

GPSMAP® 96/96C

portable aviation receiver

pilot's guide



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Preface

Thank you for choosing the Garmin GPSMAP 96 or 96C. The GPSMAP 96 and 96C utilize Garmin GPS and full-featured mapping in a portable aviation receiver. Both the GPSMAP 96 and 96C contain virtually the same features, therefore the 96C display screens are shown in this manual with additional screens shown where color settings and contrast adjustment differ. Take a moment to compare the contents of this package with the packing list on the box. If any are missing, contact your Garmin dealer.

About This Manual

This manual is organized into the following chapters:

The **Introduction** chapter contains the Table of Contents.

The **Getting Started** chapter provides information such as an overview of unit features and how to turn the unit on and adjust the backlight. It also contains a simulation to help you get acquainted with your new GPSMAP 96/96C.

The **Basic Operation** chapter provides you with information about basic features such as using the Find Menu, navigating a route, and using waypoints.

The **Main Pages** chapter provides detailed explanations about each page in the GPSMAP 96/96C and step-by-step directions on using the pages.

The **Main Menu** chapter provides detailed explanations about the Main Menu and how to use it to configure your unit.

The **Appendix** contains information such as specifications, optional accessories, and maintenance information. You can also find warranty, safety, and FCC information in the Appendix.

An **Index** is provided at the end of the manual for reference. Simply look up the topic you wish to learn about and read the page(s) listed.



The GPSMAP 96/96C uses GPS technology in order to find your precise location. GPS stands for Global Positioning System, a group of 24 satellites, circling the earth twice a day at an altitude of about 12,000 miles. The satellites transmit very low power radio signals containing position and time information, allowing anyone with a GPS receiver to determine their location on the Earth within 100 meters or better. For more detailed information regarding GPS, Garmin has prepared a booklet titled "GPS Guide for Beginners" available from our Web site at www.garmin.com.

Introduction

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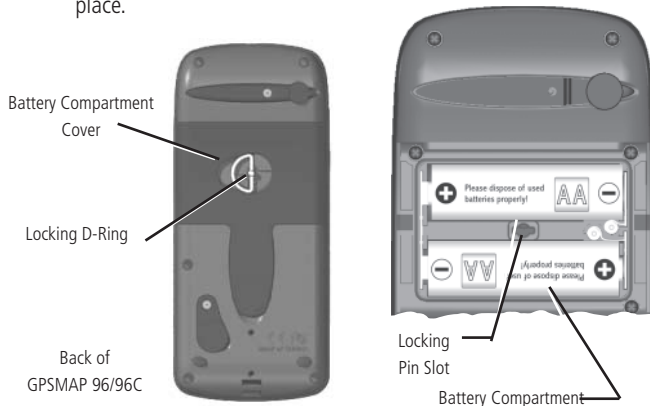
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Installing the Batteries

The GPSMAP 96/96C operates on two “AA” batteries (not included), which are located in the back of the unit. Alkaline or NiMH batteries (see page 83 for setting the battery type) may be used. Stored data will not be lost when batteries are removed.

To install batteries:

1. Remove the battery cover from the back of the unit. Turn the D-Ring 1/4 turn counter-clockwise and then pull.
2. Insert the batteries, observing the proper polarity. A polarity diagram can be found molded into the battery compartment.
3. Reinstall the battery cover by reinserting the locking pin in the back of the unit. Turn the D-Ring 1/4 turn clockwise to lock in place.



Installing the Batteries

Important Note

When replacing batteries, use only new or fully charged batteries. Do not mix Alkaline, NiMH or NiCAD batteries. Rechargeable batteries may typically display less capacity than disposable batteries.

Remove the batteries from the unit if you don't plan to use it for several months. Storing batteries in the unit for prolonged periods may result in leakage and damage to the battery compartment.

Follow the manufacturer's instructions for proper care and disposal of used batteries. Do not incinerate used batteries, as internal materials may ignite with explosive violence.

Extensive use of backlighting and/or WAAS as well as key beep tones will significantly reduce battery life.

To set backlighting intensity and timeout, see page 84.

To disable WAAS, see page 83.

To mute the beep tones, see page 86.

Getting Started

Key Functions

IN/OUT Zoom Keys

- From the Map Page, press to zoom in or out.
- From any other page, press to scroll up or down a list.

DIRECT TO/FIND/NRST Key

- Press and release at any time to view the Go To Pages for Airports, Nav aids, etc. when in Aviation Mode or the Find Menu when in Automotive and Marine Modes.
- Press and hold for Nearest Airports (Aviation) Recent Finds (Automotive) or MOB (Marine) Mode.

POWER/BACKLIGHT Key

- Press and Hold to turn unit On/Off
- Press and Release to adjust backlighting (Contrast - GPSMAP 96).

QUIT Key

- Press and release to cancel data entry or exit a page.



ROCKER Key

- Move Up/Down or Right/Left to move through lists, highlight fields, on-screen buttons, icons, enter data or move the map panning arrow.

PAGE Key

- Press to cycle through the main pages.
- Press and hold to change the usage mode.

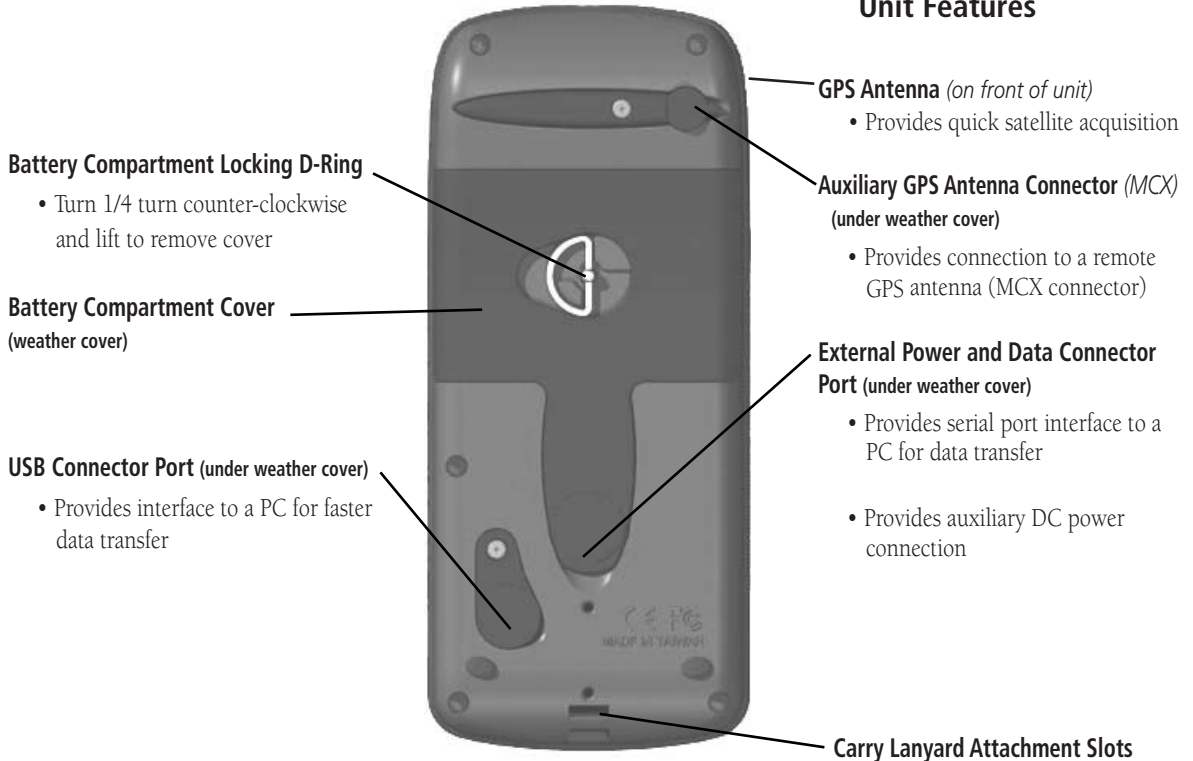
MENU Key

- Press and release to view options for a page.
- Press twice to view the Main Menu.

ENTER/MARK Key

- Press and release to enter highlighted options, data or confirm on-screen messages.
- Press and hold at any time to mark your current location as a waypoint.

Unit Features

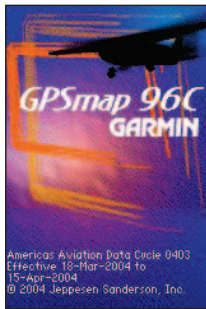


Getting Started

Unit Overview

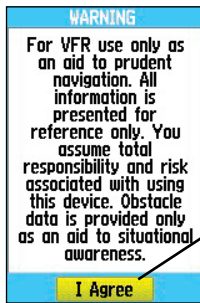


GPSMAP 96



GPSMAP 96C

"Power Up" Pages



Warning/ Information Page

Press the ENTER key to acknowledge and display the Satellite Page

Turning On the GPSMAP 96/96C

The first time you power up your new GPSMAP 96/96C, the receiver must collect satellite data and establish its present position. To ensure proper initialization, the GPSMAP 96/96C is shipped from the factory in AutoLocate mode, which allows the receiver to "find itself" anywhere in the world. Before you turn on the unit to start initialization, be sure that it has a clear and unobstructed view of the sky to receive satellite signals.

To turn On and Off the GPSMAP 96/96C:

1. Press and hold the red **POWER** key. When the unit powers on, a tone sounds and the "Power Up" page displays.
2. After a few seconds, a Warning/Information Page displays. To acknowledge that you have read and understand the warning, press the **ENTER** key to continue.
3. To turn off the GPSMAP 96/96C, press and hold the red **POWER** key again.

WARNING: When you agree with the statements on the Warning Page it is assumed that you understand that the GPSMAP 96 and GPSMAP 96C are intended as aids to navigation only. That the navigation information and obstacle data provided by the GPSMAP 96 and GPSMAP 96C is intended as an aid to situational awareness only. That it does not take precedence over accepted practices for safe navigation using Visual Flight Rules and that you have accepted the responsibilities and risks associated with using these devices.

Initializing the GPSMAP 96/96C

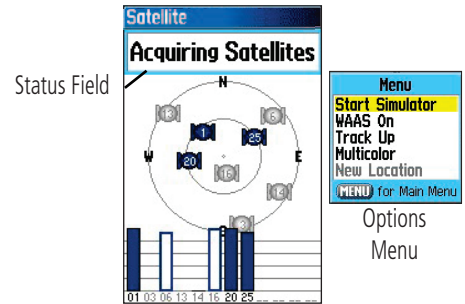
As soon as you turn the GPSMAP 96/96C on, it begins searching for satellites in your area and should acquire a fix within a few minutes. When you have cycled through the "Power Up" and Warning pages the Satellite Page displays. At the top of the screen, the unit displays the status as "Acquiring Satellites." A sky view array depicting the approximate location of overhead satellites is displayed in the center of the page. When a signal of sufficient strength is received the satellite is identified by its assigned number. The sky view represents a theoretical dome directly over your current location with a pointer to indicate orientation. While viewing the Satellite Page, a signal strength bar for each satellite the unit is trying to acquire appears at the bottom of the screen with the satellite numbers displayed below each bar.

The progress of satellite acquisition is shown in three stages:

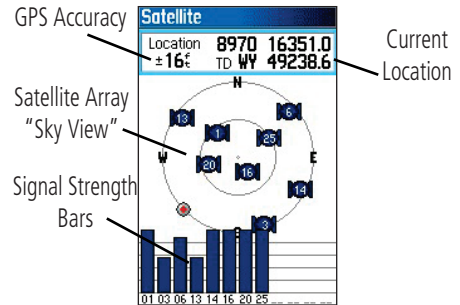
- No signal strength bars – the receiver is looking for the satellites.
- Hollow signal strength bars – the receiver has found the indicated satellites and is collecting data.
- Solid signal strength bars – the receiver has collected the necessary data and the satellites are ready for use.

Press the **MENU** key to view options for "Simulator," "WAAS," "Track Up/North Up," "Multicolor display," and "New Location" to use the Map Page to establish your approximate location. Once the receiver has collected information from and is fixed on at least three satellites, the unit is "Ready to Navigate" and you can advance to the Map Page.

Unit Overview



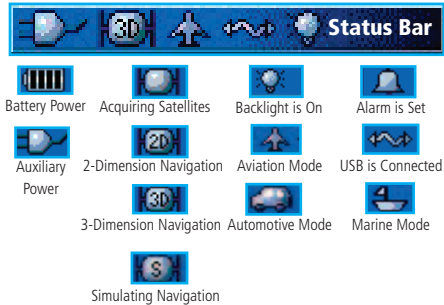
Satellite Page "Acquiring" Satellites



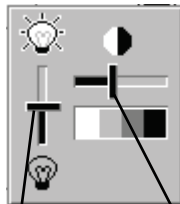
Satellite Page "Ready To Navigate"

Getting Started

Unit Overview



GPSMAP 96C
Backlight Adjustment



GPSMAP 96
Backlight and
Contrast Adjustment

Status Bar

At the top of each page, a Status Bar provides the current status for several unit features that are not otherwise noticeable when operational.

Adjusting the Backlight and Contrast

You may want to adjust the backlight to see the display better. You can also adjust the contrast if using the GPSMAP 96.

To adjust the backlight level:

1. Press and quickly release the **POWER** key.
2. Press the **ROCKER** key UP to increase the brightness or DOWN to decrease the brightness.
3. Press **ENTER/MARK** or **QUIT** to close.

To adjust the contrast level: (GPSMAP 96 only)

1. Press and quickly release the **POWER** key.
2. Press the **ROCKER** key to the RIGHT to increase the contrast or to the LEFT to decrease the contrast.
3. Press **ENTER/MARK** or **QUIT** to close the Backlight/Contrast adjustment window.

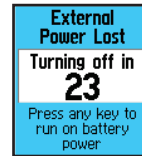
Unit Overview

On-Screen Messages

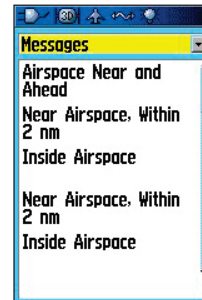
Whenever a significant event in unit operation occurs, an on-screen message appears to advise you. In many instances a remedy is also provided. Pressing the **ENTER** key acknowledges and closes the message window.

You can use the Message Log feature to record those messages for later review. You can also select only certain types of messages for storage on the Message Log. A message filter allows you to identify the types of messages desired for review. This is particularly helpful in reviewing messages that appear while navigating a route, such as obstacle warnings, to help you edit a route for reuse by avoiding certain obstacles.

For more detailed information about using the Message Log feature, refer to page 109.



On-Screen Messages



Message Log
(Filtered Aviation Navigation Messages)

Getting Started

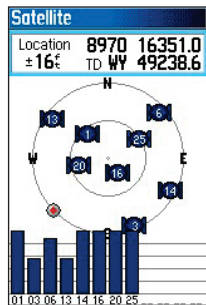
Main Page Overview

Aviation Mode, Marine Mode, and Automotive Mode

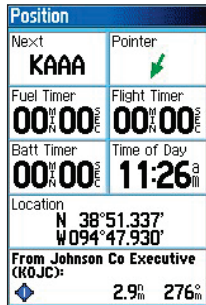
The GPSMAP 96/96C offers three usage modes, Aviation Mode (default), Marine Mode, and Automotive Mode, allowing you to customize settings to use the unit for each application. The modes can be changed in the System Setup option or by pressing and holding the **PAGE** key. The main pages are linked together in a series that you may cycle through by pressing the **PAGE** key to go forward and the **QUIT** key to reverse. Each page also has an Options Menu that allows you to customize each (in all three modes) to your preferences and/or select features that relate to that page. To view the Options Menu for a page, press the **MENU** key.

Aviation Mode features five main pages: Satellite Page, Position Page, Map Page, HSI Page and Active Route/Go To Page. An example of each page in Aviation Mode appears below. Each of these pages has a specific use and each page is discussed later in this manual. The Aviation Mode is the default mode for the GPSMAP 96/96C. This guide first addresses each page, such as the Map Page, as displayed in the Aviation Mode. The guide then describes the page shown in Marine and Automotive Mode, if major differences exist.

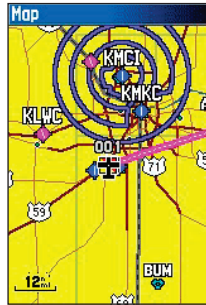
Aviation Mode: Page Sequence



Satellite Page



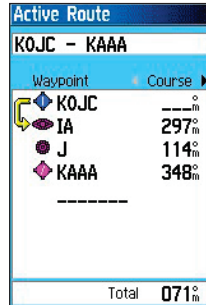
Position Page



Map Page



HSI Page



Active Route/Go To Page

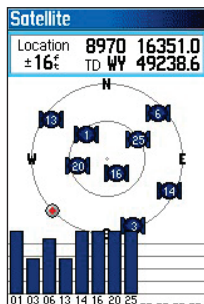
Main Page Overview

Marine Mode features five main pages: the Satellite, Position, Map, Pointer, and Active Route pages. The Active Route Page appears with a list of route waypoints if you are navigating. See the "Navigation" section for more information on navigation options. Automotive Mode features the same five pages as Marine Mode with the exception that the Active Route Page provides instructions when auto-routing is being used. When you are following roads to your destination, the Active Route Page changes from a list of waypoints to a graphic of each turn on your route with a turn detail page to support each turn on the active route. An optional Highway Page may be enabled in all modes.

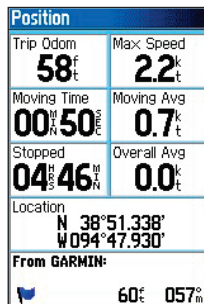
To switch usage modes:

1. Press and hold the **PAGE** key.
2. Use the **ROCKER** key to select either "Aviation", "Automotive", or "Marine" and press the **ENTER** key.

Marine Mode: Page Sequence



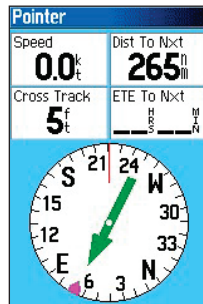
Satellite Page



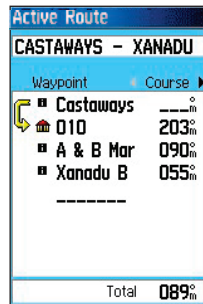
Position Page



Map Page



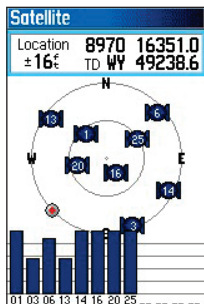
Pointer Page



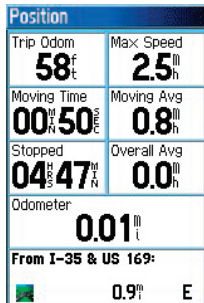
Active Route/Go To Page

Getting Started

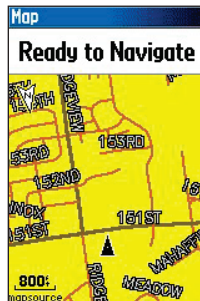
Main Page Overview



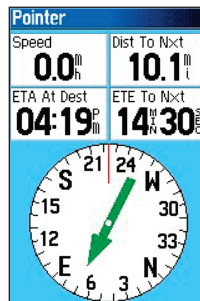
Satellite Page



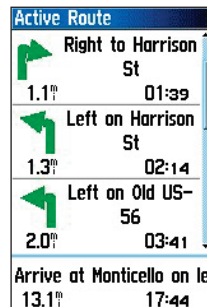
Position Page



Map Page



Pointer Page



Active Route Page when following roads

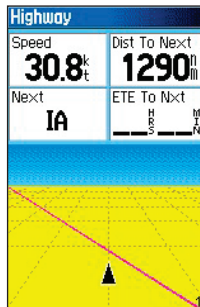
To show the Highway Page:

1. Press **MENU** twice to display the Main Menu.
2. Use the **ROCKER** key to highlight the "Highway Page" icon and press **ENTER**. This page can be displayed for all three operating modes.

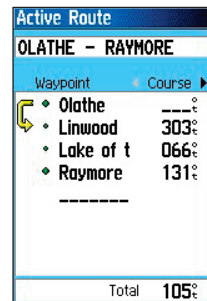


Highway

Highway Page icon
Accessed from the Main Menu



Highway Page (optional)



Active Route Page for direct Go To navigation

Using the GPSMAP 96/96C

Understanding how to operate unit Features

The GPSMAP 96/96C unit's advanced keypad system is designed to allow quick, convenient selection of navigation options and data entry. As you progress through this Pilot's Guide, you will often be instructed to press a specific key or highlight a field on the screen. Many keys on the keypad have dual functions. When pressed and released they perform a primary function and when pressed and held they perform a secondary function. Many keys change functions when a particular feature page is displayed. When a field is selected on the screen, it is highlighted. Selection is controlled by the **ROCKER** key.

The following features are referred to throughout this manual.

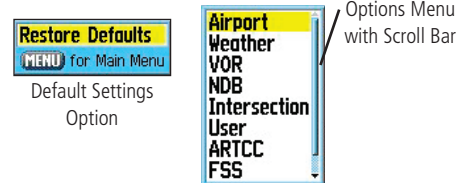
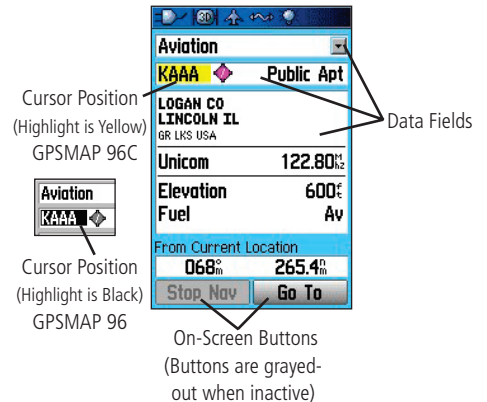
Cursor – The highlighted area on the screen that can be moved UP/DOWN/LEFT/RIGHT with the **ROCKER** key to select individual fields. Moving the cursor makes a selection, begins data entry, or scrolls through a list.

Field – The location on a page where data or an option may be entered and displayed. The cursor is placed on a field using the **ROCKER** key to begin data entry or selection of options.

On-Screen Button – Use the **ROCKER** key to highlight a button and press **ENTER** to select the action.

Scroll Bar – When viewing a list of items too long to display on the screen, a scroll bar appears along the right side of the list. The position of the scroll bar indicates which portion of the list is currently displayed. The height of the scroll bar indicates the number of items in the list. To scroll through a list, press UP or DOWN on the **ROCKER** key.

Default – A factory set system format is followed unless you change a setting. For example, the default setting for speed readings in Marine Mode is nautical miles per hour (knots), but may be changed to kilometers or miles per hour. Once a setting is changed, the new setting is retained until another change is made or a 'Restore Default' option is selected.



On-Screen Operating Features

Getting Started

Using the GPSMAP 96/96C

To select an option: use the **ROCKER** key to highlight it and press **ENTER** to activate.



Options that are grayed-out are not activated.

Options Menu

Use the **ROCKER** key to highlight the desired on-screen button and then press **ENTER**.



On-Screen Buttons

Additional options may display when activating buttons.



Selecting Options and Entering Data

You may select and activate options and enter data to customize your GPSMAP 96/96C to fit your personal needs. This requires movement of the cursor, which is identified in this manual as highlighting, selecting, or choosing an item in a list or a field on the screen. Use the **ENTER** key and **ROCKER** key to select options, enter names and numbers in data fields, and activate your selections.

To select and activate an option:

1. With any page displayed, press the **MENU** key. An Options Menu appears with a list of optional features for that page.
2. Use the **ROCKER** key to move the cursor UP or DOWN the menu to highlight your desired selection.
3. Press **ENTER** to activate the feature. Another window may then appear with more options. If so, select the desired option and press **ENTER** again.

To exit a menu or return to the previous setting, press the **QUIT** key.

The **QUIT** key moves backwards through your steps. When pressed repeatedly, the **QUIT** key returns to the main page you started from.

To select and activate an on-screen button:

Use the **ROCKER** key to highlight the desired on-screen button and press **ENTER**.

To practice entering data, try marking a waypoint and customizing one of the waypoint properties, such as the waypoint name.

To mark your current location as a waypoint, press and hold the **ENTER/MARK** key until the New Waypoint Page appears.

Using the GPSMAP 96/96C

To enter data in a data field:

1. Use the **ARROW KEYPAD** to highlight the desired data field and press **ENTER** to activate the field.
2. Press UP or DOWN on the **ROCKER** key to select characters. Press RIGHT to move to the next character field or press LEFT to move back to the previous character field. If there are two lines of data, keep pressing RIGHT to drop down to the next line.

To clear the entire data field, move the cursor to the left-most character field and press LEFT once more on the **ROCKER** key.

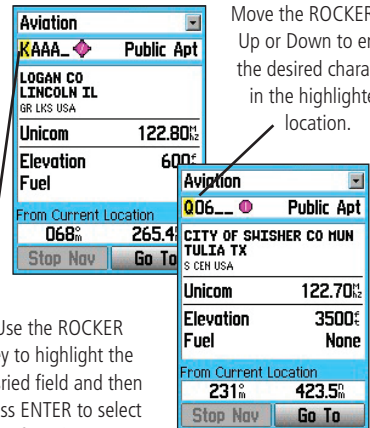
3. After entering the desired data, press **ENTER** to confirm the change.
4. To save the waypoint and exit the New Waypoint Page, highlight 'OK' and press **ENTER**. Or, to cancel the waypoint and exit the New Waypoint Page, highlight 'Delete' and press **ENTER**.

Not all fields are programmable, such as the date and time. When you are on a page with fields that are not selectable, the cursor skips over them.

Using Additional Map Data

Optional MapSource CD-ROMs enhance the versatility of your GPSMAP 96/96C. With optional MapSource City Select data, you can view listings of nearby restaurants, lodging, shopping centers, attractions and entertainment, and even retrieve addresses and phone numbers for any listed location. With optional BlueChart data, you can access marine nav aids, wrecks, obstructions, and anchorage locations.

The included USB Interface Cable or an optional PC Interface Cable (with a serial connector) is used to transfer MapSource CD-ROM data to the unit.



Getting Started

Using the GPSMAP 96/96C



"Start Simulator" Option



Entering a New Location

From the GPS Options Menu you can enter a "New Location" to simulate from. For example, if you are interested in using the GPSMAP 96/96C in your plane and your hangar is near San Diego, but you live in Los Angeles, you can select San Diego as your New Location. Simply select "New Location" from the Options Menu and press ENTER. Select "Use Map" and press ENTER. Then, using the map Panning Arrow, pan to the new location and press ENTER.

To aid in learning to use the GPSMAP 96/96C, please use the Simulator Mode. Simulator Mode is also helpful for practicing with the unit indoors or when no satellite signals are available. All waypoints and routes created in Simulator Mode are retained in memory for future use.

Activating the Simulator Mode

NOTE: Do not attempt to navigate using Simulator Mode, the GPS receiver is turned off. Any Satellite Signal Strength Bars displayed are only simulations and do not represent the strength of actual satellite signals.

To put the unit into Simulator Mode using the Main Menu:

1. Press the **MENU** key twice to display the Main Menu.
2. Highlight the Setup icon and press **ENTER** to display the Setup Menu.
3. Highlight the System icon and press ENTER to display the System Setup Page.
4. On the System Setup Page, highlight the "GPS" field and press **ENTER**.
5. Select "Simulator" and press **ENTER**. Press **QUIT** to return to your previous page.



To put the unit into Simulator Mode using the Satellite Page:

1. Press the **PAGE** key repeatedly until the Satellite Page is displayed..
2. Press the **MENU** key to open the Options Menu.
3. Highlight "Start Simulator" and press **ENTER**.

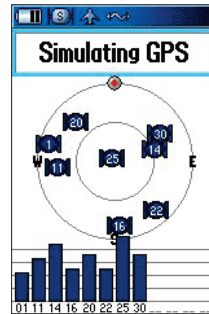
Simulating Navigation in Aviation Mode

The main purpose of using a GPS receiver is for navigating to a known position. To get a feel for navigating with the GPSMAP 96/96C, it is a good idea to practice navigation in Simulator Mode.

