



MapSource™

user's
manual
and
reference
guide



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Thank you for choosing GARMIN MapSource™ — the complete tool for managing your GARMIN GPS. MapSource provides geographic data on a CD-ROM, which augments the information already on your GARMIN GPS basemap. You may also quickly select maps and save them for use on your GARMIN GPS unit. With MapSource, you can view existing waypoints, routes and tracks on the graphic map or quickly create new waypoints or routes with a click of the mouse. Editing and managing your waypoints and routes is made easy with MapSource. This manual is organized into five sections for your convenience:

Introduction—gives a quick overview of MapSource and contains the Table of Contents and important information pertaining to the use of MapSource data.

Getting Started—takes you through installing MapSource and describes the MapSource Interface.

Quick Tour—walks you through the basic functions of MapSource.

Reference—provides details about the functions of MapSource.

Appendices—contains the map legends for MapSource, Keyboard Shortcuts and the Index.

We hope you enjoy MapSource and thank you again for choosing GARMIN!

Introduction

Customer Service

Contact GARMIN

If you should encounter any difficulty while installing MapSource, or if you have any questions about MapSource, contact GARMIN's Product Support Department by phone at 913-397-8200 or 800-800-1020, Monday – Friday, 8 am – 5 pm Central Time; or by e-mail at sales@garmin.com.

Introduction

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Introduction

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If the data source is lacking a feature, or an item is mislocated or misidentified, it will be incorrectly identified or missing in the GARMIN cartography product as well. Each MapSource product has its strengths and weaknesses, and not all are suitable for every purpose. Please keep this in mind as you use and enjoy the benefits the cartography provides.

GARMIN encourages customers to report any errors found in our electronic maps by completing our on-line Error Reporting Form in the Cartography section of our web site at: <http://www.garmin.com/cartography/mapSource/errorForm.html>.

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WARNING: No National Hydrographic Office has verified the information in this product and none accept liability for the accuracy of reproduction or any modifications made thereafter. No National Hydrographic Office warrants that this product satisfies national or international regulations regarding the use of the appropriate products for navigation.

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Introduction

Warnings and Cautions

BlueChart™

Introduction

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Compatibility

Waypoint/Route/Track Management

MapSource is compatible with all GARMIN GPS systems except the GPS 100 family of products (including GPS 100AVD, GPS 100MRN, GPS 100MIL, and SRVY II) and Panel Mount Aviation products.

Map Transfer

Not all GARMIN GPS systems are compatible with this feature. Please consult your GPS Owner's Manual to determine if your unit is able to use this feature.

GARMIN data cards (available for use with selected GARMIN GPS systems) and the GARMIN USB (Universal Serial Bus) Data Card Programmer, can only be used to transfer and store map data. They will not store Waypoints, Routes or Tracks, which are only transferred to or from the GPS unit for storage or retrieval.

Installation and Removal of Program

Minimum System Requirements

IBM-compatible PC with Pentium processor or equivalent, 16-32 Megabytes RAM, CD-ROM drive, mouse or other pointing device, 256-color display adapter (24-bit color recommended) and monitor with 640 x 480 resolution or higher, and a minimum of 20 Megabytes to 1.5 Gigabytes of free hard drive space (depending on the map data).

MapSource requires a 32-bit operating system such as Windows 95/98/2000, Windows ME, XP or Windows NT 4.0. An available serial port is required for interfacing with a GPS unit. Internet access is recommended for MapSource products with "locked" data. Use of the GARMIN USB Data Card Programmer accessory requires Windows 98/2000, Windows ME or XP, and a USB (Universal Serial Bus) Port.

Getting Started

Compatibility and Installation Requirements



USB Data Card Programmer

Getting Started

Program Installation and Removal



Install Welcome Screen



'Run' Dialog Box

To install the MapSource software:

1. Insert the MapSource CD-ROM into your computer's CD-ROM drive.
2. Your computer should automatically run the start-up file and display a welcome screen. If it doesn't run automatically, click the Start button and select "**Run...**" then type in the drive letter of your CD-ROM drive followed by "setup" (for example, "d:\setup"), and press **Enter**.
3. Follow the directions on your computer screen.
4. If you have purchased multiple MapSource products, repeat steps 1-3 for the additional CD-ROM(s). "Full Install" copies all files to your hard drive, so the CDs won't be required to run the program. **This may take 1-2 Gigabytes of hard drive space.**

If your MapSource product includes more than one CD, installation will only occur from the first disc. The other MapSource discs will be needed for running the program after installation.

Unlocking Map Data and Registration

Some MapSource products must be "unlocked" before you can view and download the detailed map data. Those products come with a MapSource Unlock Certificate, which includes either a 25-character unlock code, or an 8-character coupon code for obtaining an unlock code.

With recent versions of MapSource products that contain locked data, the UnlockWizard will automatically run at the end of the installation process. Follow the directions on your computer screen and use the code on your MapSource Unlock Certificate to unlock the map data and register your MapSource product.

To remove MapSource from your system:

1. Click the **Start** button and select "Settings," then "Control Panel."
2. From the Control Panel page, select *Add/Remove Programs*, then highlight MapSource and click *Add/Remove*.

Unlocking Maps

If you did not unlock maps during installation, if you want to unlock another MapSource region, or if you want to unlock maps for a second GARMIN GPS unit, you may do so using the UnlockWizard and/or the 'Unlock Codes' window.



Keep your Unlock Certificate and Unlock Code in a safe place. You may need this information in the future if you need to re-install MapSource. GARMIN cannot give refunds or exchanges for MapSource Unlock Codes.

Redeeming a Coupon Code

If your MapSource Unlock Certificate includes an 8-character coupon code, you will use that number to obtain an unlock code, either by following the directions on the Certificate or by using the UnlockWizard.

UnlockWizard

To run the UnlockWizard, click the Start button, select "Programs," then select UnlockWizard from the MapSource menu. Follow the directions on your computer screen to either enter a 25-character unlock code or redeem an 8-character coupon code to unlock the map data. Once the map data is unlocked, the unlock code and coverage area information will appear in the 'Unlock Codes' window in MapSource.

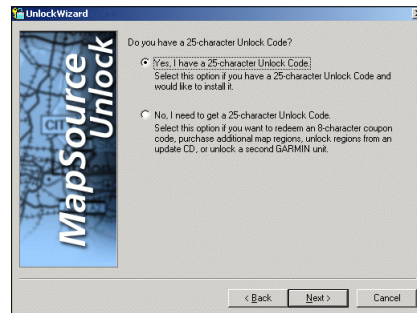
If you have a 25-character unlock code that you did not enter using the UnlockWizard during installation, you may enter it in the 'Unlock Codes' window instead of running the UnlockWizard again.

Getting Started

Unlocking Maps

NOTE: To check if your MapSource product includes the UnlockWizard, click the Start button, select "Programs," then "MapSource" and look for the UnlockWizard.

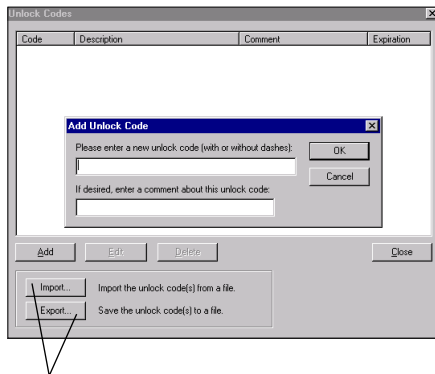
If you don't have the UnlockWizard, go to www.garmin.com/unlock/ to obtain an unlock code.



UnlockWizard

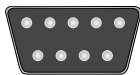
Getting Started

Unlocking Maps



'Unlock Codes' Window

Click the **Import** button to add Unlock Code(s) from a saved file on your computer. To save Unlock Code(s) to a file on your computer, click the **Export** button.



Serial Communications Port

To enter an Unlock Code and unlock a map region:

1. Select *Unlock Codes* from the Tools Menu or press **Ctrl** and **U**.
2. Click the **Add** button. Type or paste the 25-character code in the space. Enter a note in the Comment field if desired (this may be useful for distinguishing multiple Unlock Codes in the list).
3. Click **OK**. To add another code, repeat steps 3 and 4. To exit, click the **Close** button.

To edit or delete an Unlock Code:

1. Select *Unlock Codes* from the Tools Menu or press **Ctrl** and **U**.
2. Select the desired Unlock Code by highlighting it with a click of the left mouse button.
3. To edit the Unlock Code, click the **Edit** button and enter or modify the notes in the Comment field. Click **OK** when you're finished.
4. To delete the Unlock Code, click the **Delete** button. Click **Yes** when you are asked "Are you sure you want to delete..." If you made a mistake, click **No** and the Unlock Code will not be deleted. To exit, click the **Close** button.

Connecting the GPS to a Computer

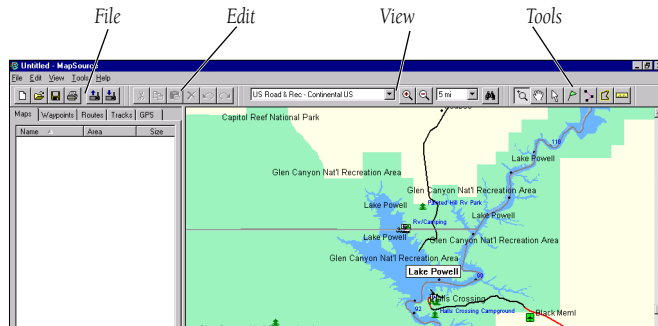
To connect your GPS to your computer:

1. Using a PC Interface Cable, connect your GPS to a serial communications port on your computer (see illustration).
2. To be sure you have a good connection, you can have MapSource automatically detect the GPS on the COM port. Check that your GPS is powered on and the Serial Data Format is set to GARMIN.
3. Select *Preferences* in the Edit Menu and click the Transfer tab.
4. Click the **Auto Detect** button. The 'Auto Detect' window appears, showing which COM port your GPS is connected to and the software version of your GPS. Click **OK** to set the COM port and exit.

Finding Your Way Around MapSource

MapSource Toolbars

MapSource has four toolbars: 'File', 'Edit', 'View' and 'Tools', that allow you to quickly access many of the functions available in the menus.

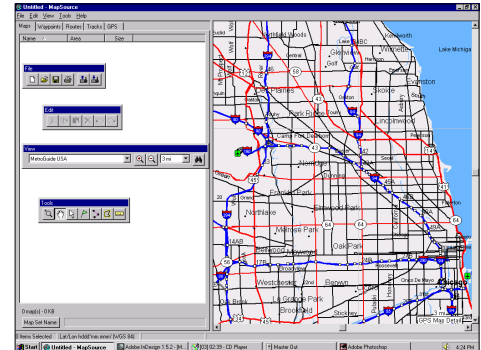


Undocking the Toolbars

The toolbars can be undocked and moved around the application for your convenience. To undock a toolbar, place the mouse pointer over an open area on the toolbar, click and hold the left mouse button and move the toolbar to a different location. To return a toolbar to its starting location, move it back to the top of the application.

Getting Started

MapSource Toolbars



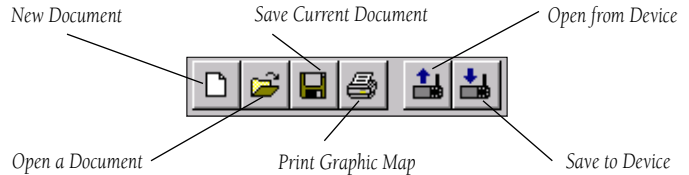
Undocking the Toolbars

Getting Started

File and Edit Toolbars

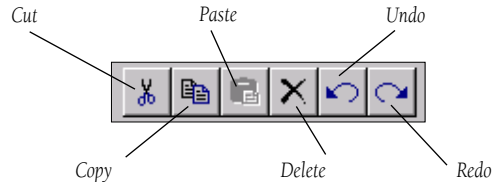
File Toolbar

The File Toolbar contains functions of the File Menu. You can create a New Document, Open a Document, Save the Current Document and Print the Graphic Map. You may also transfer data between MapSource and a GPS or a data card inserted in a USB programmer by selecting Open From Device or Save To Device. See page 19 for more detailed information on the File Menu.



Edit Toolbar

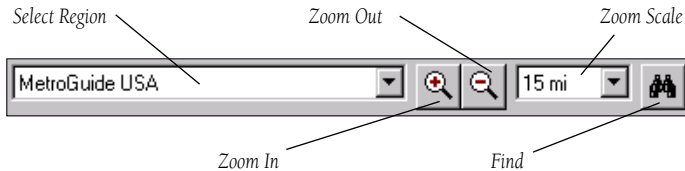
The Edit Toolbar contains functions of the Edit Menu. You can select the Cut, Copy and Paste functions, Delete selected items, and Undo the last user action. After an “undo” is performed, the Redo button is activated, allowing you to revert to the last user action, or “redo” the “undo.” See page 20 for more detailed information on the Edit Menu.



View and Tools Toolbars

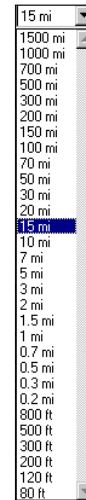
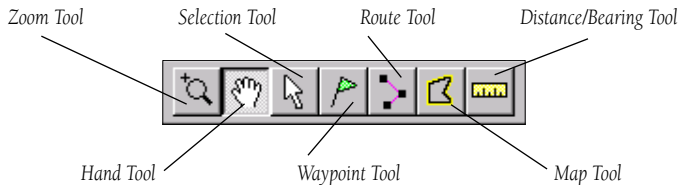
View Toolbar

The View Toolbar contains features of the View Menu. You can Select a Region to view, Zoom In/Out, Select a specific Zoom Scale or activate the Find feature. The Find features lets you search for a city and view it on the Graphic Map. Some MapSource products include the Advanced Find feature, allowing you to search for a city, point of interest or an address and view it on the Graphic Map. See page 25 for more detailed information on the View Menu.



Tools Toolbar

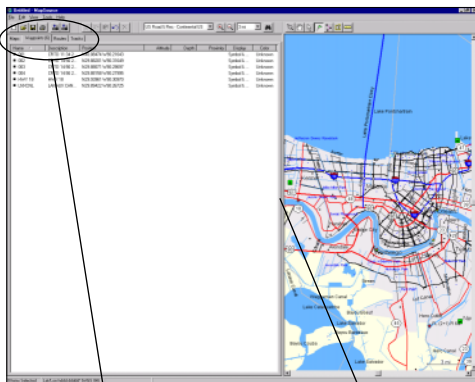
The Tools Toolbar contains features of the Tools Menu. You can directly select the Zoom, Hand, Selection, Waypoint, Route, Map, and Distance/Bearing Tools. See page 31 for more detailed information on the Tools Menu.



