

# GPSMAP 276C

*chartplotting receiver*

*owner's manual*



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## **Preface**

Thank you for choosing the Garmin GPSMAP 276C. The GPSMAP 276C utilizes the proven performance of Garmin GPS and full-featured mapping to create an unsurpassed portable marine navigation chartplotter. Please take a moment now to compare the contents of this package with the packing list on the outside of the box. If any pieces are missing, please contact your Garmin dealer immediately.

## **About This Manual**

To get the most out of your new navigation system, take time to read this manual and learn the operating procedures for your unit in detail. 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 276C.

The **Basic Operation** chapter provides you with information about basic features such as using the Find Menu, navigating a route, and using waypoints. There are also step-by-step directions to assist you in these operations.

The **Main Pages** chapter provides detailed explanations about each page in the GPSMAP 276C 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 or pages listed.

## **Welcome**



*The GPSMAP 276C 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](http://www.garmin.com).*

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# Introduction

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# Getting Started

## Unit Overview











The GPSMAP 276C is an all-in-one, versatile, color chartplotter and automobile navigator — perfect for land or water. This portable GPS navigator features a 256-color TFT display that is easy to read in bright sun along with a built-in basemap and auto routing to provide you with turn-by-turn directions.



## Unit Overview



### Learning about the Keypad

-  Press the **IN** key to adjust the map scale to show a smaller area with more detail (zoom in).
-  Press the **OUT** key to adjust the map scale to show a larger area with less detail (zoom out).
-  Press the **PAGE** key to cycle the unit through the main pages in sequence and return the display from a submenu page. Press and hold for more than one second to open the Usage Mode window, which allows you to switch between Marine Mode and Automotive Mode.
-  Press the **QUIT** key to cycle the unit through the main pages in reverse sequence, revert to the previous value in a data entry field, or cancel an unintended function.
-  Press the **ENTER/MARK** key to select a highlighted option. When entering data, it allows you to initiate entry, and then to accept the selected value(s). Press and hold for more than one second to mark a waypoint.
-  Press the **MENU** key to display a menu of available options for the current page. Press the **MENU** key twice to display the Main Menu.
-  Press the **NAV/MOB** key to display the Navigation Menu window. While in Marine Mode, press and hold for more than one second to activate the Man Overboard (MOB) function. While in Automotive Mode, press and hold for more than one second to display the Next Turn Page and also have the voice prompt announce the next turn.
-  Press the **FIND** key to quickly search for and access user waypoints, cities, points of interest, services and other items used for navigation.
-  Press and hold the **POWER** key for more than one second to turn the unit on and off. Briefly press and release to adjust the backlighting and external speaker volume.
-  Use the **ARROW KEYPAD** to select (highlight) menu options and to enter data. Also use the **ARROW KEYPAD** to pan the cursor on the Map Page.

## **Charging the GPSMAP 276C**

Before using the unit, you may find that you need to charge the unit. Simply plug the unit into an external power source to charge. You can use the unit while it is charging.

### **To charge the unit:**

1. Lift the weather cap to expose the power connector on the back of the unit. Refer to the image on page 1 for connector location.
2. Align the notches and push the plug into the connector until fully seated.
3. Plug the 12 Volt adapter into an available AC outlet, or cigarette lighter receptacle if you have a Cigarette Lighter Adapter. Use care when routing the adapter cable being certain that it does not interfere with vehicle operation.
4. The unit begins charging as soon as external power is applied. You can use the unit while it is charging. Placing the unit in Charge Mode, as discussed below, charges the unit more quickly than when the unit is turned on and reduces draw on the vehicle/boat battery.

## **Information about the Charge Mode**

Applying external power to the GPSMAP 276C automatically starts the unit for full operation. If the battery is present and needs to be charged, the external power source charges the unit while it is in use.

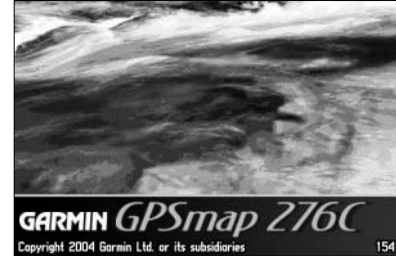
If you do not want to use the unit, but you would like to charge the battery, you can put the unit into the Charge Mode. Connect the unit to an external power supply. Press and hold the red **POWER** key: Instead of completely turning off, the unit now goes into the “Charge Mode” as shown to the right.



**NOTE:** *While in Charge Mode, the unit does draw a small amount of current from the vehicle/boat battery. To avoid discharging the vehicle’s battery, disconnect the external power cable from the GPSMAP 276C unit when not in use for several days.*

After much use, the lithium-ion battery in the unit may seem like it is not holding a charge any longer. This is common for lithium-ion batteries. Please contact Garmin or your Garmin Dealer to order a Battery Pack replacement if you are experiencing charging issues.

## **Unit Overview**

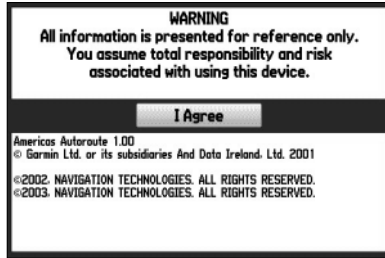


Welcome Page

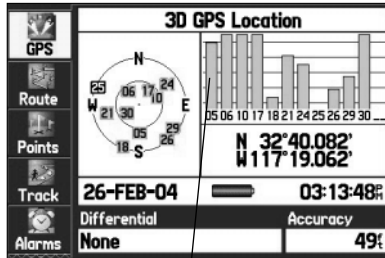


Charge Mode

## Unit Overview



Warning Page



Signal Strength Bars

### Turning On the GPSMAP 276C

The first time you power up your new GPSMAP 276C, the receiver must collect satellite data and establish its present position. To ensure proper initialization, the GPSMAP 276C 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 the antenna is rotated up as shown on page 1, and that it has a clear and unobstructed view of the sky to receive satellite signals.

#### **To turn On and Off the GPSMAP 276C:**

1. Press and hold the red **POWER** key. When the unit powers on, a tone sounds and a Warning/Information Page displays.
2. To acknowledge that you have read and understand the warning, press the **ENTER/MARK** key to continue.
3. To turn off the GPSMAP 276C, press and hold the red **POWER** key again.

### Initializing the GPSMAP 276C

As soon as you turn the GPSMAP 276C on, it begins searching for satellites in your area and should acquire a fix within a few minutes. At the top of the screen, the unit displays the status as “Acquiring Satellites.” While viewing the GPS Tab of the Main Menu, a signal strength bar for each satellite the unit is trying to acquire appears at the top 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 indicated.
- 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.

Once the receiver has collected information from, and is fixed on, at least three satellites, the unit is “Ready to Navigate” and the display automatically switches to the Map Page.

## **Adjusting the Backlight and Volume**

You may want to adjust the backlight to see the display better.

### **To adjust the backlight level:**

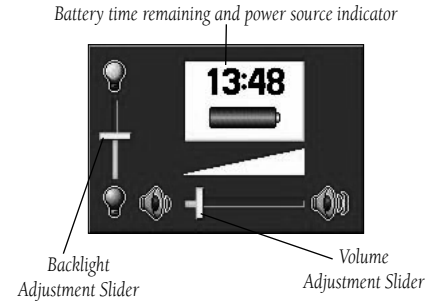
1. Press and quickly release the **POWER** key.
2. Press the **ARROW KEYPAD UP** to increase the brightness or **DOWN** to decrease the brightness.
3. Press **ENTER/MARK** or **QUIT** to close the Backlight/Volume adjustment window.

If you are using the optional External Speaker with 12/24-Volt Adapter Cable with the GPSMAP 276C, you may want to adjust the volume level of the speaker.

### **To adjust the speaker volume:**

1. Press and quickly release the **POWER** key.
2. Press the **ARROW KEYPAD RIGHT** to increase the volume (louder) or **LEFT** to decrease the volume (softer).
3. Press **ENTER/MARK** or **QUIT** to close the Backlight/Volume adjustment window.

