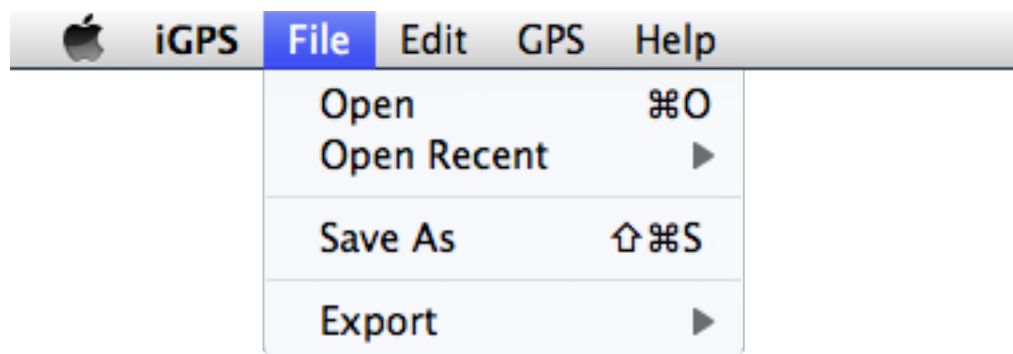
Saving and opening iGPS files*

To save waypoints and routes that you have received from your GPS, click File on the menu bar and then select Save As. A standard Mac OS X file save dialog will open allowing you to save the received data to an iGPS file

To open an existing iGPS file, click File on the menu bar and then select Open or Open Recent. A file can also be opened by double-clicking it or dropping it onto the iGPS application icon.

The name of the open file will be shown in the iGPS window title bar. The number of waypoints and routes contained in the file will be shown at the bottom of the iGPS window.

The following shows the drop-down menu when File is selected from the iGPS menu bar.



*Received GPS data can be saved only if iGPS has been licensed. An unlicensed version of iGPS can receive and send waypoints and routes to the same GPS but cannot save them to a file.

To obtain an iGPS license, click iGPS on the menu bar and select License iGPS.

This will open the secured iGPS webstore in your Safari web browser where you can purchase a license using a credit card or PayPal.

Your iGPS serial number will arrive by email within minutes after the completing the transaction.

Sending waypoints and routes to the GPS

iGPS can send a selected waypoint, a selected route or all waypoints and routes to your GPS.

The radio buttons named 'Waypoint', 'Route' and 'All waypoints and routes' determine what is sent to the GPS.

To send all waypoints and routes to your GPS, select the 'All waypoints & routes' radio button and then click the purple button named 'Send to GPS'.

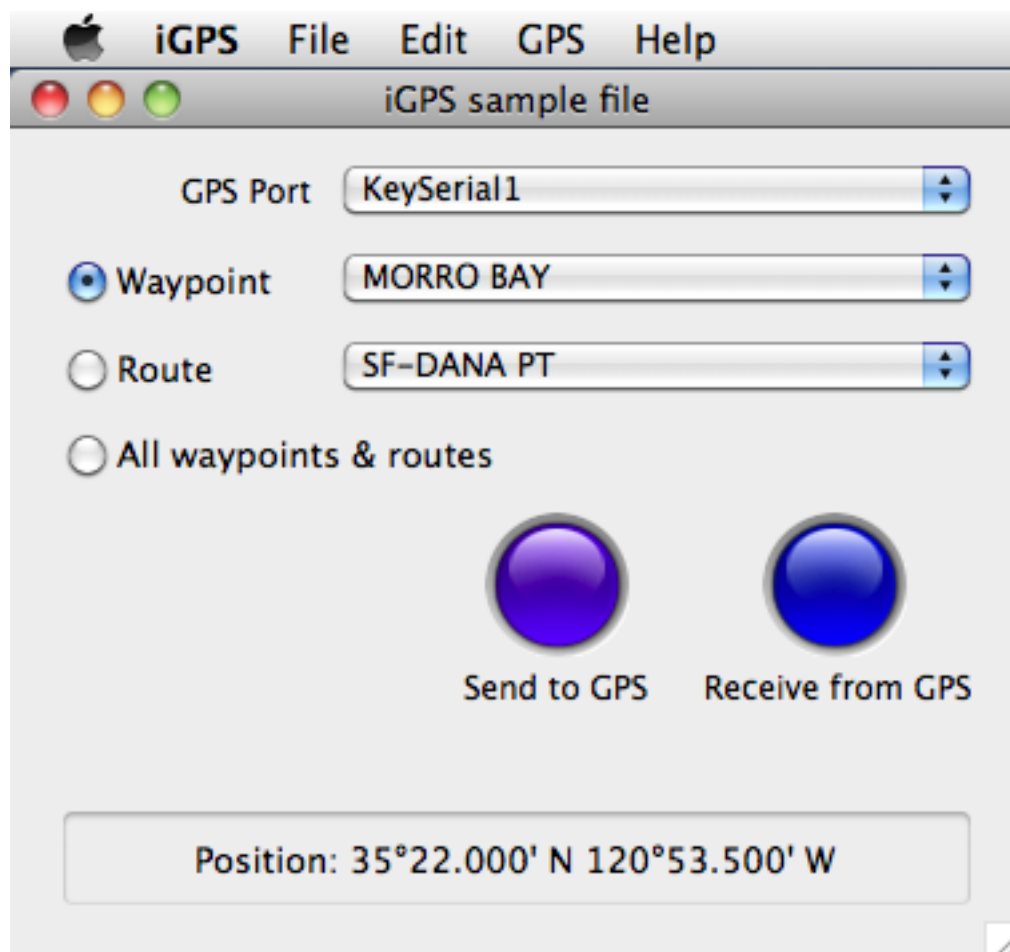
The Waypoint and Route radio buttons work with their corresponding pop-up menus.