With the Zoom Scale, you can zoom In as close as 80 ft., and Out up to 1500 miles. The Zoom In and Zoom Out buttons offer the same zoom increments.

Getting Started

Data Tabs



Tabs

Splitter Bar

Tab Lists

The Tab selects the type of data displayed. To see all of the data it might be necessary to change the position of the Splitter Bar. The Splitter Bar can be moved by clicking and holding the left mouse button on the bar, and dragging it to a new location.

Data Tabs

The Data Tabs (Maps, Waypoints, Routes, Tracks and GPS) are located on the left side of the display. The GPS Tab provides real time tracking when you run MapSource on a laptop with a GARMIN GPS connected to the laptop. For more information on real time tracking and the GPS Tab, see page 53.

When the Maps, Waypoints, Routes or Tracks tab is selected, the data for that item is displayed in list form. When data is created or transferred from the GPS, the Tab List for the data item is automatically updated. For example, when you select maps to be saved to a GPS, they will be listed in the Maps Tab.

The Tab Lists allow you to easily select items for viewing or editing. Data displayed in the Tab Lists can be sorted by column. You may need to move the Splitter Bar to see all the column headers. The Splitter Bar can be moved by clicking and holding the left mouse button on the bar and dragging it to a new location.

To sort the data by a specific column, click on the column header. An arrow will appear, showing the direction of the sort, ascending or descending. You may also change the order the columns are arranged from left to right by clicking on a column header, then "dragging and dropping" the column into the desired location.

The Tab Lists show what items will be transferred to a GPS or a data card in a USB programmer. MapSource will transfer all of the data in a chosen Tab, not just the item highlighted in the list.

Graphic Map

The Graphic Map shows the region of the world that is currently selected in the Region Selection Box. You can zoom in and out and move to different parts of the selected region. At large zoom scales (Zoom Out), less detail is displayed. At smaller zoom scales (Zoom In), you can see the actual detailed map features that can be transferred to your GPS (if your GPS supports this feature). When this occurs, “GPS Map Detail” will be displayed below the zoom scale in the lower right-hand corner of the Graphic Map.

To pan the Graphic Map, use the on-screen scroll bars or the keyboard's arrow keys. In addition, the **Page Up** and **Page Down** keys move the map window up or down by the length of the window. Holding the **Ctrl** key and pressing an arrow key moves by the width of the window in that direction (up, down, left, or right).

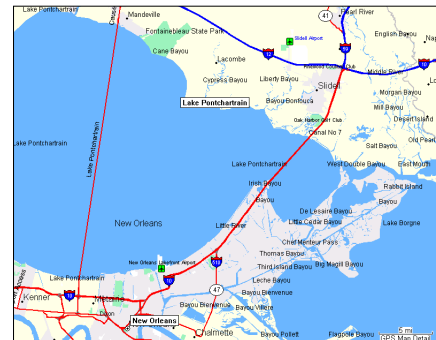
Status Bar

The Status Bar extends across the bottom of the MapSource window. The Status Bar displays information relating to the current action. The Status Bar can show:

- Latitude and Longitude of the mouse pointer when the mouse is positioned on the Graphic Map, regardless of which tool is selected.
- The number of tab items selected in the Tab List.
- The current Position Format and Map Datum set in Preferences.
- If the Map Tool is selected, the name and approximate data size of the geographical map boundary currently highlighted on the Graphic Map will be displayed in the right panel of the Status Bar.
- If the Distance/Bearing Tool is selected, the distance and bearing from a beginning point will be displayed in the right panel of the Status Bar.

Getting Started

Graphic Map/ Status Bar



Graphic Map



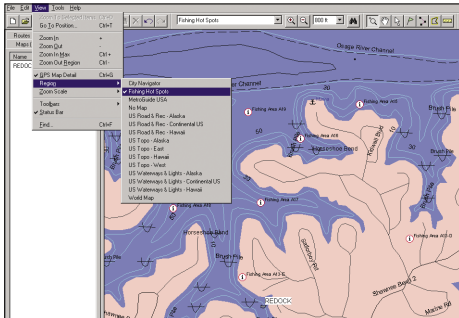
Status Bar

MapSource Tour

MapSource Tour



MapSource Icon



Selecting a Map Region

Select a Map Region to view on the Graphic Map from the data that you have loaded. If you only have one MapSource product loaded, it will be the only selection in the list.

A Tour through MapSource

This tour is intended to take you through the basic operations of MapSource. You can find more detailed descriptions of the tools and operations in the Reference section of this manual. A copy of this Quick Tour can be found in the MapSource Help Menu.

This tour presumes that you have installed MapSource, unlocked the map data (if required), have not changed the default settings of the application and that your GPS is connected to a serial port on your computer. Open the MapSource application by double clicking the MapSource icon on your desktop. To view a map region from the MapSource data you have loaded, choose 'Region' in the View Menu and pick a region. To view more map detail, set the 'Zoom Scale' (also located in the View Menu) between 2 miles and 500 feet. Some Points of Interest may only appear at the 500 ft scale or smaller.

MapSource comes with a sample document file that we will use for this tour, so lets open it and get started! From the File Menu select 'Open'. In the MapSource folder, locate the file 'MapSource Tour' and double click it (The MapSource folder is the installation folder you chose during installation. You will need to change the folder you are working from to this folder.). Notice that the Routes Tab and Waypoints Tab now contain some data. At the top of each tab you will see the tab name followed by the number of items contained in the tab list. The Waypoints Tab should contain 13 waypoints. Display the Waypoints Tab List by clicking on the Waypoints Tab.

Waypoints

Let's start by looking at waypoint 001. Select waypoint 001 by clicking on it one time with the left mouse button. From the View Menu, choose *Show Selected Waypoint On Map*, to center the waypoint on the Graphic Map at the current zoom scale.

Viewing Waypoint Data

There are two places to view waypoint data:

Waypoints Tab List—The Waypoints Tab List displays waypoint data but doesn't allow you to edit the information. It may be necessary to slide the Splitter Bar in the middle of the display to the right to see all of the data.

Waypoint Properties—To display the 'Waypoint Properties', double click on the waypoint in the Waypoints Tab List. The 'Waypoint Properties' dialog allows you to review and edit waypoint data.

Editing Waypoint Properties

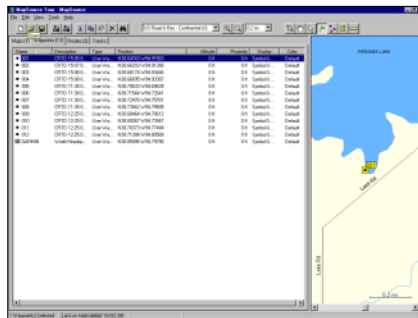
With the properties for waypoint 001 displayed, highlight the waypoint name field and type "Boat Ramp" as a new name. Scroll through the symbol list and select the Boat Ramp symbol. To save the changes and view the waypoint on the Graphic Map, click the **Show on Map** button. To save and exit the 'Waypoint Properties', click **OK**.

Things You Should Know About Waypoint Properties:

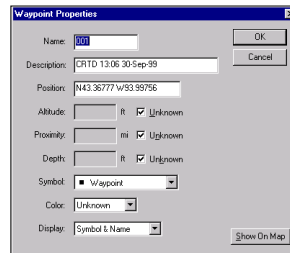
- GARMIN GPS products limit the number of characters in a waypoint name. If you transfer a waypoint with a name that exceeds the character limit, the GPS will truncate the name. If more than one waypoint name is the same after truncation, only one of the waypoints will be loaded in the GPS. (continued)

MapSource Tour

Waypoints



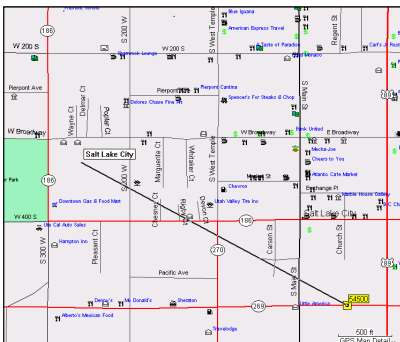
Waypoints Tab List



'Waypoint Properties' Dialog Box

MapSource Tour

Waypoints



Moving a Waypoint

- GARMIN GPS products limit the number of characters in the waypoint description. If the MapSource description exceeds this limit, the waypoint description will be truncated.
 - If you select a symbol that does not exist in your GPS, the waypoint will be represented by a square when transferred into your GPS.
- See your GPS Owner's Manual for your product's limitations.

Creating Waypoints

Creating a new waypoint is as easy as locating a spot on the Graphic Map with your mouse and clicking.

Creating a Waypoint using the Waypoint tool:



1. Select *Waypoint* located in the Tools Menu.
2. Place the mouse pointer over a position on the Graphic Map and click the left mouse button.

The 'Waypoint Properties' dialog appears for the new waypoint. MapSource automatically assigns a name and symbol for new waypoint. Make any desired changes in the 'Waypoint Properties' and click **OK**. Notice that MapSource added the new waypoint to the Waypoints Tab List.

Moving a Waypoint using the Selection tool:



1. Choose *Selection* located in the Tools Menu.
2. On the Graphic Map, click on the waypoint to select it, then click it again. Do not double click on the waypoint, as this will display the 'Waypoint Properties.'
3. Position the mouse pointer at the new location, then click again to anchor the waypoint.

Routes

A route is a collection of waypoints used for navigation. When creating a route on the Graphic Map, you can use existing waypoints or create new waypoints while creating the route.

Creating a Route using the Route tool:

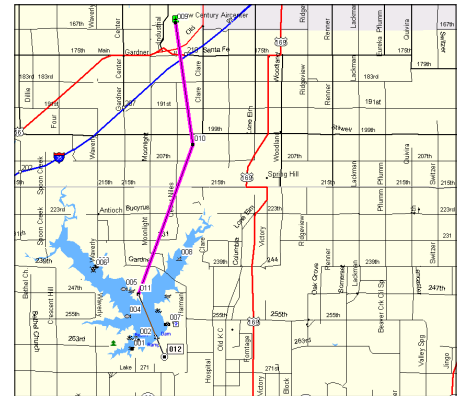


1. Select *Route* located in the Tools Menu.
2. Highlight waypoint *009* in the Waypoints Tab List, then choose *Show Selected Waypoint on Map* located in the View Menu.
3. Adjust the Zoom Scale so you can see waypoints *009* through *012*.
4. Place the mouse pointer on waypoint *009*. When the waypoint is selected (there will be a white circle surrounding the waypoint), click on the waypoint. Move the mouse pointer; there will be a line extending from *009* to the mouse pointer location. Click on waypoints *010*, *011* and *012* in that order.
5. Move the mouse pointer to any location on the Graphic Map and click again. A new route waypoint is created and added to the route at the location you selected.
6. When you have finished adding waypoints to the route, press the **Esc** key on your keyboard to end the route.

Select the Routes Tab. You can see that a new route has been added. MapSource automatically names the new route using names of the first and last waypoints in the route.

MapSource Tour

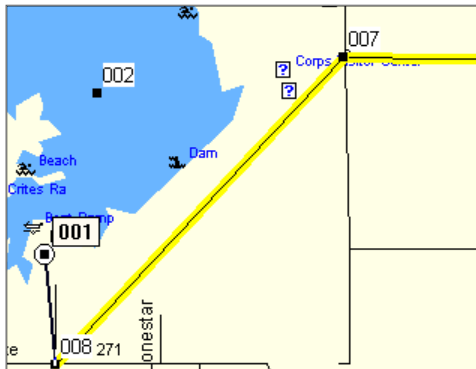
Routes



Using the Route Tool

Create a new route by clicking on waypoints in the order that you wish to navigate them. You can create new waypoints while creating the route by clicking on a map location.

Routes/ Tracks



Extending a Route

Extending a Route:

1. Choose *Selection* located in the Tools Menu. Select the route that you just created by clicking on it with the left mouse button (the route will turn yellow when selected).
2. With the Selection Tool, click the first or last waypoint in the route.
3. Click on an existing waypoint or a position on the Graphic Map to add to the route.
4. When finished extending the route, press the **Esc** key on your keyboard.

Deleting a Route:

1. Choose *Selection* located in the Tools Menu, then select the route that you just finished creating on the Graphic Map.
2. Press the **Delete** key on the keyboard.

The route will be removed from the Tab List and the Graphic Map. Notice that the route waypoints remain; only the route has been erased.

Tracks

A track cannot be created in MapSource unless you have a GPS connected to your computer and use the Real Time Tracking feature in the GPS Tab. If a track has been transferred to MapSource from a unit or created with Real Time Tracking, then the Tracks Tab List will display those tracks. For more information on tracks, Real Time Tracking and the GPS Tab, see pages 53-57.

Map Sets

A Map Set is one or more detailed maps selected from the Graphic Map to be transferred to your GPS unit. Not all GARMIN GPS units can use detailed maps. Please consult your Owner's Manual to determine if your unit has this capability and its limitations. To begin, select the Maps Tab.

Creating a Map Set:



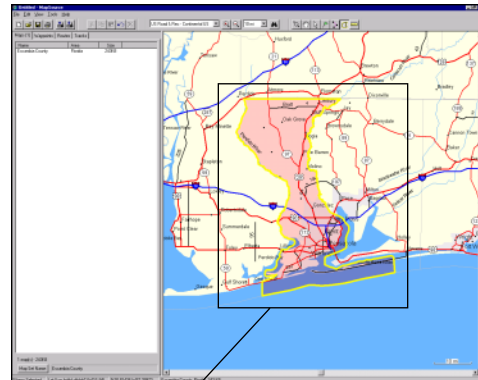
1. Select *Map* located in the Tools Menu.
2. Place the Map Tool inside a boundary area. The area will become outlined in yellow.
3. Click inside the map boundary to add it to the Map Set. The selected area will now be shaded in pink.

The MapSource data that you have loaded determines the geographical map boundaries. Each product has different boundary areas. When the Map Tool is placed inside a map boundary area, that area will become outlined in yellow. If you are having difficulty locating a map boundary area, change the zoom scale and try again. Most map boundaries can be seen at the 30 mile (50 km) zoom scale.