## Unit Overview



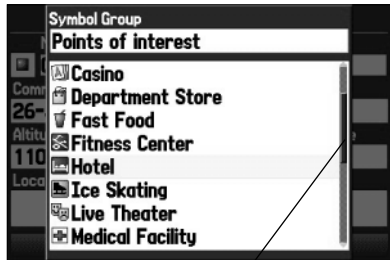
## Using the GPSMAP 276C



Cursor highlighting  
a Field

On-screen  
buttons

Field



Scroll Bar

### Understanding the Features

The GPSMAP 276C unit's advanced keypad system is designed to allow fast, convenient selection of navigation options and data entry. As you progress through this *Owner's Manual*, you will often be directed to press a specific interface key or highlight a field on the screen. When you are directed to press a key, you should press and quickly release the key. If the key needs to be held down for a period of time to activate a secondary function, the instructions will tell you to do so. The position of the highlight is controlled by the **ARROW KEYPAD**. When a field is selected on the screen, it is highlighted in yellow.

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 **ARROW KEYPAD** to select individual fields. Moving the cursor to a given location allows you to begin data entry or scroll through a list. A yellow highlight indicates the location of the cursor.

**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 **ARROW KEYPAD** to begin data entry or selection of options.

**On-Screen Button** – Similar to “field.” Use the **ARROW KEYPAD** to highlight a button and press **ENTER/MARK** to select the action that corresponds to the button.

**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 **ARROW KEYPAD**.

**Default** – A system selection format built into the unit's memory that is followed unless you change a setting. For example, the default setting for speed readings 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' menu option is selected.

## Selecting Options and Entering Data

You may select and activate options and enter data to customize your GPSMAP 276C 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/MARK** key and **ARROW KEYPAD** 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 **ARROW KEYPAD** to move the cursor UP, DOWN, RIGHT, or LEFT on the menu to highlight your desired selection.
3. Press **ENTER/MARK** to activate the feature. Another window may then appear with more options. If so, select the desired option and press **ENTER/MARK** 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.

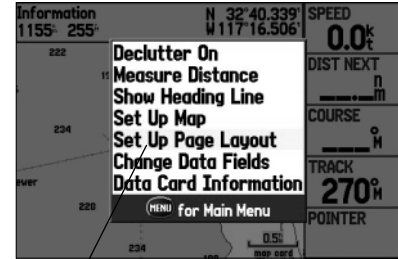
### To select and activate an on-screen button:

1. On a page with on-screen buttons, use the **ARROW KEYPAD** to highlight the desired on-screen button.
2. Press **ENTER/MARK**.

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 276C



Selecting an option from an Options Menu



On-Screen Button

## Using the GPSMAP 276C

| New Waypoint                  |          |                        |
|-------------------------------|----------|------------------------|
| Name                          |          |                        |
| CABIN                         |          |                        |
| Comment                       |          |                        |
| 26-JAN-04 15:53               |          |                        |
| Altitude                      | Depth    | Temperature            |
| 1073'                         |          | F                      |
| Location                      |          | Modified               |
| N 38°54.349'<br>W 094°45.927' |          | 26-JAN-04<br>03:53:50' |
| Delete                        | Show Map | OK                     |

On the New Waypoint Page, you may also enter data to customize the Comment, Altitude, Depth, Temperature, or Location.

### To enter data in a data field:

1. Use the **ARROW KEYPAD** to highlight the desired data field and press **ENTER/MARK** to activate the field.
2. Press UP or DOWN on the **ARROW KEYPAD** 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.



**TIP:** To clear the entire data field, move the cursor to the left-most character field and press LEFT once more on the **ARROW KEYPAD**.

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

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 Garmin Data Cards and MapSource CD-ROMs enhance the versatility of your GPSMAP 276C. 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.

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 optional Data Card.

To help you get to know your GPSMAP 276C, please use the Simulator Mode. Simulator Mode is also helpful for practicing with the unit indoors or when no satellite signals are available. All waypoint and route planning in Simulator Mode is retained in memory for future use. The following section describes how to use simulator mode and walks you through some basic navigation using the simulator.

## Activating the Simulator Mode



**NOTE:** Do not attempt to navigate using Simulator Mode. When the unit is set to 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 'Setup' from the vertical list of tabs.
3. On the 'System' tab of the Setup Tab, highlight the 'System Mode' field and press **ENTER/MARK**.
4. Highlight 'Simulator' and press **ENTER/MARK**. Press **QUIT** to return to your previous display.

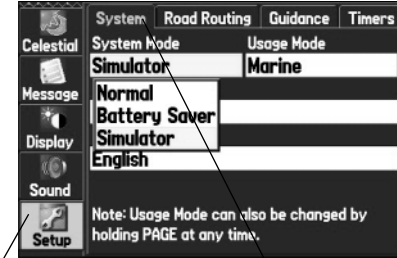
### To put the unit into Simulator Mode using the GPS Tab:

1. Press the **MENU** key twice to display the Main Menu and highlight the 'GPS' from the vertical menu.
2. Press the **MENU** key to open the GPS Tab Options Menu.
3. Highlight 'Start Simulator' and press **ENTER/MARK**.

## Entering a New Location

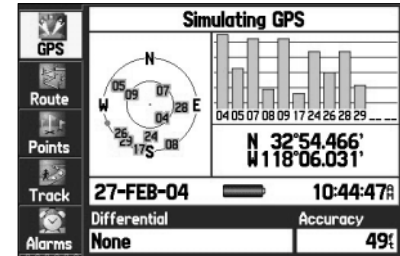
From the GPS Options Menu you can also enter a New Location to simulate from. For example, if you are interested in using the GPSMAP 276C in your boat near San Diego but you live in Los Angeles, you can select the San Diego coast as your New Location. Simply select 'New Location' from the GPS Tab Options Menu and press **ENTER/MARK**. Select 'Use Map' and press **ENTER/MARK**. Then, using the map cursor, pan to the new location and press **ENTER/MARK**.

## Simulated Basic Navigation



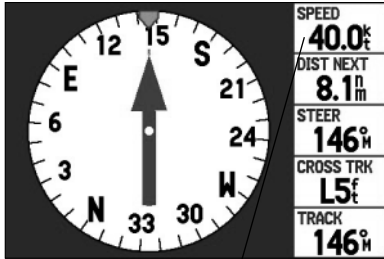
Setup Tab of Main Menu

System tab

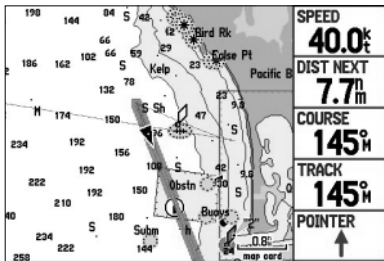


When the GPSMAP 276C is in Simulator Mode, the GPS Tab of the Main Menu displays the satellite status as "Simulating GPS."

## Simulated Basic Navigation



To show simulated navigation in Marine Mode, press UP on the ARROW KEYPAD on the Compass Page to set a simulated speed.



Simulated navigation displayed on the Map Page (Marine Mode)

## Simulating Navigation

The main purpose of using a GPS receiver is for navigating to a known position. To get a feel for navigating with the GPSMAP 276C, it is a good idea to practice navigation in Simulator Mode. The following is a basic exercise for finding and navigating to a destination in Marine Mode. For this simulation we have set our location to the San Diego coast.

### To find a marine destination:

1. Be sure the GPSMAP 276C is set to Simulator Mode (see "Activating the Simulator Mode" on the previous page).
2. Press the **FIND** key.
3. Highlight 'Tide Stations' and press **ENTER/MARK**.
4. Use the **ARROW KEYPAD** to select a nearby Tide Station and press **ENTER/MARK**. For our example, we selected 'Point Loma'.
5. With 'Go To' highlighted on the Tide Station Information Page, press **ENTER/MARK**.

### To simulate navigation to the destination in Marine Mode:

1. Follow the steps above to find a destination tide station. The GPSMAP 276C switches to the Map Page. A magenta line shows the direct route from your current location to your 'Go To' destination. If desired, press **IN** or **OUT** to adjust the zoom level.
2. Press the **PAGE** key twice to display the Compass Page.
3. Press UP on the **ARROW KEYPAD** to increase the speed to 40 kt. (which is the desired speed setting).
4. Press **QUIT** to return to the Map Page. Press **IN** to adjust the zoom level. Observe the movement of the position marker (triangle) as the unit simulates navigation. If desired, press **PAGE** or **QUIT** to view the simulated navigation on the other main pages.

Now we will simulate navigation in the Automotive Mode. To switch between Marine and Automotive Mode, press and hold the **PAGE** key. Use the **ARROW KEYPAD** to select 'Automotive' and press **ENTER/MARK**.