To send a selected waypoint to the GPS, click the Waypoint radio button, select a waypoint from the pop-up menu and then click the purple 'Send to GPS' button.

Sending a selected route works the same way. Select a route from the pop-up menu, click the Route radio button and then click the purple 'Send to GPS' button.

When the Waypoint radio button is active, the latitude and longitude of the selected waypoint is shown at the bottom of the iGPS window. Selecting the Routes radio button displays the total distance of the route.

iGPS will display various status messages in this same area. To clear the status message, click on the status message or press the 'esc' key.



Exporting waypoints and routes as GPX files*

To export waypoints and routes, click File on the menu bar, move the cursor to Export and then click Waypoints or Routes on the submenu.

The radio buttons named 'Waypoint', 'Route' and 'All waypoints and routes' determine what is to be exported.

Select the 'All waypoints and routes' radio button and then click on the Waypoints submenu of Export to save all of your waypoints in GPX format to a file named Waypoints.gpx. Click on the Routes submenu to export all routes to the Routes.gpx file.

To export a particular waypoint, click the Waypoint radio button, select a waypoint from the pop-up menu and then click the Waypoints submenu of Export. The waypoint will be exported as a gpx file using the same name as the waypoint with a .gpx extension.

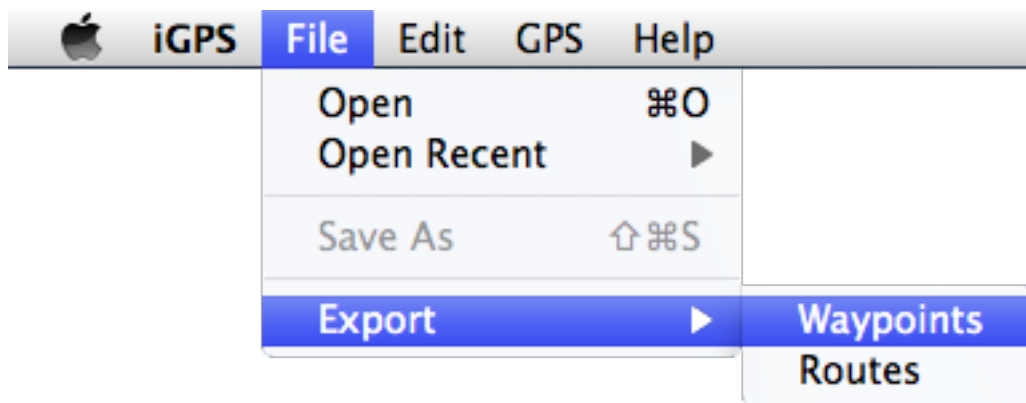
Exporting a selected route works the same way. Choose a route from the pop-up menu, click the Route radio button and then click the Routes submenu of Export. The name of the gpx file will be the route name with a .gpx extension.

The GPX files are saved in the folder that has been set in iGPS Preferences.

If the folder already contains a gpx file with an identical name then the existing file will not be overwritten. A numeric suffix will be added to the name of the new file to make it unique.

iGPS implements the official Garmin extensions to the GPX 1.1 specification so that exported waypoints include depth data.

The following shows the Waypoints submenu of Export from the iGPS menu bar.