When you add a map to the Map Set, the Name, Area and the Size of the map are shown in the Maps Tab List. At the bottom of the Maps Tab List, you will see the number of maps that have been selected and the required memory for the Map Set. If the Map Set contains a large number of maps or a large memory capacity, you may get a warning from MapSource. To remove the warning, reduce the number of maps.

MapSource Tour

Map Sets



Creating a Map Set

Choose the Map Tool. Place the mouse pointer in the geographical area that you want to select. The area will become outlined in yellow. To select the area and add it to the Map Set, click the left mouse button. When the area is selected it will be shaded in pink and listed in the Maps Tab List.

MapSource Tour

Map Sets/ Transferring Data



The USB Data Card Programmer will only operate with Windows 98, Windows 2000, Windows ME or Windows XP.



***NOTE:** Preprogrammed BlueChart or Fishing Hot Spots data cards should not be used in the USB Programmer or in a GPS unit for saving MapSource maps. The data will be lost. If you have a BlueChart or Fishing Hot Spots data card in your GPS unit, remove it before transferring map sets to the unit to avoid losing the preprogrammed data. If you choose to overwrite the preprogrammed data on a BlueChart or Fishing Hot Spots data card, GARMIN will not replace or recover the lost data.*

Deleting Maps:

1. Click the map name in the Maps Tab List then press the **Delete** key. Or, with the Map Tool Selected, click the mouse inside the boundary of the map area you want to delete.

To remove several maps at the same time, hold the **Ctrl** key and drag a box around the selected map boundaries. You can also select several maps in the Maps Tab List and press the **Delete** key. When a map is deleted, it will no longer be shaded pink on the Graphic Map and will be removed from the Maps Tab List.

Transferring Data

After creating waypoints, routes, map sets and tracks in MapSource, the data can be saved for use on a GARMIN GPS three different ways:

- To the internal memory of a GARMIN GPS unit, which accepts all data types (maps, waypoints, routes and tracks).
- To a data card in a GARMIN GPS unit—maps are saved to the card, and all other data is saved to the unit's internal memory.
- To a data card in a GARMIN USB data card programmer, which will only accept map data.

When transferring map data to a GPS or data card, all previously stored map data or pre-loaded data in the GPS or on the card will be erased and replaced with the new information (the GPS basemap, however, will not be overwritten).

Saving MapSource data to a GPS:



1. If the GPS holds a data card, be sure a card is inserted correctly in the unit (if you are saving maps). Also, be sure the unit is properly connected to the computer with the serial data cable, and that the unit's transfer mode is set to GARMIN.

Transferring Data



Pre-Loaded Map Data

If your GPS unit includes a pre-loaded Points of Interest database, you will see a warning about erasing the pre-loaded data before you save MapSource maps. The pre-loaded data can be recovered to your GPS unit by downloading it from the GARMIN web site:

1. Go to www.garmin.com
2. Click "Support", then "Updates and Downloads"
3. Select the name of your GARMIN GPS unit
4. Click the "Download" link below "Download Preloaded Marine POI Database"

Any MapSource maps on your GPS unit will be erased and replaced with the POI database.

2. Select *Save To Device* from the File Menu and select the Serial Port Tab.
3. In the 'What To Save' dialog, select the data type for transfer by placing a check mark in the box(es) next to the type of data you want to save, or click the **Select All** button.
4. In the 'Communication Options' dialog, you may choose to 'Turn Off GPS After Transfer' by placing a check mark in the box. You may also modify the communication settings by selecting a different Port or Baud Rate, or have MapSource automatically detect the Port and Baud Rate of your connection by clicking the **Auto Detect** button.
5. Click the **Save** button to begin data transfer. As the transfer takes place, MapSource will display a progress indicator and the GPS will display a message indicating that the data is being transferred.



Saving Maps to a data card in a USB Programmer:

1. First, be sure the programmer is properly connected to a USB port on your computer and a data card is inserted correctly in the programmer.
2. Select *Save to Device* from the File Menu and select the USB Port Tab.
3. The USB Port dialog will appear with "Card Programmer" highlighted.
4. Click the **Save** button to begin transferring maps.

Because you can only save maps to a data card, there will not be a "What To Save" dialog on the USB Port Tab. A progress indicator will appear on the computer screen, and when finished, MapSource will display a message indicating "Transfer complete." Do not remove the data card during the transfer.

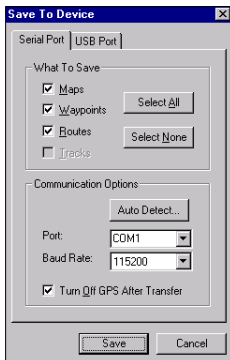


Transferring data to MapSource from a GPS:

NOTE: You cannot open maps from a GPS unit that cannot accept downloadable maps. Please see your GPS owner's manual to learn more about your GPS unit's capabilities. (continued)

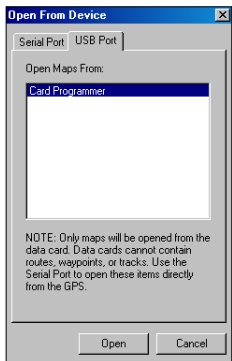
MapSource Tour

Transferring Data



Save To Device— Serial Port Tab

Open From Device— USB Port Tab



1. If transferring maps from a data card in a GPS, be sure the card is inserted correctly in the unit. Also, be sure the unit is properly connected to the computer with the serial data cable and the unit's transfer mode is set to GARMIN.
2. Select *Open From Device* from the File Menu and select the Serial Port Tab.
3. In the 'What To Open' dialog, select the data type for transfer by placing a check mark in the box(es) next to the type of data you want to save, or click the **Select All** button.
4. In the 'Communication Options' dialog, you may choose to 'Turn Off GPS After Transfer' by placing a check mark in the box. You may also modify the communication settings by selecting a different Port or Baud Rate, or have MapSource automatically detect the Port and Baud Rate of your connection by clicking the **Auto Detect** button.
5. Click on the **Open** button to begin transfer.

Transferring Maps to MapSource from a data card in a USB Programmer:



1. First be sure the programmer is properly connected to a USB port on the computer and a data card is inserted correctly in the programmer.
2. Select *Open From Device* from the File Menu and select the USB Port Tab.
3. With "Card Programmer" highlighted, click the **Open** button to begin transferring maps.

A progress indicator will appear on the computer screen and when finished, MapSource will display a message indicating "Transfer Complete." Do not remove the data card during the transfer.

File Menu

New— Opens a new, empty MapSource document.

Open— Opens a previously saved MapSource document.

Save/Save As— Saves the current MapSource document.

Print— Prints the current Graphic Map display.

Print Preview— Shows a preview of what will be printed. To print the preview, click the **Print** button at the top of the page.

Print Setup— Activates the setup page for printing the MapSource Graphic Map display.

Open From Device— Allows you to transfer selected data (Maps, Waypoints, Routes and Tracks) from a GPS or maps only from a Data Card inserted in a Programmer connected to the computer. See “Transferring Data” on page 16 for more information.

Save To Device— Allows you to transfer selected MapSource data to a GPS or maps only to a Data Card inserted in a Programmer. See “Transferring Data” on page 16 for more information.



GARMIN GPS units are limited in the number of waypoints, routes, tracks and map sets that can be stored in the unit. Please refer to your GARMIN GPS owner’s manual to learn about the limitations of your specific model.

Send Mail— This function allows you to send an e-mail with the current MapSource document as an attachment.

Reference

File Menu

N ew	Ctrl+N
O pen...	Ctrl+O
S ave	Ctrl+S
Save A s...	
P rint...	Ctrl+P
Print Preview...	
Print Setup...	
Open From Device...	Ctrl+Shift+O
Save To Device...	Ctrl+Shift+S
Send Mail...	
Import...	
Export...	
Recent File	
E x it	

File Menu

Reference

File Menu/Edit Menu

U <u>ndo</u>	Ctrl+Z
Re <u>d</u> o	Ctrl+Y
Cu <u>t</u>	Ctrl+X
<u>C</u> opy	Ctrl+C
<u>P</u> aste	Ctrl+V
New <u>W</u> aypoint...	Ctrl+W
New <u>R</u> oute...	Ctrl+R
Duplicate Route	
<u>D</u> el ete Route	Del
<i>Remove Waypoint from Route</i>	Ctrl+Del
Route Properties...	
Select <u>A</u> ll	Ctrl+A
Preferences...	Ctrl+Shift+P

Edit Menu

Import— This feature allows the user to open data stored using GARMIN's PCX5 Version 2.09 software. MapSource can display waypoints (.wpt), routes (.rte), tracks (.trk) or one of the maps (.grm) provided with PCX5. When using a PCX5 map (.grm), turn off any MapSource map data by choosing 'No Map' in the 'Region' menu selection to avoid screen clutter.

Export— This feature allows the user to export MapSource data in a tab delimited text format (.txt) for use in a word processor or spreadsheet, or in a .dxf format.

Recent Files— This area shows the four most recently used MapSource documents. To quickly reopen one of these files, click on the document name.

Exit— Closes the MapSource application.

Edit Menu

Undo— Reverts to most recent previous action taken by the user.

Redo— After an 'Undo' is performed, the Redo button is activated, allowing you to revert to the last user action, or "redo" the "undo."

Cut, Copy, Paste— These functions work like many other Windows programs. You may cut or copy any MapSource list information to the Windows clipboard for the following purposes:

- To paste data from one active MapSource document to another active MapSource document.
- To paste MapSource information into a word processor, simple text editor, or a spreadsheet program in tab-delimited text format.

Edit Menu

New Waypoint— Automatically creates a new waypoint in the center of the Graphic Map, assigns a waypoint name, description, and displays the ‘Waypoint Properties’ dialog box. You can change the waypoint name, description, change the position, assign an altitude, enter a proximity distance, enter a depth, choose a symbol, select display colors (if you have a color unit), and set the display options for the waypoint. To center the waypoint on the Graphic Map, click **Show on Map**. When you are finished, click the **OK** button to save the waypoint. If you don’t want to save the waypoint, click the **Cancel** button. For more detailed information, see “Creating Waypoints” on page 41.

New Route— Displays the ‘Route Properties’ dialog box. To create a new route, click the **Insert** button and select a waypoint from the list (you must have already created and saved waypoints to choose from). With some MapSource products, you may also search for a city or point of interest to add to the route by clicking the **Find** button. Continue inserting route points in the order that navigation will take place. When the last point has been inserted, click **OK** to save and add the new route to the Routes Tab List. If you wish to save and view the new route on the Graphic Map, click **Show on Map**. When you create a route, MapSource will automatically assign a name based on the names of first and last route waypoints. To change the route name, uncheck the ‘Autoname’ box. This will activate the name field so you can type in a new route name. For more detailed information, see page 47.

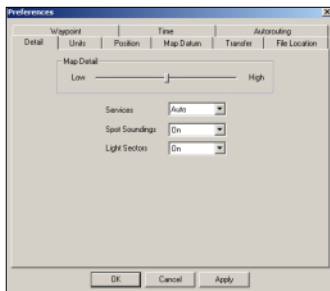
Duplicate Route— Duplicates the selected route in the route list.

Delete— Deletes Waypoint(s), Route(s), Track(s) or Map(s) selected in the Tab List or on the Graphic Map.

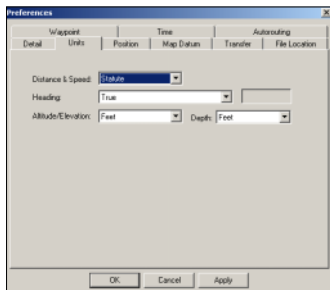
**‘Waypoint Properties’ Dialog Box
for a New Waypoint**

Reference

Edit Menu: Preferences



Preferences—'Detail' Tab



Preferences—'Units' Tab

Remove Waypoint(s) from Route— Removes a selected waypoint from the selected route. For more information, see “Editing Routes” on page 48.

Properties— Activates the ‘Route’, ‘Waypoint’, ‘Map’ or ‘Track Properties’ dialog box, depending on the data item that is selected.

Select All— Highlights all data in the active Tab List and on the Graphic Map.

Preferences— Activates the setup functions for MapSource. Preferences are organized into an easy-to-use tabbed format, with 8 setup tabs to choose from: Detail, Units, Position, Map Datum, Transfer, File Location, Waypoint, Time and AutoRouting. When you change any of the ‘Preferences’ settings, click the **Apply** button to make the change, then click **OK** to save and exit.

Detail Tab: Use the slider control to adjust the amount of detail displayed on the Graphic Map (this setting does not affect the amount of detail transferred to the GPS) and options for displaying ‘Services’, ‘Spot Soundings’ and ‘Light Sectors’ on the Graphic Map.

Units Tab:

Distance/Speed: Select Metric, Nautical or Statute. All distance or speed measurements will reflect this setting.

Heading: Choose True, Automatic Magnetic Variation, User Magnetic Variation or Grid. ‘True’ will show true North headings. ‘Automatic’ will automatically calculate the magnetic variation for the geographical area. ‘Grid’ provides a true North heading as determined by the Position Format. When ‘User’ is selected, the field to the right is activated for entering a magnetic variation.

Altitude/Elevation: Select Feet or Meters.

Depth: Select Feet, Meters or Fathoms.

Position Tab: Select from the available grid formats or manually enter information for a user defined grid.

System Defined Grid Formats: Select a grid format from the drop-down list.

User Defined Grid Format: Manually enter values to create a custom grid format.

Map Datum Tab: Select from over 100 available map datums, allowing MapSource to easily match up with just about any paper chart or map, or manually enter information for a user defined map datum.

System Defined Datum: Select a map datum from the drop-down list.

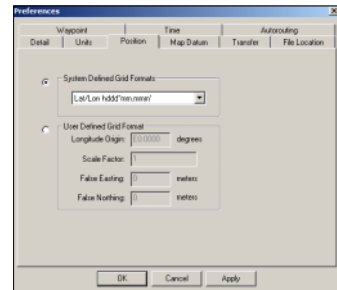
User Defined Datum: Manually enter values to create a custom map datum.

Transfer Tab: This allows you to check and modify the communications settings for transferring data between your computer and your GPS unit. Select **Auto Detect** to have the computer automatically detect the correct COM Port and Baud Rate for transfer. Or manually choose a Port and Baud Rate that works best with your computer.