## To find a land destination:

1. Be sure the GPSMAP 276C is set to Simulator Mode (see "Activating the Simulator Mode").
2. Press the **FIND** key.
3. Highlight 'Cities' and press **ENTER/MARK**.
4. Use the **ARROW KEYPAD** to select a nearby city and press **ENTER/MARK**. For our example, we selected 'National City, CA'.
5. With 'Go To' highlighted on the city information page, press **ENTER/MARK**.

## To simulate navigation to the destination in Automotive Mode:

1. Follow the steps above to find a destination city. The GPSMAP 276C switches to the Map Page. A magenta line shows the auto route from your current location to your 'Go To' destination. If desired, press **IN** or **OUT** to adjust the zoom level.
2. Press **QUIT** to return to the Map Page. Press **IN** to adjust the zoom level. Observe the movement of the position marker (triangle) as the unit simulates navigation. If desired, press **PAGE** or **QUIT** to view the simulated navigation on the other main pages.

Continue to use the Simulator to practice navigation as needed. When you are ready to navigate on your own, don't forget to turn the Simulator off before you start.

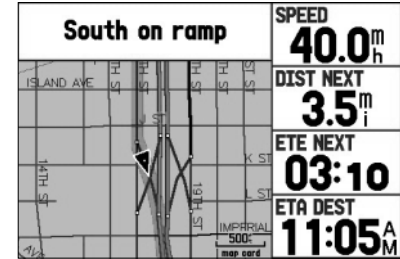
## To turn off the Simulator:

1. Turn the unit off by pressing and holding the red **POWER** key.
2. Turn the unit back on by pressing and holding the red **POWER** key. The unit powers on in Normal Mode.

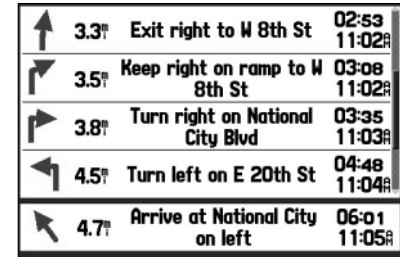


**NOTE:** You can activate and deactivate the Simulator through the Setup Tab of the Main Menu or by pressing **MENU** while on the GPS Tab of the Main Menu.

## Simulated Basic Navigation



Simulated navigation displayed on the Map Page  
(Automotive Mode)



Simulated Current Route Page (Automotive Mode)

## Main Pages Overview

### **Main Pages: Marine Mode and Automotive Mode**

The GPSMAP 276C offers two usage modes, Marine Mode (default) and Automotive Mode, allowing you to customize settings to use the unit for both applications. The main pages are linked together in a series that you may cycle through by pressing the **PAGE** key to move forward and the **QUIT** key to reverse. Each page also has an Options Menu that allows you to customize each page (in both Marine and Automotive Modes) to your preferences and/or select features that specifically relate to that page. To view the Options Menu for any page, press the **MENU** key.

Marine Mode features five main pages: the Map, Compass, Highway, Active Route, and Position Data pages. Automotive Mode features two main pages: the Map and Trip Computer pages. Optional Highway and Compass Pages may be enabled in Automotive Mode. Two additional pages appear during active navigation while in Automotive Mode – a Current Route Page appears if you are navigating with turn-by-turn directions and an Active Route Page appears if you are navigating “Off Road.” See the “Navigation” section for more information on navigation options.

The Marine Mode is the default mode for the GPSMAP 276C. This manual first addresses the page, such as the Map Page, as displayed in the Marine Mode. The manual then describes the page as shown Automotive Mode.

#### **To switch usage modes:**

1. Press and hold the **PAGE** button.
2. Use the **ARROW KEYPAD** to select either ‘Automotive’ or ‘Marine’ and press **ENTER/MARK**.

The following examples show the main pages in Marine Mode with optional MapSource BlueChart detailed maps.

In Automotive Mode, the main pages have a slightly different appearance. For example, some data field defaults show data that is more appropriate for land navigation, and the Map Page and Compass Page display turn-by-turn directions during active navigation.

## Marine Mode Page Sequence

**PAGE** →

Map Page (Marine Mode)

Compass Page (Marine Mode)

Highway Page (Marine Mode)

Active Route Page (Marine Mode)

Position Data Page (Marine Mode)

**QUIT**

## Automotive Mode Page Sequence

**PAGE** →

Map Page (Automotive Mode)

Optional Compass Page (Automotive Mode)

Optional Highway Page (Automotive Mode)

Current Route Page (Automotive Mode)

Trip Computer Page (Automotive Mode)

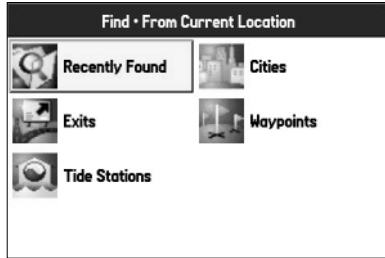
**QUIT**

### To show the Compass Page or Highway Page:

1. Press **MENU** twice to display the Main Menu.
2. Use the **ARROW KEYPAD** to highlight the Display Tab.
3. Highlight the 'Highway Page' or 'Compass Page' field and press **ENTER/MARK**.
4. Select 'On' and press **ENTER/MARK**.

*NOTE: Keep in mind that in Automotive Mode the Current Route Page only appears during active navigation.*

## Finding an Item



Find Menu

*without additional BlueChart or MapSource maps installed*

| Item            | Distance | Bearing |
|-----------------|----------|---------|
| Buoy            | 347M     | 0.0M    |
| Buoy            | 347M     | 0.0M    |
| Buoy            | 086M     | 0.0M    |
| Buoy            | 065M     | 0.2M    |
| Tks             | 075M     | 0.8M    |
| Radio Telescope | 034M     | 1.0M    |
| Radio Telescope | 034M     | 1.0M    |
| Tower           | 035M     | 1.0M    |
| Tower           | 033M     | 1.0M    |

*Navaid search result list*

## Using the Find Menu

The Find Menu allows you to easily search the stored waypoints and points of interest. You can access the Find Menu by pressing the **FIND** key. After you press **FIND**, the unit searches for items from your current location or from another location on the map. The unit then displays the results.

The Find Menu is comprised of several default categories: Waypoints, Cities, Exits, and Tide Stations. Additional categories are displayed depending on the optional BlueChart or MapSource data card inserted into the unit. Your position or the map pointer must be within the map outline area to search for information from the BlueChart or MapSource data.

### To find a waypoint or other item from your current location:

1. From any page, press **FIND**. Using the **ARROW KEYPAD**, highlight the desired category from the list and press **ENTER/MARK**.
2. Using the **ARROW KEYPAD**, highlight the desired item from the list and press **ENTER/MARK**. The item's information page automatically opens, allowing you to save the item as a waypoint, show the item on the map, or automatically create a route (Go To) the item.

### To find an item from another location through the Find Menu:

1. From any page, press **FIND**. Using the **ARROW KEYPAD**, highlight the desired category from the list and press **ENTER/MARK**.
2. Press **MENU**. Highlight 'Near Other' and press **ENTER/MARK**. If you are actively following a route, you may also choose 'Near Current Route', 'Near Next', or 'Near Destination'.
3. Select a reference position on the map and press **ENTER/MARK**. The list changes to display items nearest to the new map position.

## Finding an Item

### To find an item from another location through the Map Page:

- 1 From the Map Page, use the **ARROW KEYPAD** to pan to the desired location and press **FIND**.
2. Using the **ARROW KEYPAD**, highlight the desired category from the list and press **ENTER/MARK**.
3. Using the **ARROW KEYPAD**, highlight the desired item from the list and press **ENTER/MARK**. The item's information page automatically opens, allowing you to save the item as a waypoint, show the item on the map, or automatically create a route (Go To) the item.

### Viewing the Information Page

Each item listed in the Find Menu results list has an information page. The information page displays a variety of information about the map item.

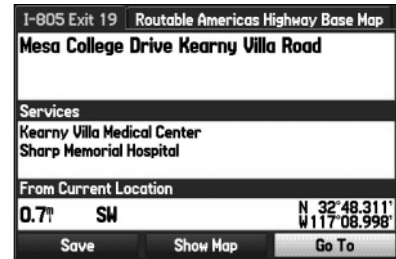
### To view details about an item:

1. With the desired item highlighted in the search results list, press **ENTER/MARK**.

An Information page appears with details about the item in a tabbed format. Depending on the type of item, additional options are available for viewing the item on the Map, viewing notes on a MapSource or BlueChart map, viewing a tide chart, viewing the list of maps on your data card, and viewing the next item in the search results list.