To find an aviation destination and simulate navigation in Aviation Mode:

1. Be sure the GPSMAP 96/96C is set to Simulator Mode (see "Activating the Simulator Mode" on the previous page).
2. Press the **DIRECT TO**  key.
3. Select "Aviation," highlight the airport code field, press **ENTER**, and enter the desired destination airport code.
4. The highlight automatically jumps to the on-screen 'Go To' button. Press **ENTER** to start navigating.
5. The GPSMAP 96/96C switches to the previous page displayed. A (magenta - GPSMAP 96C and gray - GPSMAP 96) line on the Map Page shows a direct route from your current location to your 'Go To' destination. If desired, press **IN** or **OUT** to adjust the zoom level.
6. Press the **PAGE** key one time to display the HSI Page.
7. Press UP on the **ROCKER** key to increase the simulated speed. The aircraft symbol now begins moving on the magenta route line.
8. Press **QUIT** or **PAGE** to return to the Map Page. Press **IN** or **OUT** to adjust the zoom level. Observe the movement of the aircraft symbol  as the unit simulates navigation. If desired, press **PAGE** or **QUIT** to view the simulated navigation on the other main pages.

Using the GPSMAP 96/96C



Simulating GPS Page



Simulating GPS Symbol



Simulating HSI Page

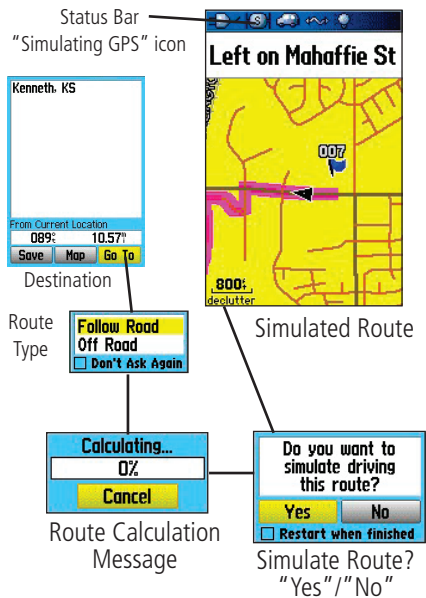


Usage Mode Selector

WARNING: Do not attempt to navigate using Simulator Mode, the GPS receiver is turned off. Any Satellite Signal Strength Bars or navigation displayed are only simulations and do not represent the strength of actual satellite signals or route navigation.

Getting Started

Using the GPSMAP 96/96C



Simulating Navigation in Automotive Mode

To switch between Aviation and Automotive Mode, press and hold the **PAGE** key. Use the **ROCKER** key to select 'Automotive' and press **ENTER**.

To find a land destination and simulate navigation in Automotive Mode:

1. Be sure the GPSMAP 96/96C is set to Simulator Mode.
2. Press the **FIND** key.
3. Highlight the Cities icon and press **ENTER**
4. Use the **ROCKER** key to select a nearby city and press **ENTER**.
5. With the "Go To" button highlighted on the city information page, press **ENTER**. A sub-menu displays asking if you want to "Follow Road" (the unit will create a turn by turn route to the destination) or navigate "Off Road" (a direct line to the destination.) Select one and press **ENTER**. The display switches to the Map Page and a "Calculating Route" message displays while the route is calculated. A magenta line shows the auto-route following roads or a straight line from your current location to your destination. This will be followed by a "Do you want to simulate driving this route?" message. Select "Yes". If desired, press **IN** or **OUT** to adjust the zoom level.
6. Press **IN** to adjust the zoom level. Observe the movement of the Position Arrow as the unit simulates navigation. Press **PAGE** or **QUIT** to view the simulated navigation on the other main pages.

When you are ready to navigate on your own, turn the Simulator off.

Select "Stop Simulator" from the Satellite Page Options Menu and press **ENTER**.

Navigating in Aviation Mode

Using the Direct To Key to Generate a Go To

The GPSMAP 96/96C includes an internal Jeppesen® database, and memory for up to 1000 user-created waypoints. The GPSMAP 96 accepts 22MB, while the GPSMAP 96C accepts 118MB to display MapSource data. The Jeppesen database provides position and facility information for airports, VORs, NDBs, and more. Updates to the Jeppesen database are available every 28 days online (www.garmin.com). The update program is designed to operate on Windows®-compatible PCs and requires the USB Cable to connect to a PC. The following information is provided from the Jeppesen database:

Airport – * identifier, facility name, city/state/country, position (latitude/longitude), field elevation, available fuel types, runway designations/layout, runway surface(s), runway length(s), runway width(s), runway lighting, runway traffic pattern direction data, communication frequencies, and published approaches.

Weather – associated with an airport (ASOS, ATIS, and AWOS).

VORs – * identifier, facility name, city/state/country, position (latitude/longitude), frequency, service volume (high, low, terminal), and type (such as VOR-DME, TACAN, and VORTAC).

NDBs – * identifier, facility name, city/state/country, position (latitude/longitude), and frequency.


Intersections – identifier, nearest VOR, radial and distance from nearest VOR, position (latitude/longitude), and region/country.


ARTCC – Air Route Traffic Control Centers.


Airspace – boundaries (Class B, Class C, Class D, Control Zones, SUAs, and MOAs), controlling agency, and vertical boundaries.


FSS – Flight Service Stations.

User Waypoints – name, symbol, position (lat/lon), elevation, and comment.

In Aviation Mode, press the **DIRECT TO**  key to display the Go To Page, which allows you to select an airport or navaid, a recently (previously) used waypoint, or a user-created waypoint as your destination.

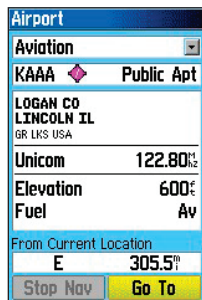
When a 'Go To' or route is currently in use, pressing the **DIRECT TO**  key displays a detailed information page for the current destination.

In Marine or Automotive Mode, pressing the **DIRECT TO**  key displays the Find menu, which allows you to select a destination waypoint.

Also, in Marine Mode, pressing and holding the **DIRECT TO**  key creates a Man OverBoard waypoint and starts navigating to that point.

* Symbology used for NDBs, VORs, and airports are consistent with those used on a sectional chart.

Navigating in Aviation Mode



Aviation Mode Go To Page




Options List

Go To Aviation

The Go To 'Aviation' page displays (Airport) identifier, CTAF or tower frequency, facility name, city/state/country, available fuels, field elevation, distance and bearing from your current location, and airport position (latitude/longitude).

To Go To an airport or navaid:

1. Press the **DIRECT TO**  key to display the Go To Page. If 'Aviation' is not highlighted, press the **ROCKER** key until the topmost field is highlighted. Press **ROCKER** key right or left until 'Aviation' is selected.
2. Use the **ROCKER** key to enter the desired airport, facility name, intersection, VOR or NDB. Press UP and DOWN to change the highlighted character and RIGHT to move to the next character field. As you scroll through the characters the GPSMAP 96/96C displays any database entries with the same characters you have entered to that point. If more than one entry exists in the database for the characters you have entered, a pop-up window appears listing the entries. Use the **ENTER** key and **ROCKER** key to select the desired waypoint from the duplicate list.
3. Press **ENTER** once the desired waypoint is displayed.
4. With the on-screen Go To button highlighted, press **ENTER**. A course is plotted from your present position to the selected destination waypoint.

Go To Comm

The Go To 'Comm' page contains identifier, frequency, and frequency type. Available frequency types are: ATIS, Pre-taxi, Clearance, Ground,

Navigating in Aviation Mode

Tower, Unicom, Multicom, AWOS, ASOS, Departure, Approach, Arrival, Class B, Class C, Class D, TMA, CTA, and TRSA.

As you view frequencies for various airports you will encounter some with an asterisk (*). This denotes a frequency with usage restrictions.

To view usage restrictions for a communication frequency:

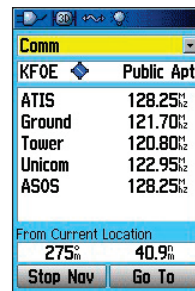
1. Select 'Comm' with the **ROCKER** key in the topmost field. Use the **ROCKER** key to highlight any frequency with usage restrictions (as denoted by an asterisk) and press **ENTER**. A Usage Restrictions Page will appear describing the restrictions for the selected frequency.
2. To return to the 'Comm' information page press **ENTER**.

Go To Runway

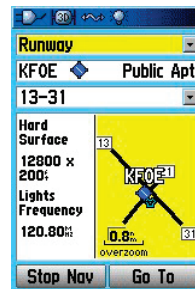
The Go To 'Runway' page displays identifier, runway designations, runway layout (map), traffic pattern direction, surface type, lighting frequency, length, width, distance and bearing from your current location, and airport position (latitude/longitude). Use the third field to change between multiple runway information.

Go To Approach

The Go To 'Approach' page shows identifier, approach name, final approach fix (FAF) and missed approach point (MAP), distance and bearing from your current location, and airport position (latitude/longitude). Available approach types include ILS, localizer, RNAV, GPS, VOR, VOR/DME, and NDB. Approach name, final approach fix (FAF) and missed approach point (MAP) appear ONLY if the airport has a published approach.

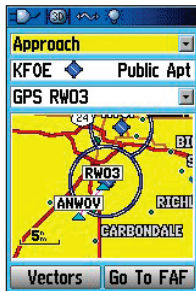


Comm Identifier



Runway Identifier

Navigating in Aviation Mode



Approach Identifier


Note: When using a route, and on the final leg of the route to the destination airport, the 'Select Approach' option allows you to quickly retrieve and select available approaches. This option overrides your current route. The original route is still available for later use. The approaches provided in the Jeppesen database are for monitoring purposes only. The GPSMAP 96/96C is not an IFR-approved instrument and should not be used as a primary source of navigation guidance in instrument conditions.

When viewing information for 'Runway' or 'Approach', use the **ROCKER** key to highlight the runway designation or approach name and press **ENTER**. Then press UP or DOWN on the **ROCKER** key to scroll through available runways/approaches. Press **ENTER** to select the runway/approach that you would like to view additional information for.

Select Approach

The 'Select Approach' option replaces a destination airport with the sequence of waypoints for the selected approach. Keep in mind that the airport must have a published approach (GPS, RNAV, VOR, NDB, localizer, or ILS) and only the final course segment (usually from final approach fix to missed approach point) of the published approach is available in the GPSMAP 96/96C.

To select an approach using the Go To page:

1. Press the **DIRECT TO**  key to display the Go To Page.
2. Use the **ROCKER** key to highlight "Approach."
3. Use the **ROCKER** key to select the approach from the third field and press **ENTER**.
4. Use the **ROCKER** key to select "Vectors" or "FAF" and press **ENTER**. The GPSMAP 96/96C removes the destination airport from the 'Go To' and replaces it with the approach waypoints.

To select an approach using the Active Route page:

1. Access the Active Route Page and press menu.
2. Use the Rocker key to choose "Select Approach."
3. Select the desired Approach from the window.
4. Indicate "Yes" or "No" in the "Vectors?" window.
4. Indicate "Yes" or "No" in the "Vectors?" window.

Navigating in Aviation Mode

To cancel vectors and/or an approach from the Go To “Approach” Page:

1. Access the Go To ‘Approach’ page.
2. Press **Menu**. Highlight ‘Cancel Approach’ and/or ‘Cancel Vectors’ and press **Enter**.


To cancel vectors and/or an approach from the Active Route Page:

1. Access the Active Go To page and press **MENU** to open the Options Menu.
 2. Highlight ‘Cancel Vectors’ and press **ENTER** to navigate directly to the FAF.
- Or

Highlight ‘Cancel Approach’ or ‘Select Approach’ and press Enter to change.

Go To User and Recent

To Go To a recently used waypoint or user-created waypoint:

1. Press the **DIRECT TO**  key to display the Go To Page. Use the **ROCKER** key to highlight the first field. Press the **ROCKER** key to the right or left until “Recen” or “User” is selected.
2. Use the **ROCKER** key to highlight the desired waypoint from the list. From “User”, you can also select the top waypoint name line and then spell out the desired waypoint name using the **ENTER** key and **ROCKER** key .
3. Press **ENTER**/ once the desired waypoint is highlighted. With the on-screen “Go To” button highlighted, press **ENTER**. A course is plotted from your present position to the selected destination waypoint.

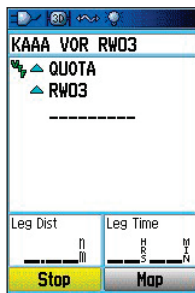


User List for Waypoints



Recent List for Waypoints

Navigating in Aviation Mode



Active Go To Page

Understanding Vectors

The “Vectors” option that appears at the last step of selecting an approach determines how you will navigate to the final approach waypoint in the approach.

If you select “Vectors,” the GPSMAP 96/96C creates an extension of the final course, beyond the final approach waypoint in the database (final approach fix [FAF]). The GPSMAP 96/96C provides no guidance to the inbound course. The course deviation needle on the graphic HSI remains off-center until you are established on this final approach course. The Map Page displays an extension of the final approach course using a bold magenta line. The HSI will automatically slew (rotate to show the direction) to the inbound course. On the Active Route (or Active Approach) Page, a “Vector to Final” symbol appears adjacent to the first approach waypoint.


If ‘No’ is selected for the “Vectors?” or the “Go to FAF” option is selected from the “Approach” Go To page, the GPSMAP 96/96C creates a straight-line course directly to the first waypoint in the approach (from wherever you are when you initiate the approach). This works much like any other route with course guidance from point-to-point and a turn usually required as you cross each waypoint.

Navigating in Aviation Mode

Go To Page Options Menu

The available options are described below. In the sections following, some options, such as Show Details, also have instructions detailing how to use the option.

To access the Go To Page Options Menu:

1. Press the **DIRECT TO**  key. The Go To Page opens
2. Press the **MENU** key.

Select Approach – displays a pop up window with the available approaches for that specific airport. This option is only available if the airport has published approaches.

Find More – directs you to the Find Menu.

Find Near Here – allows you to find other places near the waypoint or point of interest specified.

Declutter On/Off – activates three layers of map detail. Select this option multiple times to increase or decrease mapping detail. This option is only available on the Runway and Approach Go To pages.

Show On Map – takes you to the map page and zooms onto the location.

Project Waypoint – allows you to create a waypoint at a specific distance and bearing from the location selected.

Set Proximity – allows you to establish an alarm circle in a user defined distance around a waypoint.

Add To Route – places the location in an existing route or creates a new route with the location as the destination.



Go To Options Menu

Basic Operation

Using the Nearest Pages in the Aviation Mode

Nearest Pages for Aviation

The screenshot displays the 'Nearest' menu with the following categories and data:

- Airport:** K0JC (096°, 2.9%, 126.00, 4000x75), KIXD (248°, 4.5%, 133.00), S1K (122.70), K34 (122.80), 63K (122.90), K64 (135.32).
- Weather:** K0JC (096°, 2.9%, 119.35), ATIS (119.35), K0JC (096°, 2.9%, 119.35), KIXD (135.32).
- VOR:** OJC (104°, 3.0%, 113.00), RIS (111.40), MCI (00).
- NDB:** OJ (027°, 5.6%, 526%), IX (209°, 8.3%, 368%), GQ (025°, 14.0%, 517%), 15 (279°, 17.0%, 18%), 03 (069°, 21.0%, 13%), 003 (22.1%).
- Intersection:** OLATH (345°, 2.2%), DAKPY (028°), FUROR (02), KEZNU (30), REXMY (15), HFRBR (15).
- User:** GARMIN (243°, 0.0%), H C SP.
- ARTCC:** Station 1 KANSAS CITY, From Current Location.
- FSS:** Station 1 COLUMBIA, From Current Location, 018° (7.6%), Frequency 122.15%.
- Airspace:** NEW CENTURY AIRCEN (Less than 2nm away), JOHNSON CO EXECUTI (Less than 2nm away).

Nearest Pages Overview

In Aviation Mode, the Nearest function is accessed by pressing and holding the **►** key, providing detailed information on the nearest airports, airport weather sources, VORs, NDBs, intersections, and user waypoints within 200 miles of your present position. Information regarding the five nearest FSS (flight service station) and center (ARTCC) points of communication, along with associated frequency(s) is available, as well.

In Marine and Automotive Modes, the **►** key operates as a **FIND** key, opening the Find Menu so you can easily search the stored Waypoints, Cities, Aviation, and Recent Find. Loading MapSource data will provide additional search options.

In Aviation Mode, the Nearest Pages contains the following information:

Airport – nine nearest with identifier, bearing to and distance, length of longest runway, and common traffic advisory (CTAF) or tower frequency.

Wx (Airport Weather Sources)– nine nearest airport weather information sources, including AWOS, ASOS, and ATIS.

VOR (VHF Omnidirectional Radio Beacons)– nine nearest with identifier, facility type (symbol), bearing to and distance, and frequency.

NDB (Non Directional Beacons)– nine nearest with identifier, facility type (symbol), bearing to and distance, and frequency.

INT (Intersection)– nine nearest with identifier, bearing to and distance.

User (Waypoints)– nine nearest with name, bearing to and distance.

ARTCC (Air Route Traffic Control Center)– five nearest with bearing to and distance and frequency(s)

FSS (Flight Service Station)– five nearest with bearing to and distance, frequency(s) and VOR (for duplex operations)

Airspace – up to nine (depending on number of alerts provided) with name, time to entry (when applicable), and status.

To view the Nearest Pages in Aviation Mode:

1. Press and hold the **DP** key.
2. Use the **ROCKER** key to select the desired category in the topmost field.

Note: When an airspace alert is displayed, press and hold **DP** to automatically display nearest airspace information. Press and hold **DP** a second time to quickly display the nearest airports list. Additional information for airports, nav aids, and user-created waypoints is available from the information pages.

To view additional information for a nearby airport, nav aid, or user waypoint:

1. Display the nearest pages and select the desired category as described above.
2. Use the **ROCKER** key to highlight the desired waypoint on the list and press **ENTER**. The corresponding waypoint information page appears.

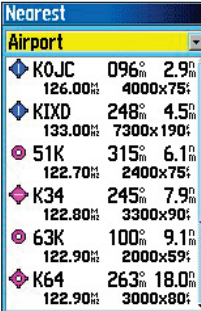
On airport information pages, use the **ROCKER** key to select the desired category from the topmost field to display the airport data.

4. Press **QUIT** to return to the Nearest Pages. You can also highlight any one of the on-screen buttons to perform that action, such as 'Delete', 'Map', or 'Go To'.

To select a nearby waypoint as your destination:

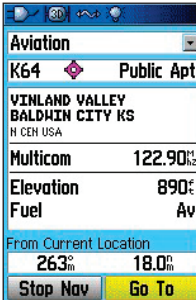
1. Display the nearest pages and select the desired category as described above.
2. Use the **ROCKER** key to highlight the desired waypoint, press **DP**, highlight Go To, and press **ENTER**.

Using the Nearest Pages in the Aviation Mode



Nearest		
Airport		
K0JC	096m	2.9m
126.00m	4000x75	
K1XD	248m	4.5m
133.00m	7300x190	
51K	315m	6.1m
122.70m	2400x75	
K34	245m	7.9m
122.80m	3300x90	
63K	100m	9.1m
122.90m	2000x59	
K64	263m	18.0m
122.90m	3000x80	

Nearest Airport List

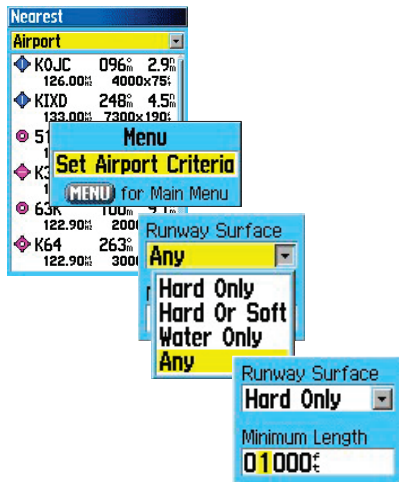


Aviation	
K64	Public Apt
VINLAND VALLEY BALDWIN CITY KS H CEN USA	
Multicom	122.90m
Elevation	890
Fuel	Av
From Current Location	
263m	18.0m
Stop Nav	Go To

Go To page for selected Airport

Basic Operation

Using the Nearest Pages in the Aviation Mode



Set Airport Criteria Menus

Setting Airport Criteria

From the Nearest Airport selection, an options window allows you to filter out airports that do not meet a defined criteria. This allows you to only show airports with a desired surface type and sufficient runway length.

To enter airport criteria:

1. Press and hold **DP** and select the 'Airport' category.
2. Press **MENU** to display the Options Menu. A pop-up menu 'Set Airport Criteria' will appear, then press **ENTER**. Another pop-up window will appear with the current settings for runway surface and minimum runway length.
3. With the runway surface field highlighted, press **ENTER**. Use the **ROCKER** key to select the desired surface type and press **ENTER**.
4. Highlight the minimum runway length field and press **ENTER**. Use the **ROCKER** key to enter the minimum acceptable runway length. Press **ENTER**.

Note: Use caution when changing the nearest airport criteria. In an emergency, a short runway is still typically preferable to an off-field landing. If you set the runway length too high or exclude many runway surfaces, you may not be alerted to a nearby airport that otherwise would be listed.

Runway Surface – allows you to set criteria for the type of surface on the runway:

Any – displays any runway, regardless of surface type.

Hard Only – displays only runways with a concrete, asphalt or similar surface.

Hard or Soft – displays all runways except water landing facilities.

Water Only – display only water landing facilities.

Minimum Runway Length – allows you to enter a specific length for the shortest runway allowed.

Viewing Communication Frequencies

The Nearest Pages list up to five nearest flight service station (FSS) and air route traffic control center (ARTCC) points of communication. The closest communication point—along with frequency(s), bearing to and distance—is displayed first, with additional points available when selected. For duplex operation, the corresponding VOR is listed (by identifier) and the transmit and receive frequencies are denoted by a 'TX' and 'RX' respectively.

To view additional communication frequencies:

1. Press and hold **▶** to open the Nearest Pages.
2. Use the **ROCKER** key to select the 'ARTCC' or 'FSS' category.
3. Press the **ROCKER** key DOWN to highlight the 'Center' or 'Station' field (depending which category you are on) and press **ENTER**.
4. Select the desired numbered item from the list and press **ENTER** to display the communication information. The lowest numbers on the list are the closest communication points.

Viewing Airspace Information

When an airspace alert is provided, press the **▶** key to automatically display nearby airspace information. This information includes name, time to entry (if applicable) and status. Normally, only one or two airspace alerts will occur at a time, but with sectorized controlled airspace (such as many Class B areas) you may have more. Status information can appear as follows:

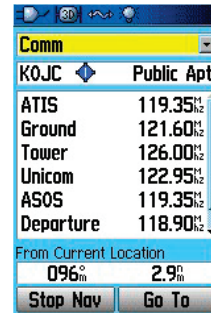
Ahead: Your projected course will take you inside an airspace within the next ten minutes or less.

Near: You are within two nautical miles of an airspace, but not projected to enter it.

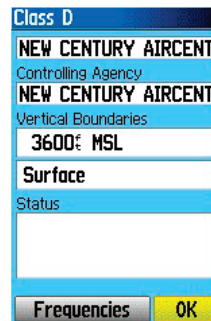
Near & Ahead: You are within two nautical miles of an airspace and your current course will take you inside the airspace.

Inside Airspace: You are within the boundaries of the airspace.

Using the Nearest Pages in the Aviation Mode



Communications Frequencies Page



Airspace Information Page

Using the Nearest Pages in the Aviation Mode

From the Nearest Pages you can display additional airspace information as well, such as floor and ceiling limits or communication frequency(s).

To view additional airspace information:

1. Once an airspace alert had been provided, press and hold **D▶** to display the Nearest Pages and the airspace information. If you are already viewing the Nearest Pages, use the **ROCKER** key to select the 'Airspace' category.
2. Use the **ROCKER** key to select the desired airspace alert entry on the page, then press **ENTER**. An information page opens displaying the controlling agency, status, and floor/ceiling limits.
3. To display a communication frequency for the airspace, select the on-screen "Frequencies" button and press **ENTER**.
4. To return to the Nearest Pages, select the on-screen "OK" button and press **ENTER**.

Navigating in Automotive Mode

Auto-Routing is a feature that makes it simple to navigate to a destination when in Automotive Mode. You can select a destination point from the Find Menu, and the unit quickly sets an auto-route from your present position. Once you have selected a destination (by highlighting it) from one of the categories in the Find Menu, press **ENTER** to display the Information Page for that item. Highlight the on-screen Go To button at the bottom of the page and press **ENTER** to begin the Auto-Routing process from your current location to the destination.

To begin calculating your route, a “Follow Road”/“Off Road” option windows displays on the Map Page. Select “Follow Road” and press **ENTER**, otherwise a direct line of navigation is projected to the destination. Next a “Calculating Route” windows displays and counts the percentage of route calculated. When complete, the Map Page displays a bold magenta (gray for the GPSMAP 96) line overlaying the roads on your route. A guidance message displays at the top of the page with directions to the first turn on the route. As you approach each turn, a tone sounds and a Turn Preview Page displays with a detailed graphic of the turn.

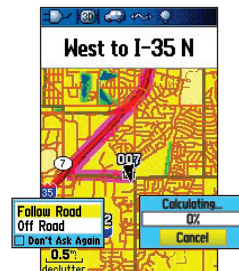
To view all turns on the route, press the **PAGE** key repeatedly until the Active Route Page displays with a graphic list of the turns. Highlight any turn field and press **ENTER** to view the Preview Page for that turn.

Two other Main Pages, the Position Page and Pointer Page provide travel information and directional guidance. Selecting the Highway Page from the Main Menu provides a graphic highway depicting your route.

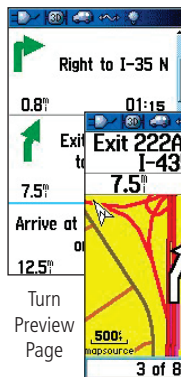
Navigating in Automotive Mode



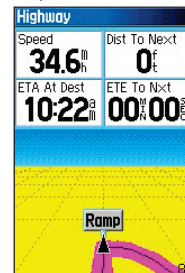
Find Item Information Page



Map Page with Route displayed (Follow Road and Calculating windows)



Active Route Page (Turns List)



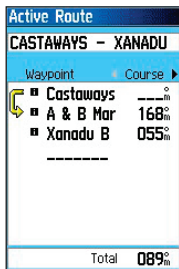
Highway Page

Basic Operation

Navigating in Marine Mode

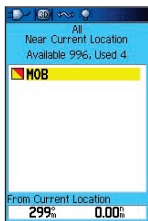
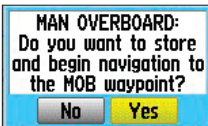


Marine Mode Route on Map

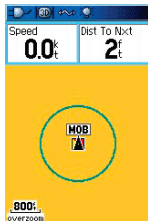


Marine Mode Active Route

Man
Overboard
"Pop-up"
message



MOB on Waypoints list



MOB on Map

Going to a Destination in Marine Mode

Navigating to a destination in Marine Mode uses the same features as the Automotive Mode with the exception of the Auto-Routing feature. When you select a Find Menu item (typically from the Marine Points list) the GPSMAP 96/96C creates a direct-line navigation route to the destination. If you desire to create a route with turns at specific points, refer to the section on Creating Routes. Once a route is activated, the point to point path is displayed on the Map Page and supported by the Main Page, Navigation Pages and the Highway Page. The Active Route Page displays a list of the waypoints on the route and indicates the next point on the route.

Man OverBoard (MOB)

The Man OverBoard (MOB) feature (functional only in the Marine Mode) lets you simultaneously mark and set a course to a position for quick response to emergency situations.