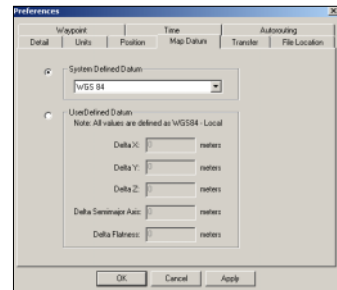
Port: Use the drop-down list to select the COM port used for communication with your GARMIN GPS via the PC Interface cable. Some computers use different names for the serial communication ports, so you may be required to manually enter the name of the serial port.

Reference

Edit Menu: Preferences



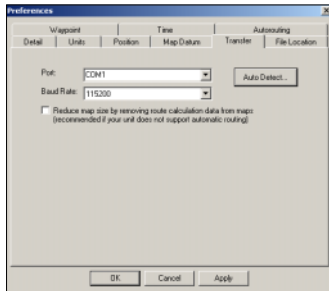
Preferences—'Position' Tab



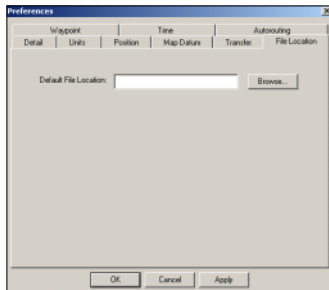
Preferences—'Map Datum' Tab

Reference

Edit Menu: Preferences



Preferences—'Transfer' Tab



Preferences—'File Location' Tab

Baud Rate: Use the drop-down list to select the baud rate used to transfer data to and from MapSource. If you consistently observe operation at 9600 baud, you may wish to manually select a baud rate that works best for your computer.

Auto Detect: MapSource has the ability to search for and automatically select the Port where the GARMIN GPS is connected. To have MapSource automatically select the communication port, make sure the GPS is connected and turned on. Click the **Auto Detect** button. MapSource will display the progress of the search and will inform you when a connection has been made. Click **OK** to accept the Port selection.

Reduce Map Size: For routable MapSource products, this option removes the route calculation data from maps before transferring them to your GPS. This is recommended for use with units that don't accept automatic routes. Place a check mark in the box to select this option.

File Location Tab: This allows you to set up a default location on your computer for saving and opening your MapSource files, importing PCX5 data, and exporting .txt and .dxf data. Manually enter the location or click the **Browse** button to select the folder for your default file location.

Waypoint Tab: Sets up the preferences for creating waypoints in MapSource.

Characters: Use the drop-down menu or manually enter a number to limit the number of characters in waypoint names.

Creating a Waypoint on a Map Feature: Select between 'Let MapSource decide its name, symbol and display' and 'Use the choices above.' When you select 'Use the choices above,' you may manually enter a name prefix and/or use the drop-down menus to select a symbol and how the waypoint will be displayed on the Graphic Map.

Time Tab: Sets up displayed time, either by the computer's local time zone, or by entering a UTC offset.

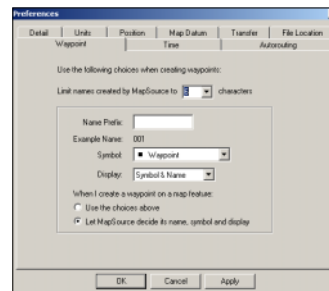
Autorouting Tab: Sets up preferences for automatic routing calculations when using a routable MapSource product. Select, deselect or set up the following for MapSource to automatically calculate a route: Calculation Style (Faster Time/Shorter Distance/Direct Route), Type of Vehicle, Avoid Highways, Avoid Toll Roads, Avoid U-Turns, and Average Driving Speeds on various types of roads. These features only apply to routable MapSource products. For more information, see "Creating Routes" on page 46.

View Menu

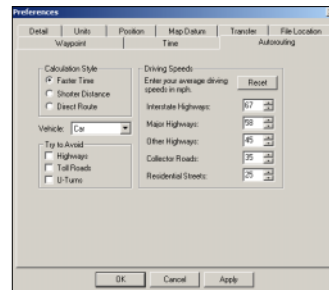
Show Selected Item on Map— When Waypoints, Routes, Maps or Tracks are selected in the Tab List, selecting this feature will display the selected item in the center of the Graphic Map. The menu heading changes to reflect the item(s) selected in the Tab List. For example, if a waypoint is selected in the Waypoints Tab List, the menu will read *Show Selected Waypoint on Map*.

Go To Position— Allows you to enter a latitude/longitude position to view on the Graphic Map.

Edit Menu/View Menu



Preferences—'Waypoint' Tab



Preferences—'Autorouting' Tab

Reference

View Menu

Show Selected Waypoint On Map	Ctrl+D
Go To Position...	Ctrl+T
Zoom In	+
Zoom Out	-
Zoom In Max	Ctrl +
Zoom Out Region	Ctrl -
<input checked="" type="checkbox"/> GPS Map Detail	Ctrl+G
Show Crosshair	Ctrl+H
Region	▶
Zoom Scale	▶
Toolbars	▶
<input checked="" type="checkbox"/> Status Bar	
Find...	Ctrl+F

View Menu

Zoom In— Decreases the zoom scale, showing a smaller area and more detail.

Zoom Out— Increases the zoom scale, showing a larger area and less detail.

Zoom In Max— Decreases the zoom scale to the smallest setting, showing the most detail.

Zoom Out Region— Increases the zoom scale to center on the region that is currently selected.

GPS Map Detail— With this item checked, MapSource shows the actual map info that will be loaded into the GPS. Unchecking this option will enable faster map drawing, and may reduce the need for a CD-ROM to be in your computer's CD-ROM drive.

Show Crosshair— When this item is selected, MapSource re-draws the map display to show a center point on the Graphic Map. A check mark next to this feature in the View Menu indicates that it is selected.

Region— Select a MapSource product and coverage region to display on the Graphic Map. You can select a coverage region from any MapSource product that has been installed on your computer. If you select a region that has been installed, but the corresponding CD-ROM is not in your computer's CD-ROM drive, a message may prompt you to insert the proper CD.

Zoom Scale— Allows you to quickly select a zoom scale from a list.

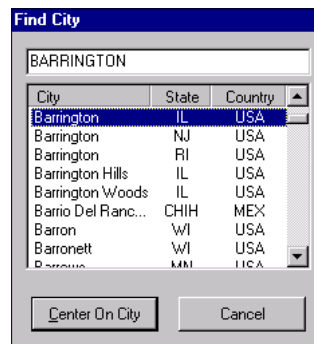
Toolbars— Allows you to individually select/deselect the File, Edit, View and Tools Toolbars to be shown or hidden on the PC screen. A check mark next to the toolbar name indicates those currently selected. You may also *Hide All* or *Show All* toolbars.

Status Bar— Allows you to show or hide the Status Bar at the bottom of the MapSource window. When this menu item is checked, the Status Bar will be displayed.

Find— Enables you to search for a city, point of interest, address or street and view it on the Graphic Map. Some MapSource products include an Advanced 'Find' dialog with additional criteria to help narrow your search. The basic Find window is entitled 'Find City' and the advanced Find window is simply entitled 'Find.' With MapSource products that are installed by region, you will only be able to find items in the maps that have been installed.

To find a city with the basic 'Find' feature and view it on the Graphic Map:

1. Select *Find* from the View Menu. The 'Find City' dialog appears.
2. Enter the name of the desired city and highlight the city in the list.
3. To display the highlighted city on the Graphic Map, click the **Center On City** button, press **Enter** on your keyboard, or double-click the highlighted city name. It may be necessary to Zoom IN to view the city name on the Graphic Map.



'Find City' Dialog



NOTE: Only cities in the selected region are listed. For example, if the selected region is Hawaii, cities in the continental U.S. will not be listed.

Reference

View Menu: Find

The screenshot shows the 'Find' dialog box with the following fields and buttons:

- Name: [] Select.. Search
- Address: [] Select.. Properties
- City: [Barrington] Select..
- State/Province: []
- Postal Code: [] OK
- Country: [] Cancel

The search results list contains the following entries:

- Barrington, Rhode Island, USA
- Barrington, Illinois, USA**
- Barrington, New Jersey, USA
- Barrington, Georgia, USA
- Barrington, Georgia, USA
- Barrington, Maryland, USA
- Barrington, New Hampshire, USA
- Barrington, New York, USA
- Barrington Center, Illinois, USA

Advanced 'Find' Dialog—City Search

To find a city with the advanced 'Find' feature and view it on the Graphic Map:

1. Select *Find* from the View Menu. The advanced 'Find' dialog appears.
2. Enter a city name in the 'City' field (you may also enter information in the other fields to narrow your search). If you are unsure of the city name, click the **Select** button to the right of the 'City' field to show a list of city "matches." Highlight the desired city and click the **Select City** button.
3. With the desired city name entered in the 'City' field, click the **Search** button to show a list of city/state matches to choose from. The first match will be displayed in the center of the Graphic Map and highlighted in the search results list.
4. Highlight the desired city and click the **OK** button to keep the selected city centered on the Graphic Map. To return to your previous map display, click the **Cancel** button.



NOTE: If you are using a MapSource product with "unlocked" data, the Advanced 'Find' feature will only locate points of interest within the unlocked region, but it will locate cities both within and outside the region.

To find a point of interest with the advanced 'Find' feature:

1. Select *Find* from the View Menu. The advanced 'Find' dialog appears.
2. Enter the name of a Point of Interest in the 'Name' field. If desired, click the **Select** button next to the 'Name' field to select from a list of "matches" for that name to help narrow your search.
3. Enter the city, state or both to enable the **Search** button.
4. Click the **Search** button. The first match will be displayed in the center of the Graphic Map and highlighted in the search results list.

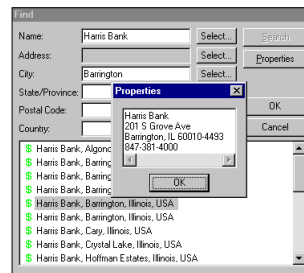
- Highlight the desired Point of Interest.
- To view the address and telephone number of the Point of Interest, click the **Properties** button (this may be helpful in distinguishing multiple Points of Interest with the same name). Click the **OK** button to exit the 'Properties' window.
- To keep the selected point displayed in the center of the screen, click the **OK** button. To return to your previous map display, click the **Cancel** button.

To find an address or street with the advanced 'Find' feature:

- Select *Find* from the View Menu. The advanced 'Find' dialog appears.
- Click the **Select** button to the right of the 'Address' field. The 'Select Address' window appears.
- Enter the number of the address in the 'Number' field. If the number is unknown, or if you want to only search for a street name, you may leave the 'Number' field blank.
- Enter the street name in the 'Street' field. A list of street name "matches" will appear to narrow your search. Highlight the desired street name from the list and click the **Select Address** button.
- The full address (or the street name) appears in the 'Address' field in the advanced 'Find' dialog. Enter the city, state, or both to enable the **Search** Button.
- Click the **Search** button. The first matching location will be centered on the Graphic Map and highlighted in the search results list. Highlight the desired location to view it on the map.
- To return to your previous map display, click the **Cancel** button. Click **OK** to exit the advanced 'Find' window and keep the map centered on the highlighted address or street.

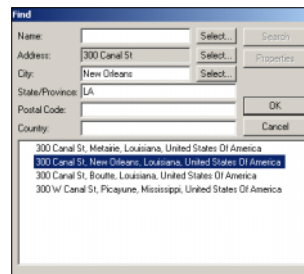
Reference

View Menu: Find



Advanced 'Find'—Point of Interest Search

Advanced 'Find' search results with the *Properties* for the selected Point of Interest displayed.



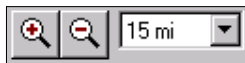
Advanced 'Find' Dialog—Address Search

Reference

Tools Menu

Z <u>o</u> om	z
H <u>a</u> nd	h
S <u>e</u> lection	s
✓ W <u>a</u> ypoint	w
R <u>o</u> ute	r
M <u>a</u> p	m
D <u>i</u> stance/Bearing	d
<hr/>	
U <u>n</u> lock Codes...	Ctrl+U
S <u>e</u> t PC Clock...	
G <u>e</u> t Unit ID...	

Tools Menu



You may also change the Zoom Scale by clicking the Zoom IN or Zoom OUT buttons, or by using the drop-down Zoom Scale list, all located in the View Toolbar.

Tools Menu

Zoom Tool— Enables you to quickly zoom to a specific area on the Graphic Map.

To zoom IN on the Graphic Map:

1. With the Zoom Tool selected, click the left mouse button to zoom IN by one step and re-center the Graphic Map on that point.
2. To zoom IN on a defined area, click and hold the left mouse key and draw a box around the area.

To zoom OUT on the Graphic Map:

1. With the Zoom Tool Selected, click the right mouse button will decrease the zoom scale by one step.



***NOTE:** Holding the Ctrl key while clicking the left mouse key will center the Graphic Map without changing the zoom level. Pressing the "+" and "-" keys on your keyboard also let you zoom IN and OUT.*

Hand Tool— Allows you to quickly pan around the Graphic Map.

To pan around the Graphic Map:

1. Place the Hand Tool on the Graphic Map, click and hold the left mouse button and drag the hand around the Graphic Map to view different areas. Release the mouse button to view the area. You may also use the Arrow Keys (Up, Down, Left, Right) on your keyboard as a shortcut to pan the Graphic Map in the desired direction.

Selection Tool— Allows you to select map features, waypoints, routes and tracks directly on the Graphic Map.

To select an item on the Graphic Map:

1. Place the Selection Tool on the desired item. The item will become highlighted in white and the name of the item will be displayed in a white box. To view details about a map feature, click the right mouse button on the item and select *Feature Properties* from the options menu.
2. To select a waypoint or route for editing, click the left mouse button on the item. The route or waypoint will be highlighted in yellow and can be edited. For more information on editing waypoints and routes, see “Editing Waypoints” on page 43 and “Editing Routes” on page 49.

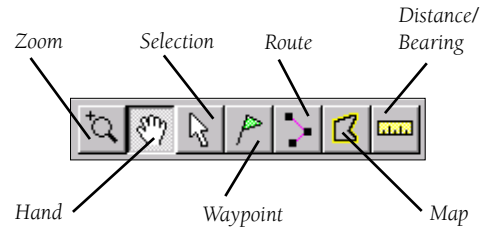
Waypoint Tool— Allows you to quickly create waypoints on the Graphic Map. For detailed information on creating waypoints using the Waypoint Tool, see “Creating Waypoints” on page 41.

Route Tool— Allows you to quickly create, or use existing waypoints on the Graphic Map to determine a route. For detailed information on creating routes using the Route Tool, see “Creating Routes” on page 46.

Map Tool— Allows you to select maps to be added to and removed from the Map Set. For more information, see “Creating and Using Map Sets” on page 57.