### Using the Find From Feature

The Find option also supports a “find from” feature that allows you to center your search around an item which you have just found. For example, you search for ‘Restricted Areas’ and the search shows an “Anchoring Prohibited” search result. If you press **FIND** again, you will see “From Anchoring Prohibited” as the new search from point. You may also use the Find feature to center your search from any waypoint, route list entry, map item or tide station. Highlight the item you want to Find ‘from’, and press the **FIND** key.



Exit Information Page

## Finding an Item



| Find History • Most Recent  |      |        |
|-----------------------------|------|--------|
| (MENU) to show Goto History |      |        |
| ⊗ Avalon, Santa Catalina Is | 295M | 64.7A  |
| ⊗ San Clemente              | 328M | 46.7A  |
| ⊗ San Diego, Quarantine Sta | 061M | 4.0A   |
| ⊗ San Diego                 | 061M | 7.5A   |
| ● National City             | 083M | 10.6A  |
| ⊗ Point Loma                | 090M | 4.0A   |
| ○ Balanced Rk               | 266M | 53.6A  |
| ⊗ Bechers Bay, Santa Rosa I | 288M | 158.9A |
| ⊗ Rincon Island, Mussel Sho | 301M | 146.6A |

Recently Found Page: Find History



Find Menu Options  
when the unit is navigating

### Recently Found Items

The Recently Found page displays a list of the items you have searched for or gone to recently. Press **MENU** to display the Options Menu for the 'Recently Found Items'.

**Show Find History** – allows you to toggle between displaying the items you have searched for recently ('Find History') and the items you have recently created a Go To for ('Goto History').

**Remove Point** – removes the point that is highlighted in the list.

### Find Menu Options Menu

To view additional options for the Find Menu, press the **FIND** key and then press **MENU**. The following options are displayed:

**Enable Auto Arrange** – automatically arranges the Find Menu. 'Disable Auto Arrange' and 'Restore Default' options appear when you select 'Enable Auto Arrange'.

**Near Other** – allows you to select a new location from which to compile the Find items lists. Using the **ARROW KEYPAD**, move the map cursor to the desired location and press **ENTER/MARK**.

**Data Card Information** – shows information about the detailed map data stored on the data card, and allows you to select which maps are displayed or not displayed on the Map Page.

Additional selections are included in the Options Menu when you are navigating:

**Near Next** – compiles the Find items lists based upon the next turn in the route.

**Near Destination** – compiles the Find items lists based upon the route destination.

**Near Current Route** – compiles the Find items lists based upon the active route.

## Going to a Destination in Marine Mode

Press the **NAV/MOB** key in on any page to begin navigating to a destination. There are four ways to navigate to a destination: Go To Point, Navigate Route, Navigate Track (TracBack), and MOB (Man OverBoard) navigation. Once you are actively navigating, you will see a magenta line that always runs from your current location to the destination on the Map page. When you are navigating in Automotive Mode, there are more options for navigation. Please refer to the “Navigating in Automotive Mode”, which follows this section.

**Go To Point** – allows you to select a waypoint or point of interest from the Find Menu to navigate to.

**Navigate Route** – allows you to select a route to navigate.

**Navigate Track (TracBack)** – allows you to select a saved track to navigate.

**Stop Navigation** – stops the present navigation.

**MOB (Man OverBoard)** – creates a Man OverBoard waypoint and navigates to that location.

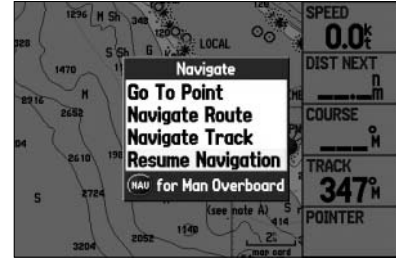
### **Go To Point**

The ‘Go To’ function lets you select a destination point and quickly sets a direct course from your present position. If you have a point highlighted on a list or on the map and press **NAV/MOB**, ‘Go To <point name>’ appears in addition to ‘Go To Point’. The ‘Go To’ function can be accessed from any list of points, the Find Menu, or graphically from the map display.

### **To ‘Go To’ a highlighted map item:**

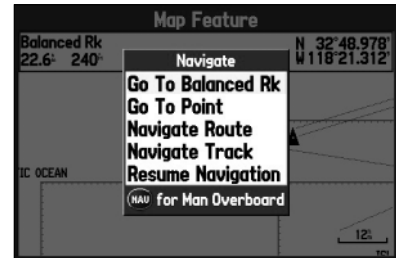
1. Use the **ARROW KEYPAD** to highlight the item you would like to navigate to on the Map Page.
2. Press **NAV/MOB**. ‘Go To <point name>’ is added to the list of options and automatically highlighted. If you have selected an area of the map that is not a map feature ‘Go To MAP Point’ is listed. Press **ENTER/MARK**.
3. Follow the magenta route created on the Map Page. You can also use the Compass Page to help you navigate to the point.

## Navigating in Marine Mode



Navigate Options in Marine Mode

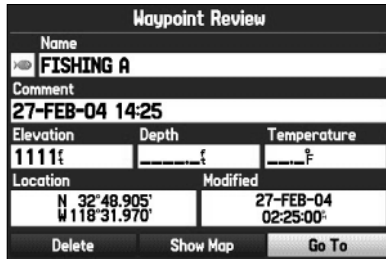
*Accessed by pressing NAV/MOB key*



Navigate Options

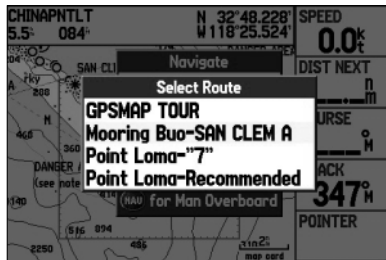
*with Map Feature highlighted*

## Navigating in Marine Mode



Waypoint Review Page

*Activating a Go To using the Find Menu*



Select Route

*Select desired route from list*

### To activate a 'Go To' from the Find Menu:

1. Press the **NAV/MOB** key.
2. Use the **ARROW KEYPAD** to highlight 'Go To Point' and press **ENTER/MARK**. The Find Menu opens.
3. From the Find Menu, highlight 'Waypoints' and press **ENTER/MARK**. (You may also choose to go to other points, such as Cities or Tide Stations from this list. The steps vary only slightly from those listed for the waypoint.)
4. Select a waypoint from the list then press **ENTER/MARK** to display the Waypoint Review Page.
5. The Waypoint Review Page automatically opens. With the 'Go To' button highlighted, press **ENTER/MARK** to begin navigation.

### Navigate Route

The 'Navigate Route' option allows you to easily select a route from a list.

### To navigate a route:

1. Press the **NAV/MOB** key.
2. Use the **ARROW KEYPAD** to highlight 'Navigate Route' and press **ENTER/MARK**.
3. Use the **ARROW KEYPAD** to highlight the desired route and press **ENTER/MARK**.

The Active Route Page automatically opens. With the 'Go To' button highlighted, press **ENTER/MARK** to begin navigation.

### To stop route navigation:

1. Press the **NAV/MOB** key.
2. Highlight 'Stop Navigation' and press **ENTER/MARK**.

For information about creating routes, refer to the "Using Routes" section later in this chapter.

## Navigate Track (TracBack Navigation)

The TracBack function allows you to retrace your path using the track log automatically stored in the receiver's memory, which eliminates the need to store waypoints along the way. TracBack routes are created by reducing your track log into a route of up to 300 turns and activating an inverted route along those points. Once activated, a TracBack route leads you back to the oldest stored track log point, so it is a good idea to clear the existing track log before you start your current trip. You must have saved an active track log (Saved Track) before you can navigate that route (TracBack).

For more information on setting up the Track options and saved tracks, see the "Track Tab" section.

### To save the entire track log:

1. Press the **MENU** key twice to open the Main Menu.
2. Use the **ARROW KEYPAD** to highlight 'Track' from the vertical menu, then highlight the 'Active' tab to the right.
3. Use the **ARROW KEYPAD** to select 'Save' and press **ENTER/MARK**.
4. A window pops up asking if you want to save the entire track log. To save the entire track, highlight 'Yes' and press **ENTER/MARK**.