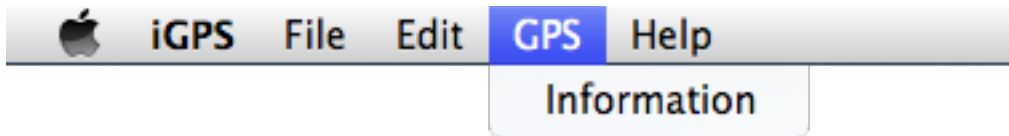


*All waypoints and routes can be exported only if iGPS has been licensed. An unlicensed version of iGPS is limited to exporting the first waypoint and the first route.

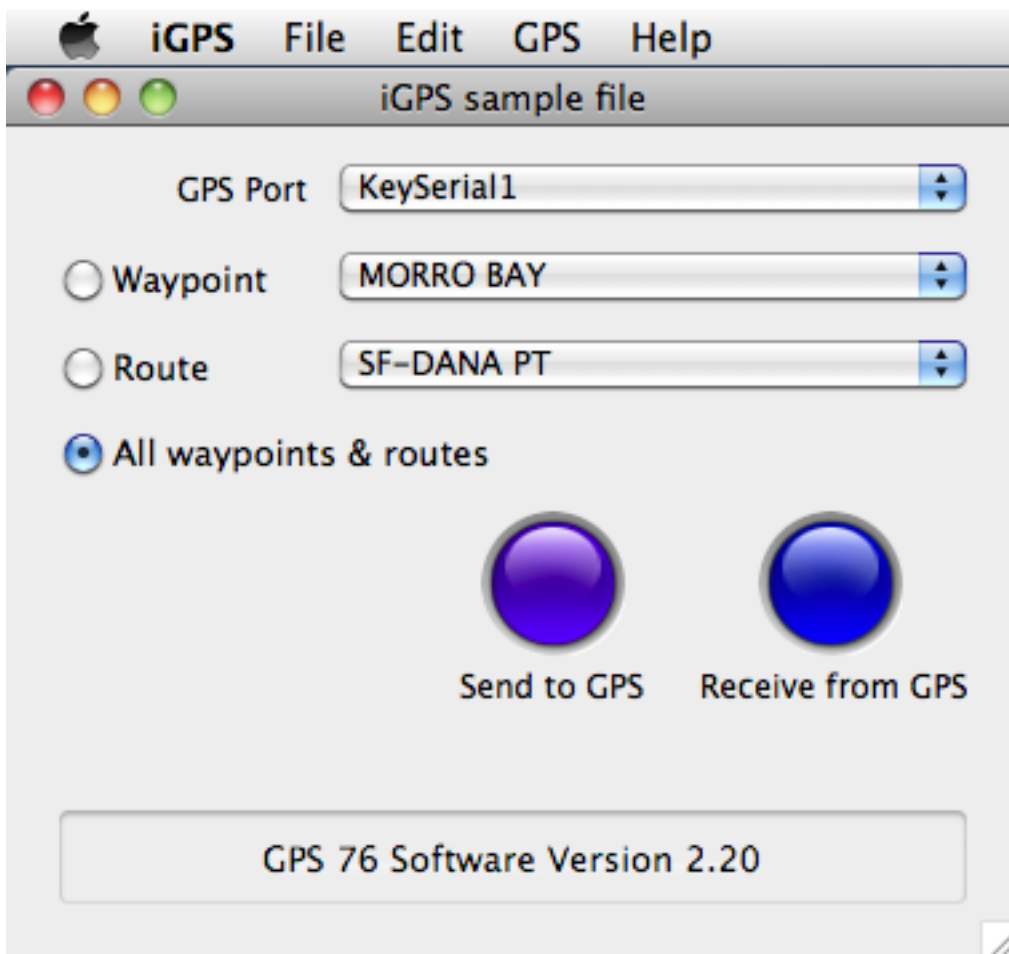
To obtain an iGPS license, click iGPS on the menu bar and select License iGPS.

Displaying Garmin GPS information

With your GPS connected to the computer, click GPS on the iGPS menu bar and then select Information.