To activate the MOB function:

1. Press and hold the **DIRECT TO** key.
2. Select "Yes" and press **ENTER** to confirm and begin navigating to the MOB.

Once a MOB has been activated, an 'MOB' waypoint with an international MOB symbol is created and the unit begins actively navigating to that point. Use any of the Navigation Pages to guide you back to the MOB point. The MOB waypoint is stored in the waypoint list .

Using Waypoints

Creating and Using Waypoints

The Garmin GPSMAP 96/96C stores up to 1000 alphanumeric waypoints with a user-defined icon, comment, altitude, depth, and temperature available for each waypoint. Waypoints can be created using three basic methods:

- **ENTER/MARK** key – allows you to mark your present position.
- **Graphically** – allows you to define a new waypoint position from the map display using the **ROCKER** key to position the Panning Arrow.
- **Text Entry** – allows you to enter a new waypoint's position coordinates manually.

Marking Your Present Position

The Garmin GPSMAP 96/96C's **ENTER/MARK** key lets you quickly capture your present position to create a new waypoint. You must have a valid position (2D or 3D) fix to mark your present position. This can be determined by looking at the Satellite Page.

To mark your present position:

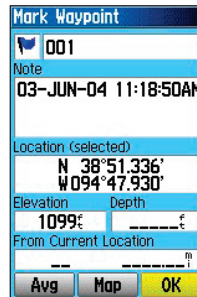
1. Press and hold the **ENTER/MARK** key until the Mark Waypoint Page appears, then release it. You will see a default three-digit name and symbol for the new waypoint.
2. To accept the waypoint with the default name and symbol, use the **ROCKER** key to highlight "OK" and press **ENTER**.

To change the any information on the Mark Waypoint Page, highlight the appropriate field and press **ENTER**. After entering and confirming your changes, highlight "OK" and press **ENTER**.



MARK

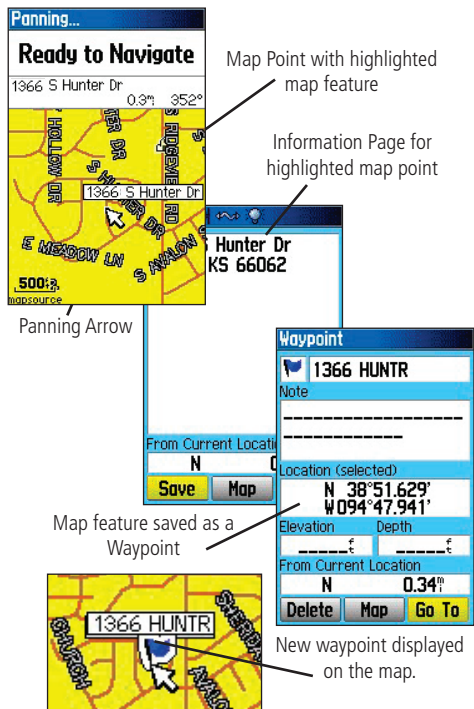
To mark your current location as a waypoint, press and hold the ENTER/MARK key.



Mark Waypoint Page

Basic Operation

Using Waypoints



Creating Waypoints Graphically

Waypoints may also be quickly created with the Map Page Panning Arrow. This allows you to 'point and shoot' at any map position or map feature to create a new waypoint. When you move the cursor over a map item, you will see a highlighted description of that item. The GPSMAP 96/96C uses the map item text shown on the cartography as the default name and symbol for the new waypoint.

To create a new waypoint using the Map Page:

1. Press **PAGE** until the Map Page is displayed.
2. Use the **ROCKER** key to move the Panning Arrow to the desired map point or map feature.
3. Press and quickly release the **ENTER** key to capture the map point. Pressing and holding **ENTER** will mark your present position, not the map Panning Arrow's location.

If you have highlighted a map feature, an information page is displayed after you press **ENTER**. Use the **ROCKER** key to highlight 'Save' and press **ENTER** to save the item as a waypoint.

4. The Waypoint Page appears. To accept the waypoint with the default name and symbol, highlight "OK" and press **ENTER**.

To change the any information on the Waypoint Page, highlight the appropriate field and press **ENTER**. After entering and confirming your changes, highlight "OK" and press **ENTER**.

Additional Options for Creating Waypoints

Waypoints may also be created by manually entering position coordinates through the Find feature of the Main Menu. This method can be useful for creating a waypoint at a specific latitude/longitude position from a chart. You can also manually change the location coordinates in the New Waypoint Page to create a new waypoint.

To create a waypoint through the Main Menu:

1. Press **MENU** twice to display the Main Menu.
2. Use the **ROCKER** key to highlight the Find icon on the page and press **ENTER** to display the Find Menu.
3. Open a Find category and select an item from the list, then press **ENTER** to display the information page and then select "SAVE".

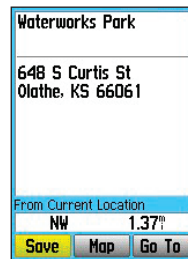
To change any information on the New Waypoint Page, highlight the appropriate field and press **ENTER**. After entering and confirming your changes, press **QUIT**.

To create a new waypoint by entering location coordinates:

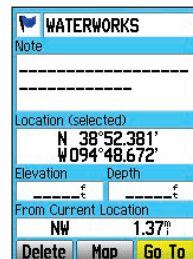
1. Create a waypoint using your favorite method (discussed in previous sections). The new waypoint is created with the next available waypoint number and the receiver's last known position as the default name and position.
2. Use the **ROCKER** key to highlight the 'Location' field and press **ENTER**. Use the **ROCKER** key to enter the desired position coordinates and press **QUIT** when finished.

To change any of the other information on the New Waypoint Page, highlight the appropriate field and press **ENTER**. After entering and confirming your changes, press **QUIT**.

Using Waypoints



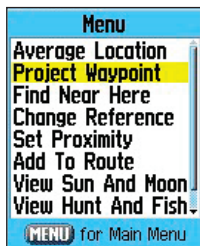
Information Page for a Find Item



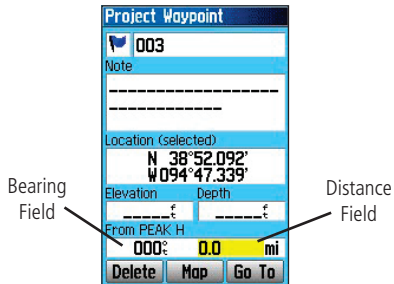
Find Item saved as a Waypoint

Basic Operation

Using Waypoints



Project Waypoint
Option



Project Waypoint Page

To create a new waypoint by projecting its location:

A waypoint may also be created by “projecting” the distance and bearing from a specific location to a new location.

1. Create a waypoint using your favorite method (discussed in previous sections) or select a desired waypoint from the Find Feature Waypoints List.
2. Press **MENU** to open the New Waypoint Page Options Menu.
3. Use the **ROCKER** key to highlight “Project Waypoint” and press **ENTER** to display the Project Waypoint Page.
4. To set the distance that the new waypoint will be projected beyond the original waypoint, highlight the “Distance” portion of the “From” field and press **ENTER**. Use the **ROCKER** key to adjust the distance and press **ENTER**.

To adjust the bearing that the new waypoint will be projected from the original waypoint, highlight the “Bearing” portion of the “From” field and press **ENTER**. Use the **ROCKER** key to adjust the bearing and press **ENTER**.

When you have adjusted all elements of the projected location, highlight “Map” or “GoTo” and press **ENTER**. To save the new waypoint, press **QUIT**.

5. Make any other desired changes to the new waypoint data (such as the name or symbol), then highlight “OK” and press **ENTER**.

Using Waypoints

Waypoint Menu Options

As well as 'Project Location', additional options are available by pressing **MENU** on the New Waypoint and Waypoint Information Pages: "Average Location," "Find Near Here," "Change Reference," "Set Proximity," "Add To Route," "View Sun and Moon," "View Hunt and Fish," and "Reposition Here." Select "Average Location" to have the unit take several sample location measurements for the waypoint and recalculate for a more accurate position reading. You can only average the location for a waypoint you are currently marking where you have a fix on satellites from that location.

To calculate the average location:

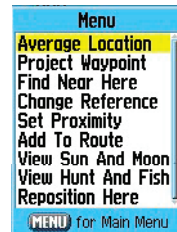
1. Select "Average Location" from the Options Menu.
2. The "Average Location" screen appears. Watch as the fields change as the unit calculates the average position of the waypoint. When you are satisfied with the average location, press **ENTER**.

To find an item (waypoint, etc) near a selected waypoint :

Select "Find Near Here" to display the Find Menu and select a category to display a list of map items near that waypoint.

To change the reference point for a waypoint:

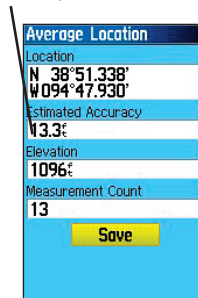
Select "Change Reference" to display a map page with instructions at the bottom for placing the Panning Arrow at a new reference point. Press **ENTER** to change the reference and return to the waypoint page.



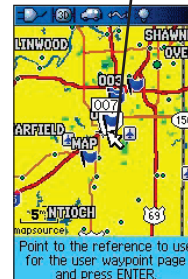
Waypoint Options Menu

Use Panning Arrow to define a new reference.

Estimated Accuracy Field



Average Location Page



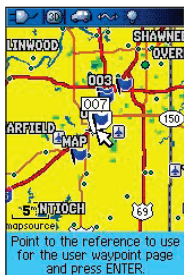
Change Reference Page

Basic Operation

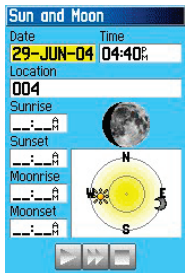
Using Waypoints



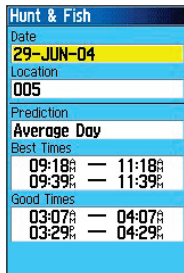
Set Proximity
Waypoint



Change Reference



View Sun and
Moon



View Hunt and
Fish

To set a proximity alarm for a waypoint location:

1. Select "Set Proximity" from the Options Menu.
2. Press **ENTER** to display the Proximity Waypoints Page. Then follow setup instructions on page 101.

To add a new waypoint to a route:

1. Select "Add To Route" from the Options Menu.
2. The "Routes" screen appears. Highlight the desired route or select "New Route" and press **ENTER**.
3. A "Successfully Added Waypoint" message appears. Press **ENTER** to acknowledge and exit.

To view Sun and Moon positions at a waypoint location:

Select "View Sun and Moon" and press **ENTER** to display Sun and Moon positions for that location. See the section on Sun and Moon tables for detailed information.

To view Hunt and Fish predictions for a waypoint location:

Select "View Hunt and Fish" and press **ENTER** to display Hunt and Fish predictions for that location. See the section on Hunt and Fish tables for detailed information.

To reposition a waypoint to your current location:

Select "Reposition Here" and press **ENTER** to position the waypoint at your current location.

Using Waypoints

Reviewing and Editing Waypoints

Once you have created and stored a waypoint, it may be modified, reviewed, renamed, moved, or deleted at any time through the Waypoint Review and Waypoint Edit Pages.

To access the Information Page:

1. Use the **ROCKER** key to highlight the desired waypoint on the Map Page.
2. Press **ENTER** to display the Waypoint Information Page. If the waypoint is located on a map database feature, or MapSource or BlueChart feature, the Information Page includes additional information about that location.

From the Waypoint Information Page, you may change the name, symbol, comment, position coordinates, or depth for the selected waypoint.

To change the waypoint name:

1. Highlight the waypoint name field and press **ENTER**.
2. Use the **ROCKER** key to enter a new name and press **ENTER**.

To change the waypoint symbol:

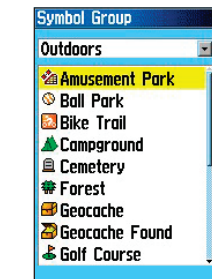
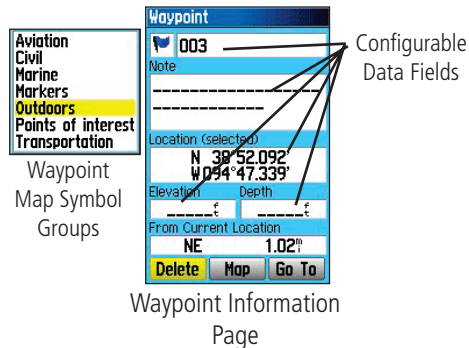
1. Highlight the symbol field next to the name and press **ENTER**.
2. Highlight the Symbol Group field at the top of the page and press **ENTER** to display the list of groups. Use the **ROCKER** key to select the desired symbol group and press **ENTER**.
3. Use the **ROCKER** key to select the desired symbol from the group list and press **ENTER** when done.

To delete a waypoint:

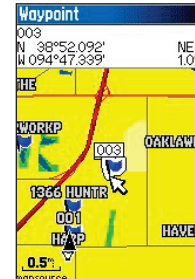
Highlight the "Delete:" button on the page and press **ENTER**.

To view the waypoint on the map:

Highlight the "Map" button on the page and press **ENTER**.



Waypoint Map Symbol Group List



Waypoint on the Map

Basic Operation

Using Waypoints



Waypoints List Options
Menu



Delete Waypoint
Options

The following options are available by pressing **MENU** key with the Waypoints list displayed:

Find Nearest/Find By Name – displays nearest waypoints or all waypoints.

Select Symbol – displays only waypoints with the same symbol from the list.

Change Reference– changes the location for which nearest waypoints display.

Delete – deletes by symbol or all waypoints from the unit.

Note: Once a waypoint is deleted from the list, it cannot be recovered from the unit. It is advisable to backup important waypoints to a computer using the USB cable and interface software or write them down by hand.

To delete a waypoint from the Waypoints List:



1. Use the **ROCKER** key to highlight the waypoint to be deleted.
2. Press **ENTER** to display the Information Page for that waypoint.
3. Highlight “Delete” button on the page and press **ENTER**. Confirm the deletion warning by selecting “Yes” and pressing **ENTER**.


To delete waypoints by symbol:

1. Highlight the waypoint to be deleted and press **MENU**.
2. Highlight the symbol from the “Used Symbols” list and press **ENTER**.
3. Use the **ROCKER** key to highlight the symbol of the waypoint(s) to be deleted and press **ENTER**.
4. Highlight “Yes” and press **ENTER** to confirm. Choose “No” or press **QUIT** to stop the deletion.

Using the Map Page

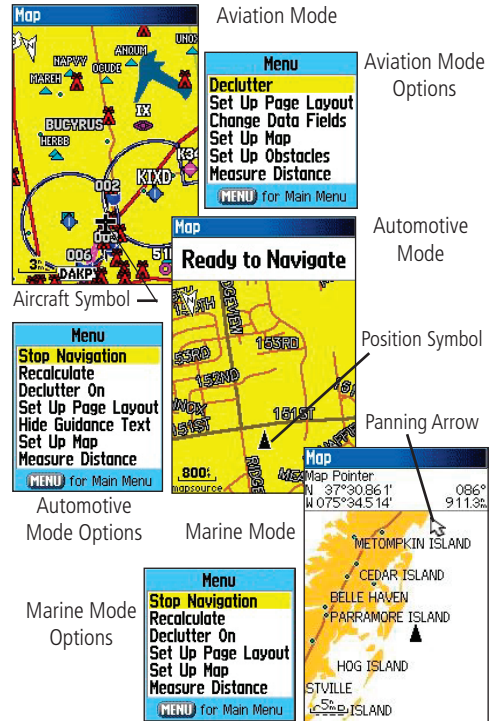
The GPSMAP 96/96C features a real-time moving map that can do much more than just plot your course. The Map Page displays digital cartography (map information) that includes airspace boundaries, airports, nav aids, lakes, rivers, coastlines, cities and highways. An on-screen pointer (Panning) arrow lets you pan ahead to other map areas, determine distance and bearing to any map position, and retrieve database information directly from the map. Dedicated zoom keys (**IN** and **OUT**) are provided for instant scale adjustments.

Two basic map operating modes, position mode and cursor mode, determine what cartography is shown on the map display. Position mode pans the cartography to keep the present position marker within the display area. The position marker (position icon) that shows your travel on the Map Page is an aircraft symbol  in Aviation Mode or a position symbol  in Marine or Automotive modes. The GPSMAP 96/96C always powers up in the position mode, with the last known location centered on the map display.

When you press the **ROCKER** key, the GPSMAP 96/96C enters cursor mode that pans the cartography to keep the cursor, the white pointer (panning) arrow icon , within the display area. When the cursor is active, an additional data window appears at the top of the screen to indicate the position, range, and bearing to the cursor or a selected waypoint or map item.

Up to four user-selectable data fields can be selected to appear on the screen. From the Map Page Options, each data field may be configured to display any one of the possible data options. You can also add an HSI field which replaces two data fields on the page or select 'Map Only' without data fields, using the Map Page Options Menu.

Map Page

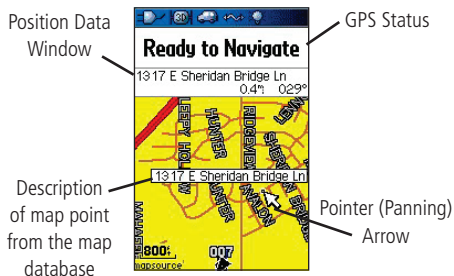


The diagram illustrates the Map Page interface in three different operating modes:

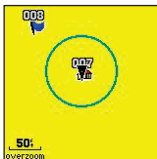
- Aviation Mode:** Shows a map with an aircraft symbol (a blue airplane) and a menu with options: Declutter, Set Up Page Layout, Change Data Fields, Set Up Map, Set Up Obstacles, Measure Distance, and MENU for Main Menu.
- Automotive Mode:** Shows a map with a position symbol (a black crosshair) and a menu with options: Stop Navigation, Recalculate, Declutter On, Set Up Page Layout, Hide Guidance Text, Set Up Map, Measure Distance, and MENU for Main Menu.
- Marine Mode:** Shows a map with a position symbol (a black triangle) and a menu with options: Stop Navigation, Recalculate, Declutter On, Set Up Page Layout, Set Up Map, Measure Distance, and MENU for Main Menu.

Additional features shown include a panning arrow icon and a data window displaying map pointer coordinates: N 37°30.861' 096° W 075°34.514' 911.32.

Map Page



Map Page in Panning Mode



An Accuracy Circle displays around the Position Arrow when the map scale is zoomed in, using both map resolution and GPS accuracy to place your location within the circle. The smaller the circle the more accurate your location.

Panning the Map with the Pointer Arrow

The Pointer Arrow allows you to pan away from your present position and scroll to other map areas around the world (even outside of your current detail coverage). As you pan past the edge of the current map display, the screen actively scrolls to provide continuous map coverage (keep in mind that the position icon stays in your present location and may not be visible on the display screen when you pan the map).

To move the arrow:

Press Up, Down, Right or Left on the **ROCKER** key .

As you move the Arrow, the distance and bearing from your present position to the cursor is displayed in the data window. When you zoom in panning mode, the arrow stays centered on the screen. When the arrow is stationary, a fixed coordinate position appears in the position field, and the distance and bearing from your present position changes as your vehicle moves.

To re-center your position on screen:

1. When you are finished panning the Map, press the **QUIT** key.
2. The unit automatically returns to position mode.

The arrow may also be used to “snap” to on-screen waypoints and map items, allowing you to review a selected position or feature directly from the map display.

To select an on-screen waypoint or map item with the arrow:

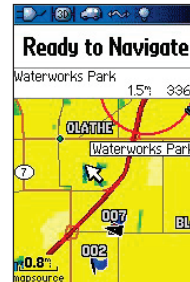
1. Use the **ROCKER** key to move the arrow to the desired waypoint or map item. If there are several items grouped closely together, zoom in closer for a better view.
2. When a waypoint or map item is selected, it is highlighted on screen with the name and position displayed at the top of the screen, along with the distance and bearing from your current location.

To view additional details about an on-screen waypoint or map item:

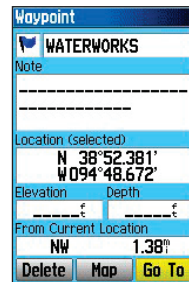
1. With the desired waypoint or map item highlighted, press **ENTER**.
2. If the item is a waypoint, a Waypoint Information Page appears, showing details such as name, symbol, coordinates, elevation, and depth. On-screen buttons offer options to delete the waypoint ("Delete"), show the waypoint on a map ("Map"), or begin navigation to the waypoint ("Go To") from your current location. If desired, select an on-screen button and press **ENTER**, or press **QUIT** to exit the Waypoint Information Page.

If the item is a map feature, an Information Page appears, showing details about the feature. On-screen buttons offer options to save the item as a waypoint ("Save"), show the item on a map ("Map"), or begin navigation to the item ("Go To") from your current location. If desired, select an on-screen button and press **ENTER**, or press **QUIT** to exit the Information page.

Map Page

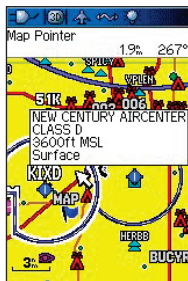


Map Page in Panning Mode with a map item highlighted.



Information Page for the above map item

Map Page



Map Page in Panning Mode with an airspace highlighted.

Airspace Information

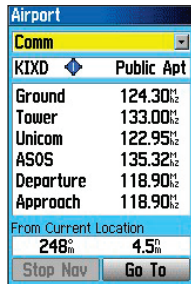
The Panning mode may also be used to retrieve information on airspaces depicted on the map. Once the Pointer Arrow is placed on an open area within an airspace, the entire airspace (or airspace sector) is highlighted. A text box adjacent to the arrow indicates the airspace type and floor/ceiling limits. Additional information, including communication frequencies, is available from an information page.

To retrieve airspace information from the Map Page:

1. Use the **ROCKER** key to select an open area within the desired airspace's boundary. The boundary line is highlighted and a window appears showing airspace type and floor/ceiling limits.
2. To display additional information press **ENTER**.
Communication frequencies may then be displayed by highlighting the on-screen 'Frequencies' button and pressing **ENTER**.
3. To return to the Map Page, highlight 'OK' and press **ENTER**.



Airport Information Page



Communication Frequencies for Airport

Selecting Map Scales and Additional Maps

The map display has 28 available range scales from 20 ft. to 800 nm. (20 ft. to 800 mi or 5 m to 1200 km). The map scale is controlled by the **IN** and **OUT** keys, with the current scale displayed at the bottom left of the map display.

To select a map scale (zoom in and out):

- Press the **OUT** key to zoom out and the **IN** key to zoom in

The system has a built-in worldwide database to 20 mi, with more detailed coverage available through the use of the optional MapSource data. The GPSMAP 96/96C displays cartography as long as there is mapping information available for the range you have selected.

Map coverage conforms to the following conditions:

- Cartography is displayed when the selected zoom range is covered by either the internal basemap or other MapSource data downloaded to the unit.
- When the selected zoom range is covered by both the internal bundled database and downloaded MapSource detailed mapping information, the cartography with the best resolution is displayed.
- When the selected zoom range exceeds the resolution of the data in use, an “overzoom” warning appears below the map scale.
- When mapping data, downloaded from MapSource, is used, a MapSource identifier appears below the zoom scale indicator.

Map Page



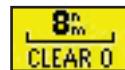
Using the built-in basemaps



Using MapSource downloaded detailed mapping data



Overzoom - No additional data available



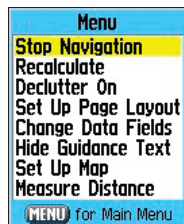
CLEAR 0 - No map data shown

The scale value is represented by the width of the scale bar.

Map Page



Aviation Mode



Automotive Mode



Marine Mode

Map Page Options Menu

The Options Menu on the Map Page provides access to functions and features of the Map Page, as well as layout options for the page. Each data field may be configured to display any one of several data options.

To display the Map Page Options Menu:

From the Map Page press the **MENU** key to display the options menu.

The available options are described below. In the sections following, options, such as Measure Distance, have instructions on how to use the option. The Options Menu varies slightly between the Usage Modes.

Stop Navigation – turns off active route navigation.

Recalculate – recalculates any active route.

Declutter On/Off – toggles between showing map detail or simply map outlines for easier viewing.

Set Up Page Layout – allows you to customize the layout of the page, such as the size of text and number of data fields.

Show/Hide Guidance Text – (Automotive Mode only) toggles between showing or hiding the directions field at the top of the Map Page display. Hiding the directions enables more of the map to be visible.

Set Up Map – jumps to the Map Setup Menu, allowing you to configure the map display to your preferences, including map detail, map orientation, automatic zoom, and various map items and points. See page 87.

Set Up Obstacles – jumps to Obstacle Setup Page allowing you to configure obstacle alert settings.

Change Data Fields – allows you to specify the type of data displayed in each data field on the page. Refer to the Appendix for a complete descriptions of all data fields used in the GPSMAP 96/96C.

Measure Distance – allows you to measure the bearing/distance between two points on the map.

To declutter the Map Page:

1. Press **PAGE** repeatedly until the Map Page is displayed.
2. Press **MENU**.
3. Use the **ROCKER** key to highlight "Declutter" and press **ENTER**.

To declutter the Map Page in Aviation Mode:

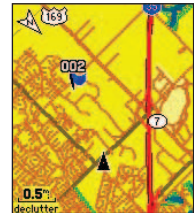
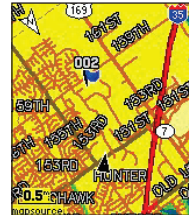
You can adjust the level of declutter by pressing **ENTER** repeatedly.

1. Press **PAGE** repeatedly until the Map Page is displayed.
2. Press **MENU**.
3. Use the **ROCKER** key to highlight "Declutter" and press **ENTER**.

The first level shown after you press **ENTER** is identified by "CLEAR -1" under the map scale. The background map detail—including highways, cities, rivers & smaller lakes—is removed from the map display.

4. Press **ENTER** again. Airspace boundary detail is removed from the map display. "CLEAR-2" appears below the map scale.
5. Press **ENTER** again. Only the waypoints/navaids that are part of the current Go To or route appear on the map display. "CLEAR-3" appears below the map scale.
6. Press **ENTER** again to return ALL detail to the map display.

Map Page



Automotive Mode

Declutter

Aviation Mode



Clutter

Clear 1



Clear 2



Clear 3

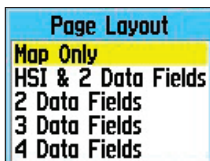


Main Pages

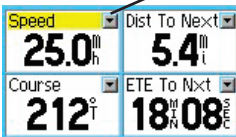
Map Page



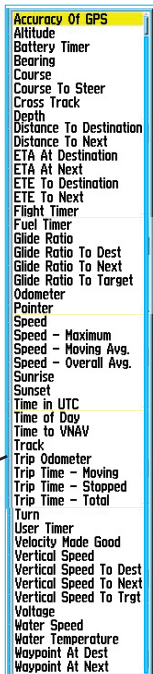
Measure Distance



Page Layout



Change Data Fields



Data Field Options

To measure the Bearing/Distance between two points:

1. Highlight the "Measure Distance" option and press **ENTER**. An on-screen pointer appears on the map display at your present position with "ENT REF" below it.
2. Move the cursor to the desired reference point (the starting point that you want to measure from) and press **ENTER**. A push-pin icon marks the starting point on the map display.
3. Move the cursor to the point to which you want to measure. The bearing and distance from the reference point and cursor coordinates are displayed in the data window at the top of the display.
4. Press the **QUIT** key to finish.

To set up the page layout:

1. Highlight "Set Up Page Layout" from the Options Menu and press **ENTER**.
2. Select the desired option and press **ENTER**. The options vary between the three usage modes.

To change a data field display:

1. From the Options Menu, highlight "Change Data Fields" and press **ENTER**.
2. Move the field highlight to the data field you want to change and press **ENTER**.
3. Press Up or Down on the **ROCKER** key to highlight the data you want to display, and press **ENTER**.
4. Press **QUIT** to exit.

Refer to the Appendix for a detailed description of each data option.

Using the HSI Page

The HSI (Horizontal Situation Indicator) Page replaces the Pointer Page when the unit is in Aviation Mode. During active navigation, the HSI Page guides you to your destination with digital data field readouts and a graphic pointer display with a bearing pointer.