### To activate a TracBack using the NAV/MOB key:

1. Press the **NAV/MOB** key, then highlight the 'Navigate Track' option and press **ENTER/MARK**.
2. Highlight the track you wish to navigate and press **ENTER/MARK**.
3. Use the Arrow Keypad to select the point to which you want to navigate (TracBack to) and press **ENTER/MARK**.

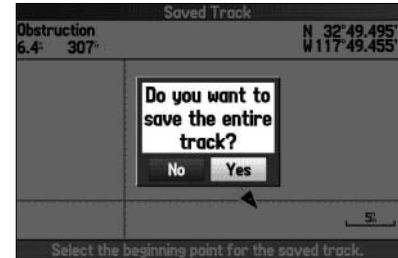
### To stop TracBack navigation:

1. Press the **NAV/MOB** key.
2. Highlight 'Stop Navigation' and press **ENTER/MARK**.

## Navigating in Marine Mode

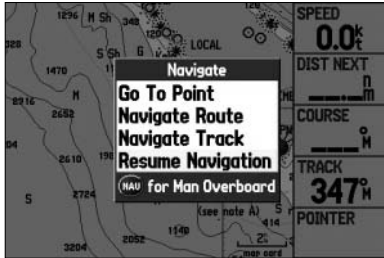


Clearing the track log



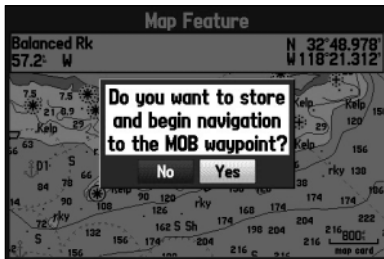
Saving the entire track

## Navigating in Marine Mode



Navigate Options

Accessed by pressing **NAV/MOB** key



Man OverBoard confirmation screen

Once a TracBack has been activated, the GPSMAP 276C divides the track into segments called 'legs'. Up to 300 temporary 'turns' are created to mark the most significant features of the track in order to duplicate your exact path as closely as possible. To get the most out of the TracBack feature, remember these tips:

- Always clear the track log at the point that you want to go back to (such as a dock or camp site).
- There must be at least two track log points stored in memory to create a TracBack route.
- The 'Record Mode' option on the 'Active' tab of the Track Tab must be set to 'Fill' or 'Wrap'.
- If the track log 'Interval' option on the 'Active' tab is set to the 'Time' option, the route may not Navigate your exact path (keep the interval set to 'Resolution' for best performance).
- If the receiver is turned off or satellite coverage is lost during your trip, the TracBack draws a straight line between any point where coverage was lost and where it resumed.
- If the changes in distance and direction of your track are too complex, 300 waypoints may not mark your path accurately. The receiver then assigns the 300 waypoints to the most significant points of your track and simplifies segments with fewer changes in direction.

### Man OverBoard (MOB)

The Man OverBoard function (MOB) lets you simultaneously mark your present position and create a direct route back to that position for quick response to emergency situations.

#### To activate the MOB function:

1. Press and hold the **NAV/MOB** key, or press the **NAV/MOB** key twice.
2. Press **ENTER/MARK** to confirm and begin navigating to the MOB position.

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 and may be deleted like any other waypoint.

## Going to a Destination in Automotive Mode

Press the **NAV/MOB** key in on any page to begin navigating to a destination. Automotive Mode provides the basic options as offered while navigating in Marine Mode, as well as several other options that are especially helpful while you are navigating in Automotive Mode.

**New Route** – functions the same as ‘Go To Point’ in Marine Mode navigation. Allows you to select a waypoint or point of interest from the Find Menu to navigate to.

**Navigate Route** – allows you to select a route to navigate.

**Navigate Track (TracBack)** – allows you to select a saved track to navigate.

**Resume Navigation** – restarts the present navigation.

The following options are also available when you press **NAV/MOB** while you are navigating a route.

**Recalculate** – initiates route recalculation based on your selection of ‘Faster Time’, ‘Shorter Distance’, or ‘Off Road’.

**Detour** – creates a detour based upon the distance you select (‘1/2 mile’, ‘1 mile’, ‘2 miles’, ‘5 miles’, or ‘15 miles’). (Only displayed when you are navigating.) Press **NAV/MOB** again and select ‘Cancel Detour’ to end the detour.

**Edit Vias** – allows you to add points to travel through before you get to your destination. These are really helpful when looking for a gas station and planning an entire leg of a road trip.

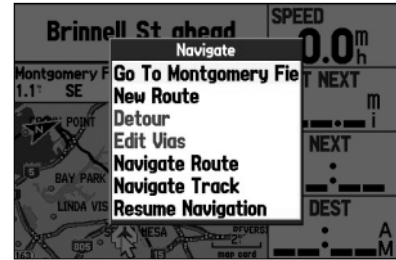
**Stop Navigation** – stops the present navigation.

### **New Route**

The ‘New Route’ option works the same as the ‘Go To’ function in Marine Mode. You can select a destination point from the Find Menu, and the unit quickly sets a direct course from your present position. If you have a point highlighted on a list or on the map and press **NAV/MOB**, ‘Go To <point name>’ appears in the Navigate List.

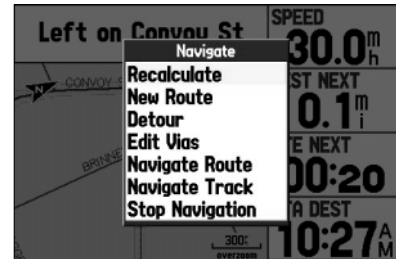
Refer to the ‘Navigating in Marine Mode’ section previously found in this manual.

## Navigating in Automotive Mode



Navigate Options in Automotive Mode

*with Map Feature highlighted  
Accessed by pressing NAV/MOB key*



Navigate Options in Automotive Mode

*while navigating in Automotive Mode  
Accessed by pressing NAV/MOB key*

## Navigating in Automotive Mode



Add/Edit Vias Page



Add/Edit Vias Page

*showing a via point before the destination*

### Navigate Route

The 'Navigate Route' option allows you to easily select a route from a list. Refer to the 'Navigating in Marine Mode' section previously found in this manual. Also refer to the "Using Routes" section.

### Navigate Track (TracBack Navigation)

The TracBack function allows you to retrace your path using the track log automatically stored in the receiver's memory, which eliminates the need to store waypoints along the way. Refer to the 'Navigating in Marine Mode' section previously found in this manual. Also refer to the "Track Tab" section for more information on setting up the Track options and saved tracks.

### Edit Vias

You can add via points (points through which you would like to travel) to your route using the 'Edit Vias' option. Via points are great for adding a stop at the gas station or bank to your route. They are really helpful when planning a long trip.

### To add via points to your route:

1. While navigating your route, press the **NAV/MOB** key. The Navigate menu opens.
2. Use the **ARROW KEYPAD** to select 'Edit Vias' and press **ENTER/MARK**.
3. From the pop-up window, highlight either 'Use Map' or 'Find' and press **ENTER/MARK**.
4. If you selected 'Use Map', use the **ARROW KEYPAD** to select the desired item on the map and press **ENTER/MARK**.  
If you selected 'Find', select an item from the Find Menu as discussed in the "Finding an Item" section found previously in this manual. Remember you can press the **MENU** key while the Find Menu is open to find an item near another location, such as the destination.
5. The new point is added to the route as displayed in the Add/Edit Vias Page. Continue steps 2 through 4 until you have added all of the vias that you want. Highlight 'Done' and press **ENTER/MARK** to apply the new vias to the route.

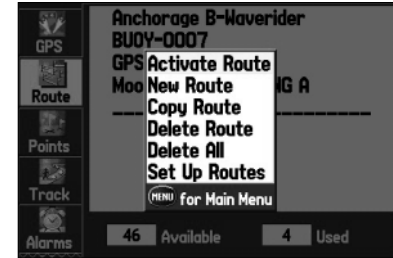
## Creating a Route

The Garmin GPSMAP 276C lets you create and store up to 50 reversible routes, with up to 300 waypoints each. Routes can be created in two ways. The first way is to select waypoints from the Find Menu, allowing you to see a list of the route points as you create the route. The second way is by selecting waypoints or map items from the Map Page, allowing you to see each route point graphically on-screen as you create the route.

