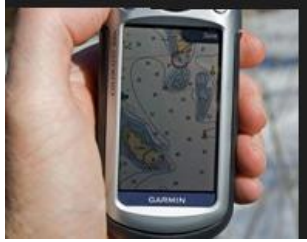


Garmin IMG Maps

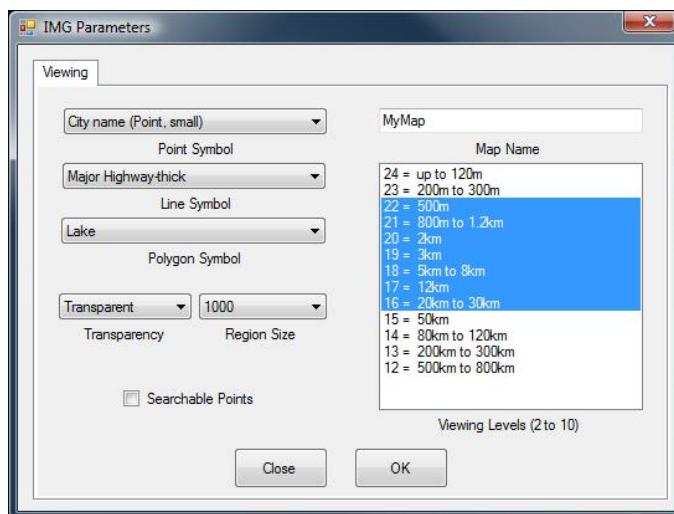


IMG files are graphic files that can be displayed on Garmin GPS units. They can be transparent or opaque so they can essentially supplement or replace the existing basemap. Because Garmins have fairly conservative limitations with regard to waypoints or track logs, they can be convenient to display many points (eg. several thousand).

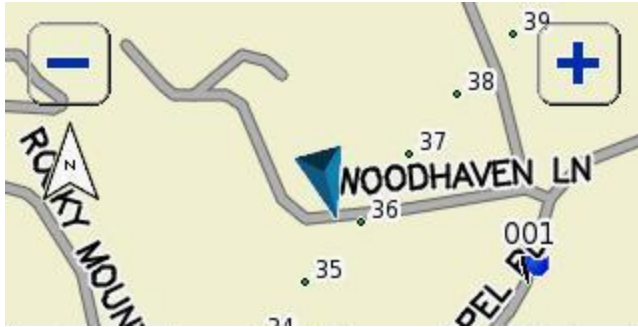
Dynamic Survey Solutions has purchased programming developer tools from the author of [cGPSMapper](#) in order to provide the capability of creating IMG files from either QuikMap or GPSQL and uploading them to your Garmin GPS receiver. You should be aware that there is always some risk associated with connecting to a Garmin. It is instructive to read a [text file](#) that the author of cGpsMapper has on his site.

QuikMap is capable of creating point IMG files or creating an IMG file from any vector file such as shape, DGN, DWG, or DXF while GPSQL can create point, line or polygons IMG files from any query.

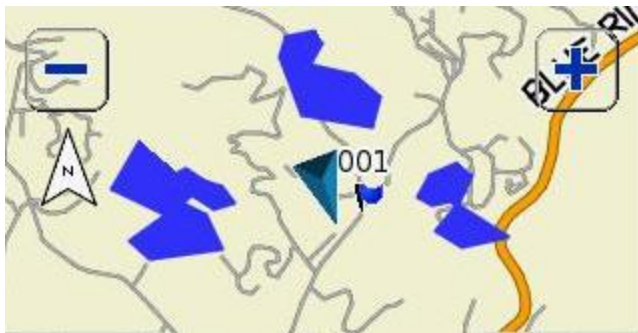
When you create an IMG file, the coordinates will have to be WGS84 geographic. For GPSQL, the field selection dialog will default to WGS84 latitude and longitude. For QuikMap, you will be prompted for the coordinate system of the input data and this will be converted to WGS84. In both cases it is necessary to configure the information that is contained in the header of the IMG file in order to have the Garmin render it to your liking. The items to address are located on the following dialog:



On the dialog above, there are lists for available point, line and polygon types. These lists are rather extensive and some experimentation might be required to find a selection that suits you. The ones shown here are actually good general choices for these entity types.