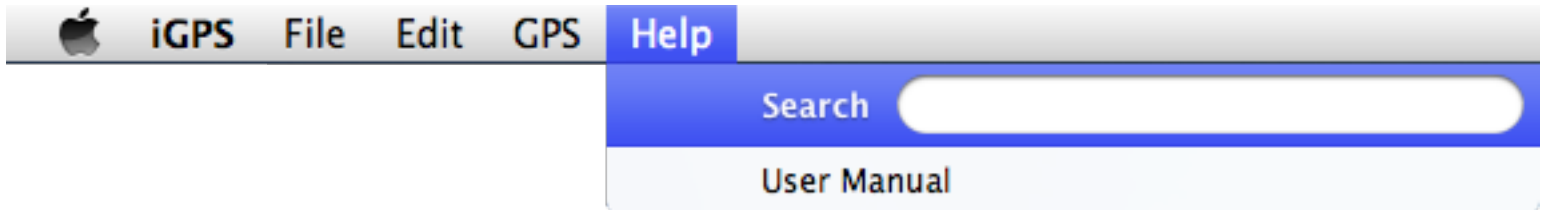


The Garmin GPS model number and software version will be displayed at the bottom of the iGPS window. To clear the GPS information, click on this information or press the 'esc' key.



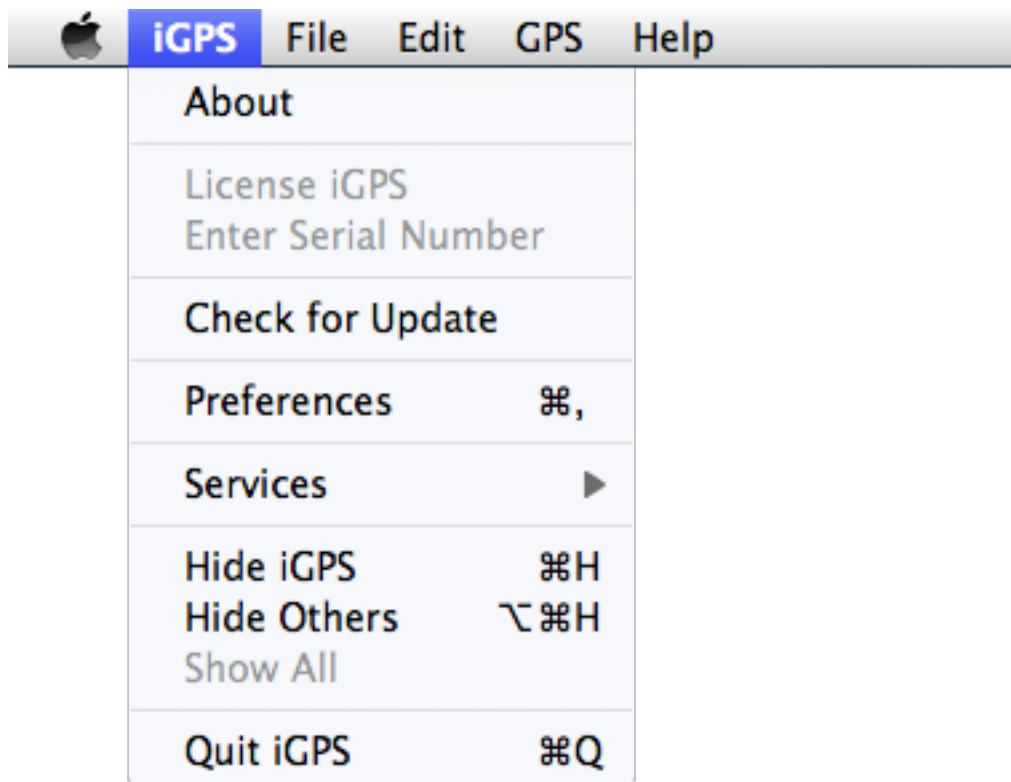
iGPS Help

On the iGPS menu bar, click Help and then click User Manual to open the iGPS User Manual in your default PDF file reader.



iGPS version

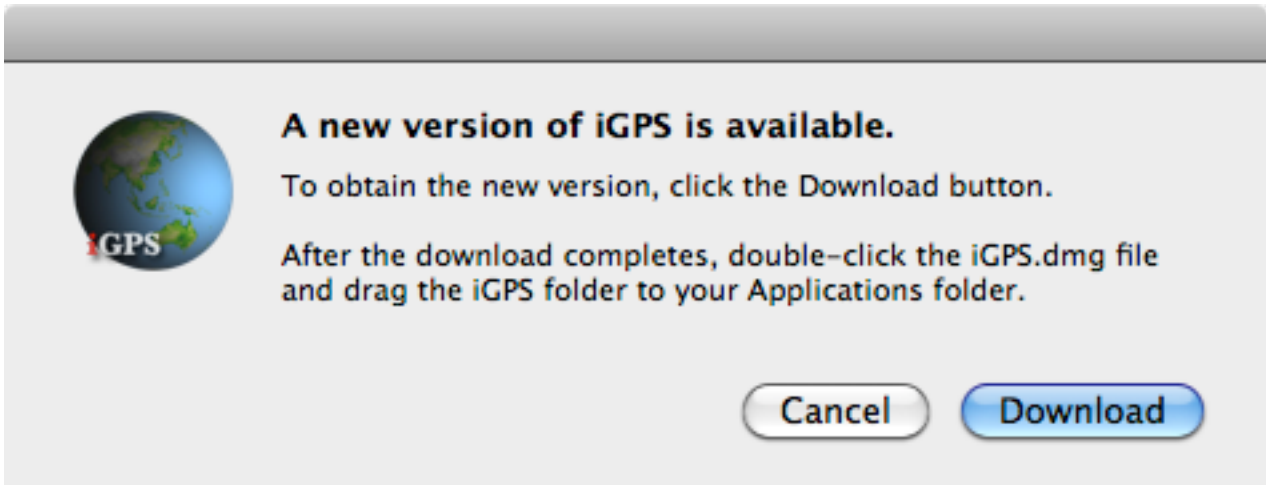
On the iGPS menu bar, click iGPS and then click About to display the version number of iGPS and to whom the iGPS software has been licensed.