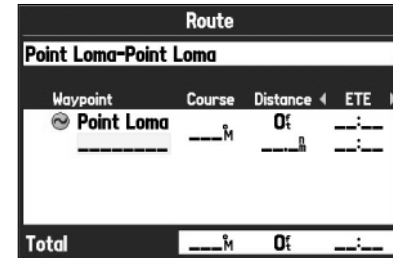
### To create a route using the Find Menu:

1. Press the **MENU** key twice to display the Main Menu page.
  2. Use the **ARROW KEYPAD** to highlight 'Route' from the vertical list of tabs.
  3. Press the **MENU** key to display the Route Options Menu. Select 'New Route' and press **ENTER/MARK**.
- Or Highlight the first available blank route slot and press **ENTER/MARK**.
4. The Route Review Page automatically opens, displaying a blank route. Press **ENTER/MARK** to find items to add to the route.
  5. The Find Menu opens. Using the methods discussed in the "Finding an Item" section of this manual, select waypoints and/or points of interest to add to your route. When the item information page is open, highlight 'OK' and press **ENTER/MARK** to add the point to the route. Repeat until you have added all of the points to the route.

## Using Routes



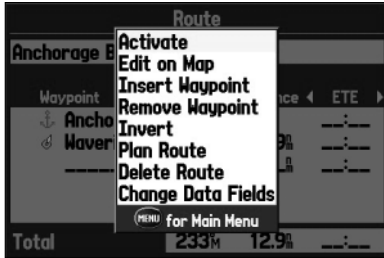
Creating a new route



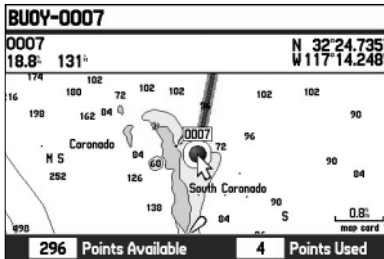
Creating a new route on Route Review Page

# Basic Operation

## Using Routes



Route Review Page Options Menu



Creating a new route on the map

### To create a route graphically:

1. Press the **MENU** key twice to display the Main Menu Page. Use the **ARROW KEYPAD** to highlight 'Route' from the vertical list of tabs.
2. Press the **MENU** key to display the Route Options Menu. Select the 'New Route' option and press **ENTER/MARK**.

Or Highlight the first blank slot in the Route List page and press **ENTER/MARK**.

3. On the Route Review Page, press the **MENU** key to open the Route Review Page Options Menu.
4. Use the **ARROW KEYPAD** to highlight 'Edit on Map' and press **ENTER/MARK**.
5. Use the **ARROW KEYPAD** to highlight the desired map item and press **ENTER/MARK**. If you have selected an area of the map that is not a feature or waypoint, a new waypoint is created for that location. Press **ENTER/MARK** on the New Waypoint Page to save the location as a waypoint and continue adding points to your route. You can edit the properties of this waypoint as you can with any waypoint. Refer to the "Using Waypoints" section of this manual for more information.

Repeat until you have added all points to the route. As you add each point to the route, the top of the map shows the waypoint/map item name, bearing and distance from your location, and coordinates of the cursor. The bottom of the map displays the number of available and used points. A route line appears on the map to indicate each completed leg, and a dotted line appears to indicate the distance and bearing from the last route waypoint to the map pointer location.

6. When finished press **QUIT** twice to return to the Route Review Page. Or, press **MENU**, highlight 'Edit as Text' and press **ENTER/MARK** to view the Route Review Page.

### Route Tab Options Menu

The Route Tab displays all the routes currently stored in memory, along with a descriptive name for each route. Access the Route Tab Options Menu by pressing the **MENU** button on the Route Tab. For more information, refer to the "Route Tab" section later in this manual.

## Active Route Page

Whenever you have activated a route in the GPSMAP 276C, the Active Route Page shows each point (waypoint or map item) of the active route. 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. Refer to the "Route Tab" section of this guide for complete information.

## Route Review Page

Once you have created a route, the Route Review Page allows you to edit a selected route.

### To open to the Route Review Page:

1. Press **MENU** twice and highlight 'Route' from the vertical list of tabs.
2. Use the **ARROW KEYPAD** to highlight the name of the desired route and press **ENTER/MARK**.

### To enter a custom route name:

By default the name includes the first and last waypoints in the route.

1. From the Route Review Page, highlight the name field and press **ENTER/MARK** to begin editing.
2. Use the **ARROW KEYPAD** to enter up to a 15-character name and press **ENTER/MARK**.

### To review individual route points:

1. From the Route Review Page, highlight the desired point and press **ENTER/MARK**.
2. On the Point Review window, you may choose 'Next' (highlight the next point on the route list), 'Show Map' (show the point on a map window) or 'Save' (save the point as a waypoint) and press **ENTER/MARK**. If the route point is a user waypoint, you may edit any of the waypoint properties on the Waypoint Review Page (see the "Waypoint" section in the "Basic Operation" chapter for details).

Once you are back on the Route Review Page, the next point in the route is automatically highlighted. This allows you to review each point on the route by pressing **ENTER/MARK** repeatedly.

## Using Routes

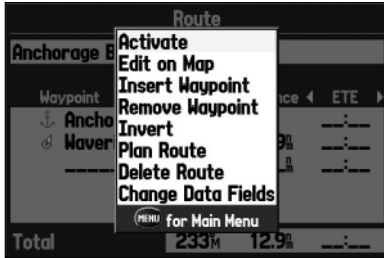


Route List Page

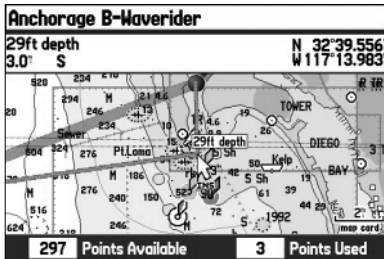
| Waypoint            | Course      | Distance     | ETE          |
|---------------------|-------------|--------------|--------------|
| Anchorage Waverider | 233M        | 0M           | 12.9%        |
|                     |             |              |              |
| <b>Total</b>        | <b>233M</b> | <b>12.9%</b> | <b>12.9%</b> |

Route Review Page

## Using Routes



Route Review Options Menu



Editing the route on the map

### Route Review Options Menu

By pressing **MENU** on the Route Review Page, the following menu options are available:

**Activate** – begins navigation of the route.

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

**Insert Waypoint** – inserts a waypoint (or point from the Find Menu) before the highlighted waypoint or add a point(s) onto the end of the route.

**Remove Waypoint** – deletes the selected waypoint from the route.

**Invert** – reverses the order of the route.

**Plan Route** – allows you to enter information about your route to more accurately provide you with arrival times.

**Delete Route** – deletes the entire route.

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

### To edit the route on the map:

1. Press **MENU** twice to open the Main Menu. Use the **ARROW KEYPAD** to select 'Route' from the vertical menu of tabs.
2. Use the **ARROW KEYPAD** to select the desired route and press **ENTER/MARK**. Press **MENU**.
3. Highlight 'Edit on Map' and press **ENTER/MARK**.
4. Use the **ARROW KEYPAD** to select a location on the magenta route (the route turns bright red when the cursor is over the route) and press **ENTER/MARK**.
5. Use the **ARROW KEYPAD** to drag the route to the new point location and press **ENTER/MARK**.
6. The New Waypoint Page opens. Edit the waypoint as desired, highlight 'OK', and press **ENTER/MARK**.
7. Repeat steps 4 through 6 until all desired points are added to the route. Press **QUIT** when finished.

## Using Routes

### To add points to the route using the Route Review Page and the Find Menu:

1. Press **MENU** twice to open the Main Menu. Use the **ARROW KEYPAD** to select 'Route'.
2. Use the **ARROW KEYPAD** to select the desired route and press **ENTER/MARK**.
3. Use the **ARROW KEYPAD** to highlight the spot in the route that you want to add the new point. (The new point is added before the highlighted route point.) Press **MENU**.
4. Highlight 'Insert Waypoint' and press **ENTER/MARK**.
5. The Find Menu automatically opens for you to search for and select the waypoint or point of interest you want to add to the route.
6. In the point Review Page, press **ENTER/MARK** when 'OK' is highlighted to add the new point to the route.