To show the HSI Page in Aviation Mode:

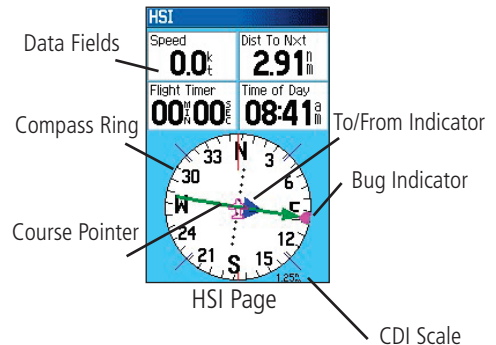
While in Aviation Mode, use the **PAGE** key to display the HSI Page.

The graphic on the HSI Page depicts the desired course to the destination (or to the next waypoint in a route), current ground track, off course error and a To/From indicator. The rotating compass ring indicates your current ground track (read at the top of the ring). The desired course pointer or course deviation pointer indicate the desired course and the distance you are off-course. A bug indicator provides course to steer information, guiding you to the destination if you are off-course.

The course deviation scale appears behind the course deviation pointer. If you stray off-course, the pointer indicates how far off-course you are. To get back on-course, steer toward the pointer. The course deviation scale is adjustable for .25, 1.25, or 5.0 (nautical mile/statute mile/kilometer) full scale deflection. The default setting is 1.25. This is adjusted using the IN and OUT keys.

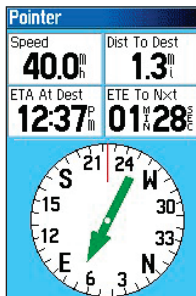
As you reach your destination, the To/From Indicator at the center of the HSI indicates waypoint passage. The four data fields at the top of the page are user configurable by accessing the “Change Data Fields” option from the HSI Page Options Menu. For definitions of available data field options refer to the Appendix.

HSI Page

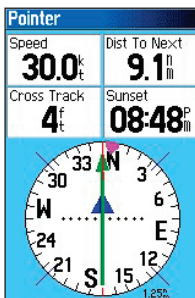


Main Pages

Pointer Page in Marine and Automotive Modes



Pointer Page (Automotive Mode)



Pointer Page (Marine Mode)

Using the Pointer Page

The Pointer Page replaces the HSI Page when the unit is in Marine or Automotive Mode. During active navigation, the Pointer Page guides you to your destination with digital data field readouts and a graphic Pointer display with a bearing pointer.

To show the Pointer Page in Marine and Automotive Modes:

While in Automotive or Marine Mode, use the **PAGE** key to display the Pointer Page.

The bottom of the page features a rotating “Pointer ring” that shows your course over ground (track) while you are moving. The course is indicated at the top of the Pointer ring.

The direction of your destination (bearing) relative to the course is indicated by a bearing pointer in the middle of the Pointer ring. A bearing “bug” on the outside of the Pointer ring in Marine mode only). The Pointer ring and bearing indicators work independently to show, at a glance, the direction of your movement and the direction to your destination. If the arrow points up, you are going directly to the waypoint. If the arrow points any other direction turn toward the arrow until it points up. The Marine Mode is a “Course Pointer” similar to the HSI, that can be selected from the Marine Mode Options Menu.

Note: You must be moving for the Pointer to accurately update and display your heading.

Configurable data fields at the top of the page display helpful information during active navigation. For definitions of data field settings, refer to the Appendix.

The Automotive Mode features data fields with default settings that are more desirable for land navigation.

HSI/Pointer Page Options Menu

The Options Menu on the Pointer Page allows you to customize the HSI/Pointer Page to your preferences in all unit operating modes. Like the Map Page, the HSI/Pointer Page features user-selectable data fields. Each data field may be configured to display any one of several data options, and the data window layout may be customized to change the actual size of the data displayed.

To display the HSI/Pointer Page Options Menu:

Press the **MENU** key to display the Options Menu and **ROCKER** key to select an option.

The options available on the HSI/Pointer Page Options Menus are:

Stop Navigation/Resume Navigation – (Automotive and Marine modes)

Recalculate – (Automotive and Marine Modes) Use for an active route.

Set OBS and Hold – (Aviation Mode) Allows you to alter your course.

Set CDI Scale – (Aviation and Marine Modes) Adjusts the CDI scale.

Set Bug Indicator – (Aviation and Marine Modes) Sets the Bug Indicator mode.

Enable/Disable VNAV Indicator – (Aviation Mode)

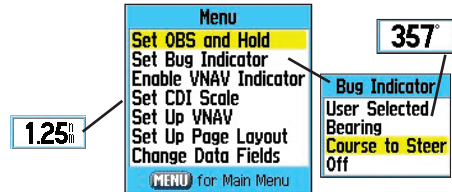
Bearing Pointer/Course Pointer – (Marine Mode) Toggles between the Bearing Pointer and the Course Pointer. The Course Pointer, which shows how far off you are from your desired course and how to get on course. Also referred to as a CDI, Course Deviation Indicator.

Set Up VNAV – (Aviation Mode) Takes you to the VNAV setup page.

Set Up Page Layout – allows you to choose text size and number of data fields.

Change Data Fields – allows you to specify the type of data displayed in each data field on the page. Refer to the Appendix for data descriptions.

HSI/Pointer Page Options



HSI Page Options
(Aviation Mode)



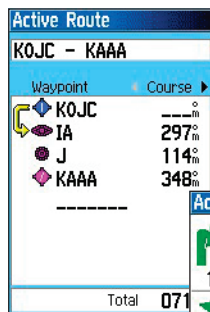
Pointer Page Options
(Automotive Mode)



Pointer Page Options
(Marine Mode)

Main Pages

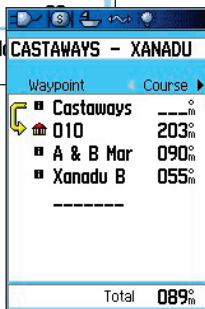
Active Route Page



Active Route
(Aviation Mode)



Active Route
(Automotive
Mode)



Active Route
(Marine Mode)

Active Route Page

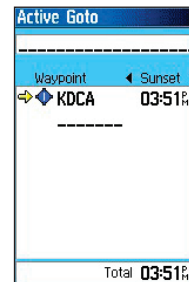
Whenever you have activated a route while in Aviation or Marine Mode, the Active Route Page shows each point (waypoint or map item) of the active route, with the point name, Course, Distance, and several other fields of information. The current destination point, the “active” point, is marked with an arrow icon. As you navigate a route, the list automatically updates to indicate the next “active” point first. The Active Route and Route Review Pages share many of the same features and options.

Whenever you have activated a route in the GPSMAP 96/96C set in Automotive Mode, the Active Route Page shows each turn of the active route, with the distance to the turn, the street name, and estimated time to arrival and time of arrival. As you navigate a route, the turn list automatically updates to indicate the next turn at the top of the list.

You can scroll through the entire list by moving the scroll bar up or down. Highlight any of the turns on the list and press **ENTER** to view the Next Turn page for that turn. The Current Route and Next Turn page display similar information, just in a different layout. The Next Turn page displays your next turn on a map.

For additional details on the Active Route Page, see the “Using Routes” section of the “Basic Operation” chapter.

The Active Route Page becomes an Active Go To Page when navigating to a destination with no waypoints in between you and the destination.



Active GoTo
(Aviation Mode)

Active Route Page

Active Route Page Options Menu

The following route options are available by pressing the **MENU** key

Deactivate – stops route navigation.

Edit on Map – allows you to edit the route on the map.

Reverse Route – reverses the order of the route.

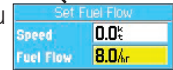
Select Approach – (Aviation Only) allows you to select the final course segment of a published approach, replacing the final destination airport (in a Go To or route) with the sequence of waypoints for the selected approach. The approaches provide only the final course segment, usually from final approach fix (FAF) to missed approach point (MAP), and are based on existing GPS, RNAV, VOR, NDB, localizer, or ILS approach procedures. All approach procedures are flown as a sequence of waypoints in the route. In order to select an approach and add the waypoints to the route, the final destination in the “Go To” or “Route” must be an airport with a published approach.

Set Fuel Flow – allows you to enter fuel consumption rate and distance. Intended for use in the Aviation Mode, but can be applied to other modes.

Change Data Fields – allows you to customize the data fields displayed on the Active Route Page.



Active Route
Options Menu



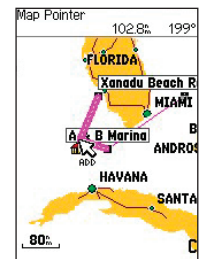
Editing a Route on the Map

To edit a Route on the Map:

1. From the Active Route Options Menu, select “Edit on Map” and press **ENTER** to display the Map with the route.
2. Use the Panning Arrow to highlight a point on the route and press **ENTER** to display the options for that point. You can “Review”, “Remove” or move the “Next” point.
3. Move the Panning Arrow to any point on a route leg and press **ENTER** to drag the leg to a point on the map where you want to add a waypoint. Press **ENTER** to create a new waypoint.



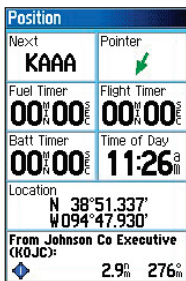
Highlighted Waypoint
and its options



Drag the route leg to
create a new waypoint

Main Pages

Position Page Aviation Mode



Aviation Mode Position Page



Position Page
Options Menu

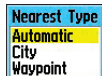
“Change Nearest Type”
Options

Aviation



Marine

Automotive



Understanding the Position Data Page

The Position Data Page provides a quick reference for the important data you want to display while navigating a route in Aviation Mode and Marine Mode. The default page displays six user-selectable data fields. The two fields at the bottom of the page display location position coordinates and the nearest airport, city, etc. depending on the mode of operation.

Position Data Page Options Menu

The following options are available from the Position Data Page:

Reset – allows you to display the “Reset” page. See the following page for reset options.


Big Numbers – allows you to change the data fields to display fewer data fields with larger numbers for easier viewing.

Change Data Fields – allows you to specify the type of data displayed in each data field displayed. See the Appendix for a listing of the data fields.

Change Nearest Type – allows you to specify the type of item to be used as the nearest item. The choices differ based upon the Usage Mode you are currently using.

Position Page

Automotive & Marine Modes

Position	
Trip Odom 58^f _t	Max Speed 2.5^{mi} _h
Moving Time 00:50^h _m	Moving Avg 0.8^{mi} _h
Stopped 04:47^h _m	Overall Avg 0.0^{mi} _h
Odometer 0.01^{mi} _t	
From I-95 & US 169	
	0.9^{mi} E

Automotive and Marine
Modes
Position Page

Reset
<input checked="" type="checkbox"/> Reset Trip Data
<input type="checkbox"/> Reset Odometer
<input checked="" type="checkbox"/> Reset Max Speed
<input type="checkbox"/> Clear Track Log
<input type="checkbox"/> Delete Saved Tracks
<input type="checkbox"/> Delete All Waypoints
<input type="checkbox"/> Delete All Routes
Select All
Unselect All
Apply

Position Page
Reset Page

Understanding the Position Page

The Position Page provides a quick reference for the important data you want to display while navigating a route in Automotive or Marine Mode. It indicates your current speed and many helpful statistics about your trip, such as bearing, average speed, and moving time.

Reset the Position Page before beginning a trip. If you make frequent stops, leave the GPSMAP 96/96C powered on in order to receive satellites. This allows the unit to accurately measure elapsed time during the trip.

Position Page Reset Menu

The following options are available from the Position Page Reset Menu. Some options are only available if you have changed the Page Layout from the default (shown to the right).

Reset Trip Data – clears trip information, except the maximum speed and the odometer.

Reset Odometer – clears the running total of the distance traveled since the odometer was last reset

Reset Max Speed – clears the maximum speed.

Clear Track Log – clears the track log.

Delete Saved Tracks – deletes all saved tracks.

Delete All Waypoints – deletes all waypoints.

Delete All Routes – deletes all routes.

Main Menu

Overview

The Main Menu is the directory for all unit features not in the Main Page sequence with the exception of Mark Waypoint , which is accessed by pressing the **ENTER/MARK** key. The Time and Date can be found at the

bottom of this page. A detailed discussion of each of the Main Menu features follows this brief introduction. Use the **ROCKER** key to highlight a feature name and then press **ENTER** to display the feature page.

- **Find** - This feature provides a convenient method for searching for cities, airports, etc.
- **Tracks** - This feature allows you to maintain a record of your movements (track log).
- **Routes** - Create a list of points that you wish to navigate to and save for later use.
- **E6B** - Calculates winds aloft, density altitude, and true airspeed based on entered data.
- **Flights** - Displays a log of the flights you have taken using the GPSMAP 96/96C.
- **Timers** - Allow for timing of flights, batteries, etc.
- **Aircraft** - Allows you to enter custom information about your aircraft.
- **Setup** - Controls the settings for many of the unit operating system features.
- **Proximity** - An Alarm feature for a defined circle around a specified waypoint.
- **Calendar** - A calendar with data access as well as waypoint association.
- **Alarm Clock** - This feature allows you to use the GPSMAP 96/96C as an Alarm Clock.
- **Nav/Sonar Alarms** - This feature allows you to select from a variety of navigation alarms for aviation and maritime use.
- **Calculator** - A standard or scientific calculator for measurement conversions, etc.
- **Stopwatch** - A multi-featured stopwatch.
- **Sun & Moon** - Sunrise and sunset times, moon phases and sun and moon location for any given date and time.
- **Hunt & Fish** - A table of time frames for best hunting and fishing opportunities for any given location and date.
- **Message Log** - Allows you to view a list of messages received. This feature also includes filters to exclude messages by type.
- **Highway** - A useful graphic perspective with configurable data fields for navigating a route.



Main Menu

Using the Find Menu

The Find Feature provides you with a method for searching for Waypoints, Airports, Cities, and Exits which are included in the GPSMAP 96/96C basemap and Jeppesen database. You can also find a Waypoint you have saved. If you have downloaded Garmin MapSource® mapping data that contains additional map detail, you can search for and find Points of Interest, Addresses and Intersections. If you download BlueChart® data, you can find Marine Points such as Wrecks and Obstructions, NAVAIDS, and Anchorages. If this additional data is not loaded, these options are not available.

Searching for a map item is simplified by separating the map database into groups which are shown as icons on the Find Menu Page.

- When you access a Find group list, by default it will contain only those items near your current location or the Panning Arrow (if active).
- To save effort in searching again for an item already found, you can use the “Recent Finds” group which contains a list of 50 last found items of all categories. Pressing and holding the **Direct To** key also displays this category at any time when in Automotive or Marine Mode.

The options menu for each map item group offers its own unique search options such as “Find By Name,” “Find Nearest,” “Select Symbol” (for Waypoints), “Change Reference” (by moving the map Panning Arrow to a new location), “Nearest Containing” (a key word you enter), “Select Category” (for those groups such as Food and Drink, Lodging, etc.). Using these options can effectively shorten your search.

Using Find



Press the DIRECT TO key to display the Find Menu when in Automotive or Marine Mode

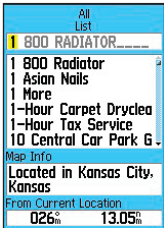


Options Menu for Waypoints

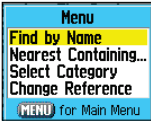


Find Menu

Find By Name Option



Options Menu for groups with Sub-Categories



Main Menu

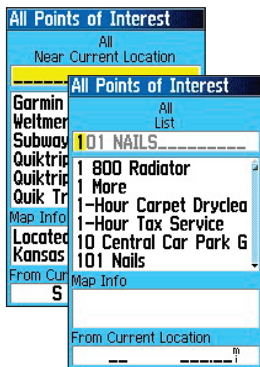
Using Find



All Points of Interest



"Finding" icon displays while searching



Recent Finds

Pressing and holding the FIND key in Automotive Mode will take you to this page. Or select this icon from the Find Menu and press ENTER.



Recent Finds List

Searching for a location using Find By Name

If you know the name of the location you want to find, the Find By Name search option may be the easiest method of searching.

To find a location using Find By Name:

1. Press the **DIRECT TO** key to display the Find Menu.
2. Use the **ROCKER** key to highlight the icon for the type of item you want to search for and press **ENTER** to display the page. Or, if you want to search the entire item database, select "All Points of Interest."
3. Press the **MENU** key to select "Find By Name."
4. Use the **ROCKER** key and **ENTER** key to enter the name of the location, when the list displays a match, highlight "OK" and press **ENTER** to go to a list where you can select the item.
5. With the item selected, press **ENTER** to display the Information Page for that item.

Searching for a location using Recent Finds

The Recent Finds Page saves all of your most recent searches on a list that places your last found location at the top of the list. When you exceed the number of entries the list can hold, the oldest is deleted.

To return to a recently found item:

1. With the Find Menu displayed press the **ROCKER** key to highlight the Recent Finds icon and press **ENTER** to display the Recent Finds List.
2. Use the **ROCKER** key to select the list item you want view and press **ENTER** to display the Information Page for that item.

Using the Find Item Information Page

When you have selected a Find item and pressed the **ENTER** key, an Information Page displays with detailed information about the item. This page contains:

- A title (if a waypoint, it can be renamed and a map symbol assigned)
- An information field (if a waypoint, information you add, if a map item, an address or other description)
- Location coordinates, if the item is a waypoint.
- Elevation and depth if a waypoint.
- Direction and distance from current location or the map pointer

At the bottom of the page are three on-screen buttons, these buttons will appear differently depending on whether you are selecting a Find item to navigate to or adding a Find item to a route list as a waypoint.

- If selecting an item as a destination, the three buttons will display as:
 - Save/Delete** - Add to or Remove from the Waypoints list.
 - Map** - display on the Map Page.
 - Go To** - start a Go To navigation.
- If selecting an item to add to a list of points, these three buttons will be displayed.
 - Save** - save as a waypoint.
 - Map** - display on the Map Page.
 - Use** - insert into a list of points on a route.

Using Find

Waypoint	
LAKE TRAIL	
Note	
07-DEC-03 10:58:01AM	
Location	
N 38°51.338' W094°47.930'	
Elevation	Depth
1093'	-----'
From Current Location	
-----'	
Delete	Map
Go To	

Selected as a destination

Information Page
for a Waypoint

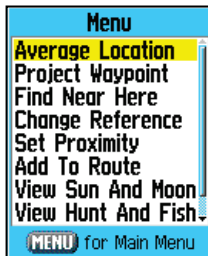
Sports/Fitness Center	
Praire Life Center	
13655 S Alden St Olathe, KS 66062 913-764-5444	
From Current Location	
NE	2.90'
Save	Map
Use	

Selected as a Point on a Route or Track

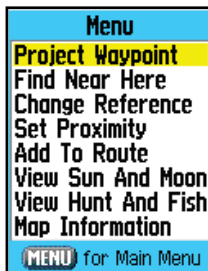
Information Page for a Map Item

Main Menu

Using Find



Waypoint Information Page Options include "Average Location"



Find Map Database Item Information Page Options

Using the Find Item Information Page Options Menu

The Find Information Page Options Menu offers eight options for using a Find Item as a tool for navigation.

To use the Find Item Information Page Options Menu:

1. With an Information page displayed for a Find item, press the **MENU** key to display the Options Menu.
2. Use the **ROCKER** key to highlight the desired option and press **ENTER** activate:

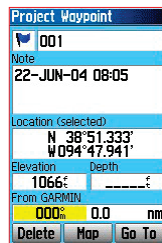
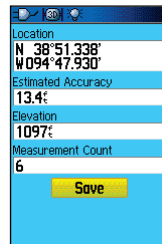
- **Average Location** - Used with waypoints only, it samples a waypoint location over time and averages the result for a more accurate position reference.

(Refer to page 35 for detailed information on Location Averaging)

- **Project Waypoint** - Create a new waypoint by referencing another location by entering a bearing and distance from the referenced location (present position or Find Item location)

(Refer to page 34 for detailed instructions)

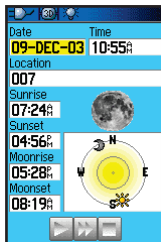
- **Find Near Here** - Returns you to the Find Menu where you can search for map items near the item defined on the Information Page.



- **View Sun and Moon -**

View the Sun and Moon tables for this item location.

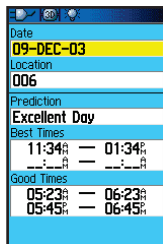
(Refer to page 107 for detailed information about the Sun and Moon Tables.)



- **View Hunt and Fish -**

View the Hunt and Fish tables for this item location.

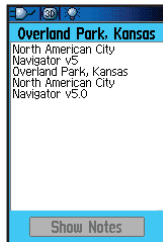
(Refer to page 108 for detailed information about the Hunt and Fish Tables)



- **Map Information -**

Display the map that the map item originated from.

(Refer to page 89 of the Appendix for information about downloading detailed maps.)

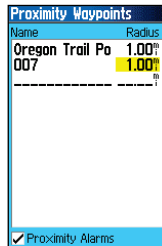


Using Find

- **Change Reference** - Point to a new location on the map Page using the Panning Arrow and press **ENTER**.

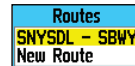


- **Set Proximity** - Program an alarm to sound when you are within a specified radius of an item defined by the Information Page.
(Refer to the Section on Proximity Waypoints on page 101 for detailed information.)



- **Add To Route** - Include this item on a New Route or add it to an existing route.

(See Using Routes page 72 on for details)

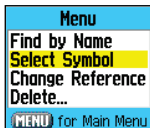


Main Menu

Using Find



Find Waypoints List



Find Waypoint Options

Searching for a Waypoint

The Waypoints List is your storage location for all created and saved waypoints. Waypoints can be created from marking your location, pointing to a place on the map or saving any other Find item (i.e. city, restaurant) as a waypoint. Waypoints are stored in alpha/numerical order and are also identified by a symbol assigned from a list of symbol types. Waypoints can be selected as destinations and added as points on a route.

To find a Waypoint:

1. Press the **DIRECT TO** key to display the Find Menu.
2. Highlight the Waypoint icon and press **ENTER** to display the Waypoints List.
3. Use the **ROCKER** key to scroll up and down the list to find a waypoint. If the list is large, you can press the **MENU** key to display a list of search options.

Find By Name: allows you to enter the name of the waypoint in a search field.

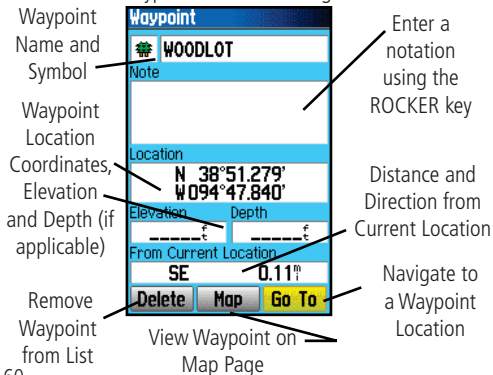
Find Nearest: allows you to list only those waypoints near your current location.

Select Symbol: allows you to search for only those waypoints of a specific type.

Change Reference: allows you to use the Panning Arrow to select a point on the map other than your current location.

4. Once found, a waypoint information page can be viewed by pressing the **ENTER** key. The data can be edited or select "Go To" to navigate to a waypoint.

Waypoint Information Page



Using Find

Searching for a City

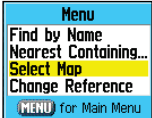
The Find Cities feature allows you to search for any city listed in the mapping database (either in the basemap or from downloaded detailed mapping data).

To find a city:

1. Use the **ROCKER** key to select the "Cities" option, then press **ENTER** to display the find by "Nearest" list of cities.
2. Use the Options Menu to find a city "By Name", by entering a key word for "Nearest Containing," use "Select Map" to select a different map to search from or to "Chance Reference" from your current location using the Map Pointer to find cities nearest a new location on the map.
3. If using find "By Name," begin spelling the name of the city by using the **ROCKER** key. When you have entered enough characters to define the name, a match list displays. If you are using find "By Nearest" scroll through the list to find the city you want. If using "Nearest Containing" use the **ROCKER** key to enter the key word to display a list of cities using that word.
4. Use the **ROCKER** key to select the desired city from the list and then press **ENTER** to display the Information Page for that city.
5. With the Information Page displayed, you can select "Go To," "Map," or "Save" options.



Cities



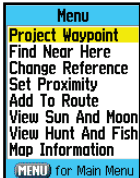
Cities Options Menu



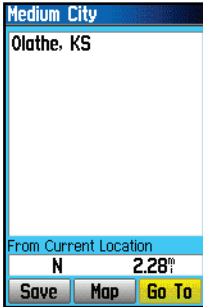
Find Cities List



Select Maps Options



City Page Options



City Information Page

Main Menu

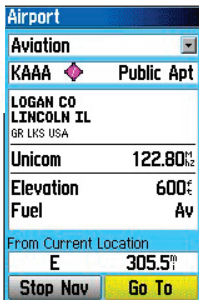
Using Find



Aviation



Press the DIRECT TO key to display the Aviation GoTo Page when in Aviation Mode



Aviation Go To Page



Find More... takes you to the Find Menu with references near your current location.

Find Near Here - takes you to lists of map items near the airport identified by the Aviation Go To Page.

Options Menu



Add To Route - list of current saved routes.
Select one or create a new route.

Searching for an Airport

The Find Aviation feature allows you to search for airports provided in the Jeppesen database in your GPSMAP 96/96C.

To find an airport: (Aviation mode)

1. Press the **DIRECT TO** key when in Automotive or Marine Mode to display the Find Menu, select the Aviation icon, then press **ENTER...** or press the **DIRECT TO** key when in Aviation Mode to display the Aviation Go To Page.
2. The "Aviation Go To" Page displays the first airport on the database list of airports, its location, communication frequencies, elevation, type of fuel available, and the direction and distance from your current location.
3. To search for a specific airport, highlight the airport field and use the **ROCKER** key to enter the identification letters of the airport. Then press **ENTER** to highlight the Go To button.
4. Press **ENTER** to create a direct route to the airport from your current location or **QUIT** to exit the page.

To use the Aviation Go To Page Options:

1. With the desired airport displayed on the page, press the **MENU** key to display the Options Menu.
"Find More" and "Find Near Here" take you to the "Find Menu".
"Show on Map" displays the airport on the map, "Project Waypoint" allows you to project a new waypoint from that location (see page 34), "Set Proximity" allows you to set a proximity alarm for this location (see page 101) and "Add To Route" allows to place the airport in a route you are creating (see page 72).

Searching for a Marine Point

The Find Marine Point feature allows you to search for the marine items, such as marinas, nav aids, services, wrecks and obstructions. If using BlueChart® detailed marine chart data, the Tide Station feature allows you to view tide predictions for locations contained in the mapping data.

To find a Tide Prediction Station

1. Press the **DIRECT TO** button when in Automotive or Marine mode to display the Find Menu.
2. Select the Marine Points icon, then press **ENTER** to display the sub-icon(s) for marine items supported by the basemap and downloaded detailed marine charts.
3. Use the **ROCKER** key to highlight and select the Tide Station icon, then press **ENTER**.
4. A list of tide stations nearest to you displays. If a “None Found” message displays, then you are not currently located near a coast line. Press the **MENU** key to display the Tide Station Options Menu. Select from “Nearest Containing” or “Change Reference.” You can enter a key word for a known tide station or can use the map pointer to move to the nearest coast line and then press **ENTER** to establish a location near marine items.
5. Select a tide station from the list and press **ENTER** to display the information page for that tide station.

At the bottom of the Information Page are on-screen buttons for “Go To,” “Map,” and “Save.”

Using Find

The interface shows two main icons: **Marine Points** and **Tide Station**. Below them are two panels:

Tide Station List: A list of tide stations near the map pointer. The list includes: Edisto Beach, Edisto Isl, Carters Dock, Big Bay, Edisto Marina, Big Bay, Peters Point, St. Pierr, Otter Island, Ocella Creek, 2 Mi. Abo, and Seabrook. Below the list is a map showing the location of the selected tide station (Edisto Beach, Edisto Island) on the coast of the Little Ogeechee River and Ogeechee River, near Ossabaw Island. The map shows tide station symbols (blue circles with 'S') and a map pointer.