Checking for iGPS updates

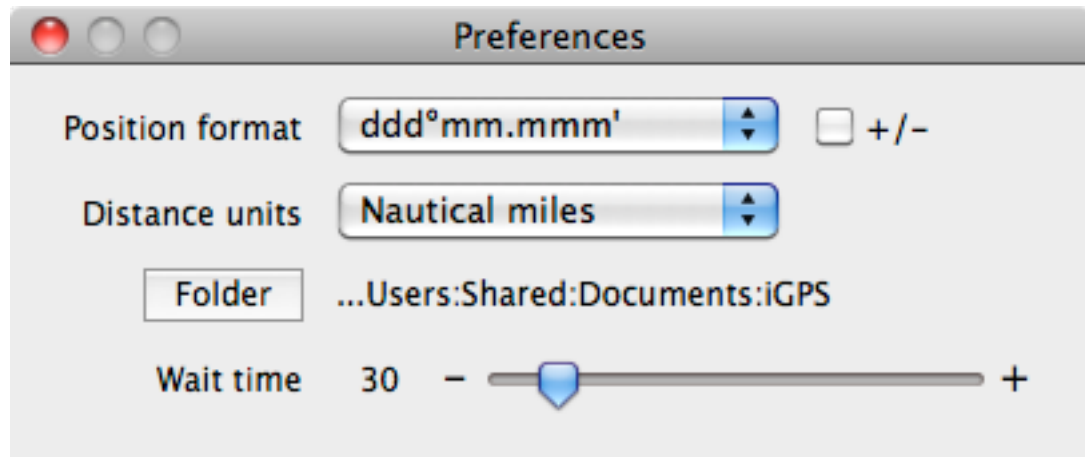
On the iGPS menu bar, click iGPS and then click Check for Update. If a new version of iGPS is available, you can obtain it by clicking the Download button.

The new iGPS.dmg file will be downloaded to the folder that you have specified for downloads in your Safari web browser.



Setting iGPS Preferences

On the iGPS menu bar, click iGPS and select Preferences. Changes that you make to iGPS preferences are saved and become effective when the Preferences window is closed.



Position format

The Position format setting determines how latitude and longitude are displayed. Select the format that you prefer from ddd.ddddd°, ddd°mm.mmm' or ddd°mm'ss.s".

If the +/- checkbox to the right is checked then latitude and longitude are displayed with a plus or minus sign prefix instead of the letters N, S, W, and E.

Distance units

The Distance units setting specifies the unit of measurement that iGPS will use when displaying the total distance in a route. You can select kilometers, nautical miles or U.S. statute miles.

Folder

The Folder setting is the default location where you want to save iGPS files.

To change this setting, click on the Folder button and a Mac OS X Choose a Folder window will open. Navigate to the folder that you want to use and then click the Choose button.

Wait Time

The Wait time setting is used to adjust the time that iGPS will wait for a response from the GPS. With older Garmin GPS units, it may be necessary to increase the wait time to ensure reliable communications. The range of adjustment is 0 to 300 in 1/60th of a second increments.

An indication that the wait time needs to be increased is if GPS communication errors occur when receiving or transmitting data.

To change the setting, move the slider. You can adjust the wait time precisely by clicking on the plus or minus signs at either end of the slider bar.

Uninstalling iGPS

Drag the following items to the Trash and then empty the Trash.

1. iGPS folder from your Applications folder
2. iGPS folder from ~/Library/Application Support
3. com.leoregius.iGPS.plist file from ~/Library/Preferences