Reference

Tools Menu



Tools Toolbar

The tools available in the ‘Tools’ menu can be accessed through Toolbar shortcuts or keyboard shortcuts. To activate a tool, click the shortcut on the Toolbar or enter the shortcut on the keyboard.

Tools Keyboard Shortcuts

Zoom — z	Route — r
Hand — h	Map — m
Selection — s	Distance/Bearing — d
Waypoint — w	Unlock Codes — Ctrl + U

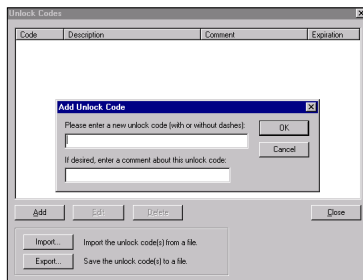
Reference

Tools Menu



Distance/Bearing Tool

When using the Distance/Bearing tool, the distance and bearing from a beginning point to the cursor will be displayed in the Status Bar at the bottom of the MapSource application window.



Adding an Unlock Code

Distance/Bearing Tool— Allows you to measure the distance and bearing from one point to another on the Graphic Map.

To determine a distance and bearing:

1. Place the Distance/Bearing Tool at a “beginning” point on the Graphic Map and click the left mouse button.

OR:

1. With any tool selected (except the Zoom Tool), place the cursor at a “beginning” point on the Graphic Map, click the right mouse button and select *Begin Measurement*.
2. Move the tool/cursor to an “end” point and click the left mouse button. The distance and bearing from the starting point to the finishing point will be displayed in the Status Bar.
3. You may continue to another “end” point, or click the right mouse button to end the operation. Select *Cancel* to stop measuring and keep the measurement displayed on the Graphic Map. Select *Clear Measurement* to stop measuring and clear the measurement from the Graphic Map.

Unlock Codes— Activates the Unlock Codes window, where you may view a list of unlocked map data, as well as add, delete and edit unlock codes. If you unlocked map data during installation, the unlock code and a description of the coverage area will show in the list.. If you chose not to unlock maps during installation, if you want to unlock another MapSource region, or if you want to unlock maps for a second GARMIN GPS unit, you may do so using the ‘Unlock Codes’ window and the UnlockWizard. See “Unlock Codes” on pages 2-4 for more information.

Set PC Clock— Allows you to synchronize the clock on your PC with the GPS clock. Click the **OK** button to set the PC Clock. Make sure your GPS is connected to a serial communication port on your computer. If you see the message “The GPS is not responding,” you may need to check the Serial Connection Settings.

Get Unit ID— Retrieves the Unit ID of your GPS unit. Click the **OK** button to get the Unit ID. Make sure your GPS is connected to a serial communication port on your computer. If you see the message “The GPS is not responding,” you may need to check the Serial Connection Settings.

Help Menu

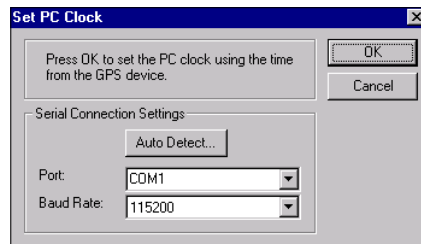
Contents— Displays the Help Contents tab. A copy of MapSource’s Quick Tour can be found here for easy reference.

Index— Displays the Help Index tab.

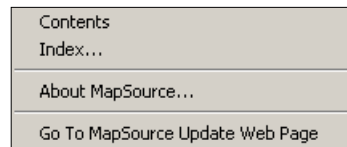
About MapSource— Displays the About Box. The About Box contains information about the MapSource application, including software version, USB driver versions, and a list of installed products.

Go To MapSource Update Web Page— Jumps to the ‘MapSource Updates and Downloads’ page of the GARMIN web site, so you may check for the latest available version of MapSource software to download. To update MapSource, click the “Download” link and follow the directions on your computer screen. Note: this will only update the MapSource program, not the map data.

Tools Menu/Help Menu



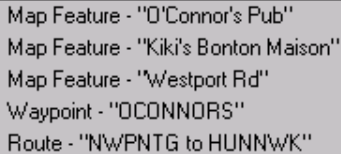
Set PC Clock



Help Menu

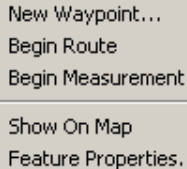
Reference

Right-Click Menu



Map Feature - "O'Connor's Pub"
Map Feature - "Kiki's Bonton Maison"
Map Feature - "Westport Rd"
Waypoint - "OCONNORS"
Route - "NWPNTG to HUNNWK"

When you click the right mouse button on a location that has multiple features, the first menu will be a list of all those items. Select one of these items and the appropriate right-click menu options will appear.



New Waypoint...
Begin Route
Begin Measurement
Show On Map
Feature Properties...

Map Feature Right-Click Menu Options

Right-Click Menus

MapSource includes shortcuts to many functions of the main menu through the Right-Click Menus. With any tool selected (except the Zoom Tool), click the right button on your mouse anywhere on the Graphic Map, and a menu of options will appear for that feature or location. Right-clicking on an item in one of the Data Tabs will also activate a menu of options for that item.

When there is more than one map feature at a given location (such as a waypoint that is part of a route), a list of those features will appear first, with the name and type of feature. Select the desired feature from the list, and the right-click menus for that feature will appear.

Map Feature Right-Click Menu

By clicking the right mouse button on an open area or on a feature of the Graphic Map (such as a Point of Interest, Exit, Fishing Area or Navigational Aid—not a route, waypoint, or track), the following menu options may appear:



NOTE: The 'New Waypoint', 'Begin Route' and 'Begin Measurement' options are default right-click options. They will be available by clicking the right mouse button anywhere on the Graphic Map.

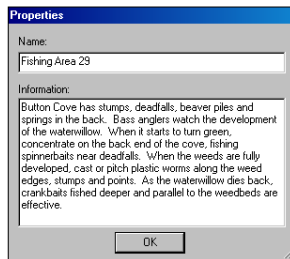
New Waypoint— Creates a new waypoint at the selected map location and accesses the ‘Waypoint Properties’ dialog. For more information, see “Creating Waypoints” on page 41.

Begin Route— Activates the Route Tool and begins a route at the selected map location. For more information, see “Creating Routes” on page 46.

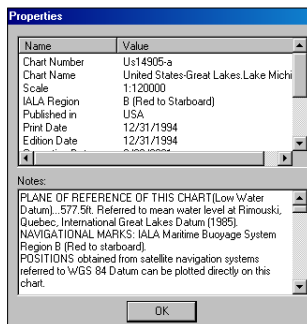
Begin Measurement— Activates the Distance/Bearing Tool, allowing you to measure the distance and bearing from the location you selected to another location on the Graphic Map. For more information, see “Distance/Bearing Tool” on pages 32-33.

Show on Map— “Zooms” to the selected map feature and centers it on the Graphic Map.

Feature Properties— Activates the Properties for the selected map feature, such as the address and phone number of a Point of Interest, services and facilities at an Exit, information about a Fishing Hot Spot or Lake, or details about a Marine Chart.



**Map Feature Properties—
Fishing Hot Spots**



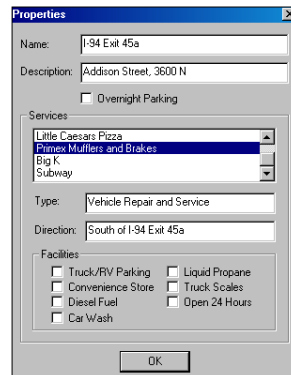
**Map Feature Properties—
BlueChart**

Reference

Right-Click Menus



Map Feature Properties—Point of Interest



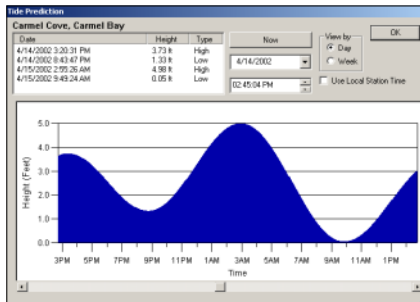
Map Feature Properties—Exit Services

Reference

Right-Click Menus



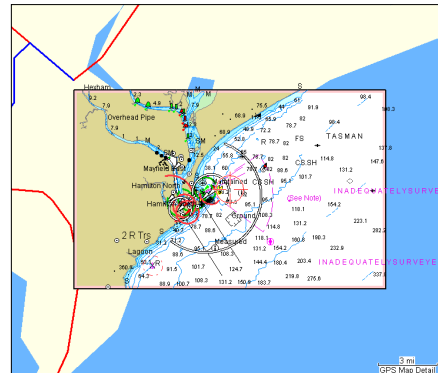
Tide Station Symbol



'Tide Prediction' Window

Predict Tides— By clicking the right mouse button on a Tide Station (If your MapSource product supports this feature), this menu option appears. Selecting this option displays the current tide information for the selected location. On the 'Tide Prediction' window, you may also view the tide information for a different time or date, choose to view the information either by day or by week, and choose to view it using the local station time.

Show This Map Only/Show All Maps— This feature applies to BlueChart regions of MapSource, where map areas frequently overlap. With the Map Tool selected and a map area highlighted in yellow, right-clicking the map area will access this additional option. Select *Show This Map Only* to view detail only within the selected map. To cancel, right-click the map area again and select *Show All Maps*.



'Show This Map Only' Feature

Right-Click Menus

Move Waypoint
New Waypoint... Begin Route Begin Measurement
Remove Waypoint from Route
Cut Copy Delete Waypoint
Show Selected Waypoint On Map Waypoint Properties...

Waypoint Right-Click Menu Options

Waypoint Right-Click Menu

By clicking the right mouse button on a waypoint on the Graphic Map or in the Waypoints Tab List, the following options may appear:

Move Waypoint— Activates the Selection Tool and allows you to move the selected waypoint to another location on the Graphic Map. For detailed information on moving a waypoint, see “Editing Waypoints” on page 43.

New Waypoint, Begin Route, Begin Measurement— see page 35 for descriptions of these options.

Remove Waypoint From Route— Selecting this option will remove the selected waypoint from the route, but will not delete the waypoint (this option is only enabled if the selected waypoint is a route waypoint). For more information, see “Editing Routes” on page 49.

Cut/Copy/Paste— Just like the functions in the Edit Menu, these options allow you to cut, copy and paste waypoints from one active MapSource document to another.

Delete Waypoint— Deletes the selected waypoint.

Show Selected Waypoint on Map— “Zooms” to the selected waypoint and centers it on the Graphic Map.

Waypoint Properties— Activates the ‘Waypoint Properties’, allowing you to review and edit the properties for the selected waypoint. For more information, see “Editing Waypoints” on page 43.

Right-Click Menus

Insert Route Section
Invert Route
Recalculate Route
New Waypoint...
Begin Route
Begin Measurement
Cut
Copy
Delete Route
Show Selected Route On Map
Route Properties...

Route Right-Click Menu Options

Route Right-Click Menu

By clicking the right mouse button on a route on the Graphic Map or in the Routes Tab List, the following options may appear:

Invert Route— Reverses the waypoint order in the selected route.

This also reverses the route name, if the route name is the Autaname default “<begin point> to <end point>”.

Recalculate Route— If you have modified the Autorouting Preferences (see page 25), selecting this option will recalculate the selected route according to the new preferences. You may also use this option to have a routable MapSource product recalculate and create an automatic route from a route previously created with another (non-routable) MapSource product.

New Waypoint, Begin Route, Begin Measurement— see page 35 for descriptions of these options.

Cut/Copy/Paste— Just like the functions in the Edit Menu, these options allow you to cut, copy and paste routes from one active MapSource document to another.

Delete Route— Deletes the selected route.

Show Selected Route on Map— “Zooms” to the selected route and centers it on the Graphic Map.

Route Properties— Activates the ‘Route Properties’, allowing you to review and edit the properties for the selected route. For more information, see page 51.

Right-Click Menus

New Waypoint...
Begin Route
Begin Measurement
Cut
Copy
Paste
Delete Track
Show Selected Track On Map
Track Properties...

Track Right-Click Menu Options

Additional Right-Click Menu options that may appear for a selected route:

Resume Route— By selecting a route, then right-clicking the start or end point of that route, this options appears, allowing you to extend the route to an existing waypoint or map location.

Insert Route Section— By selecting a route, then right-clicking a leg of that route (between two waypoints) on the Graphic Map, this option appears, allowing you to insert a new point in that leg of the route. For more information, see “Editing Routes” on page 49.

Replace Route Section— By selecting a route with at least three waypoints, then right-clicking a waypoint in that route on the Graphic Map, this option appears, allowing you to move the waypoint to a new location. For more information, see “Editing Routes” on page 48.

Track Right-Click Menu

By clicking the right mouse button on a track on the Graphic Map or in the Tracks Tab List, the following options may appear:

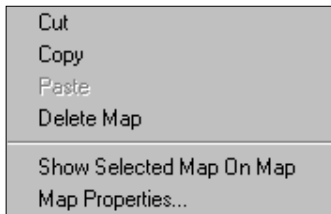
New Waypoint, Begin Route, Begin Measurement— see page 35 for descriptions of these options.

Cut/Copy/Paste— Just like the functions in the Edit Menu, these options let you cut, copy and paste tracks from one active MapSource document to another.

Delete Track— Deletes the selected track.

Show Selected Track on Map— “Zooms” to the selected track and centers it on the Graphic Map.

Right-Click Menus



Maps Tab List Right-Click Menu Options

Track Properties— Activates the ‘Track Properties’, allowing you to review and edit the properties for the selected track. For more information on Tracks, see page 53.

Maps Tab List Right-Click Menu

By clicking the right mouse button on a map in the Maps Tab List, the following options map appear:

Cut/Copy/Paste— Just like the functions in the Edit Menu, these options let you cut, copy and paste maps from one active MapSource document to another.

Delete Map— Deletes the selected map from the Maps Tab List.

Show Selected Map on Map— “Zooms” to the selected map and centers it on the Graphic Map.

Map Properties— Activates the ‘Map Properties’, which shows the name, type of coverage area, and size of the map. For more information on maps, see “Creating and Using Map Sets” on page 57.

Creating Waypoints

A waypoint is a geographic location stored in memory. Waypoints can be created in MapSource using the Waypoint Tool or the 'Waypoint Properties' dialog box. When a waypoint is created, MapSource will automatically assign a name to the waypoint based on its location. If you created the waypoint on a map feature, the waypoint name will be an abbreviation of the name of the feature. If the waypoint is created on an open location, MapSource will assign a numeric name to the waypoint. All waypoint properties can be changed, allowing you to customize the waypoint for display and use.