Tide Prediction Station: A detailed information page for the selected tide station. It shows the station name (Edisto Beach, Edisto Island), the date (16-MAR-04), and a tide prediction graph. The graph shows a high tide of 5.9' and a low tide of 0.04'. The time of high tide is 03:02. The station is located 4.07 miles from the map pointer, with coordinates SE 924.42. At the bottom are buttons for **Save**, **Map**, and **Go To**.

Annotations on the right side of the image:

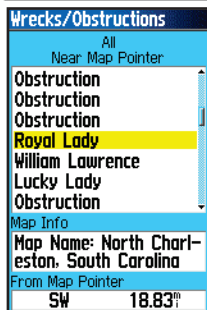
- Tide Station List
- Tide Station Symbols on Map Page
- Tide Station Prediction Page
- (High and Low tides for a 24 hour period for the date shown)

Main Menu

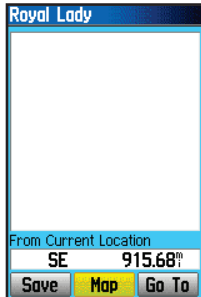
Using Find



Wrecks/Obstructions



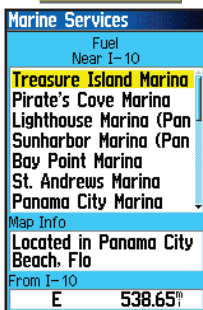
Wrecks/Obstructions List



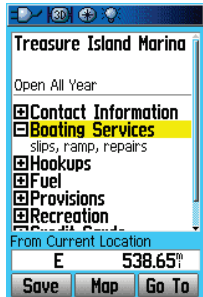
Detailed Information



Marine Services



Marine Services List



Detailed Information

To find a Wreck or Obstruction

1. Select the Marine Points icon, then press **ENTER** to display the sub-icon(s) for marine items supported by the basemap and downloaded detailed marine charts.
2. Use the **ROCKER** key to highlight and select the Wrecks/Obstructions icon, then press **ENTER**.
3. If you get a "None Found" message, you are too far from the coastline or out of the area of map data coverage. Press the **MENU** key and use the "Change Reference" option as explained on the previous page.
4. Select an item from the list and press **ENTER** to display the information page for that item.

At the bottom of the Information Page are on-screen buttons for 'Go To', 'Map', and 'Save'.

To find Marine Services

1. Follow the same procedure as above to access the Marine Points Menu, then select the Marine Services icon.
2. If the "None Found" message displays, follow the same steps explained previously to display a list of marine services near the location you have selected.
3. When the information page for a selected service displays, you can highlight each information category and press **ENTER** to display additional information.

Searching for an Address

The Find Addresses feature allows you to search for an address within the coverage of downloaded detailed mapping data. Enter the street number, and street name and the Find Feature will match that data with addresses in the map database.

To find an Address: *(Automotive or Marine Modes)*

1. Press the **DIRECT TO** key to display the Find Menu.
2. Highlight the Addresses icon and press **ENTER** to display the "Addresses" page.
3. If your unit has a GPS fix the "Region" field at the top of the page will display your current region and there will be no <Enter City> field. The city will display with the list of address matches when done.
4. Press the **MENU** key to display the options list. You can choose a new region, clear all, or display a list of regional cities if you want to search for a city yourself. If you select "Enable City Filter" an enter city field will display on the Address Page. Highlight the field and press **ENTER** to display the city list. Select a city from the list and press **ENTER** to insert the city.
5. Next enter the Street Number <Enter Number> using the **ROCKER** key.
6. Finally press **ENTER** to display the street list. Use the **ROCKER** key to enter enough of the street name to display a match on the list below. When done, a list of matches appears below. Select one and press **ENTER** to display the Information Page. Highlight the "Go To" button to navigate to the address.

Using Find



Addresses

Addresses
Kansas
<Enter Number>
<Enter Street Name>
Matches (0)
None Found

Options Menu

Menu
Clear Region
Clear All
Enable City Filter
MENU for Main Menu

Find Addresses Search Page

Addresses
Kansas
7500
Aberdeen
Matches (25)
7500 Aberdeen St Prairie Village, KS 66208
7700 Aberdeen St Prairie Village, KS 66208

Find Address Matches

Address
7500 Aberdeen St Prairie Village, KS 66208
From Map Pointer
321% 1162.19m
Save Map Go To

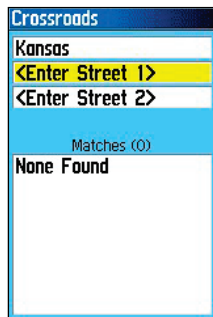
Address Information Page

Main Menu

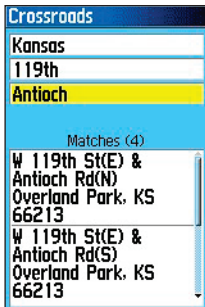
Using Find



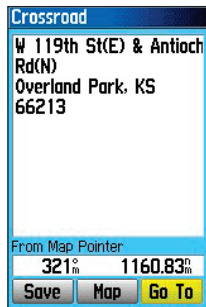
Options
Menu



Crossroads Search Page



Crossroad Matches



Crossroad Info Page

Searching for a Crossroad

The Find Crossroads feature allows you to search for a street intersection within the coverage of downloaded detailed mapping data. Enter the two street names and the Find Feature will match that data with intersections in the map database.

To find a Crossroad: *(Automotive or Marine Modes)*

1. Press the **FIND** key to display the Find Menu.
2. Highlight the Crossroads icon and press **ENTER** to display the "Find Crossroads" search page.
3. If your unit has a GPS fix the "Region" field at the top of the page will display your current region and there will be no <Enter City> field. The city will display with the list of crossroad matches when done.
4. Press the **MENU** key to display the options list. You can choose a new region, clear all, or display a list of regional cities if you want to search for a city yourself. If you select "Enable City Filter" an enter city field will display on the Crossroads Page. Highlight the field and press **ENTER** to display the city list. Select a city from the list and press **ENTER** to insert the city.
5. Highlight <Enter Street 1> and follow instructions in step 6 on the previous page. Repeat for <Enter Street 2>.
6. When done, a list of matches appears below. Select one and press **ENTER** to display the Information Page. Highlight the "Go To" button to navigate to the crossroad.

Searching for a Point of Interest

You can use the Find Point of Interest feature to locate a nearby restaurant, lodging, landmark, public building, park, etc. However, you must have downloaded MapSource detailed mapping that supports this feature otherwise these options, plus Address and Crossroad options, are not available.

To find a point of interest:

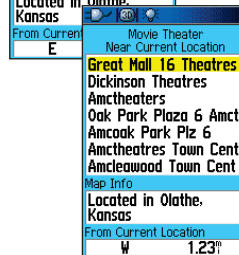
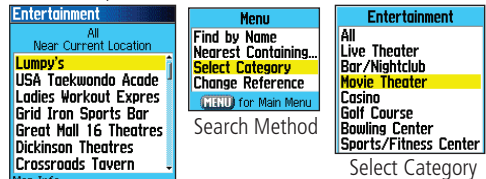
1. Press the **DIRECT TO** key In Automotive or Marine Modes to display the Find Menu or the "Show More" option from the Aviation Go To Page. Or select the Find icon from the Main Menu.
2. Highlight a desired "Points of Interest" icon and then press **ENTER** to display the list of nearest points.
3. Press the **MENU** key to choose from search options or choose "Select Category" to narrow your search.
4. Highlight the desired item from the list and then press **ENTER** to display the Information Page for that item.

If you are searching for a restaurant that is part of a national chain, only the nearest restaurant to your location is displayed when you search using the "Find Nearest" method. If you search using the "By Name" method, then all of the locations for that chain in the mapping database will be displayed with the closest to your current location listed first.

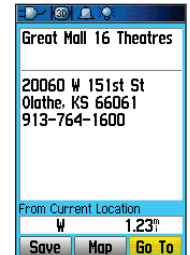
Using Find



Find POI Topic List



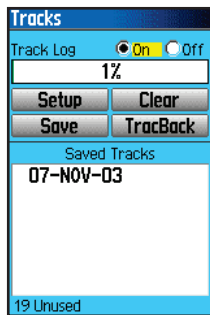
Category List



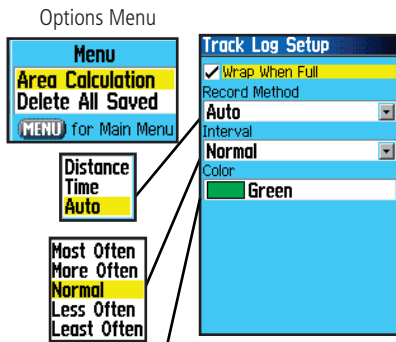
POI Information Page

Main Menu

Using Tracks



Tracks Page with Saved Track Log



Track Log Setup Page

Active Track Color Options

Using a Track Log

The Tracks feature creates an electronic trail on the map page as you travel about and is referred to as a Track Log. A track log contains information about points along its path, including time, position, altitude and depth.

Use a Track Log to:

- Record your movements for a given time and place and save it.
- Measure the area of any space you encircle with a track.
- Retrace your path in either direction.

To create a Track Log:

1. Press the **MENU** key twice to display the Main Menu. Then use the **ROCKER** key to highlight the Tracks icon.
2. Press **ENTER** to display the Tracks Page. The page contains On and Off buttons to activate or cancel the Track Log and a Track Log meter which displays the percentage of track log space used.
3. Beneath the Track Log field are four on-screen buttons to: "Setup" a track log, "Clear" the track log, "Save" a track log, and to activate the "TracBack®" feature for the current log.
4. To setup a track log, highlight the "Setup" button and press **ENTER** to display the Setup page. The first item on the page is "Wrap When Full". If you don't check this item, then the track log will stop recording when full instead of overwriting the oldest data with new data.

(cont. on the next page)

5. Highlight the "Record Method" field and press **ENTER** to display the Distance, Time and Auto options. Because a track is made of a series of points that define your path of travel, they can be placed a specified "Distance" apart or placed at a "Time" interval you specify. The "Auto" option allows you choose from five intervals.
6. Next, set the interval for setting track points. You can choose from distance, time or frequency values.
7. The last item is the Active Track Color Options list.
8. When completed, press the **QUIT** key to return to the Track Log Page.

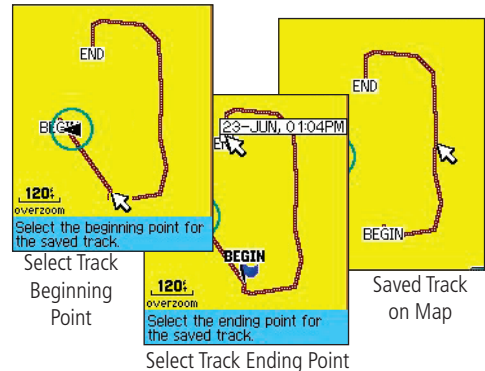
To Save a Track Log:

1. With the Tracks Page displayed, highlight the "Save" button and press **ENTER**, you will be asked "Do You Want To Save the Entire Track?". If you select "Yes," a "Saving Track" message appears followed by the Saved Track Page. The new saved track will be a representation of the entire track log from beginning to end.
2. If you select "No" a map showing the entire track appears and prompts "Select the beginning point for the saved track." Use the **ROCKER** key to move the Panning Arrow to the point on the track line that you want to become the beginning of the Saved Track and press **ENTER**.
3. The next prompt asks you, "Select the ending point for the saved track." Use the Panning Arrow to identify a point on the track that you want as the End Point and press **ENTER**. A "Saving Track" message appears followed by the Saved Track Page.
(cont. on the next page)

Using Tracks

Saved Track	
Name	23-JUN-04 02
Distance	0.17"
Area	2.1 ac
Color	Dk Red
<input type="checkbox"/> Show On Map	
Delete	Map
TracBack	OK

Saved Track Page



Main Menu

Using Tracks

4. The Saved Track Page allows you to: Rename the track, view the track distance, view the calculated area encircled by the track (an area is defined even if the track is open ended), specify a color for the track when displayed on the map page (Show On Map). On-screen buttons at the bottom of the page allow you to Save the track (OK), Delete, View it on the Map, and navigate the track back to any point along the track (TracBack).



Saved Track Page

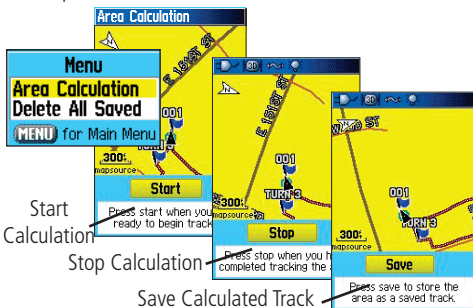


Saved Track on the Map Page

To view a Track on the Map:

1. With the Saved Tracks Page for the track or the Track Log displayed, highlight the Map button and press **ENTER** to display the Map Page.
2. A map showing the entire track appears with Begin and End markers. Any User Waypoints added to the Track will be displayed as well.

Area Calculation Option



To calculate the area of a Track:

1. With the Track Log Page displayed and the Track Log On, press the **MENU** key to display the Area Calculation option.
2. Highlight the option and press **ENTER** to display the calculation Start Page. Press **ENTER** to start the calculation as you begin to move and define the area's boundaries. The page now displays a "Stop" button.
3. When you have completed defining the area, press **ENTER** to display the page with a "Save" button.
4. Press **ENTER** again to save the new track to the Saved Tracks List.

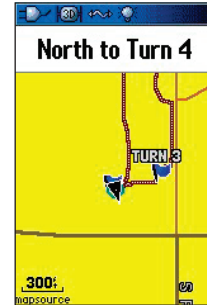
To Use the TracBack feature:

1. With the Saved Tracks Page for the track or the Track Log displayed, highlight the TracBack button and press **ENTER** to display the TracBack Page.
2. A map showing the entire track appears and you are prompted to select the point you want to TracBack to. Use the **ROCKER** key to move the Panning Arrow to the desired point on the map and press **ENTER** to start navigating the TracBack.
3. Select either "Follow Road" to route back to the selected point using available roadways or "Follow Track" to retrace your original path of travel. Highlight the "Don't ask Again" option and press **ENTER** if you want to use the same option the next time you use TracBack.
4. When the TracBack Navigation Page displays, directions to the first turn on the track display at the top of the page. Move in the direction of the first turn. When you reach the first turn the display will provide direction to the next turn, and so on, until you have reached your destination.
5. To exit a TracBack, press the **MENU** key and select "Stop Navigation."

To Create a User Waypoint on a Saved Track:

With a saved track displayed on the map, use the **ROCKER** key to move the Panning Arrow to the point on the track that you want to mark as a user waypoint. Press **ENTER** to display the Mark Waypoint Page.

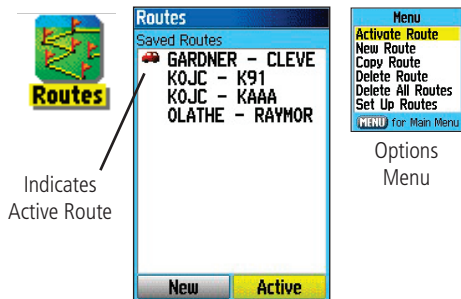
Using Tracks



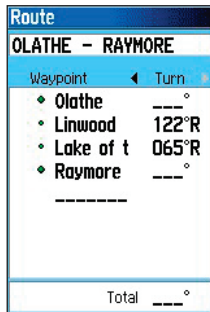
TracBack Page

Main Menu

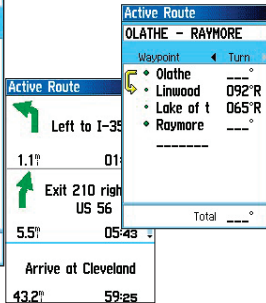
Using Routes - Automotive Mode



Saved Routes List



Active Route Page when Off Road



Creating and Using a Route

Route navigation allows you to create a sequence of intermediate waypoints which lead you to your final destination. The GPSMAP 96/96C stores 50 routes, each with up to 250 waypoints each. A route can be created and modified from the Routes Page, and waypoints can be added to a route from the Aviation Go To Page or Find Menu. More complex routes can be created using a PC and MapSource programs and then transferred to the unit memory.

To create a route:

1. Access the "Routes" page from the Main Menu. The page has a "New" button, an "Active" button and a list of saved routes.
2. Use the **ROCKER** key to highlight the "New" button and press **ENTER** to display the route Setup Page.
3. With an empty row (dashed) in the route list highlighted, press **ENTER** to display the Aviation Go To Page
4. Press the **MENU** key, select "Find More..." and press **ENTER** to display the Find Menu.
4. Use the Find Menu to select a route waypoint from one of the Find Menu groups and display the Information Page for the selected waypoint, city, exit, point of interest, etc. Highlight the on-screen "Use" button and press **ENTER** to place it on the Route Waypoint List.
5. To add more points to the route, repeat the process. You can rename the route if desired.
6. Press **QUIT** to save it to the Saved Routes list. Or... press **MENU**, highlight "Activate" and press **ENTER** to navigate.

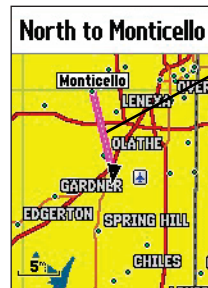
Methods of navigating to a destination:

- When you activate the “Go To” button on the Information Page for a User Waypoint or other Find Menu item, the GPSMAP 96/96C creates a straight path (point to point) from your current location to that location.
- When you select the “Activate” option from a Route page options menu the GPSMAP 96/96C creates a route composed of several User Waypoints or Find Menu items, with the last being your destination. It navigates directly from point to point. Before each turn in the route a turn page displays a guidance message and graphic of the turn. You can view the turns at any time by pressing the **ROCKER** key up or down while the route is active.
- In Automotive Mode these two navigation methods change when you select the “Follow Roads” option from the Routing Setup Page. Both Go To navigation and point to point routing become routes that allow you to navigate using roads.

The routes use existing roadways (either those in the basemap or from downloaded detail mapping) to automatically calculate a route to your destination. Turns on roadways are added to the active route page and will be preceded by a guidance message with graphic display of the turn.

If there are not enough roads at your location to calculate a route, a message will display to advise you.

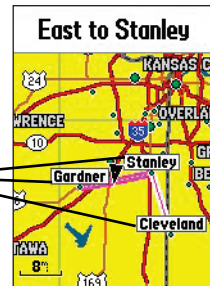
Using Routes



Direct Line Navigation

Go To (Distance)

Navigation from Waypoint to Waypoint



Manual Routing

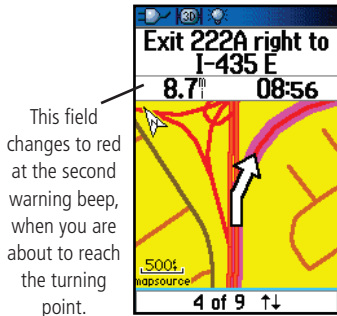


Navigation using Existing Roadways

Auto Routing

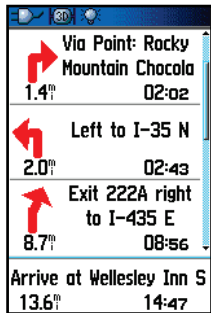
Main Menu

Using Routes - Automotive Mode



This field changes to red at the second warning beep, when you are about to reach the turning point.

Preview of Turn 4 of 9 Turns on a Route



List of Turns for an Active Route using the "Follow Roads" option

Navigating a Route

After you have created a route, you can begin navigation immediately or save it to the Saved Routes list as explained on page 72.

When you are navigating a route, a guidance message and graphic view of turns in the route will display as you approach each one. Using the "Follow Roads" option from the Routing Setup Page increases the number of turns and displays an Active Route page with a list of turns. If you selected the "Off Road" option you can view only the list of points for a route from the Active Route Page. (See Routing Setup on page 92.)

To Preview the Turns for an Active Route:

1. From the Routes Page, highlight the route from the Routes list.
2. Press **ENTER** to display the Route Page for the route.
3. Highlight the desired route and from the Saved Routes list and press the **MENU** key to display the options menu. Select "Activate," and press **ENTER** to begin navigation and to display the route on the Map Page.
4. To view the list of turns on the route, cycle the **PAGE** key to display the Active Route Page. To view any individual turn on the list, use the **ROCKER** key to highlight it and press **ENTER**.
5. The Preview Page displays the turn and guidance text and a small field at the bottom showing the turn number in sequence and total turns in the route. To scroll through all turn previews, move the **ROCKER** key Up or Down. To exit, press the **QUIT** key.
6. To stop navigating, select "Stop Navigation" from the Map or Pointer Page and press **ENTER**.

Route Options *(for all operating modes)*

To activate a route:

1. From the Saved Routes Page, press the **MENU** key to display the Options Menu. Highlight the "Active Route" option and press **ENTER**.

To create a new route:

1. From the Saved Routes Page, press the **MENU** key to display the Options Menu. Highlight the "New Route" option and press **ENTER** to display the New Route Page

To copy a route:

Highlight the "Copy Route" option and press **ENTER**. The copied route displays and is named the same but followed by a numeral 1.

To delete a route or all routes:

1. From the Saved Routes Page, press the **MENU** key.
2. To clear a highlighted route or the saved routes list, select "Delete Route" or "Delete All Routes" and press **ENTER**. A prompt will display, asking "Do you really want to delete...?" Select "Yes" and press **ENTER**.

To set up the route leg transition for routes:

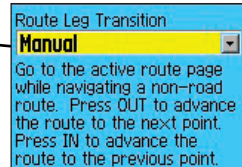
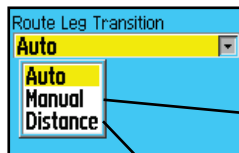
1. From the Saved Routes Page, press the **MENU** key to display the Options Menu.
2. Highlight the "Set Up Routes" option and press **ENTER** to display the Route Leg Transition Set Up Page.
3. Highlight the Route Leg Transition field and press **ENTER** to display the list of options. Select "Auto," "Manual" or "Distance." These settings control manner in which the route advances to the next leg.

Using Routes



Saved Routes
Options

Route Leg Transition
Options



Manual Route Leg
Transition



Route on the map transitions to the next leg point when you are within a 1 mile radius of that point.

Main Menu

Using Routes

Route
GARDNER - CLEVELAND

Waypoint Course

- Gardner
- Stanley 078%
- Cleveland 163%

Total 118%

Route Waypoint
Options Menu

Route Detail Page

Menu

- Activate
- Edit on Map
- Reverse Route
- Select Approach
- Set Speed and Fuel

(MENU) for Main Menu

Edit on Map
Options Menu

Options Menu

Set Speed and Fuel Option

Review
Remove
Next
Add Turns

Edit on Map
Options Menu

KAAA
VOR RW03
NDB RW21

Approach
Options Menu

Using the Route Detail Page Options:

To activate the route:

1. With the Options Menu displayed, highlight the "Activate" option and press **ENTER**.

To edit the route on the map:

1. With the Options Menu displayed, highlight the "Edit on Map" option and press **ENTER** to display the route on the map. Use the **ROCKER** key to move the panning arrow to select a route waypoint on the map.
3. Press **ENTER** to display the options for editing that waypoint. You can: "Review" the waypoint, "Remove" the waypoint, move to the "Next" waypoint, and "Add Turns" by creating new waypoints on the map.

To reverse the route:

With the Options Menu displayed, highlight the "Reverse Route" option and press **ENTER**.

To select an approach: (Aviation Mode only)

With the Options Menu displayed, highlight "Select Approach" to display options for the destination airport.

To set speed and fuel flow:

With the Options Menu displayed, select the "Set Speed and Fuel" option and press **ENTER** to display the Set Fuel Flow option.

To modify a waypoint on a Route Detail Page:

Select the waypoint from the list of waypoints and press **ENTER** to access the Route Waypoint Options Menu. You can: "Review" the information page for the waypoint, "Insert" a new waypoint ahead of the selected waypoint, "Remove" the selected waypoint, "Change" it to another waypoint, and "Move" it in the list order.

E6B Flight Computer

The E6B Flight Computer in the Main Menu calculates Density Altitude, True Airspeed, and Winds Aloft (Head Wind, Tail Wind, Wind From, and Wind Speed), based upon information you enter.

To open the E6B page of the Main Menu:

1. Press **MENU** twice to open the Main Menu.
2. Highlight the E6B icon from the vertical list of tabs using the **ROCKER** key and press **ENTER** to display the setup page.

Indicated Altitude – required entry for density altitude/true airspeed calculation. Enter the aircraft's altimeter reading.

Calibrated Airspeed – required entry for density altitude/true airspeed calculation. Enter the aircraft's airspeed indicator reading.

Baro Pressure – required entry for density altitude/true airspeed calculation. Use current altimeter setting (barometric pressure).

Total Air Temperature – required entry for density altitude/true airspeed calculation. Total Air Temperature (TAT) is the temperature of the air including the heating effect caused by speed.

Heading – required entry for winds aloft calculation. Use heading from the aircraft's heading indicator or directional gyro.

True Airspeed (calculated figure or user entered) – from entry of calibrated airspeed, baro pressure, and total air temperature. Also can be entered directly for winds aloft calculations.

Head Wind (calculated figure) – from entry of heading and true airspeed.

Wind From (calculated figure) – from entry of heading and true airspeed.

Wind Speed (calculated figure) – from entry of heading and true airspeed.

Density Altitude (calculated figure) – from entry of indicated altitude, baro pressure and total air temperature.

E6B Flight Computer



E6B Flight Computer	
Indicated Altitude	
10000'	
Calibrated Airspeed	
100 ^{kn}	
Baro Pressure	Total Air Temp
29.92"	59°
Heading	True Airspeed
300°	120 ^{kn}
Head Wind	
20 ^{kn}	
Wind From	Wind Speed
300°	20 ^{kn}
Density Altitude	
12092'	

E6B Flight Computer



Options Menu

Main Menu

E6B Flight Computer

E6B Flight Computer	
Indicated Altitude	
10000 ^{ft}	
Calibrated Airspeed	
100 ^{kn}	
Baro Pressure	Total Air Temp
29.92 ⁱⁿ	59 [°]
Heading	True Airspeed
N	120 ^{kn}
Head Wind	
20 ^{kn}	
Wind From	Wind Speed
N	20 ^{kn}
Density Altitude	
12092 ^{ft}	

E6B Flight Computer Page

Restore Defaults
MENU for Main Menu

Options Menu

Note: If Cardinal letters are selected for the "Direction Display" field of the "Units" setup page, the "Heading" and "True Airspeed" fields can not be configured.

To calculate true airspeed and density altitude:

1. From the E6B page use the **ROCKER** to highlight the "Indicated Altitude" field (at the top of the page) and press **ENTER**.
2. Use the **ROCKER** key to enter the altitude displayed on your altimeter. Press **ENTER** when finished.
3. Repeat steps 1 and 2 to enter the "Calibrated Airspeed," "Baro Pressure" and "Total Air Temperature." (For 'Calibrated Airspeed', use the speed displayed on your airspeed indicator. Use the current altimeter setting for "Baro Pressure." "Total Air Temperature" is the temperature of the outside air including the heating effect caused by speed. For most aircraft, this is the temperature reading on a standard outside air temperature gauge.)
4. The calculated figures for "True Airspeed" and "Density Altitude" are displayed in the designated fields.

To calculate winds aloft:

1. Follow the steps above to determine true airspeed. Or, use the **ROCKER** key and **ENTER** to manually enter a true airspeed figure in the "True Airspeed" field.
2. Use the **ROCKER** key to highlight the "Heading" field and press **ENTER**.
3. Use the **ROCKER** key to enter the aircraft heading displayed on your directional gyro or Pointer. Press **ENTER** when finished.

The figures for "Head Wind," "Wind From," and "Wind Speed" are displayed.

Note: If a True North reference is currently selected (as the heading reference) on your GPSMAP 96/96C, you must enter "Heading" using a True North reference to accurately determine winds.