Consider the actual Garmin Nuvi image at left. The points you see are from the supplementary IMG file and the points have been coded as small cities, yet it is a good choice for points in general.



The display capture here shows several polygons from the supplementary IMG file that have been rendered as 'lake'.



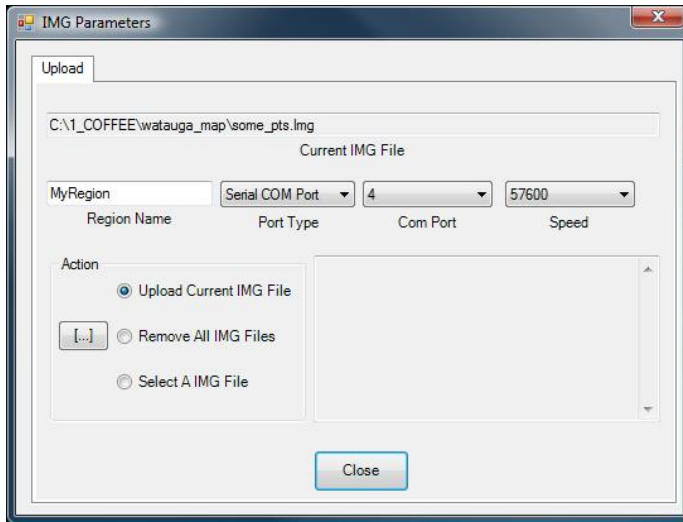
The display capture here shows the same polygons as above but the display has been changed to 3D and the polygons themselves have been rendered as 'woods'.

Supplementary IMG maps can be opaque or you can elect to make them transparent so that any base map shows through. Region size refers to the number of features you see per region. Increasing this value makes the map more sluggish.

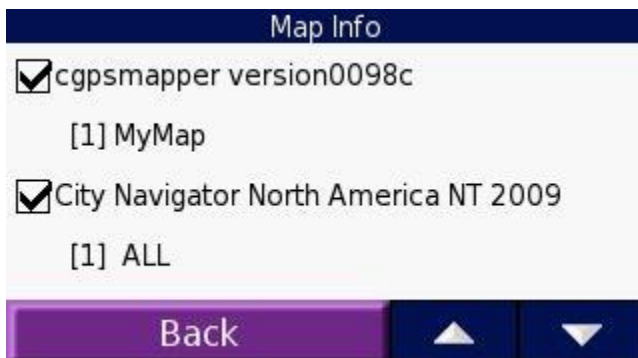
Zoom Levels - On the right of the dialog, you select all the zoom levels at which you want to view your IMG map. Unfortunately, the listed zoom level values are not exact and varies some on a per unit basis. The highest zoom level selected is normally the one at which you no longer see the features as you zoom further out. We use the term, normally because many Garmin GPS units have options for detail. In the eTrex series the map set-up screen offers five choices for detail level. What you will find is that at higher detail levels,

objects will continue to be visible even if the user zooms out further than the greatest level at which you have defined them. You should be prepared for these unit specific oddities.

Transferring An IMG File To The GPS Unit - Once the IMG file is created, the dialog below will be seen.



At this point, the IMG file is created (and appears in the text box), and you might or might not want to move it to the Garmin unit. There is of course an option to allow you to upload the current IMG file to your Garmin. If you are using regular serial comms, you need to specify the port. If you are connected via USB, remember that the drivers must have been installed prior to trying to upload. This dialog also has an option to connect to the Garmin and remove all current IMG maps its might contain. It will not remove the base map that accompanied the unit.



But Wait, There's More - Some Garmin units will attach to your PC and become mass storage devices. In other words, just another drive. If you use Explorer, look for the 'Garmin' folder. In it there will be at least one IMG file and probably two. DO NOT DELETE OR CHANGE THESE. What you will want to do is name your supplementary IMG file to 'gmapsupp.img' and place it in the same folder as

the two existing ones. When you detach the Garmin, you can find the map configuration dialog and turn on the map listed as 'cgpsmapper'.