Creating a Waypoint with the Waypoint Tool

The Waypoint Tool can be selected three ways: by choosing *Waypoint* in the Tools Menu, by clicking on the Waypoint Tool icon in the Tools Toolbar, or by using the keyboard shortcut "w".

When the Waypoint Tool is selected, a flag similar to the Waypoint Tool icon will appear beside the mouse pointer on the Graphic Map.

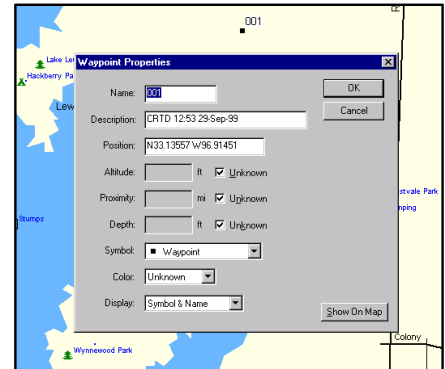
To create a Waypoint on the Graphic Map:



1. With the Waypoint Tool selected, position the mouse pointer at a location on the Graphic Map.
2. Click the right mouse button and select *New Waypoint*, or just click the left mouse button. The 'Waypoint Properties' dialog box appears.
3. Make any desired changes to the 'Waypoint Properties', then click the **OK** button to save the new waypoint. To reject the waypoint click the **Cancel** button.

Reference

Creating Waypoints

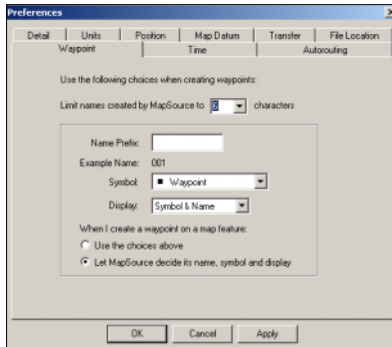


Creating a Waypoint

When you create a Waypoint on the Graphic Map, the 'Waypoint Properties' dialog box is displayed. To accept the new waypoint as is, press 'OK'. To reject the waypoint click on 'Cancel.'

Reference

Creating Waypoints



Remember that you can set up preferences for creating waypoints on the Waypoint Tab under Preferences in the Edit Menu.

Creating a Waypoint with the Waypoint Properties

A waypoint can also be created based on the center of the Graphic Map display by using the Waypoint Properties.

To create a Waypoint with the Waypoint Properties:

1. Select *New Waypoint* from the Edit Menu. This will display the 'Waypoint Properties' dialog box. MapSource will assign a name and location based on the center of the Graphic Map.
2. Make any desired changes to the 'Waypoint Properties', then click the **OK** button to save the new waypoint. To reject the waypoint, click the **Cancel** button.

Things to remember about Waypoints:

- When changing the name or description, remember that GARMIN GPS products can only display a limited number of characters. The name or description will be truncated in the GPS if it exceeds the unit's limit. If multiple waypoints have identical names after truncation, only one of the waypoints will be stored in the GPS. Refer to your GPS owner's manual to determine your GPS unit's limitations.
- All MapSource waypoints can contain proximity information. If your GPS is capable of using proximity waypoints and new waypoints that contain a proximity range are saved to your GPS, then all waypoints in the GPS unit's proximity list will be deleted and replaced with the new MapSource waypoints.
- If you select a symbol that does not exist in your GPS, the waypoint will be represented by a square when transferred to your GPS.

Editing Waypoints

Most editing features for waypoints can be performed in the 'Waypoint Properties' dialog box. To activate the 'Waypoint Properties', do one of the following:

- Double-click a waypoint name in the Waypoints Tab List
- Double-click a waypoint on the Graphic Map
- Highlight a waypoint in the Waypoints Tab List or on the Graphic Map, then select *Waypoint Properties* from the Edit Menu
- Highlight a waypoint in the Waypoints Tab List or on the Graphic Map, then click the right mouse button and select *Waypoint Properties*

Waypoint Properties

There are nine properties that can be modified for the selected waypoint: Name, Description, Position, Altitude, Proximity, Depth, Symbol, Color, and Display. You may also choose to center the waypoint on the Graphic Map by clicking the **Show on Map** button.

Name— Most GARMIN GPS systems limit the name to six characters. If the length of the name exceeds the limitations of your unit, the name will be truncated.

Description— A description can be entered to help identify the waypoint. GARMIN GPS units have a maximum number of characters allowed in the description field. If the description that you enter exceeds the unit limitation, the description will be truncated. Refer to the GPS unit's owner's manual to determine your unit's limitations.

Reference

Editing Waypoints

The screenshot shows the 'Waypoint Properties' dialog box with the following fields and values:

- Name: KNSCTY
- Description: Kansas City (Mo-Ks)
- Position: N39 03.832 W94 42.134
- Altitude: [] ft Unknown
- Proximity: [] mi Unknown
- Depth: [] ft Unknown
- Symbol: [v] Waypoint
- Color: [v] Unknown
- Display: [v] Symbol & Name

'Waypoint Properties' Dialog Box

Reference

Editing Waypoints

The screenshot shows the 'Waypoint Properties' dialog box. The title bar reads 'Waypoint Properties' with a close button on the right. The dialog contains the following fields and controls:

- Name:** A text box containing 'KNSCTY' and an 'OK' button to its right.
- Description:** A text box containing 'Kansas City (Mo-Ks)' and a 'Cancel' button to its right.
- Position:** A text box containing 'N39 03.832 W94 42.134'.
- Altitude:** A text box with 'ft' next to it and a checked checkbox labeled 'Unknown'.
- Proximity:** A text box with 'mi' next to it and a checked checkbox labeled 'Unknown'.
- Depth:** A text box with 'ft' next to it and a checked checkbox labeled 'Unknown'.
- Symbol:** A dropdown menu showing 'Waypoint'.
- Color:** A dropdown menu showing 'Unknown'.
- Display:** A dropdown menu showing 'Symbol & Name'.
- A 'Show On Map' button is located at the bottom right of the dialog.

Clicking the **OK** button saves the changes you made and exits the 'Waypoint Properties', and clicking the **Cancel** button cancels any changes and exits the 'Waypoint Properties'.

Position— The coordinates of the waypoint are displayed in the 'Position' field. The coordinates will be displayed according to the Position Format set up in Preferences. Enter new coordinates to change the position of the waypoint.

Altitude— If known, you can enter an altitude for the waypoint. If the altitude is unknown, place a mark in the 'Unknown' checkbox.

Proximity— Enter a range for a proximity warning. This property is not used by all GARMIN GPS systems. If you don't want to include Proximity data or if your unit is not compatible with proximity data, place a mark in the 'Unknown' checkbox.

Depth— Enter a depth for underwater waypoints. This is only compatible with GPS/Sounder combination units. If the depth is unknown or your unit is not compatible, place a mark in the 'Unknown' checkbox.

Symbol— Allows you to choose from over 100 different symbols. If you select a symbol that is not supported by your GPS system, it will be represented with a square symbol.

Color— This property allows the user to select from 16 colors for the waypoint. This property does not apply to all GARMIN GPS systems. Refer to your GPS owner's manual to determine if your unit is capable of displaying waypoint colors.

Display— Allows you to choose how the waypoint will be displayed. There are three settings to choose from: Symbol only, Symbol and Name, or Symbol and Description.

Show On Map— Centers the waypoint on the Graphic Map while keeping the 'Waypoint Properties' window open. You may need to move the 'Waypoint Properties' window to see the waypoint on the map.

Editing Waypoints

Moving a Waypoint on the Graphic Map:

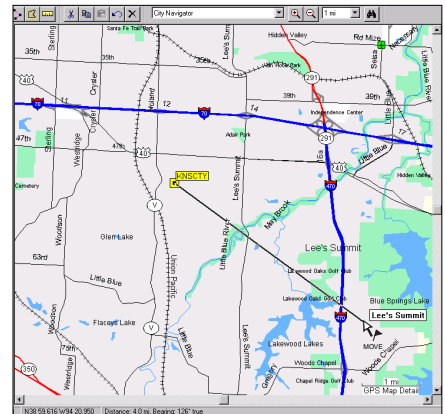
1. Choose the Selection Tool located on the Toolbar or in the Tools Menu.
2. Right-click the mouse on the desired waypoint and select *Move Waypoint*, or click the left mouse button on the waypoint to select it (the waypoint will be highlighted in yellow), then click on it again. Do not double click the waypoint, as that will display the 'Waypoint Properties' dialog box.
3. The mouse pointer will now have the word "MOVE" and a small icon of the Waypoint Tool below it. Move the mouse pointer to the new location and click the left mouse button to anchor the waypoint. You may also right-click the mouse pointer on the new location and select *Place Waypoint Here* to anchor the waypoint, or select *Cancel* to return the waypoint to its original location.

Deleting Waypoints

You can delete a waypoint on the Graphic Map or in the Waypoints Tab List.

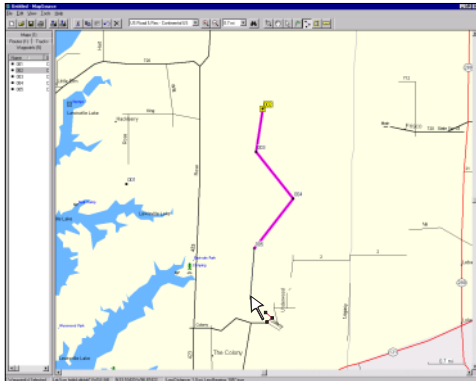
To delete a Waypoint from the Map or the Waypoints Tab:

1. With the Selection Tool, highlight the waypoint in the Waypoints Tab List or on the Graphic Map. Press the **Delete** key on your keyboard or select *Delete Waypoint* from the Edit Menu. OR, click the right mouse button on the desired waypoint and select *Delete Waypoint*.
2. To delete multiple waypoints at the same time, draw a box around the waypoints on the Graphic Map, or hold down the **Shift** key while selecting the waypoints individually. After the waypoints are selected, either press the **Delete** key, or select *Delete Waypoints* from the Edit Menu, or right-click the mouse and select *Delete Waypoints*.



Moving a Waypoint

Creating Routes



Creating a Direct Route with the Route Tool

Creating Routes

There are two ways to create a route in MapSource—on the Graphic Map with the Route Tool, or with the ‘Route Properties’ dialog box. Depending on the MapSource product you are using, you may create a direct route (a straight-line route), or an automatic route (a turn-by-turn route).



NOTE: *Not all MapSource products can create an automatic route. You must be using a routable MapSource product for MapSource to automatically calculate a route.*

Using the Route Tool

The Route Tool can be selected several ways: by choosing *Route* in the Tools Menu, by clicking on the Route Tool icon in the Tools toolbar, and by using the keyboard shortcut “r”. You may also start a route by clicking the right mouse button on the desired starting point on the Graphic Map, and then selecting *Begin Route*.

Creating a direct route with the Route Tool:



1. After selecting the Route Tool, click the waypoints or map locations in the sequence you want them to appear in the route. If there is not a waypoint where you click, a new waypoint will be created at that location. As you continue, route legs will be created in a direct line from one point to the next.
2. When you have entered all of the points that you want in the route, press **Esc** on your keyboard or right-click to end the route. A route will be created and automatically named using the names of the first and last waypoints.

Creating an automatic route with the Route Tool:

1. Follow the previous directions for "Creating a direct route with the Route Tool."
2. With a routable MapSource product, MapSource will automatically calculate a turn-by-turn route. The Auto-Route will be displayed on the Graphic Map, along the roads it follows and with the turns it takes, instead of showing a direct line from one point to the next. Detailed information about an Auto-Route's turns and directions can be viewed in the 'Route Properties' for that route.

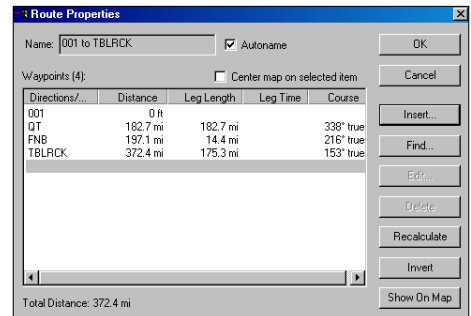
Using the Route Properties

You may create a route with the Route Properties by inserting waypoints, and with some MapSource products, you may also insert points of interest and cities through the Find feature. Start a new route with the Route Properties by selecting *New Route* in the Edit Menu or by using the keyboard shortcut "**Ctrl + R**".

Creating a direct route with the Route Properties:

1. With the 'Route Properties' dialog box displayed, click the **Insert** button to display the 'Select Waypoint' dialog box. A list of waypoints will appear.
2. Highlight the waypoint that you want to insert, then click **OK**. Repeat the process, choosing the waypoints in the order that you wish to navigate them. If enabled, you may also use the **Find** button to search for a city or point of interest to add to the route (see pages 27-30 for more information on using the advanced 'Find' feature). The route points will be listed in the 'Route Properties' as they are added to the route.
3. When you are finished, click the **OK** button to save the new route.

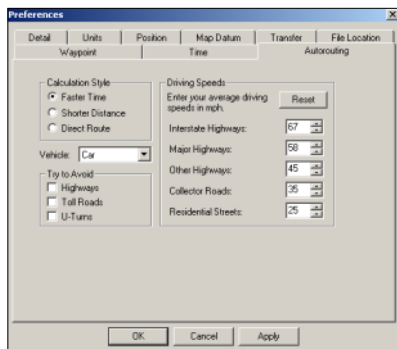
Creating Routes



Creating a Direct Route with the 'Route Properties' Dialog Box

Reference

Creating Routes



Remember that you can set up preferences for creating automatic routes on the 'Aurouting' Tab under 'Preferences' in the Edit Menu.

Creating an automatic route with the Route Properties:

1. Follow the previous directions for "Creating a direct route with the Route Properties."
2. With a routable MapSource product, MapSource will automatically calculate a turn-by-turn route. As you add points, the directions and turns will be listed between each waypoint in the 'Route Properties' dialog box. The automatic route will also show the roads it follows and turns it takes on the Graphic Map, instead of showing a direct line from one point to the next.