To restore defaults:

1. Open the E6B page of the Main Menu.
2. Press **MENU** to open the Options Menu.
3. Press **ENTER** when "Restore Default" is highlighted.

Using the Flight Log

The Flight Log displays a list of any recorded flights, including date, route of flight, and flight time. The GPSMAP 96/96C saves up to 50 recorded flights. Entries on this list are automatically created for each flight (but only in Aviation Mode). Recording begins when your speed exceeds 30 knots and you gain 500' of altitude. The 'Route of Flight' information uses the nearest airport as the departure airport. The destination airport is continuously updated as your flight progresses. If you land and ground-speed drops below 30 knots, the flight entry is saved and a new entry will be recorded when you depart the airport. (Touch-and-goes or brief stops of less than ten minutes will append to the current flight record, rather than start a new entry.) Select any listed item to view additional flight information.

To view details for a saved flight:

1. Press the **MENU** key twice to open the Main Menu.
2. Highlight the Flights icon using the **ROCKER** key and press **ENTER** to open the page.
3. Use the **ROCKER** key to highlight the desired flight and press **ENTER**.
4. With "OK" highlighted, press **ENTER** to return to the Flight Log.

An optional FlightBook software package is available to further simplify your flight record keeping. For additional detail about FlightBook, visit the Garmin Web site at <http://www.garmin.com/aviation>.

Flight Log Options Menu

The following options are available by pressing the **MENU** key:

Delete Flight – deletes the highlighted flight record from memory.

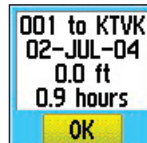
Delete All Flights – deletes all flight records from memory.

Flight Log



Flight Log	
Date	Route Of Flight
02-JUL	001-KTVK
01-JUL	GARMIN-001
01-JUL	GARMIN (Loc

Flight Log Page



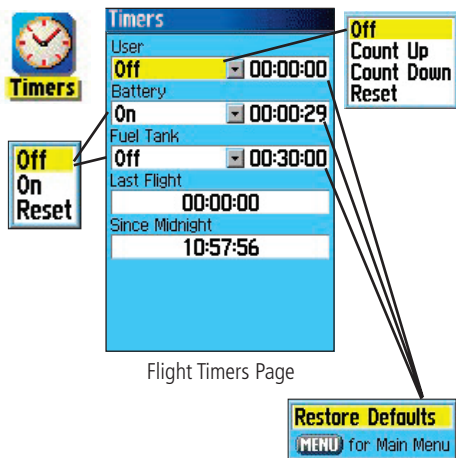
Selected Flight Log



Option Menu

Main Menu

Flight Timers



Flight Timers Page

Flight Timers

To open the Timers page, press the **MENU** key twice to open the Main Menu. Select the Timers icon and press **ENTER** to display the Timers Page.

User – allows you to set the timer to “Count Up” or “Count Down.” You can also “Reset” the timer and turn it “Off.” Enter a time to use when counting up or down to the right. Can be used for any application.

Battery– allows you to set the battery useful life timer to Off, On or Reset

Fuel Tank– allows you to set the fuel tank timer to Off, On or Reset. Useful for timing tank switching.

Last Flight – displays the length of time the unit was turned on during the last flight.

Since Midnight – displays the time the unit has been turned on since midnight. This will reset at midnight.

To use the Flight Timers feature:

1. Press the **MENU** key twice to open the Main Menu.
2. Highlight the Timers icon using the **ROCKER** key and press **ENTER** to open the page.
3. Use the **ROCKER** key to highlight the desired timer field and press **ENTER** to view options for that field. The “User” field can be used for any function you wish to time.
4. Use the **ROCKER** key to select the desired option and press **ENTER**.
5. Use the **ROCKER** key to highlight the numeric field adjacent to each topic, then press **ENTER** to highlight the first character. Use the **ROCKER** key to enter a value if desired.

Aircraft Profile

The Aircraft Profile Page consists of two separate sections: 'Aircraft Profile' and 'Weight & Balance'.

Aircraft Profile Setup

The Aircraft Profile allows you to define cruising speed, maximum speed, and fuel flow for up to ten aircraft that you regularly fly.

To enter an aircraft profile:

1. On the "Aircraft Profile" Page, use the **ROCKER** key to highlight the on-screen "New" button and press **ENTER**.
2. Highlight the "Current Aircraft" field and press **ENTER**.
3. Use the **ROCKER** key to enter the aircraft tail number (or other identifying information) in the "Current Aircraft" field. Press **ENTER** when finished.
4. Use the **ROCKER** key enter information for the cruising and maximum speeds for your aircraft, the your aircraft's fuel flow, and the symbol for your aircraft.

To select a saved aircraft profile:

1. On the "Aircraft Profile" page, use the **ROCKER** key to highlight the "Current Aircraft" field and press **ENTER**.
2. Use the **ROCKER** key to select a desired aircraft profile and press **ENTER**.

To create a new profile, rename or delete a saved aircraft profile:

Use the **ROCKER** key to highlight the "New," "Edit" or "Delete" buttons at the bottom of the page and press **ENTER**.

Aircraft Profile



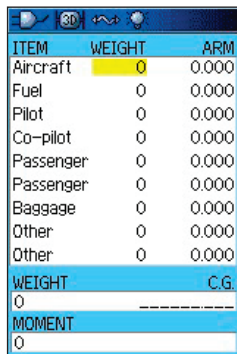
Aircraft Profile	
Current Aircraft	UNNAMED
Cruise Speed	138 ^{kn}
Maximum Speed	173 ^{kn}
Fuel Flow	8.0 ^{hr}
Symbol	Single Engine
New Edit Delete	
Weight & Balance...	

Aircraft Profile Page

Single Engine
Multi Engine
Jet
Sailplane
Hang Glider
Helicopter

Main Menu

Aircraft Profile



ITEM	WEIGHT	ARM
Aircraft	0	0.000
Fuel	0	0.000
Pilot	0	0.000
Co-pilot	0	0.000
Passenger	0	0.000
Passenger	0	0.000
Baggage	0	0.000
Other	0	0.000
Other	0	0.000
WEIGHT		C.G.
0		-----
MOMENT		
0		

Weight & Balance Page

Options
Menu



Empty Aircraft – retains aircraft empty weight and arm figures, retains other arm figures, but zeros all other weight values.

Restore Default – restores all settings to zero.

Weight & Balance

“Weight & Balance” may be used during your pre-flight preparations to verify the weight and balance conditions for your aircraft. By entering the weight and arm values on this page, the GPSMAP 96/96C can calculate the total weight, moment and center of gravity (CG) figures, ensuring a safe flight every time.

Before entering the various figures, you will need to determine the basic empty weight of the airplane and the arm (or ‘station’) for each weight entered. These figures should be determined using the pilot’s operating handbook for your airplane. The pilot’s operating handbook will also note the weight limitations and fore/aft CG limits. Compare those figures to the values calculated by the GPSMAP 96/96C.

To perform weight and balance calculations:

1. From the Aircraft Profile page, use the **ROCKER** to select “Weight & Balance” at the top of the page.
2. Use the **ROCKER** key to highlight the desired weight field and press **ENTER**.
3. Use the **ROCKER** key to enter the weight figure. Press **ENTER** when finished.
4. Use the **ROCKER** key to highlight the corresponding arm field and press **ENTER**.
5. Use the **ROCKER** key to enter the arm figure. Press **ENTER** when finished.
6. Repeat steps 2 through 5 above until all figures are entered. The calculated moment, weight, and CG figures appear at the bottom of the page. Keep in mind that the “Aircraft” (empty weight/arm) figures must be entered as a reference to calculate a valid moment, weight, and CG.

The Setup Menu

The Setup Menu allows you to customize the GPSMAP 96/96C to your personal preferences. Each setup page is identified by an icon, Highlight an icon and press **ENTER** to view that setup page. The setup pages are arranged with features and data fields that can be changed to meet your requirements. It is not necessary to change the default settings unless desired.

To access the Setup Menu:

1. From the Main Menu select the Setup icon and press **ENTER**.
2. With the Setup Menu displayed, select the feature you wish to modify and press **ENTER**.

System Setup

The System Setup Page allows you to choose from three modes of GPS operation, enable/disable WAAS, designate battery type, choose a display text language, and choose what happens when the GPSMAP 96/96C is disconnected from an external power source.

To change a System Setup feature:

1. Use the **ROCKER** and **ENTER** keys to select the feature field and setup options.
2. With an option for a field highlighted, press **ENTER** to select.

To view the software version, press **MENU** and select "Software Version."

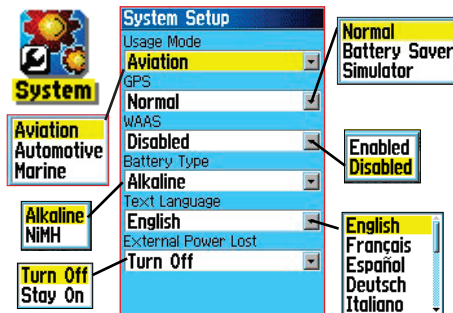


The Setup Menu



Setup Menu

System Setup



System Setup Page and Options

Main Menu

Display Setup

Display

Daytime
Nighttime
Auto

Stays On
15 Seconds
30 Seconds
1 Minute
2 Minutes

Backlight
Timeout
Options

Display Setup Page

Amethyst
Aquamarine
Diamond
Emerald
Opal
Pearl
Peridot
Ruby
Sapphire
Topaz

Color Scheme

Options

Level
Selector

100%

The screenshot shows the 'Display Setup' menu. On the left, there are three callout boxes: 'Display' with a color wheel icon, 'Daytime Nighttime Auto' with a sun/moon icon, and 'Stays On' with a list of time options. The main menu has a title bar 'Display Setup' and several options: 'Display Mode' (set to 'Auto'), 'Daytime Color Scheme' (set to 'Diamond'), 'Nighttime Color Scheme' (set to 'Sapphire'), 'Backlight Timeout' (set to 'Stays On'), and 'Backlight Level' (set to '100%'). On the right, there is a scrollable list of color schemes: Amethyst, Aquamarine, Diamond, Emerald, Opal, Pearl, Peridot, Ruby, Sapphire, and Topaz. Below this list is a 'Level Selector' icon (a lightbulb with a vertical slider) and the text 'Options' and 'Level Selector'. A callout box on the right lists the color scheme options.

Interface Setup

Interface

Interface Setup Page

USB (GARMIN Data Format)
Not Connected
Serial Data Format
GARMIN

GARMIN
GARMIN DGPS
NMEA In/NMEA Out
Text Out
RTCM In
RTCM In/NMEA Out
RTCM In/Text Out
None

Data Format
Options

The screenshot shows the 'Interface Setup' menu. On the left, there is a callout box 'Interface' with a computer and GPS icon. The main menu has a title bar 'Interface Setup' and several options: 'USB (GARMIN Data Format)' (set to 'Not Connected'), 'Serial Data Format' (set to 'GARMIN'), and 'Data Format' (set to 'GARMIN'). On the right, there is a scrollable list of data format options: GARMIN, GARMIN DGPS, NMEA In/NMEA Out, Text Out, RTCM In, RTCM In/NMEA Out, RTCM In/Text Out, and None. A callout box on the right lists these options.

Display Setup

The Display Setup Page allows you to select a screen display color scheme for day and night viewing. You can set the backlight timeout and the level of brightness which can significantly save on battery power.

To change a System Setup feature:

1. Use the **ROCKER** and **ENTER** keys to select the feature field and setup options menus.
2. With an option for a feature field highlighted, press **ENTER** to select. Use the **ROCKER** key to slide the brightness level selector.

Interface Setup

The Interface Setup Page allows you to control the input/output format used when connecting your unit to a computer, external NMEA devices, a DGPS beacon receiver, etc. using a USB or Serial Port Cable

The following settings are available:

GARMIN - The proprietary format used to exchange waypoint, route, track log and MapSource data with a PC.

GARMIN DGPS - The proprietary format used with a Garmin differential beacon receiver (e.g., GBR 21). Provides for tuning of the beacon receiver directly from the GPSMAP 96/96C.

Aviation In - The proprietary format used for connection to a Garmin panel-mounted GPS receiver. Allows Go To or route selection on the panel-mount to be automatically displayed on the GPSMAP 96/96C.

NMEA In/NMEA Out - Supports input and output of standard NMEA 0183 version 3.01 data.

Text Out - Allows ASCII text output of location and velocity information. No input.

RTCM In - Provides DGPS input using a standard RTCM SC-104 format. No output.

RTCM In/NMEA Out - Allows DGPS input using a standard RTCM SC-104 format and supports the output of standard NMEA 0183 version 3.01 data.

RTCM In/Text Out - Allows DGPS input using a standard RTCM SC-104 format and supports the output of simple ASCII text output of location and velocity information

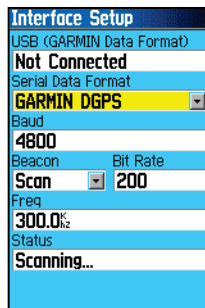
None - Provides no interfacing capabilities.

To change an Interface Setup feature:

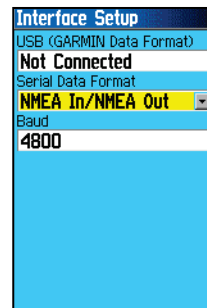
1. Access the Interface Setup Page as explained at the beginning of this section.
2. Highlight the desired setting and press **ENTER**.
3. When you select Text Out and /or RTCM In, additional fields will appear. Use the **ROCKER** key to highlight "Baud Rate" and press **ENTER**. Use the **ROCKER** key to highlight the desired setting and press **ENTER**.
4. For Garmin DGPS or RTCM In/NMEA Out, use the **ROCKER** key to highlight "Beacon" and press **ENTER**. Use the **ROCKER** key to select "Scan" or "User" and press **ENTER**.

If "Scan" is selected, the GPSMAP 96/96C will automatically direct the beacon receiver to scan for available beacon transmitters.

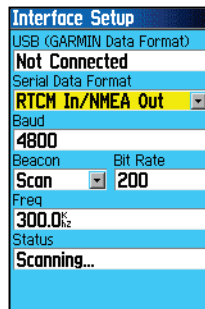
Interface Setup



Data Format Page for
GARMIN DGPS



Data Format Page for:
NMEA In/NMEA Out
Text Out
RTCM In
RTCM In/Text Out



Data Format Page for
RTCM In/NMEA Out

IMPORTANT NOTE:

When the USB cable is connected to the GPS map 96/96C, it is automatically detected and communicates only in Garmin Format. When the USB is connected, Garmin format will not communicate through the Serial connection, while all other formats can be used by the Serial connection with the USB still connected.

Main Menu

Tones Setup



Tones



Tones Sound when high-lighted

Check to Mute all Tones

Tones Setup Page

Page Sequence Setup



Page Sequence



Options Menu

Restores to original setting

Adds all pages to the list

Page Sequence Setup Page

Tones Setup

The Tones Setup Page allows you to customize the signal tones for a variety of unit features.

To use the Tones Setup feature:

1. Access the Tones Setup Page.
2. Use the **ROCKER** key to highlight the feature for which you want to set a tone and press **ENTER** to display the options menu.
3. Highlight the desired option and press **ENTER**. As you move down the list, each different tone will sound.

Page Sequence Setup

The Page Sequence Setup Page allows you to reorder any of the Main Pages, or add pages when you cycle the **PAGE** key. If you add a page to the sequence, it will no longer appear in the Main Menu.

To move, insert or remove a page:

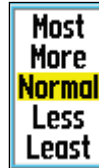
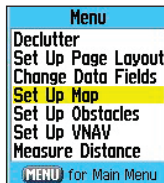
1. Access the Page Sequence Setup Page.
2. To move a page in the order, highlight the page and press **ENTER**. Select "Move," then move Up or Down until the desired position is displayed and press **ENTER**.
3. To insert a new page, highlight the page you wish to insert the new page before and press **ENTER**. Select "Insert," then choose a page from the displayed list and press **ENTER**.
4. To remove a page, highlight the page and press **ENTER**. Select "Remove" and press **ENTER**.

Using the Map Setup Feature

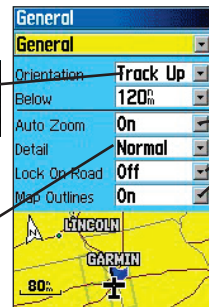
The map display for your GPSMAP 96/96C can be customized. A factory set of default settings currently controls the Map Page display and may be satisfactory for your current requirements. The Map Setup pages allow you to determine how map features appear on the page by controlling map orientation, text size, track display, map item display, detailed map data display and more. It is suggested that you wait until you are more familiar with the operation of your unit before deciding what features you want to customize.

To customize the Map Page display:

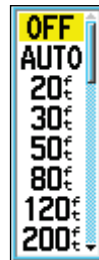
- To access the Map Setup Pages, press the **MENU** key with the Map Page displayed.
- Scroll down the Menu to the "Setup Map" option and then press **ENTER** to display the Map Setup Page. At the top of the page are icons for each setup page.
- Use the **ROCKER** key to move from icon to icon when selecting a map setup page and to move up and down to the feature fields on each page.
- With a Map Setup feature highlighted, press the **ENTER** key to display the list of options for that feature. Each Map Setup Page has a menu of general options. This menu can be accessed by pressing the **MENU** key with the page displayed.



Map Setup



The "General Settings" Map Setup Page



Many of the Setup features use the same type of option lists: Off/On, Most to Least, Small to Large, a scale with On/Off, Auto and distance options.

The Map Setup Options Menu allows you to quickly restore map settings.



Main Menu

Map Setup

General	
Orientation	Track Up
Below	120%
Auto Zoom	On
Detail	Normal
Lock On Road	Off
Map Outlines	On

The "General Settings" Map Setup Page

Aviation	
Aviation Data	On
Land Data	On
Obstacle Data	On
Prox. Circle	AUTO

The "Aviation Settings" Map Setup Page

Tracks	
	Max Zoom
Saved Tracks	AUTO
Track Log	AUTO
Track Points	3000
Go To Line	Course
Heading Line	Off

The "Tracks Settings" Map Setup Page

Map Setup - General

The first page of the Map Setup feature is the General Settings Page. Use this page: to select the map orientation, "North Up" (with north at the top of the map) or "Track Up" (with the map oriented in the direction of travel). "Below" sets the map scale at which the Track Up feature displays, all scales above that revert to the North Up map orientation. "Auto Zoom", zooms the map scale to include the beginning and ending points of a route. Detail selects the degree of map detail displayed. You can lock the Position Arrow to display on the nearest road, compensating for variances in map position accuracy.

Map Setup - Aviation

The Aviation Settings Page allows you to turn On or Off display of Aviation, Land and Obstacle data and set the radius of proximity circles.

Map Setup - Tracks

The Tracks Settings Page has settings for maximum zoom for viewing saved tracks and active track logs. You can set the number of track points for recording a track, select either a bearing or course line for navigating a track and set the heading line to off and to display in distance or time .

Map Setup - Map Information

The Map Information Page displays a list of downloaded detailed MapSource® maps such as topographic, marine charts and maps with auto-routing capability. Use the **ROCKER** key to highlight the desired map and then press **ENTER** key to show it on the map display or turn it off.

Pressing the **MENU** key displays list of options for managing maps.

Map Information Options Menu



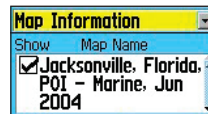
Map Setup - Points - Zoom

The Map Points - Zoom Page allows you determine the map scale at which various map features display. You turn off the display, set it to Auto or select a value from 20 feet to 500 miles.

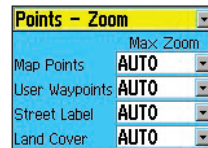
Map Setup - Points - Text

Use the Map Points - Text Page to select the text size for descriptions of items on the Map Page. You can select from Small, Medium, or Large.

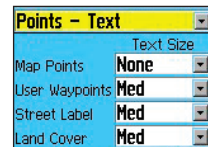
Map Setup



The "Map Information" Map Setup Page



The "Points- Zoom" Map Setup Page



The "Points - Text" Map Setup Page

Main Menu

Map Setup

SUA's	
	Max Zoom
Class B, CTA	AUTO
Class C, TMA	AUTO
Tower Zone	AUTO
Restr. Areas	AUTO
MOAs	AUTO
Mode C Veils	OFF
Other SUAs	AUTO

The "SUA's" Map Setup Page

Airport - Zoom	
	Max Zoom
Large Apt.	AUTO
Medium Apt.	AUTO
Small Apt.	AUTO
Runway Num.	AUTO
Runway Ext.	AUTO

The "Airport - Zoom" Map Setup Page

Airport - Text	
	Text Size
Large Apt.	Large
Medium Apt.	Large
Small Apt.	Med
Runway Num.	Small

The "Airport - Text" Map Setup Page

Map Setup - SUA's

The SUA's Page of the map setup feature allows you determine the map scale at which various Special Use Airspace areas display. You can turn off the display, set it to Auto or select a value from 20 feet to 500 miles.

Map Setup - Airport - Zoom

The Airport - Zoom Page of the map setup feature allows you determine the map scale at which various airports and runway features display. You can turn off the display, set it to Auto or select a value from 20 feet to 500 miles.

Map Setup - Airport - Text

The Airport - Text Page of the map setup feature allows to select the text size for descriptions of airports and runways on the Map Page. You can select from Small, Medium, or Large.

Map Setup - Aviation Navigation - Zoom

Use the Avtn Nav- Zoom Page to determine the map scale at which various aviation navigation features display. You can set it to Auto or select a value from 20 feet to 500 miles.

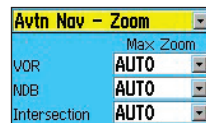
Map Setup - Aviation Navigation - Text

Use the Avtn Nav - Text Page to select the text size for descriptions of aviation navigation features on the Map Page. You can select from Small, Medium, or Large.

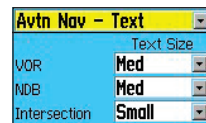
Map Setup - Marine

The Marine Settings Page is used to control the display of marine chart items when using downloaded marine charts (i.e. MapSource BlueChart® marine mapping data).

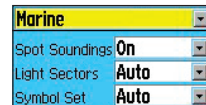
Map Setup



The "Aviation Navigation - Zoom" Map Setup Page



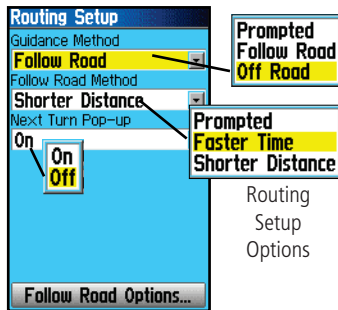
The "Aviation Navigation - Text" Map Setup Page



The "Marine Settings" Map Setup Page

Main Menu

Routing Setup



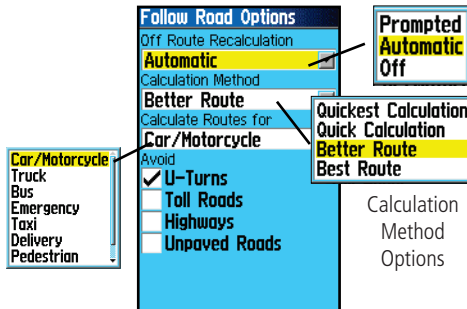
Routing Setup Page

Routing Setup

The Routing Setup Page allows you to customize how the routing functions behave. There are setup and option menus for route creation and methods of navigation.

To Use Routing Setup Options:

1. Access the Routing Setup Page.
2. Select the Guidance Method and choose "Prompted" if you want to be asked to a method ("Follow Road" or "Off Road") each time a route is calculated. Otherwise, the chosen method will always be used for navigation.
3. If you chose "Follow Road" then the "Follow Road Method" field will offer a similar choice of "Prompted," "Faster Time" or "Shorter Distance."
4. If you want the Next Turn Preview Page to display just before each turn on the route, select "On" from the "Next Turn Pop-Up" field.
5. When using the "Follow Road" guidance method, select the Follow Road Options on-screen button and press **ENTER** to choose from a page of options.

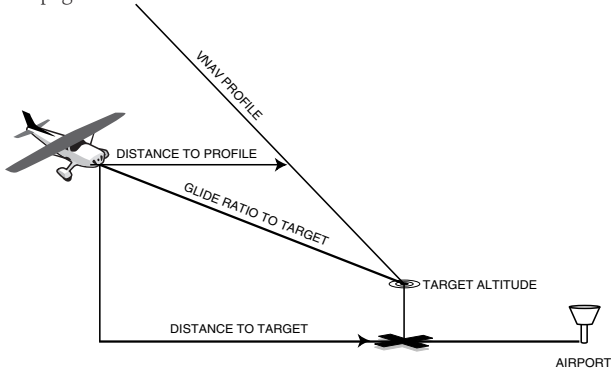


Follow Road Options

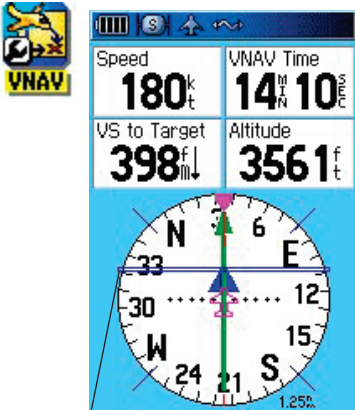
VNAV (Vertical Navigation) Setup Page

The "VNAV" page provides settings for the vertical navigation feature. These settings create a three-dimensional profile that guides you from your present position and altitude to a final (target) altitude at a specified location. When defined, message alerts and data track your progress on the HSI page.

As you approach the initial descent point, the time to vertical navigation field (ETV) indicates the time to reach the initial descent point. The 'Approaching VNAV Profile' message will appear one minute prior to the initial descent point. The descent angle will lock to prevent changes in speed from altering the profile. The VNAV feature will not take into account any changes in groundspeed that occur during the transition from level flight to descent or climb. The 'Approaching Target Altitude' message appears at 500 ft above the target altitude, the time to vertical navigation will go blank, and the VNAV indicator will disappear from the HSI page.



VNAV Setup



VNAV on HSI Page

A VNAV indicator appears as a moving bar depicting the Vertical Deviation from the VNAV Profile.

Note: The GPSMAP 96/96C is a VFR navigation tool and should not be used to perform instrument approaches. VNAV is only a VFR navigation instrument and is not intended for instrument approaches.

Main Menu

VNAV Setup

VNAV
Target Altitude
1000ft
Above Waypoint
By
4.6m
Before
VNAV Waypoint

VNAV Profile
400ft↓
VNAV Messages
On

VNAV Setup Page



Settings

Target Altitude – the altitude you want to be at when you reach your target location. Select “Above Waypoint” to use field elevation for airports in the Jeppesen database or “Above MSL” to specify an exact MSL altitude target.

By – defines the target location with settings of distance “Before” or “After” a reference waypoint (normally the final destination airport). To set a target location AT a reference waypoint, enter a distance of zero.

VNAV Waypoint – allows you to select any waypoint along the currently active route (or Go To) as your reference waypoint. The reference waypoint defines the target location (see above).

VNAV Profile – allows you to select the desired descent rate.

VNAV Messages – enables and disables the VNAV alert messages.

To define the VNAV profile settings:

1. Press the **MENU** button twice to display the Main Menu. Use the **ROCKER** button to select “Setup” and then “VNAV”.
2. Use the **ROCKER** and **ENTER** keys to highlight and select options.

To Restore Defaults:

While on the VNAV page, press **MENU**. A pop up window with the message ‘Restore Defaults’ will appear. Press the **ENTER** key.

Airspace Alarms Setup Page

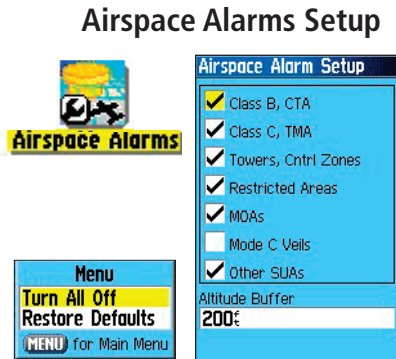
You can select and activate the following airspace alarms.