### To use the Trip Planning feature:

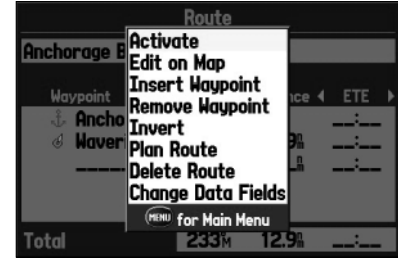
1. Press **MENU** twice to open the Main Menu. Use the **ARROW KEYPAD** to select 'Route'.
2. Use the **ARROW KEYPAD** to select the desired route and press **ENTER/MARK**.
3. Press **MENU**. Highlight 'Plan Route' and press **ENTER/MARK**.
4. Enter the desired data for Speed, Fuel Flow, Departure Time, and Departure Date. Press **QUIT** to return to the Route Review Page.



**NOTE:** Fuel flow rates on your unit are measured in "units per hour". System setting changes for units of measure (statute, nautical or metric) do not affect the fuel flow measure. You should enter fuel flow rates based upon available information for your vehicle (such as the operator's manual or performance specifications) and make note of the desired units of measure (such as gallons or liters).

### Following a Route

Once a route has been created, it can be activated and used for navigation with the **NAV/MOB** key. Refer to the previous pages for more information.



Route Review Page Options Menu



Creating a new route on the map

## Using Waypoints

| New Waypoint    |          |             |
|-----------------|----------|-------------|
| Name            |          |             |
| 0001            |          |             |
| Comment         |          |             |
| 26-FEB-04 11:15 |          |             |
| Elevation       | Depth    | Temperature |
| 1151ft          |          | F           |
| Location        |          | Modified    |
| N 32°40.082'    |          | 26-FEB-04   |
| W 117°19.062'   |          | 11:15:49    |
| Delete          | Show Map | OK          |

New Waypoint Page

### Creating and Using Waypoints

The Garmin GPSMAP 276C stores up to 3000 alphanumeric waypoints with a user-defined icon, comment, elevation, depth, and temperature available for each waypoint. Waypoints can be created using three basic methods:

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

### *Marking Your Present Position*

The Garmin GPSMAP 276C'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 GPS Tab on the Main Menu.

#### **To mark your present position:**

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

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

## Creating Waypoints Graphically

Waypoints may also be quickly created with the Map Page cursor, which 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 276C 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 **ARROW KEYPAD** to move the cursor to the desired map position or map feature.
3. Press and quickly release the **ENTER/MARK** key to capture the cursor position. Pressing and holding **ENTER/MARK** will mark your present position, not the map cursor's location.

If you have highlighted a map feature, an information page is displayed after you press **ENTER/MARK**. Use the **ARROW KEYPAD** to highlight 'Save' and press Enter/Mark to save the item as a waypoint.

4. The New Map Waypoint Page appears. To accept the waypoint with the default name and symbol, highlight 'OK' and press **ENTER/MARK**.

To change the any information on the New Map Waypoint Page, highlight the appropriate field and press **ENTER/MARK**. After entering and confirming your changes, highlight 'OK' and press **ENTER/MARK**.

## Using Waypoints

| Buoy                      | Spot Depth | Depth Contour | Chart US18740 |
|---------------------------|------------|---------------|---------------|
| Foundation Color: Yellow  |            |               |               |
| Light Color: White        |            |               |               |
| Light Type:Group Flashing |            |               |               |
| Period:20.0s              |            |               |               |
| Notes:Priv                |            |               |               |
| From Current Location     |            |               |               |
| 6.8m                      | 23 M       | N 32°38.011'  | W 117°26.693' |
| Save                      | Show Map   | Go To         |               |

Map Feature Information Page

Select 'Save' to save feature as a waypoint

| New Waypoint    |          |             |
|-----------------|----------|-------------|
| Name            |          |             |
| BUOY            |          |             |
| Comment         |          |             |
| 26-FEB-04 11:22 |          |             |
| Elevation       | Depth    | Temperature |
| _____ f         | _____ f  | _____ F     |
| Location        |          | Modified    |
| N 32°38.011'    |          | 26-FEB-04   |
| W 117°26.693'   |          | 11:22:10    |
| Delete          | Show Map | OK          |

New Waypoint Page

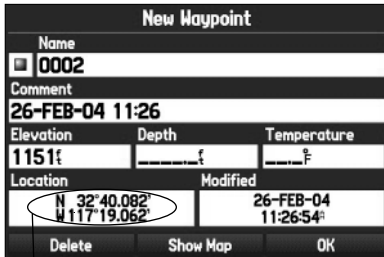
New Waypoint Page for map feature shown above

## Using Waypoints



Points Tab Options Menu

Creating a waypoint through the Points Tab of the Main Menu



To change the location of a waypoint, highlight the character you want to change in the Location field. Press UP or DOWN on the **ARROW KEYPAD** to change the character.

### Additional Options for Creating Waypoints

Waypoints may also be created by manually entering position coordinates through the Points Tab 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 **ARROW KEYPAD** to highlight the 'Points' from the vertical list of tabs and press **MENU**.
3. Highlight 'Create Waypoint' and press **ENTER/MARK**.

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

#### 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 know position as the default name and position.
2. Use the **ARROW KEYPAD** to highlight the 'Location' field and press **ENTER/MARK**. Use the **ARROW KEYPAD** to enter the desired position coordinates and press **ENTER/MARK** when finished.

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

## 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). The new waypoint is created with the next available waypoint number and the receiver’s last know position as the default name and position.
2. Press **MENU** to open the New Waypoint Page Options Menu.
3. Use the **ARROW KEYPAD** to highlight ‘Project Location’ and press **ENTER/MARK**.
4. To change the location from which you are projecting the new waypoint, highlight the ‘From’ field and press Enter/Mark. The Find Menu opens. Select the point from which you will project you new waypoint just as you would select a waypoint or point of interest. For more information see the “Finding an Item” section in the “Basic Operation” chapter.

To adjust the distance that the new waypoint will be projected beyond the original waypoint, highlight the ‘Distance’ field and press **ENTER/MARK**. Use the **ARROW KEYPAD** to adjust the distance and press **ENTER/MARK**.

To adjust the bearing that the new waypoint will be projected from the original waypoint, highlight the ‘Bearing’ field and press **ENTER/MARK**. Use the **ARROW KEYPAD** to adjust the bearing and press **ENTER/MARK**.

When you have adjusted all elements of the projected location, highlight ‘OK’ and press **ENTER/MARK**.

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



New Waypoint Options Menu



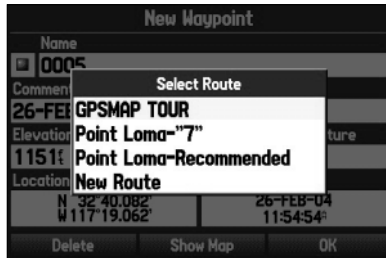
Project Location Menu

Enter the desired distance, bearing, and location to project from

## Using Waypoints



Average Location Page



### Select Route Tab

After selecting 'Append to Route' from the Options Menu, the Select Route Tab opens for you to select the route to add this waypoint to.

## Waypoint Menu Options

As well as 'Project Location', two additional options are available by pressing **MENU** on the New Waypoint and New Map Waypoint Pages: 'Average Location' and 'Append To Route'. These menu options also appear on the Waypoint Edit and Waypoint Review Pages. Select 'Average Location' to have the unit take several sample location measurements for the waypoint and recalculate for a more accurate position reading. Select 'Append to Route' to add the new waypoint to the end of a route.

### 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/MARK**.

### To append a new waypoint to a route:

1. Select 'Append To Route' from the Options Menu.
2. The 'Select Route' screen appears. Highlight the desired route or select 'New Route' and press **ENTER/MARK**.
3. With 'OK' highlighted, press **ENTER/MARK** to save the waypoint.

## 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 Waypoint Review Page:

1. Use the **ARROW KEYPAD** to highlight the desired waypoint on the Map Page.
2. Press **ENTER/MARK** to display the Waypoint Review Page. If the waypoint is located on a map feature, or MapSource or BlueChart feature, the Waypoint Review Page includes additional information tabs about the other features at that location.

### To access the Waypoint Edit Page:

1. Press **MENU** twice to view the Main Menu.
2. Use the **ARROW KEYPAD** to highlight 'Points' from the vertical list of tabs, then highlight the desired waypoint from the 'User' or 'Proximity' tabs.
3. Press **ENTER/MARK** to display the Waypoint Edit Page. If the waypoint is located on a map feature, or MapSource or BlueChart feature, the Waypoint Edit page will NOT display the details of the other map features.