Adding a map location to an automatic route with the Route Properties:

1. Select a point in the route where you want to add a map location. To add a map location at the end of the route, highlight the blank space at the end of the route list. To add a point anywhere else, click the point in the route list that will follow the location you add.
2. Click the **Find** button. The advanced 'Find' dialog box will appear, allowing you to search for a city, point of interest or address to add to the route. See pages 27-30 for more information on using the advanced 'Find' feature.
3. When you have found the desired map location, click the **OK** button in the advanced 'Find' dialog box. The map location will be added directly before the point you selected in the route and MapSource will automatically calculate the new location into the route.

Naming a Route

If the 'Autoname' checkbox is marked, MapSource will automatically name the route using the names of the first and last waypoints entered in the route. To enter a different name, remove the mark from the 'Autoname' checkbox and enter a name in the 'Name' field.

Inverting a Route

You can reverse the order of the route waypoints by clicking the **Invert** button. This feature is convenient when you want to navigate a route in the reverse direction. When finished, click **OK** to save the route.

Editing Routes

Editing Routes on the Graphic Map



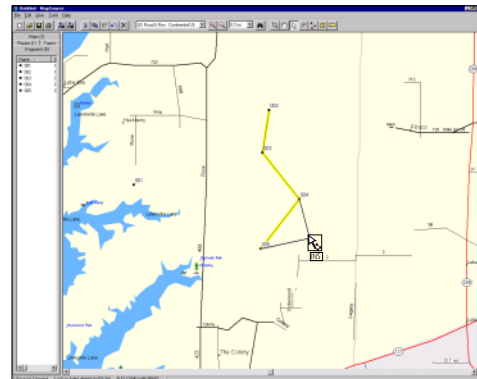
Routes can be edited on the Graphic Map using the Selection Tool. You may choose the Selection Tool by clicking the Selection Tool icon from the Tools Toolbar, by choosing *Selection* from the Tools Menu, or by using the keyboard shortcut “s”. The Selection Tool allows you to add waypoints to the beginning, middle or end of a route, remove a waypoint from a route, and move a waypoint to a new location in a route.

Inserting Waypoints into an existing Route:

1. With the Selection Tool activated, select the route in the Routes Tab List or on the Graphic Map by clicking on it with the left mouse button. When the route is selected, it will be displayed in yellow.
2. Click the left mouse button on the route leg you want to add a waypoint to, or click the right mouse button on the route leg and select *Insert Route Section*. The mouse pointer will now have the letters “INS” and a small icon of the Route Tool below it. The route leg will “rubber band,” allowing you to stretch it to an existing waypoint or a map location.
3. When you have the mouse pointer at the desired position, click the right mouse button and select *Add to Route*, or just click the left mouse button to add the point to the route leg.
4. Repeat these steps to insert additional waypoints. Click the left mouse button away from the route or press the **Esc** key on your keyboard to quit and save the changes to the route.

Reference

Editing Routes



Adding a Waypoint to a Route

Moving a Waypoint to another location in a Route:

1. With the Selection Tool activated, select the route in the Routes Tab List or on the Graphic Map by clicking on it with the left mouse button. When the route is selected, it will be displayed in yellow.
2. Left-click on the waypoint you want to move, or right-click the waypoint and select *Replace Route Section*. The mouse pointer will now have the letters "REPL" and a small icon of the Route Tool below it. The route leg will "rubber band," allowing you to move the waypoint to a new location.
3. Position the mouse pointer where you want to move the waypoint. Click the right mouse button and select *Add to Route*, or just click the left mouse button to move the waypoint.

Editing Routes with the Route Properties

Many editing functions for routes can be performed in the 'Route Properties' dialog box.

To edit a Route with the Route Properties:

1. Select the route in the Routes Tab List or on the Graphic Map.
2. Choose *Route Properties* from the Edit Menu, or click the right mouse button and select *Route Properties*
3. Make the desired changes and click the **OK** button to save the changes and exit.

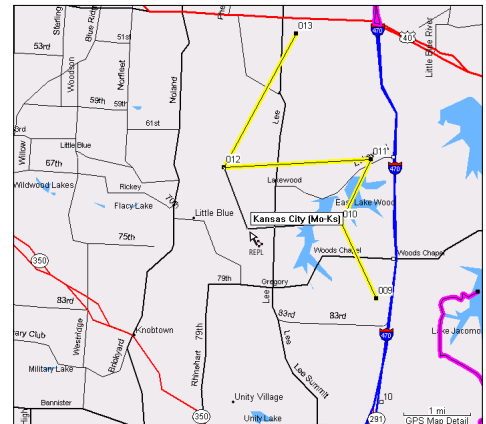
Name— To change the route name, make sure the Autaname checkbox is not marked and type in a new name.

Center Map on Selected Item— With this box checked, when you select a point in the route, it will automatically be centered on the map while you view the 'Route Properties.'

OK— Select this button to save changes to the route and exit the 'Route Properties' window.

Reference

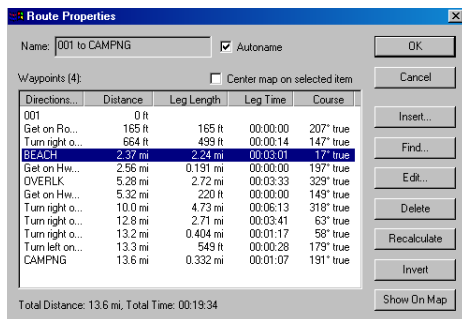
Editing Routes



Moving a Route Waypoint

Reference

Editing Routes



The 'Route Properties' Dialog Box with a Routable MapSource Product

When using a routable product, the 'Route Properties' dialog box will show directions and turns from one waypoint to the next in the selected route.

Cancel— Select this button to cancel any changes made to the route and exit the 'Route Properties' window.

Insert— To add a waypoint, click the waypoint in the list that will follow the point you want to add. Click the **Insert** button and select a waypoint from the list. The waypoint will be inserted directly before the point you selected in the route.

Find— If you are using a MapSource product that includes the Advanced 'Find' feature, this button will be activated, allowing you to search for a city or point of interest to add to the route. See "Adding a map location to an automatic route with the Route Properties" on pages 47-48 for more information.

Edit— Select the waypoint in the route list and click the **Edit** button. The 'Waypoint Properties' for the selected waypoint will appear, allowing you to review and edit the waypoint. For more information, see "Editing Waypoints" on page 43.

Delete— To remove a waypoint from a route, select the waypoint on the route list and click the **Delete** button.

Recalculate— If you have modified the Autorouting Preferences in the Edit Menu, you may recalculate an existing route according to the new preferences by clicking the **Recalculate** button. You may also use the **Recalculate** button to have a routable MapSource product change a direct route into an automatic route. For more information on setting up the 'Autorouting Preferences' see page 25. This feature only applies to routable MapSource products.

Invert— Reverses the waypoint order, making the last waypoint become the first waypoint in the route.

Show On Map— Centers the map on the selected route.

Deleting a Route

You can delete a route on the Graphic Map or in the Routes Tab List.

To delete a Route:

1. With the Selection Tool activated, select the desired route in the Routes Tab List or on the Graphic Map by clicking on it with the left mouse button. When the route is selected, it will be highlighted in yellow.
2. Press the **Delete** key on your keyboard; or select *Delete Route* from the Edit Menu; or click the right mouse button on the highlighted route either on the Graphic Map or in the Routes Tab List and select *Delete Route*.

Tracks

Tracks can be created in MapSource by connecting your GARMIN GPS to your computer and using the Real Time Tracking feature in the GPS Tab. Those tracks, and any tracks transferred to MapSource from a GPS, will be listed in the Tracks Tab List.

Real Time Tracking and the GPS Tab

When real time tracking is enabled, MapSource reads information from the GPS, shows the GPS as a red triangle on the Graphic Map, displays the tracking data in the GPS Tab, and records a track.

In order to do real time tracking with a locked MapSource product, you must do the following:

- Have a valid unlock code for your GPS unit installed in MapSource
- Receive real time information from a GARMIN unit that supports locked maps
- The GPS unit must be in GARMIN transfer mode, not NMEA mode

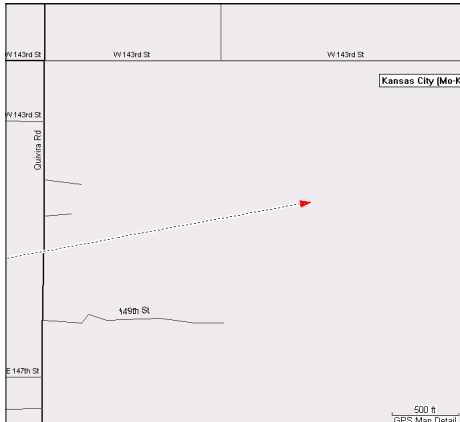
Deleting Routes/ Tracks

Name	Points	Start Time	Elapsed Time	Length	Avg Speed
Active Log 001	2	8/27/01 4:05:16 PM	00:00:01	0 ft	0.0 mph
Active Log 002	193	8/27/01 4:05:22 PM	00:02:32	3.93 mi	59.0 mph
Active Log 003	52	8/27/01 4:08:37 PM	00:00:51	1.63 mi	115 mph

Tracks Tab List

Reference

Real Time Tracking/ GPS Tab



Real Time Tracking on the Graphic Map

With the 'Keep vehicle visible on map' and 'Record track' features selected, MapSource shows the location of the GPS/vehicle (red triangle), keeps it centered on the Graphic Map, and records the track it follows.

To start Real Time Tracking:

1. Check that your GPS is properly connected to a serial port on your computer. Set the "Serial Data Format" on your GPS to either GARMIN or NMEA format. MapSource automatically reads the data format so you don't need to set up the format in MapSource. Only the more recent GARMIN GPS's will output data in GARMIN format.
2. Select the GPS Tab to have MapSource record the track, be sure the 'Record Track' box is checked. The track will be recorded and listed in the Tracks Tab.
3. To have MapSource automatically adjust the map to keep the vehicle/ GPS (red triangle) visible on the Graphic Map, check the box next to 'Keep Vehicle Visible on Map.'
4. The first field describes the current Tracking Status and should display the message "Tracking is disabled." Click the **Start Tracking** button. One of the following messages may appear in the Tracking Status field: "Trying GARMIN format", "Trying NMEA format", "3D Navigation", "3D Differential", "2D Navigation", "2D Differential" or "Poor GPS Coverage." As MapSource reads the GPS data, the tracking data will appear in the GPS Tab data fields below the Tracking Status field.
5. To stop real time tracking, click the **Stop Tracking** button.

GPS Tab Data Fields

The GPS Tab displays the data gathered from the GPS in real time, including tracking status, speed, altitude (not available in NMEA format), current compass heading ('track' field), compass bearing, position coordinates, date and time.

EPE— (Estimated Position Error) The number in this field indicates the estimated accuracy of the horizontal position fix.

DOP— (Dilution of Precision) This measures satellite geometry quality (the number of satellites received and their location in relation to each other) on a scale from one to ten—the lower the number, the better the accuracy (not available in GARMIN format).

Keep Vehicle Visible on Map— With this function selected, the vehicle (red triangle) will remain centered on the Graphic Map during real time tracking, and the map display will continually change to show where the “vehicle” is traveling. Check/uncheck the box to select/deselect this feature.

Record Track— Check this box to select or deselect this function to have MapSource record the track that your GPS is navigating. MapSource will automatically assign a track name and display it in the Tracks Tab List.

Viewing a Track on the Map

To view a Track on the Graphic Map:

1. Highlight the track name in the Tracks Tab List.
2. Select *Show Selected Track on Map* from the View Menu or from the Right-Click Menu. The track will be centered on the Graphic Map and highlighted in yellow. Zoom IN to view track points and track legs.


Viewing and Editing Track Properties

The ‘Track Properties’ can be activated by doing one of the following:

- Highlight a track in the Tracks Tab or on the Graphic Map, then select *Track Properties* from the Edit Menu.
- Highlight a track in the Tracks Tab or on the Graphic Map, then click the right mouse and select *Track Properties* from the Menu.
- Double-click the left mouse button on the track name in the Tracks Tab or on the track displayed on the Graphic Map.

Reference

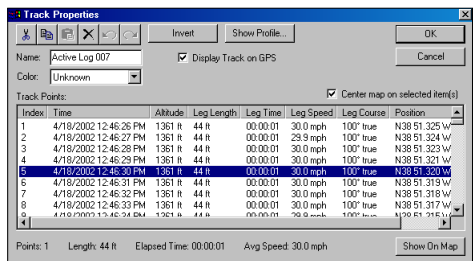
GPS Tab/ Track Properties

Maps (4)	Waypoints (13)	
Routes (17)	Tracks (7)	GPS
Stop Tracking		
3D Navigation		
Speed 30.0 mph	Altitude 1361 ft	
Track 100° true		
		
N38 51.313 W94 47.657		
4/18/2002		
12:46:36 PM		
EPE 49 ft	DOP	
<input checked="" type="checkbox"/> Keep vehicle visible on map		
<input checked="" type="checkbox"/> Record track		

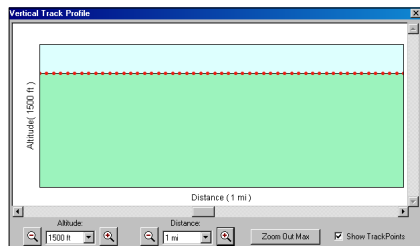
Real Time Tracking on the GPS Tab

Reference

Track Properties



'Track Properties' Window



'Vertical Track Profile' Window

Track Properties

The 'Track Properties' window lets you change the track name, assign a color (if your GPS can display colors), invert the track, view a vertical profile of the track, and view and edit track points.

Name— displays the track name.

Color— choose from 16 colors for displaying the track on your GARMIN GPS unit.

Invert— reverses the order of the track points.

Show Profile— displays a vertical profile of the track. Zoom IN and OUT to adjust the distance and altitude scales, and choose to show or hide track points. Click the left mouse button on the profile to view the distance and altitude at that location (you may need to move the scroll bars to view the entire profile, depending on the zoom scale).

Display Track on GPS— keeps the track displayed on the GPS.

Center Map on Selected Item— with this option selected, any time a track point is highlighted it will automatically be displayed in the center of the Graphic Map while you view the 'Track Properties'.

Track Points List— shows details of each track point. When points are highlighted, the selected leg of the track is highlighted in blue on the Graphic Map and the editing buttons are enabled.

Cut/Copy/Paste/Delete/Undo/Redo— editing buttons like the functions in the Edit Menu. These options let you cut, copy, paste and delete portions of the track. You may also undo and redo these editing actions.

Show on Map— select this button to view the revised track on the map while keeping the 'Track Properties' window open.