Class B, CTA/ Class C, TMA/Towers, Cntrl Zones/Restricted Area/ MOAs/Mode C Veils/Other SUAs – enables and disables the alarms. Select 'On to enable or 'Off' to disable. **Altitude Buffer** – sets the buffer for the altitude alarm. Highlight and press **ENTER** to enter a different value.

To set an alarm:

1. Access the Setup page.
2. Use the **ROCKER** key to highlight the field to the right of the alarm name you wish activate and press **ENTER**.
3. Highlight the next field to the right and press **ENTER** to activate.

When an alarm goes off, the alarm message appears on the display and the unit emits five (5) beeps. Press **ENTER** to acknowledge.

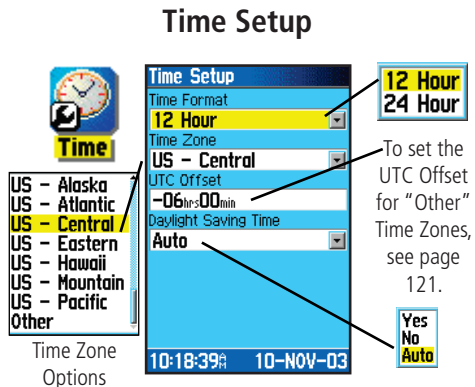


Time Setup

The Time Setup Page allows you to set the time for your location.

To use the Time Setup feature:

1. Access the Time Setup Page.
2. Highlight the Time Format field and press **ENTER** to choose from 12 or 24 (Military Time) hour formats.
3. Highlight the Time Zone field and press **ENTER** to choose the correct zone for your location. If you selected "Other," you must enter the correct Universal Time Coordinate (UTC) for your location. Refer the UTC Chart on page 121.
4. Daylight Savings Time offers choices of "Yes" or "No."



Main Menu

Units Setup



Units Setup	
Position Format	hddd°mm.mmm'
Map Datum	WGS 84
Distance/Speed	Statute
Elevation/Vert. Speed	Feet
Depth	Feet
Temperature	Fahrenheit
Pressure	Millibars

Location Setup



Location Setup	
Position Format	hddd°mm.mmm'
Map Datum	WGS 84
Heading	True

hddd°mm.mmm'
hddd°mm.ss.s"
Austrian Grid
British Grid
Dutch Grid
EOV Hungarian Grid
Finnish Grid
German Grid

Units Setup

The Units Setup Page allows you to select the units of measurement for your GPSMAP 96/96C.

To use the Units Setup feature:

1. Access the Units Setup Page.
2. Use the **ROCKER** and **ENTER** keys to highlight the various units fields and select the desired units from the lists displayed.

For more information about selecting Position Formats and Map Datums, refer to page 122 in the Appendices.

Location Setup

The Location Setup Page allows you to define settings for Position Format, Map Datum, Heading, and Magnetic Variation. To open the 'Location' tab, press the **MENU** key twice to open the Main Menu. Select 'Setup' from the vertical tab list. Then select 'Location' from the row of tabs along the top of the page.

Refer to the Appendix of this guide for more information about location formats and map datum. Also visit the National Imagery and Mapping Agency at <http://www.nima.mil>, for more information on grids and datum.

Position Format – changes the coordinate system in which a given position reading is displayed. You should only change the position format if you are using a map or chart that specifies a different position format or wish to use a format you are familiar with. The default format is latitude and longitude in degrees, minutes, and thousandths of a minute (hddd°mm.mmm'). For additional information on Loran TD setup, see the Appendix.

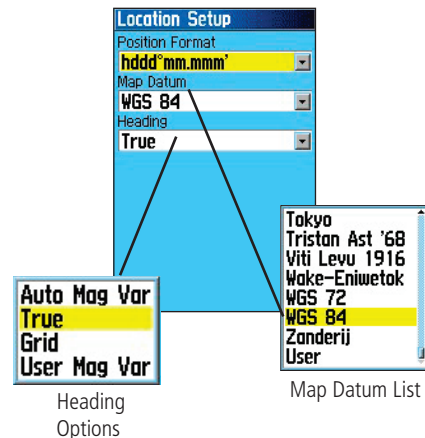
Map Datum – allows you to manually select the datum reference used to determine a given position. The default setting is 'WGS 84'. The unit automatically chooses the best datum depending upon your chosen position format. Datums are used to describe geographic positions for surveying, mapping, and navigation and are not actual maps built in the unit. Although over 100 datums are available (as listed in the Appendix), you should only change the datum if you are using a map or chart that specifies a different datum.

WARNING: Selecting the wrong map datum can result in substantial position errors. When in doubt, use the default WGS 84 datum for best overall performance.

Heading – allows you to select the reference used in calculating heading information. You can select from “Auto Mag Var,” “True,” “Grid” and “User Mag Var.” “Auto Mag Var” provides magnetic north heading references that are automatically determined from your current position. “True” provides headings based upon a true north reference. “Grid” provides headings based on a grid north reference (and is used in conjunction with the grid position formats). “User Mag Var” allows you to specify the magnetic variation at your current position and provides magnetic north heading references based upon the variation you enter. Enter the magnetic variation of your current position in the “Magnetic Variation” field if you have selected “User Mag Var” for the heading.

WARNING: The unit does not automatically calculate and update the magnetic variation at your present position if 'User Mag Var' is selected. You must periodically update the magnetic variation as your position changes. Failure to update this setting may result in substantial differences between the information displayed on your unit and external references, such as a magnetic Pointer.

Location Setup



Main Menu

Obstacle Data Setup



Obstacle Data



Lighted Obstruction 1000 ft. AGL and higher.



Unlighted Obstruction 1000 ft AGL and higher.

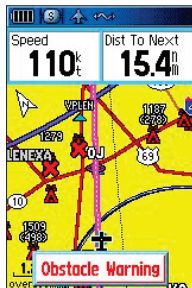


Lighted Obstruction below 1000 ft AGL .



Unlighted Obstruction below 1000 ft AGL.

Obstacle Icons



Obstacle Warning

Obstacle Data

Obstacle on the map page are displayed in red, yellow, and gray and dark gray, light gray, and white for the GPSMAP 96C and GPSMAP 96 respectively. References to obstacle icon gray tones for GPSMAP 96 units will be in parentheses for this section. Standard aeronautical chart symbols are used for lighted or unlighted obstacles above and below 1000 ft Above Ground Level (AGL). Upcoming obstacles, as you approach them, are marked by an “X” symbol.

Obstacles appearing in red (dark gray) are predicted to be within 100 ft elevation of your flight path. Those colored yellow (light gray) are more than 100 ft, but less than the elevation in the user defined “Caution Elevation” field below your flight path. You may change the Caution Elevation from the default of 1000 ft to 750 ft or 500 ft. Obstacles below your currently selected caution elevation threshold are displayed in gray (white).

Obstacle warnings are dependent upon the user defined parameters on the Obstacle Data Setup. The GPSMAP 96/96C evaluates obstacles, according to the parameters set, within a proximately one mile on either side of your projected flight path. Obstacle warnings appear in either red with white lettering (black with white lettering) indicating a red (dark gray) obstacle is in range or black with white lettering (white with black lettering) indicating a yellow (light gray) obstacle. The obstacle warning will remain on the screen until the flight path has cleared the obstacle or you have pressed **Enter**.

The GPSMAP 96/96C “Look Ahead Time” for obstacles determines the maximum time frame when an annunciation (a pop up window with tone)

will occur. The default setting is 120 Seconds, however you have the option in the Obstacle Data Setup for 90 or 60 Seconds.

“Obstacle Alert Sensitivity” determines what level of alerts are announced. The GPSMAP 96/96C defaults to high sensitivity, which will announce all red (dark gray) and yellow (light gray) obstacles at the look ahead time set. The Obstacle Data Setup allows you the option of high, medium, or low. Medium sensitivity will announce all of the red (dark gray) and the highest priority of yellow (light gray) obstacles, where low will only announce red (dark gray) obstacles.

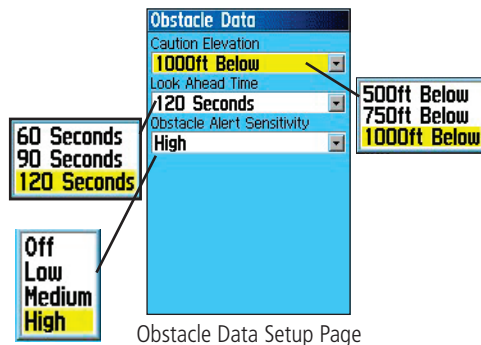
Obstacle Data Setup

The Obstacle Data Setup Page allows you to set the levels for alerting you to obstacles in or near your flight path. This setup page can also be accessed from the Map Page Options Menu.

To setup obstacle data:

1. Access the Obstacle Data Setup Page.
2. Highlight the first field and press **ENTER** to display the options for setting the minimum difference in elevation for upcoming obstacles contained in the mapping database.
3. Use the second field to set the “Look Ahead Time.” The time before reaching the obstacle that the alert is given.
4. The third field is used to determine the alert sensitivity threshold for the size of the obstacle.
5. Use the **ROCKER** key to select options and then press **ENTER**.

Obstacle Data Setup



Main Menu

Welcome Page Setup



Placing your name and phone number on this page may aid in recovery of your unit should it become lost or stolen.

Welcome Page Setup

The Welcome Page Setup Page allows you to insert a message on the Welcome Page (the first page to display when you turn the unit on).

To setup the Welcome Page:

1. Access the Welcome Page Setup Page.
2. Press **ENTER** to highlight the first character space of the message block. Use the **ROCKER** key to select and enter text.
3. When completed, press **ENTER** and then **QUIT** to close.
4. Turn you unit Off and then On again to view your Welcome Page message. You may edit the message as desired by following steps 1 through 3 again.

Proximity Waypoints

The Proximity Waypoints Page allows you to establish waypoints that have alarm circles around them at specified distances. The alarm helps you to avoid locations that are restricted or hazardous.

To use the Proximity Waypoint feature:

1. Access the Proximity Waypoints Page from the Main Menu by highlighting the Proximity icon and pressing **ENTER**.
2. With the Name field highlighted, press **ENTER** to display the Find Menu. (See page 55 for details on using the Find Feature.)
3. Select a waypoint from the Waypoints List or from any other group of map points in the Find Menu and press **ENTER** to display the Information Page for that item.
4. Highlight the "Use" button at the bottom of the page and, press **ENTER** to place the point in the list on the Proximity Waypoints Page.
5. Use the **ROCKER** key to highlight the Radius field if you want to enter a value different than the default of 1 mile.
6. Highlight the "Proximity Alarms" check box and press **ENTER** to activate the alarm feature. When you trigger an alarm, a tone will sound and a "Near Proximity Point" message appears. When you move outside the set radius, a "Leaving Proximity Point" message appears.
7. To remove or review a single entry, press **ENTER**. To remove all waypoints from the list, press **MENU** and choose "Remove All."

Proximity Waypoints



Proximity

**Review
Remove**

Use the
ENTER key
to Review or
Remove an
entry.

Proximity Waypoints	
Name	Radius
Stanley	1.00 ^m
Clare	1.00 ^m
Gardner	1.00 ^m
----- ^m	
<input checked="" type="checkbox"/> Proximity Alarms	

Proximity Waypoints List

Menu
Remove All
MENU for Main Menu

Press the
Menu key
to Clear the
Entire List

Comfort Suites-Kansas City/Olathe	
12070 S Strang Line Rd Olathe, KS 66062 913-397-0100	
From Current Location	
NE	4.09 ^m
Save	Map Use

Selected Waypoint

Main Menu

Flight Planner

Options Menu

Planner: Week Format Options

Remove Routes Options

Planner: Day Format

Planner: Month Format

Flight Planner

The Flight Planner allows you to view the following for any given day and location: Sunrise/Sunset times, moon phase flight plans saved as routes and a day, week or month calendar format display.

To use the Flight Planner feature:

1. Access the Flight Planner from the Main Menu. The current week is displayed.
2. To add a flight plan, use the **ROCKER** key to highlight the day you want and press **ENTER** to display the Page for that day.
3. Press the **MENU** key to display the Options Menu. Highlight "Add Route" and press **ENTER** to display the Saved Routes page.
4. Select the type of route (flight plan) you want to place on the Day Format Page. (See page 72 for details on using the Saved Routes Page .) With the selected route highlighted, press the **MENU** key to display the Options Menu. Select "Add To Planner" and press **ENTER** to place the point reference on the Day Format Page.
5. To remove points from a Day Format press **MENU** to display the Options Menu. Select "Remove Points" and press **ENTER** to display the Remove Points Options List. Select "Remove All" or one of the "Older Than..." time frames and press **ENTER**.
6. To view other calendar type formats, and Sun and Moon data for a specific date and location, press the **MENU** key. Use the **ROCKER** key to make your choice.

Alarm Clock

The Alarm Clock Feature allows you to use your GPSMAP 96/96C as an alarm clock. You can choose from different alarm tones, and use the “Snooze” feature to delay the alarm for an additional seven minutes.

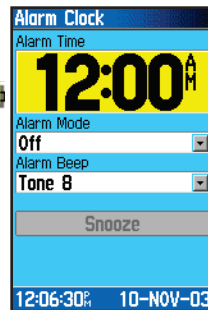
To set the Alarm Clock:

1. Access the Alarm Clock from the Main Menu.
2. Highlight the Alarm Time field and press **ENTER** to display the Number Keypad and set the desired alarm time.
3. Highlight the Alarm Mode field and press **ENTER** to display the On/Off switch.
4. Highlight the Alarm Beep field and select the type of alarm tone desired.

When you turn the alarm On, an “Alarm Set” message appears and allows you to turn the unit Off. When the “Set Time” arrives, the unit will switch On and the alarm will beep. Press any key to silence the alarm.

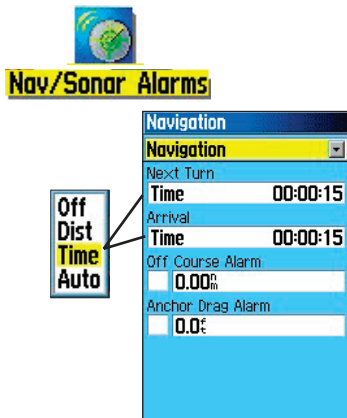


Alarm Clock



Main Menu

Nav/Sonar Alarms



Navigation Alarms Page



Alarms Options Menu

Using the Nav/Sonar Alarms Pages

The Navigation/Sonar Alarms Pages of the Main Menu allows you to define alarm settings for navigation and sonar.

To access the Alarms Tab of the Main Menu:

1. Press **MENU** twice to open the Main Menu.
2. Highlight the "Nav/Sonar Alarms" icon and press **ENTER** to display these pages. To cycle between the pages, press the **ROCKER** key left or right.

When an alarm is activated, the alarm message appears on the display and the unit emits five (5) beeps. When you select an alarm to be persistent, the alarm message appears on the display and the unit beeps until you press **ENTER** to acknowledge the alarm.

To set a persistent alarm:

Use the **ROCKER** key to highlight the check box adjacent to those alarms that offer this feature and press **ENTER** to place a check mark in the box. To remove the check mark, repeat this process.

Nav (Navigation) Alarms

Next Turn – sets an alarm to indicate next turn in route. Select "Off" for no "Next Turn" alarm. Select "Dist" to enter a specific distance. For example, if you enter 1 nm, the "Next Turn" alarm will sound one nautical mile before you reach the next turn. Select "Time" to enter a specific time before the turn for the alarm to go off. For example, if you enter 00:02:00 the "Next Turn" alarm will sound two minutes before you reach the next turn. Select "Auto" for the unit to provide a "Next Turn" alarm at its discretion.

Arrival – sets an alarm to sound when you are a specified distance or time away from a destination waypoint. Select “Off” for no ‘Arrival’ alarm. Select “Dist” to enter a specific distance. Select “Time” to enter a specific time before the destination for the alarm to go off. Select “Auto” for the unit to provide an “Arrival” alarm at its discretion.

Off Course – sets an alarm to sound when off your desired course. Place a check mark in the box, then enter a distance.

Anchor Drag – sets an alarm to sound when you have exceeded a specified drift distance. Place a check mark to turn this alarm on and then enter a distance.

Sonar Alarms

Shallow Water – sets alarms to sound when you enter an area of water that is too shallow. Select “On” and then enter a specific distance. You must be receiving sonar NMEA data for this function to work.

Deep Water – sets alarms to sound when you enter an area of water that is too deep. Select “On” and then enter a specific distance. You must be receiving sonar NMEA data for this function to work.

Speed Filter – sets the “Time Between Readings” to Off, Auto or User.

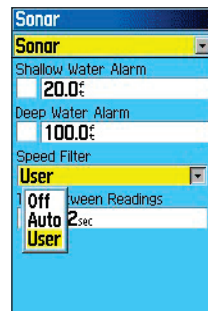
Calculator

The Calculator Feature allows you to use your GPSMAP 96/96C as a calculator. You can select either a Standard or Scientific calculator and you can choose from degrees or radians using the Options Menu.

To use the Calculator:

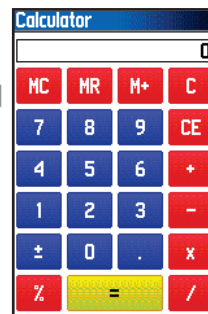
1. Access the Calculator from the Main Menu.
2. Use the **ROCKER** and **ENTER** keys to operate the calculator.

Nav/Sonar Alarms



Sonar Alarms Page

Calculator

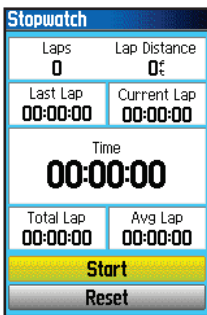


Options
Menus



Main Menu

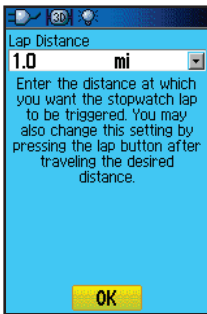
Stopwatch



Stopwatch Page



Lap Options
Menu



Setting Lap By Distance

Stopwatch

This feature allows you to use the GPSMAP 96/96C as a stopwatch, which includes a lap timer. You can choose to have the unit record the lap time based on distance.

To start the stopwatch:

Use the **ROCKER** key to highlight the "Start" field and then press **ENTER**.

To stop the stopwatch:

Use the **ROCKER** key to highlight the "Stop" field and press **ENTER**.

To use the lap feature:

With the stopwatch running, use the **ROCKER** key to highlight the "Lap" field and then press **ENTER**.

To reset the stopwatch:

With the stopwatch stopped, use the **ROCKER** key to highlight the "Reset" field and then press **ENTER**.

To time lap by distance:

Use the **ROCKER** key to highlight the Options Menu and then press **ENTER**. Choose "Lap by Distance" and press **ENTER**. To return to 'Lap by Button Press,' repeat these same steps.

To set a lap distance value:

1. Use the **ROCKER** key to highlight the Options Menu and then press **ENTER**. Choose "Set Lap Distance" and press **ENTER**.
2. Use the **ROCKER** key to highlight the field you wish to change and then press **ENTER**. Enter the new value and press **ENTER**. When done, highlight 'OK' and press **ENTER**.

Sun and Moon

The Sun and Moon Tables provide you with a graphic depiction of the sun and moon relative to the Earth. Sun and moon positions can be displayed for any time, date and location.

The Sun and Moon Page also displays sunrise, sunset, moonrise and moonset times for the selected time, date and location. On-screen buttons allow you to animate the movement of the sun and moon and stop at a given time/date. The button to the left animates the display of the sun and moon. The center button animates more rapidly, showing the phases of the moon. The right button stops animation.

To display sun and moon positions:

1. Access the Sun and Moon Page from the Main Menu.
2. To view the predictions for a different date and time, highlight those fields and press **ENTER** to display the Number Keypad.
3. To view the predictions for a different location, highlight the Location field and press **ENTER** to display the "New Location" options menu and choose from the options shown.

Sun and Moon Tables

Sun and Moon

Date	Time
10-NOV-03	12:24

Location

Current Location

Sunrise
06:54A

Sunset
05:11A

Moonrise
06:07A

Moonset
08:28A

Options Menu

- New Location
- Current Location
- Use Map
- Use Find Menu

Main Menu

Hunt and Fish Tables



Hunt & Fish	
Date	10-NOV-03
Location	Current Location
Prediction	Good Day
Best Times	11:57 ^A — 01:57 ^P --:-- ^A — --:-- ^A
Good Times	05:46 ^A — 06:46 ^A 06:08 ^P — 07:08 ^P

Hunt and Fish Page



Location Options Menu



Page Options Menu

Hunt and Fish

The Hunt and Fish Tables provide you with a listing of predicted best times for hunting and fishing for a chosen date and location.

To display hunting and fishing predictions:

1. Access the Hunt and Fish Page from the Main Menu. The current date and location are displayed in the date and location fields at the top of the page.
2. To view the predictions for a different date, highlight the Date field and press **ENTER** to display the Number Keypad.
3. To view the predictions for a different location, highlight the Location field and press **ENTER** to display the "New Location" options menu.

Choose "Use Map" to select a point on the map using the Panning Arrow. Then press **ENTER** to display the table for that location. The Location field will now state "Map Location."

Choose "Use Find Menu" to select a point from the Find Feature database. Follow instructions for using the Find Feature beginning on page 31. When a find item has been selected, highlight the "Use" button at the bottom of the item information page and press **ENTER**. The Location field will now display the name of the find item.

4. To return to the current date, press **MENU** and then **ENTER**.

Using the Message Log

The Message Log of the Main Menu displays a list of messages generated by your GPSMAP 96/96C. Use the **ROCKER** key to scroll the entire list of messages on the “Messages” Page. You can also use the “Message Filters” page to filter the messages to display only a certain types of messages.

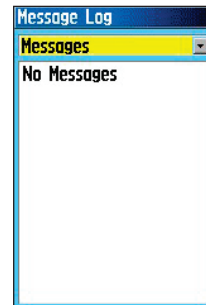
To view the messages:

1. Press **MENU** twice to open the Main Menu.
2. Highlight ‘Message’ icon using the **ROCKER** key and press **ENTER** to view the list of messages. By default all messages are displayed.
3. Use the **ROCKER** key to highlight the desired message. Press **ENTER** to view detailed information about that message.
4. To clear the page of old messages, press the **MENU** key and then **ENTER**.

To show/hide messages using the Message Filters:

1. Open the Message Page. Press the **ROCKER** key left or right to move to the “Message Filter” Page.
2. Use the **ROCKER** key to highlight the message you want to hide and press **ENTER** to remove the check mark from the box adjacent to the message type.
3. Highlight the message type again and press **ENTER** to show it again.
4. Access the Options Menu to restore default settings.

The Messages Page



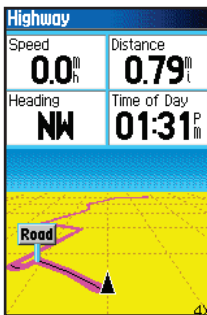
Messages Page



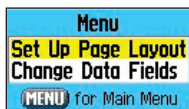
Message Filter Page

Main Menu

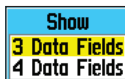
The Highway Page



Highway Page with an Active Route



Highway Page Options Menu



Data Field Display Options

The Highway Page

When you are navigating a route, the Highway Page can guide you to the destination using data fields and a graphic highway. Up to four user-selectable data fields display information such as speed, distance, time to next point on the route, etc. The list of data to display and the method of selection is the same as for the HSI/Pointer Page and is explained in detail on page 46.

The Highway graphic provides visual guidance, taking you point by point to your final destination. Your course is represented by a center line down the middle of the graphic. As you move toward each point on your route, the graphic will show the direction you should move to stay on course to the point. Five scale settings allow you to zoom in or out on the highway.

To navigate using the Highway Page:

1. While navigating, access the Highway Page from the Main Menu and observe your path of travel displayed on the highway graphic.
2. Press the **MENU** key to display the options menu. You can do the following:

Set Up Page Layout allows you to configure data fields from four to three. Change the Data Fields allows you to select the type of data to display in each field. Refer to page 46 for instructions on changing data fields. To restore defaults for the data fields press **MENU** with a data field highlighted and the press **ENTER**.

Accessories *(Included with the Unit)*

Carry Lanyard - Provides convenient method for carrying the unit.

USB PC Interface Cable - Provides connection to a PC for data transfer. Also includes MapSource Trip and Waypoint Manager CD-ROM with USB Drivers.

Yoke Mount Kit - Provides convenient placement in an aircraft. *(Not shown)*

Cigarette Lighter Adapter - Provides auxiliary power from an automobile cigarette lighter. *(Not shown)*

Owner's Manual - Start up instructions and detailed operation reference.

Quick Start Guide - Abbreviated overview of unit operation and reference.

Jeppesen Data Coupon - Free certificate for your first Jeppesen Data CD

Optional Accessories *(Not included with the Unit)*

GA 27C Remote GPS Antenna - Allows enhanced satellite acquisition. Includes suction and magnetic mount options.

MapSource CD-ROMs - Allows transfer of detailed map data. *(Not shown)*
Refer to Garmin web site: <http://garmin.com/products/GPSMAP96/96C/> for a list of compatible MapSource products.

Serial Port PC Interface Cable with Auxiliary AC Power Supply - Provides connection to a PC for data transfer. *(Not shown)*

Carrying Case - Provides protection during transport of the unit. *(Not shown)*

Auto Navigation Kit - Allows installation on a vehicle dash and includes Garmin MapSource City Select North America v5 CD-ROM.

Marine Mount Kit - Allows installation on a boat.

Bicycle Handlebar Mount Kit - Allows installation on bicycle handlebar.

Battery Pack - Rechargeable, NiMH, AA battery kit, USA receptacle.

For a complete list of available accessories for use with GPSMAP 96/96C, refer to the Garmin web site: <http://garmin.com/products/GPSMAP96/96C/>

Accessories



USB PC Interface Cable and MapSource Trip and Waypoint Manager CD-ROM
(included with the unit)



GA 27C Remote GPS Antenna with MCX Connector

CAUTION: Garmin Accessories have been designed and tested specifically for use with Garmin products. Accessories offered for sale by other manufacturers have not necessarily been tested or approved by Garmin for use with Garmin Products. Use of such accessories might cause damage to your Garmin Product and void the terms of the warranty. Using Garmin Accessories with other manufacturer's products is not recommended.

See your Garmin Dealer or website for availability.