OK— saves the changes and closes the ‘Track Properties’ window.

Cancel— cancels any changes and closes the ‘Track Properties’.

‘Track Properties’ Right-Click Menu— by clicking the right mouse button in the ‘Track Properties’ window, the following options map appear: Cut, Copy, Delete, Paste and Select All.

Creating and Using Map Sets



Not all GARMIN GPS systems can use detailed maps. Check your GPS owner’s manual to see if your unit is compatible.

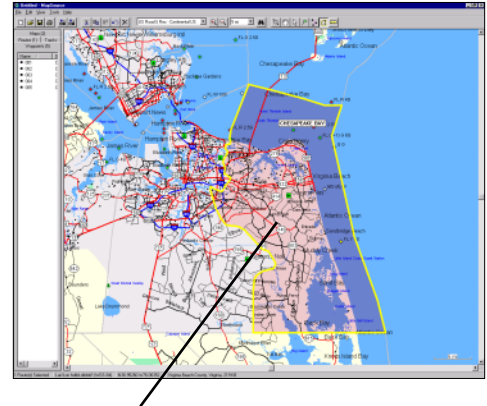
What is a Map Set?

A Map Set is one or more detailed regional maps selected from the Graphic Map to be saved for use on your GARMIN GPS unit. The regions are determined by the MapSource data that you have loaded. You can select maps from more than one MapSource data source in a Map Set, but you will only see data from one data source on your GPS.

As an example, if you select both Topographical and Roads & Recreational data for the same geographical region, you WILL NOT see a combination or topographic and road data. You will only see data from the Roads & Recreation data set.

Reference

Map Sets



Selecting a Detailed Regional Map

When the ‘Map’ Tool is placed within the boundaries of a detailed map, the border of the detailed map is outlined in yellow. To select the map, click the mouse while the border is selected. When the map is added to the Map Set, the area of the detailed map will be shaded in pink.

Reference

Map Sets



When you have added all the maps to the Map Set that you want, click the 'Save to Device' button in the toolbar to save the maps to your GPS unit or a data card. See pages 16-18 for more information on transferring data.

Selecting a regional map using the Map Tool:



1. Select a Zoom Scale that will allow you to view the boundaries of the desired regional map (most can be seen at the 30 mile/50 km zoom scale).
2. Choose *Map* from the Tools Menu. When the Map Tool is located within a detailed regional map, the borders of the region will be outlined in yellow and the region name/memory requirement will be displayed in the Status Bar. The MapSource data that you have loaded determines the geographical map boundaries, and each product has different boundary areas.



NOTE: If you have a MapSource product with map areas that are available for purchase separately, you will only be able to select those maps that you have purchased and installed on your computer.

Adding a map to the Map Set/Maps Tab List:

1. Click the left mouse button in the selected region. To choose several maps, hold the **Shift** key and click and drag the mouse to draw a box through the regions on the Graphic Map. As you add maps, they will be shaded in pink. The number of maps and the memory required to store the maps is displayed at the bottom of the Maps Tab.

At the bottom of the Maps Tab List, you will see the number of selected maps and the required memory for the Map Set. If the Map Set contains a large number of maps or a large memory capacity, you may see a warning from MapSource to reduce the number of maps in the Map Set.

Map Sets

Removing a map from the Map Set/Maps Tab List:

1. Place the Map Tool inside the border of the region that you want to deselect and click the left mouse button. To remove several maps at once, hold the **Ctrl** key and click and drag the mouse to draw a box through the regions on the Graphic Map.

OR:

1. Highlight the desired regional map in the Maps Tab list. To select several maps, hold down the **Shift** key on your keyboard and highlight the desired maps. Click the right mouse button and select *Delete Map*, or select *Delete Map* from the Edit Menu, or press the **Delete** key on your keyboard.

Map Properties

The name, type of coverage area, and size of the map can be viewed in the 'Map Properties' window by doing one of the following:

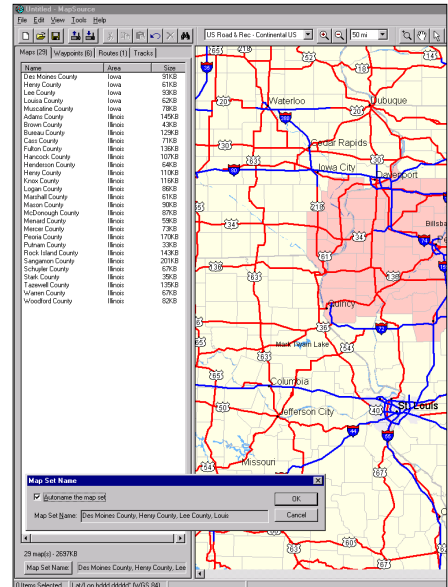
- Double-click the map name in the Maps Tab List
- Highlight the map name and press Enter
- Right-click the map name and select *Map Properties*

Naming/Renaming a Map Set

The **Map Set Name** button and 'Name' field are located along the bottom of the Maps Tab List. MapSource will automatically name a Map Set when it is created.

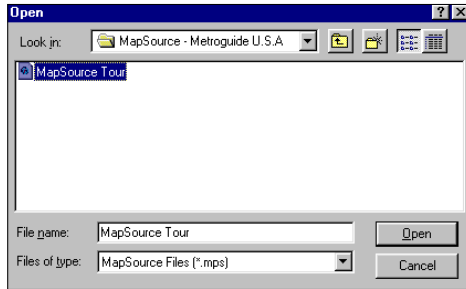
To Rename a Map Set:

1. Click the **Map Set Name** button located along the bottom of the Map Tab List.
2. Verify that the Autaname checkbox located on the 'Map Set Name' dialog box is not marked.
3. Enter a new name in the 'Name' field and click the **OK** button.



Naming a Map Set

MapSource Documents



'Open' Dialog Box

Transferring Data

After creating waypoints, tracks, routes and map sets, the data may be saved for use on your GPS using three different methods:

- To the internal memory of a GARMIN GPS unit, which accepts all data types: maps, waypoints, routes and tracks.
- To a data card in a GARMIN GPS unit. Maps are saved to the card, and all other data is saved to the unit's internal memory.
- To a data card in a GARMIN USB data card programmer, which will only accept map data.

For detailed instructions on transferring data, see pages 16-18.

MapSource Documents

Saving a MapSource Document:



1. Choose *Save* from the File Menu, or click the Save button in the File Toolbar.
2. Select a location for your MapSource document and click the **Save** button.

Opening a Previously Saved MapSource Document:



1. Choose *Open* from the File Menu, or click the Open button in the File Toolbar.
2. Select the saved document and click the **Open** button.

If you have a document open, MapSource will close the open document. If the open document data needs to be saved, MapSource will prompt you before closing the document. Only one document can be open in MapSource at a time, but you can run several instances of MapSource simultaneously, allowing you to easily trade information.



NOTE: *If you open a MapSource document with locked maps, and you don't have an Unlock Code for that map data, MapSource will still display the non-locked features of that file (waypoints, routes, etc.)*

Importing a GARMIN PCX5 Data File

You may import a GARMIN PCX5 data file to MapSource, but no other data file types are supported for import to MapSource.

To Import GARMIN PCX5 Data:

1. Choose *Import* from the File Menu. If you have set up your PCX5 data files in the Default File Location (in the File Location Tab under *Preferences* in the Edit Menu), that location will automatically appear.
2. Select the PCX5 data file and click the **Open** Button. MapSource can display PCX5 waypoints (.wpt), routes (.rte), tracks (.trk) or one of the map outlines provided with PCX5 (.grm).



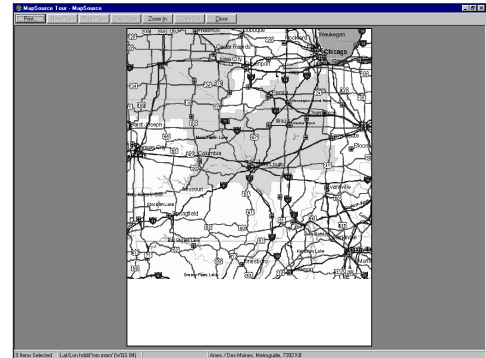
To avoid screen clutter, turn off any MapSource map data, if using a PCX5 map outline.

Printing the Graphic Map

The Print, Print Preview and Print Setup options function like other Windows applications. Choose *Print Setup* to select a printer and set printing properties. You may need to change the DPI settings for the image to print. To preview what will be printed, select *Print Preview*. To print the current Graphic Map Display, select *Print* from the File Menu. Only a representation of the Graphic Map can be printed from MapSource.

Reference



























MapSource Documents



Print Preview

Appendix A

Map Legends: Businesses and Attractions

 Ground Transportation	 Zoos And Aquariums
 Air Transportation	 Parks & Gardens
 Auto Repair	 Schools, Colleges & Universities
 Auto Rental	 Libraries
 Gas Stations	 Museums & History
 Parking	 Amusement Parks
 Lodging	 Movie Theaters
 Campgrounds & Rv Parks	 Bars & Nightclubs
 Dining	 Live Theaters
 Grocery Stores, Shopping	 Golf Courses
 Department Stores	 Marina
 Banks & Atm'S	 Pharmacies
 Post Offices	 Hospital

Color map legends can be viewed in MapSource HELP.









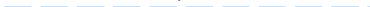
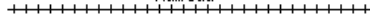




Map Legends: Points of Interest

 Danger Area	 Showers
 Dam	 Restroom
 Swimming	 Drinking Water
 Skiing	 Boat Ramp
 Scenic Area	 Wreck
 Picnic Area	 Dining
 Park	 Fuel
 Campground	 Fish
 Parking	 Daymark, Red Triangle
 Information	 Daymark, Green Square
 First Aid	 Marina
 Telephone	 Exit
 Airport	 Toll Booth
 Facilities	 Weigh Station
 Fishing Area Info	


















Color map legends can be viewed in MapSource HELP.

Appendix A

Map Legends: Lines & Areas


















	Street Or Roadway
	Ramp
	Arterial Roadway
	Other Through Hwy, State Hwy Or Major Arterial
	Principal Hwy, Us, Or Limited Acc Hwy
	Major Hwy Connector
	Major Hwy
	Stream Or River
	Intermittent/Dry Stream Or River
	Railroad
	Shipping Route
	Land Contour
	Depth Contour
	Political Boundary

	Flat (Tidal, Sand, Gravel, Mud, Etc.)
	Intermittent/Dry River or Lake
	Wetland
	Glaciers
	Golf Course or Park
	Lake, River, Sea, Ocean
	Man-Made Areas
	Metro Areas
	Woods
	Fishing Area
	Restricted Water

-  LIGHTED NAVAID, MULTI-COLORED
-  LIGHTED NAVAID, BLUE
-  LIGHTED NAVAID, VIOLET
-  LIGHTED NAVAID, ORANGE
-  LIGHTED NAVAID, YELLOW OR AMBER
-  LIGHTED NAVAID, GREEN
-  LIGHTED NAVAID, RED
-  LIGHTED NAVAID, WHITE
-  UNLIT NAVAID, MULTI-COLORED
-  UNLIT NAVAID, ORANGE
-  UNLIT NAVAID, YELLOW OR AMBER
-  UNLIT NAVAID, BLACK
-  UNLIT NAVAID, GREEN
-  UNLIT NAVAID, RED
-  UNLIT NAVAID, WHITE
-  UNLIT NAVAID, OTHER OR UNKNOWN COLOR
-  NAVAID, UNKNOWN CLASSIFICATION

Color map legends can be viewed in MapSource HELP.

Map Legends: Navigation Aids and Obstructions

-  DAYBEACON, WHITE DIAMOND
-  DAYBEACON, GREEN SQUARE
-  DAYBEACON, RED TRIANGLE
-  RAICON OR RADIO BEACON
-  FOG HORN
-  WRECK, CLEARED BY WIRE-DRUM
-  OBSTRUCTION, CLEARED BY WIRE-DRUM
-  SOUNDING
-  ROCK SUBMERGED AT LOW WATER
-  ROCK AWASH
-  OBSTRUCTION, SUBMERGED
-  OBSTRUCTION, AWASH
-  OBSTRUCTION, VISIBLE AT HIGH WATER
-  SUBMERGED WRECK, NON-DANGEROUS
-  SUBMERGED WRECK, DANGEROUS
-  VISIBLE WRECK
-  UNCLASSIFIED OBSTRUCTION























Appendix A

Map Legends: BlueChart Symbols

BlueChart™

Color map legends can be viewed in [MapSource HELP](#).

In addition to the symbols in the Navigation Aids and Obstructions Legend, the following are some of the symbols found in MapSource BlueChart marine data:

	Airport/Seaplane Base		Fishing Harbor
	Anchorage Berth		Fishing Prohibited
	Anchoring Prohibited		Information
	Beacon		Marina Information
	Building		Pilot Boarding Area
	Buoy		Precautionary Area
	Church		Radio Report Point
	Dangerous Rock		Recommended Anchorage
	Explosive		Rescue Station
	Exposed Rock		Tide Station
	Exposed Wreck		Yacht Harbor

Keyboard Shortcuts

File Menu

New Document _____ Ctrl + N
 Open Existing Document _____ Ctrl + O
 Save Document _____ Ctrl + S
 Print Graphic Map _____ Ctrl + P
 Open From Device _____ Ctrl + Shift + O
 Save To Device _____ Ctrl + Shift + S

Edit Menu

Undo _____ Ctrl + Z
 Redo _____ Ctrl + Y
 Cut _____ Ctrl + X
 Copy _____ Ctrl + C
 Paste _____ Ctrl + V
 New Waypoint _____ Ctrl + W
 New Route _____ Ctrl + R
 Delete _____ Del
 Remove Waypoint from Route _____ Ctrl + Del
 Select All _____ Ctrl + A
 Preferences _____ Ctrl + Shift + P

View Menu

Zoom To Selected Items _____ Ctrl + D
 Go To Position _____ Ctrl + T
 Zoom In _____ +
 Zoom Out _____ -
 Zoom In Max _____ Ctrl + +
 Zoom Out Region _____ Ctrl + -
 GPS Map Detail _____ Ctrl + G
 Show Crosshair _____ Ctrl + H
 Find _____ Ctrl + F

Tools Menu

Zoom Tool _____ z
 Hand Tool _____ h
 Selection Tool _____ s
 Waypoint Tool _____ w
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 Distance/Bearing Tool _____ d
 Unlock Codes _____ Ctrl + U

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Notes

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