Appendix

Accessories



Auto Navigation Kit



Marine Mount Kit

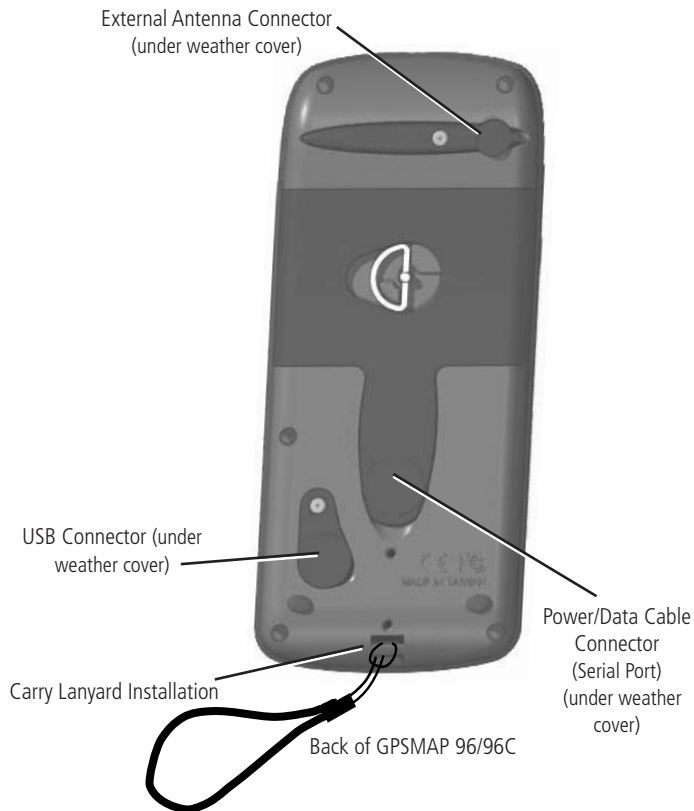


Bicycle Handlebar Mount Kit



Rechargeable NiMH Battery Kit

Accessory Ports and Installing the Carry Lanyard



External Antenna Connector
(under weather cover)

USB Connector (under
weather cover)

Carry Lanyard Installation

Back of GPSMAP 96/96C

Power/Data Cable
Connector
(Serial Port)
(under weather
cover)

PHYSICAL

Case:	Rugged, fully gasketed, water resistant, IEC-529, IPX7 (Submersible 1 meter @ 30 minutes)
Size:	6.2"H x 2.7"W x 1.4"D
Weight:	7.6 ounces (153 g) with batteries installed
Display:	
GPSMAP 96	1.6"W x 2.2"H, 4-level Gray Monochrome (180 x 240 pixels) Backlit, High Contrast
GPSMAP 96C	1.5"W x 2.2"H, 256-color, high resolution, transreflective TFT (160 x 240 pixels) Backlit
Antenna:	Built-in quad helix, remote antenna capability
Keypad:	Nine multifunction backlit keys
Operating Range:	5 to 158°F (-15 to 70°C) ¹

PERFORMANCE

Receiver:	WAAS enabled, 12 parallel channel
Acquisition Time:	Warm: Approximately 15 seconds Cold: Approximately 45 seconds AutoLocate™: Approximately 2 minutes
Update Rate:	Once per second, continuous
GPS Accuracy	
Position:	< 15 meters (49 feet), 95% typical ²
Velocity:	0.05 meter/sec steady state

Specifications



GPSMAP 96



GPSMAP 96CS

Specifications

DGPS Accuracy

Position: 3-5 meters (10-16 feet), 95% typical³

Velocity: 0.05 meter/sec steady state

Dynamics: Performs to specifications to 6 g's

Interfaces: NMEA 0183 version 2.3, RTCM SC-104 (for DGPS corrections) and RS-232 and USB for PC interface

Data Storage Life: Indefinite: no memory battery required

Map Storage: Internal; approximately GPSMAP 96 - 22 MB
GPSMAP 96C - 118 MB

POWER

Source: Two 1.5 volt AA batteries or 12 V Adapter Cable, or up to 36 VDC external power

Battery Life: GPSMAP 96 - Up to 25 hours (typical use)⁴
GPSMAP 96C - Up to 40 hours (typical use)⁴

Specifications subject to change without notice.

1. The temperature rating of the GPSMAP 96/96C may exceed the usable range of some batteries. Some batteries can rupture at high temperatures.
2. Subject to accuracy degradation to 100m 2DRMS under the U.S. DoD imposed Selective Availability (SA) Program.
3. With optional Garmin GBR 21 Beacon Receiver input.
4. Alkaline batteries lose a significant amount of their capacity as the temperature decreases. Use Lithium batteries when operating the GPS map 96/96C in below-freezing conditions. Extensive use of screen backlighting and audible tones significantly reduce battery life.

Data Field Option Definitions

Accuracy of GPS— The current accuracy of your GPS determined location.

Altitude—(Aviation Only) Height above mean sea level (MSL).

Battery Timer— The time remaining on the battery before it is fully discharged.

Bearing—The direction from your current location to a destination.

Course—The direction from your starting location to a destination.

Course to Steer— The recommended direction to steer in order to reduce cross-track error and return to the course line.

Cross Track— The distance you are off a desired course in either direction, left or right.

Depth—(Marine Only) The distance from the surface of the water to the bottom.

Distance To Destination— The “great circle” distance from current location to a Go To destination, or the final waypoint in a route.

Distance To Next— The “great circle” distance from current location to a Go To destination, or the next waypoint in a route.

ETA At Destination— Estimated Time of Arrival. The estimated time you will reach a Go To destination, or the final waypoint in a route.

ETA At Next— Estimate Time of Arrival. The estimated time you will reach a Go To destination, or the next waypoint in a route.

ETE To Destination— Estimated Time Enroute. The estimated time required to reach a Go To destination, or the final waypoint in a route.

ETE To Next— Estimated Time Enroute. The estimated time required to reach a Go To destination, or the next waypoint in a route.

Data Field Option Definitions

Flight Timer—(Aviation Only) The length of time for the current flight.

Fuel Timer—(Aviation Only) The fuel required to travel from current location to the indicated route waypoint.

Glide Ratio—(Aviation Only) The ratio of horizontal distance travelled to vertical distance travelled. For example, a 6:1 glide ratio indicates a 1000' vertical descent for every 6000' horizontal distance travelled.

Glide Ratio to Destination—(Aviation Only) The glide ratio required to descend from your present position and elevation to the destination's elevation.

Glide Ratio to Next—(Aviation Only) The glide ratio required to descend from your present position and elevation to the elevation of the route's next point.

Glide Ratio to Target—(Aviation Only) The glide ratio required to descend from present position and altitude to the target altitude at the location specified on the VNAV screen.

Odometer—The total distance you have traveled for all trips. (Separate data for each operating mode.)

Pointer—(Marine and Automotive Only) Display a direction pointer.

Speed—Display rate of travel in miles/kilometers/nautical miles per hour.

Speed - Maximum—The maximum speed at which the unit has moved.

Speed - Moving Avg.—The average speed while moving.

Speed - Overall Avg.—The average speed determined by both the moving speed and stopped time.

Sunrise—The time at which the sun rises on this day.

Sunset—The time at which the sun sets on this day.

Data Field Option Definitions

Time in UTC— The time for the Universal Time Coordinate at current geographical location.

Time of Day - The current time and date. It can be displayed in 12 or 24 hour format in local time or universal (UTC) time.

Time to VNAV - (Aviation Only) The estimated time required to reach the initial descent point in a VNAV profile.

Track— The direction of movement relative to a ground position. Also referred to as “ground track”.

Trip Odometer—A running tally of distance travelled since last reset.

Trip Time - Moving— Time the unit has been moving since last reset of the trip timers.

Trip Time - Stopped— Time the unit been stationary since last reset of the trip timers.

Trip Timer (Total)— Total time the unit has been in operation since last reset of the trip timers.

Turn—The angle difference (in degrees) between the bearing to your destination and your current line of travel. “L” means turn Left. “R” means turn Right.

User Timer— Display the user timer set in the Main Menu.

Velocity Made Good—The speed at which you are closing on a destination along a desired course.

Vertical Speed—(Aviation Only) The rate of climb or descent.

Vertical Speed To Dest—(Aviation Only) Your rate of ascent/descent to a predetermined altitude.

Vertical Speed To Next—(Aviation Only) Your rate of ascent/descent to an altitude at the next point on a route.

Vertical Speed To Target—(Aviation Only) Your rate of altitude gain/loss over time.

Voltage— Direct current voltage level of an external power source.

Water Speed—(Marine Only) Speed while traveling on water.

Data Field Option Definitions

Water Temperature - The temperature of water at a measured depth using devices interfaced to the GPSMAP 96/96C.

Waypoint At Destination - The last point on a route, your destination.

Waypoint At Next - The next point on your route.

Interfacing the GPSMAP 96/96C

The GPSMAP 96/96C is provided with interface connection to a PC using either a serial port or USB connector cable. Connection to your computer is necessary for downloading of detailed map from Garmin MapSource® and Jeppesen® Map Data CDs. You can also save routes, waypoints, and tracks from the GPSMAP 96/96C to MapSource. Refer to the MapSource User's Guide provided with your MapSource CDs.

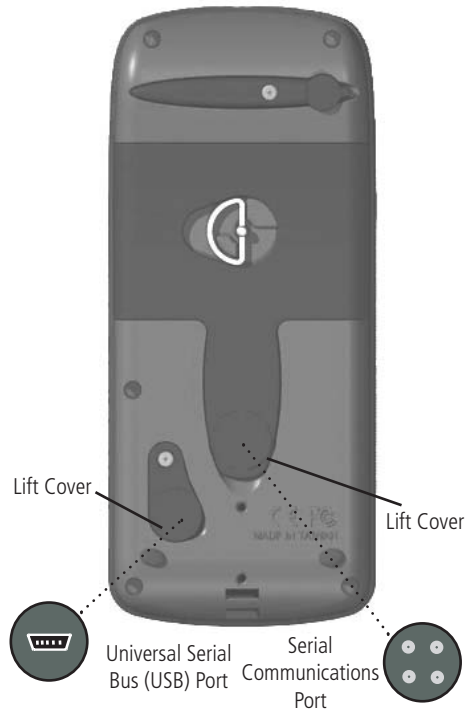
To connect to your computer using the USB connector:

1. Lift the USB protective cover from the back of the GPSMAP 96/96C and insert the smaller connector on the USB cable (provided with the unit) into the matching port.
2. Connect the remaining cable end to your PC USB port.
3. The USB connection is automatically set for Garmin format.

To connect to your computer using a Serial Port connector:

1. Lift the Serial Port protective cover from the back of the GPSMAP 96/96C and insert the round indexed connector on the cable into the matching port.
2. Connect the remaining cable end to your PC Serial port or other appropriate device.
3. Set your GPSMAP 96/96C interface setting to the appropriate interface format. Refer to Interface Setup on page 84.

Connecting the GPSMAP 96/96C to a Computer



Appendix

Downloading MapSource Map Data



Garmin MapSource

CD-ROM's offer a variety of detailed mapping data and navigation information.

MapSource is also an excellent medium for storage and safety backup of Personal Waypoints, Routes and Saved Tracks.



Garmin MapSource
U.S. Topo 24K
Digital Elevation Models
(DEM) Maps
provide elevation data
at any point identified by the
Panning Arrow

See your Garmin Dealer or visit the Garmin web site at: www.garmin.com for information on which maps work with the GPSMAP 96/96C.

Transferring MapSource Map Data

If you have purchased a Garmin MapSource CD-ROM mapping program you may want to transfer detailed map data before beginning use, to provide your unit with maximum Find features and mapping capability. The GPSMAP 96 accepts up to 22 MB and the GPSMAP 96C up to 118 MB of map data from most MapSource products. It is not possible to transfer 3rd party maps other than Jeppesen Data into these products.

You cannot view multiple types of MapSource data in the same location at the same time (one will draw over the other). When you leave a MetroGuide area for example and enter the area of a topographic map, the display will change to contour lines. The same is true when moving from a topo map to a MetroGuide map.

Maps that are at the top of the hierarchy and will replace any other map information. Because new maps are constantly being released, consult your Garmin Dealer or the Garmin website to determine the order of hierarchy.

Map data transfer requires the use of a PC, a Garmin MapSource CD-ROM, and the Universal Service Bus (USB) cable supplied with this unit. Follow detailed instructions for data transfer in the MapSource User's Manual.

It is also important to note that certain features contained in the GPSMAP 96/96C will not be enabled unless you are using mapping data they are designed to support, such as many of the Aviation Points, Find Features and DEM Elevation Profiles. Visit the Garmin website for details on all of the maps you can use with the GPSMAP 96/96C.

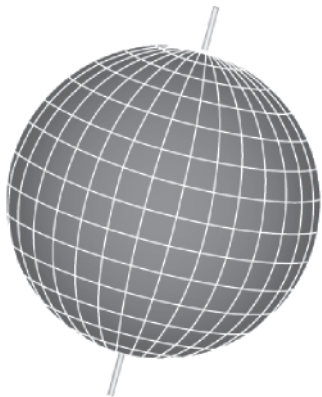
UTC Offset Chart

This chart is provided to help you determine the time offset settings for your current location if it is not in one of the time zones listed on the Time Setup Page. To change the UTC Offset, access the Main Menu, then Setup and then open the Time Setup Page. Highlight the Time Zone field and press the **ENTER** to display the list of time zones. If the desired zone is not displayed, select “Other”. Highlight the UTC Offset field and press **ENTER** to enter the appropriate offset value from the chart below. To determine your longitudinal zone, press and hold the **MARK** key and observe the longitude value in the Mark Waypoint Location field. It should fall within the sets of values on the chart. Press the **QUIT** key to avoid marking a waypoint.

Longitudinal Zone	Offset
W180.0° to W172.5°	-12.00
W172.5° to W157.5°	-11.00
W157.5° to W142.5°	-10.00
W142.5° to W127.5°	-09.00
W127.5° to W112.5°	-08.00
W112.5° to W097.5°	-07.00
W097.5° to W082.5°	-06.00
W082.5° to W067.5°	-05.00
W067.5° to W052.5°	-04.00
W052.5° to W037.5°	-03.00
W037.5° to W022.5°	-02.00
W022.5° to W007.5°	-01.00
W007.5° to E007.5°	-00.00

Longitudinal Zone	Offset
E007.5° to E022.5°	+01.00
E022.5° to E037.5°	+02.00
E052.5° to E067.5°	+03.00
E067.5° to E082.5°	+04.00
E082.5° to E097.5°	+05.00
E097.5° to E112.5°	+06.00
E112.5° to E122.5°	+07.00
E122.5° to E127.5°	+08.00
E127.5° to E142.5°	+09.00
E142.5° to E157.5°	+10.00
E157.5° to E172.5°	+11.00
E172.5° to E180.5°	+12.00

Map Datums and Position Formats



Map Datums are based on a mathematical model of the Earth.

```
hddd.ddddd°  
hddd°mm.mmm'  
hddd°mm'ss.s"  
British Grid  
Dutch Grid  
Finnish Grid  
German Grid  
India Zone 0  
India Zone IA  
India Zone IB  
India Zone IIA  
India Zone IIB  
India Zone IIIB
```

Position Formats

```
Adindan  
Rfgooye  
AIN EL ABD '70  
Anna 1 Ast '65  
ARC 1950  
ARC 1960  
Ascnsn Isld '58  
Astro B4 Sorol  
Astro Bcn "E"  
Astr Dos 71/4  
Astro Str '52  
Aus Geod '66  
Aus Geod '84  
Austria
```

Map Datums

What are Map Datums, and which should I use?

A datum is a mathematical model of the Earth which approximates the shape of the Earth and enables calculations to be carried out in a consistent and accurate manner. The datum is physically represented by a framework of ground monuments (i.e. trig. stations) whose positions have been accurately measured and calculated on this reference surface. Lines of latitude and longitude on a map or chart are referenced to a specific map datum. Every chart has a map datum reference and the GPSMAP 96/96C can be set to match most of those commonly used.

If you are navigating and comparing the GPS coordinates to a map, chart or other reference, the map datum in the GPS unit should be set to the same datum as the map or chart to ensure the most accurate navigation.

What is a Position Format, and which should I use?

Your current location can be viewed on the GPS in the form of coordinates. Since different maps and charts use different location formats, Garmin GPS units allow you to choose the correct coordinate system for the type of map you are using. The most common format is latitude and longitude, which is utilized by all Garmin units. On most models, you may choose to change the position format to use with other coordinate systems. UTM/UPS (Universal Transverse Mercator/Universal Polar Stereographic) are easy-to-use metric grids that are found on most USGS topographic quadrangle maps. Several other grids, including a user-definable grid (for the advanced user), may also be selected.

WAAS and DGPS

What is WAAS?

The Wide Area Augmentation System (WAAS) is an F.A.A. funded project to improve the overall integrity of the GPS signal. It is a space-based system that broadcasts integrity information and correction data as determined by ground reference stations (see DGPS below). At this time the system is still in the developmental stage with a goal of providing reliable signals with an accuracy of 7 meters (21-22 ft.) both horizontally and vertically 95% of the time. Current tests have shown the actual accuracy to be on the order of 2-3 meters. For more information, Go To <http://gps.faa.gov/Programs/WAAS/waas.htm>.

What is Differential GPS (DGPS)?

The U.S. and Canadian governments (among others) have set up Differential GPS (DGPS) stations to transmit correction signals. They are operational in coastal areas and on many navigable river systems. The DGPS system is available for use without fee.

In addition to compensating for errors in position, these corrections signals can also correct for deliberate degradation of the accuracy of GPS by the U.S. Department of Defense under their Selective Availability (SA) program.

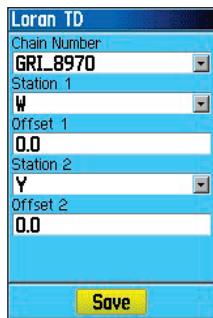
Refer to the U.S. Coast Guard's web site: <http://www.navcen.uscg.gov/> for locations and the status of the differential sites. Using DGPS requires additional equipment.

Loran TD Setup



Location Setup Page

(Position Format List with Loran TD selected.)



Loran TD Setup Page

To set up Loran TD from the Setup Menu:

1. Press the **MENU** key twice to display the Main Menu, then press again to display the Setup Menu.
2. Use the **ROCKER** key to highlight the Location icon and press **ENTER** to display the Location Setup Page.
2. Highlight the "Position Format" field and press **ENTER** to display the format list.
3. Highlight "Loran TD" press **ENTER** to display the Loran Setup Page.
4. To change the settings of any of the five fields, highlight the field, press **ENTER** select/enter the desired setting, then press **ENTER**.
6. When done, highlight the 'Save' button and press **ENTER**.

If the active GRI Chain, secondary stations, or offsets have been changed since the waypoint was created, the waypoint will now reference the active GRI-chain and secondary stations and adjust the TD coordinates accordingly. Remember that the GPSMAP 96/96C is not relying on the LORAN signal for navigation and actually converts the TD coordinate to a useful LAT/LON coordinate before storing the waypoint to memory or using it for navigation. Because of this, the unit can navigate to a TD coordinate anywhere in the world.

You must know your GRI chain number and secondary stations to create a LORAN TD position. For more information please read our LORAN TD Position Format Handbook, available at the Garmin Web site, at www.garmin.com/support/userManual.html.

Interface Wiring Diagram

Interface formats are selected from the Interface Setup on page XX of this manual. The input/output lines on your GPSMAP 96/96C are RS-232 compatible, allowing easy interface to a wide range of external devices, including PCs, differential beacon receivers, marine autopilots and /or a second GPS receiver.

The NMEA 0183 version 3.01 interface format is supported by the GPSMAP 96/96C and enables the unit to drive up to three NMEA devices.

NMEA 0183 Version 3.01 Approved Sentences:

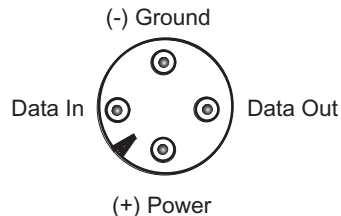
GPGGA, GPGLL, GPGSA, GPGSV, GPRMB, GPRMC, GPRTE, GPVTG, GPWPL, GPBOD

Garmin Proprietary Sentences:

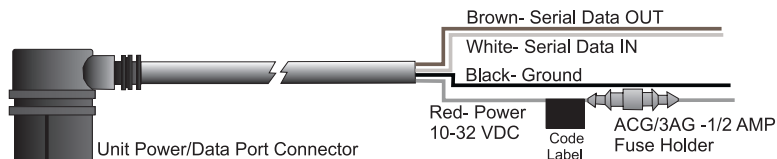
PGRME (estimated error), PGRMM (datum string), PGRMZ (altitude), PSLIB (beacon receiver control)

DGPS (Differential GPS) corrections are accepted in RTCM SC-104 version 2.0 format through the 'Data In' line. The Garmin GBR 21 is the recommended beacon receiver for use with the GPSMAP 96/96C. Other beacon receivers with the correct RTCM format may be used, but may not correctly display status or allow tuning control from the GPS unit.

The USB Interface Cable provided with this unit allows you to connect your GPSMAP 96/96C to a PC-compatible computer's USB port.



Unit Connector View



Compliance, License, and Warranty Information



FCC Compliance

The GPSMAP 96/96C complies with Part 15 of the FCC interference limits for Class B digital devices FOR HOME OR OFFICE USE. These limits are designed to provide more reasonable protection against harmful interference in a residential installation, and are more stringent than “outdoor” requirements.

Operation of this device is subject to the following conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and the receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

The GPSMAP 96/96C does not contain any user-serviceable parts. Repairs should only be made by an authorized Garmin service center. Unauthorized repairs or modifications could result in permanent damage to the equipment, and void your warranty and your authority to operate this device under Part 15 regulations.

Compliance, License, and Warranty Information

Software License Agreement

BY USING THE GPSMAP 96/96C, YOU AGREE TO BE BOUND BY THE TERMS AND CONDITIONS OF THE FOLLOWING SOFTWARE LICENSE AGREEMENT. PLEASE READ THIS AGREEMENT CAREFULLY.

Garmin grants you a limited license to use the software embedded in this device (the “Software”) in binary executable form in the normal operation of the product. Title, ownership rights, and intellectual property rights in and to the Software remain in Garmin.

You acknowledge that the Software is the property of Garmin and is protected under the United States of America copyright laws and international copyright treaties. You further acknowledge that the structure, organization, and code of the Software are valuable trade secrets of Garmin and that the Software in source code form remains a valuable trade secret of Garmin. You agree not to decompile, disassemble, modify, reverse assemble, reverse engineer or reduce to human readable form the Software or any part thereof or create any derivative works based on the Software. You agree not to export or re-export the Software to any country in violation of the export control laws of the United States of America.

Product Registration and Support

Help us better support you by completing your online registration today! Have the serial number of your GPSMAP 96/96C handy and connect to the Garmin Web site (www.garmin.com). Look for the Product Registration link on the home page. Also, be sure to record your serial number in the space provided to the right.

If you have any questions, Garmin’s Product Support department may be reached Monday through Friday, 8:00 AM to 5:00 PM Central Standard Time, by phone at **1-800-800-1020**, or by e-mail at sales@garmin.com.

Serial Number

Use this area to record the serial number in case it is lost, stolen, or needs service. Be sure to keep your original sales receipt in a safe place or attach a photocopy inside the manual. The 8-digit number is located on the back of the unit.

Serial Number:

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NOTE: *If you have previously registered a Garmin product purchase, we invite you to re-register using our NEW on-line system. Many services provided by our new product registration system are now being automated and re-registering your purchase ensures you the best possible support from Garmin.*

Limited Warranty

This Garmin product is warranted to be free from defects in materials or workmanship for one year from the date of purchase. Within this period, Garmin will at its sole option, repair or replace any components that fail in normal use. Such repairs or replacement will be made at no charge to the customer for parts or labor, provided that the customer shall be responsible for any transportation cost. This warranty does not cover failures due to abuse, misuse, accident or unauthorized alteration or repairs.

THE WARRANTIES AND REMEDIES CONTAINED HEREIN ARE EXCLUSIVE AND IN LIEU OF ALL OTHER WARRANTIES EXPRESS OR IMPLIED OR STATUTORY, INCLUDING ANY LIABILITY ARISING UNDER ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, STATUTORY OR OTHERWISE. THIS WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS, WHICH MAY VARY FROM STATE TO STATE.

IN NO EVENT SHALL GARMIN BE LIABLE FOR ANY INCIDENTAL, SPECIAL, INDIRECT OR CONSEQUENTIAL DAMAGES, WHETHER RESULTING FROM THE USE, MISUSE, OR INABILITY TO USE THIS PRODUCT OR FROM DEFECTS IN THE PRODUCT. Some states do not allow the exclusion of incidental or consequential damages, so the above limitations may not apply to you.

Garmin retains the exclusive right to repair or replace the unit or software or offer a full refund of the purchase price at its sole discretion. SUCH REMEDY SHALL BE YOUR SOLE AND EXCLUSIVE REMEDY FOR ANY BREACH OF WARRANTY.

To obtain warranty service, call your local Garmin authorized dealer. Or call Garmin Customer Service at one of the numbers listed below for shipping instructions and an RMA tracking number. The unit should be securely packed with the tracking number clearly written on the outside of the package. The unit should be sent, freight charges prepaid, to any Garmin warranty service station. A copy of the original sales receipt is required as the proof of purchase for warranty repairs.

Online auction confirmations are not accepted for warranty verification. To obtain warranty service, an original or copy of the sales receipt from the original retailer is required. Garmin will not replace missing components from any package purchased through an online auction.

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Safety Information

CAUTION: Use the GPSMAP 96/96C at your own risk. To reduce the risk of unsafe operation, carefully review and understand all aspects of this Owner's Manual – and thoroughly practice operation using Simulator Mode prior to actual use. When in actual use, carefully compare indications from the GPSMAP 96/96C to all available navigation sources, including information from other NAVAIDs, visual sightings, charts, etc. For safety, always resolve any discrepancies before continuing navigation.

CAUTION: IT IS THE USER'S RESPONSIBILITY TO USE THIS PRODUCT PRUDENTLY. THIS PRODUCT IS INTENDED TO BE USED ONLY AS A NAVIGATIONAL AID AND MUST NOT BE USED FOR ANY PURPOSE REQUIRING PRECISE MEASUREMENT OF DIRECTION, DISTANCE, LOCATION OR TOPOGRAPHY. THIS PRODUCT SHOULD NOT BE USED TO DETERMINE GROUND PROXIMITY FOR AIRCRAFT NAVIGATION.

CAUTION: The electronic chart is an aid to navigation and is designed to facilitate the use of authorized government charts, not replace them. Only official government charts and notices to mariners contain all information needed for safe navigation – and, as always, the user is responsible for their prudent use.

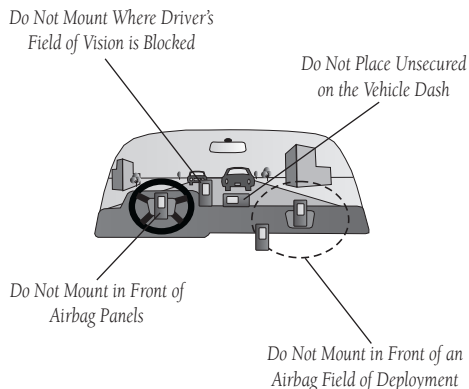
MAP DATA INFORMATION: One of the goals of Garmin is to provide customers with the most complete and accurate cartography that is available to us at a reasonable cost. We use a combination of governmental and private data sources, which we identify as required in product literature and copyright messages displayed to the consumer. Virtually all data sources contain inaccurate or incomplete data to some degree. This is particularly true outside the United States, where complete and accurate digital data is either not available or prohibitively expensive.

WARNING: The Global Positioning System (GPS) is operated by the United States government, which is solely responsible for its accuracy and maintenance. The system is subject to changes which could affect the accuracy and performance of all GPS equipment. Although the Garmin GPSMAP 96/96C is a precision electronic NAVigation AID (NAVAID), any NAVAID can be misused or misinterpreted, and therefore become unsafe.

Appendix

Safety Information

WARNING: This product, its packaging, and its components contain chemicals known to the State of California to cause cancer, birth defects, or reproductive harm. This Notice is being provided in accordance with California's Proposition 65. If you have any questions or would like additional information, please refer to our Web site at <http://www.garmin.com/prop65>.



Because the Garmin GPSMAP 96/96C can be used for vehicular navigation, important safety considerations must be followed. Please read and observe the following instructions.

WARNING: For use in vehicles, it is the sole responsibility of the owner/operator of a vehicle with the GPSMAP 96/96C installed to place and secure the device so it will not interfere with the vehicle operating controls and safety devices, obstruct the driver's view of driving conditions, or cause or personal injury in the event of an accident.

Do not mount the unit over airbag panels or in the field of airbag deployment. Airbags expand with a rapid force that can propel objects in their path towards the vehicle driver or passengers causing possible injury. Refer to airbag safety precautions contained in the vehicle owner's manual.

Do not mount the unit in a place where the driver or passengers are likely to impact it in a collision. The mounting hardware provided by Garmin is not warranted against collision damage or the consequences thereof.

WARNING: When used in vehicles, it is the sole responsibility of the driver of the vehicle to operate the vehicle in a safe manner, maintain full surveillance of all driving conditions at all times, and not become distracted by the unit to the exclusion of safe driving practices. It is unsafe to operate the controls of the unit while you are driving. Failure by the driver of a vehicle equipped with a GPSMAP 96/96C installed to pay full attention to operation of the vehicle and road conditions while the vehicle is in motion could result in an accident with property damage and personal injury.

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