From the Waypoint Review and Edit pages, 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/MARK**.
2. Use the **ARROW KEYPAD** to enter a new name and press **ENTER/MARK** when done.

### To change the waypoint symbol:

1. Highlight the waypoint symbol field to the left of the waypoint name and press **ENTER/MARK**.
2. Use the **ARROW KEYPAD** to select the desired symbol and press **ENTER/MARK** when done.

## Using Waypoints

The screenshot shows the 'Waypoint Review Page' for a waypoint named '0002'. The page is titled 'Waypoint Chart US18740'. It displays the following information:

- Name:** 0002
- Comment:** 26-FEB-04 11:33
- Elevation:** 1151ft
- Depth:** \_\_\_\_\_ft
- Temperature:** \_\_\_\_\_°F
- Location:** N 32°36.042' W 117°29.904'
- Modified:** 26-FEB-04 11:48:23

At the bottom, there are three buttons: 'Delete', 'Show Map', and 'Go To'.

Waypoint Review Page

The screenshot shows the 'Waypoint Edit Page' for a waypoint named '0002'. The page is titled 'Waypoint Edit'. It displays the following information:

- Name:** 0002
- Comment:** 26-FEB-04 11:33
- Elevation:** 1151ft
- Depth:** \_\_\_\_\_ft
- Temperature:** \_\_\_\_\_°F
- Location:** N 32°36.042' W 117°29.904'
- Modified:** 26-FEB-04 11:48:23

At the bottom, there are three buttons: 'Delete', 'Show Map', and 'Go To'.

Waypoint Edit Page

## Using Waypoints

| Waypoint Chart US18740 |               |                       |
|------------------------|---------------|-----------------------|
| Name                   |               |                       |
| 0002                   |               |                       |
| Comment                |               |                       |
| 26-FEB-04 11:33        |               |                       |
| Elevation              | Depth         | Temperature           |
| 1151f                  | f             | F                     |
| Location               |               | Modified              |
| N 32°36.042'           | W 117°29.904' | 26-FEB-04<br>11:48:23 |
| Delete                 | Show Map      | Go To                 |

Waypoint Review Page

| Waypoint Edit   |               |                       |
|-----------------|---------------|-----------------------|
| Name            |               |                       |
| 0002            |               |                       |
| Comment         |               |                       |
| 26-FEB-04 11:33 |               |                       |
| Elevation       | Depth         | Temperature           |
| 1151f           | f             | F                     |
| Location        |               | Modified              |
| N 32°36.042'    | W 117°29.904' | 26-FEB-04<br>11:48:23 |
| Delete          | Show Map      | Go To                 |

Waypoint Edit Page

### To change the other waypoint elements:

1. Highlight the desired field and press **ENTER/MARK**.
2. Use the **ARROW KEYPAD** to edit/enter the data. Press **ENTER/MARK** when done.

On the Waypoint Review and Waypoint Edit Pages, you may also delete the selected waypoint, view the waypoint on the map, and move the waypoint on the map.

### To delete a waypoint:

1. On the Waypoint Review/Waypoint Edit Page, use the **ARROW KEYPAD** to highlight 'Delete' and press **ENTER/MARK**. With 'OK' highlighted, press **ENTER/MARK** again to confirm the deletion.

### To view the waypoint on the map:

1. From the Waypoint Review/Waypoint Edit Page, highlight 'Show Map'.
2. Press **ENTER/MARK**. The waypoint is highlighted on a map with an information window at the top that shows the waypoint name, position and distance and bearing from your current position.

On the 'Show Map' map display, two additional options are available by pressing **MENU**:

**Measure Distance** – allows you to measure the distance and bearing between two points on the map (see the "Points" section of the "Main Menu" chapter for more information).

**Point to on Main Map** – returns to the highlighted waypoint on the Map Page (exits the Waypoint Review/Waypoint Edit Page).

## Points Tab

The Points Tab of the Main Menu features two tabs, 'User' and 'Proximity', that let you manage a large number of waypoints quickly and efficiently. The tabs also provide a continuously updated proximity waypoint alarm function that can be used to define an alarm circle around things like submerged hazards or shallow waters.

### To access the Points Tab of the Main Menu:

1. Press **MENU** twice to open the Main Menu.
2. Highlight 'Points' from the vertical list of tabs using the **ARROW KEYPAD**.

### 'User' tab

The 'User' tab displays a master list of all waypoints currently stored in memory. From the 'User' list, you may review, edit, rename, or delete individual waypoints or delete all user waypoints. The total number of stored and available waypoints is displayed at the bottom of the 'User' tab, with the stored waypoints arranged in numerical/alphabetical order.

### To scroll through and review the waypoint list:

1. With the **ARROW KEYPAD**, highlight 'Points' on the Main Menu, then highlight the 'User' tab.
2. Use the **ARROW KEYPAD** to scroll through the list in the desired direction.
3. Press **ENTER/MARK** to review the highlighted waypoint on the 'Waypoint Edit' page. See the previous pages for detailed information on reviewing and editing waypoints.

### To activate a 'Go To' from the 'User' tab:

1. Access the 'User' tab of the Points Tab.
2. Use the **ARROW KEYPAD** to highlight the desired waypoint and press **ENTER/MARK**.
3. Highlight 'Go To' and press **ENTER/MARK**.

## Using Waypoints



|        | User           | Proximity |       |  |
|--------|----------------|-----------|-------|--|
| GPS    | 0001           |           |       |  |
| Route  | 0001           | 347M      | 0     |  |
|        | GARMIN         | 052M      | 1157M |  |
| Points | GRMEUR         | 022M      | 4763M |  |
|        | GRMTWN         | 295M      | 5983M |  |
| Track  | TOUR1          | 062M      | 2036M |  |
|        | TOUR2          | 062M      | 2036M |  |
|        | TOUR3          | 061M      | 2035M |  |
| Alarms | 2991 Available | 9 Used    |       |  |

'User' tab of the Points Tab in the Main Menu

## Using Waypoints



User Points Options Menu

The following options are available by pressing **MENU** in the 'User' tab:

**Create Waypoint** – creates a new waypoint (see the previous pages).

**Delete Waypoint** – deletes selected waypoint from list and any route in which it was used.

**Delete By Symbol** – deletes all waypoints that use the same symbol.

**Delete By Distance** – deletes all waypoints that are a specific distance from a specific location.

**Delete All** – deletes all waypoints from the unit.



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**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 optional PC cable and interface software or write them down by hand.

---

### To delete a waypoint from the 'User' tab:

1. From the 'User' tab of the Points Tab, use the **ARROW KEYPAD** to highlight the waypoint to be deleted.
2. Press **MENU**, then highlight 'Delete Waypoint' and press **ENTER/MARK**.
- Or Press **ENTER/MARK** to open the Waypoint Edit Page. Highlight 'Delete', and press **ENTER/MARK**.
3. Press the **ENTER/MARK** key to confirm the deletion warning.

### To delete waypoints by symbol:

1. From the 'User' tab, highlight the waypoint to be deleted and press **MENU**.
2. Highlight 'Delete By Symbol' and press **ENTER/MARK**.
3. Use the **ARROW KEYPAD** to highlight the symbol of the waypoint(s) to be deleted and press **ENTER/MARK**.
4. Highlight 'OK' and press **ENTER/MARK** to confirm. Choose 'Cancel' or press **QUIT** to stop the deletion.

## Using Waypoints

### To delete waypoints by distance:

1. From the 'User' tab, highlight the waypoint to be deleted and press **MENU**.
2. Highlight 'Delete By Distance' and press **ENTER/MARK**.
3. Select 'Less Than' or 'More Than' and enter the desired distance using the **ARROW KEYPAD**.
4. If desired, you can select a waypoint or point of interest as the 'From' location. Highlight the 'From' field and press **ENTER/MARK**. From the Find Menu, select the desired location and press **ENTER/MARK**. When 'OK' is highlighted, press **ENTER/MARK**.
5. Highlight 'Delete' and press **ENTER/MARK** to delete all waypoints within the set location. Choose 'Cancel' or press **QUIT** to stop the deletion.

### To delete all user waypoints:

1. Press the **MENU** key to select the options window.
2. Use the **ARROW KEYPAD** to highlight 'Delete All' and then press **ENTER/MARK**.
3. Highlight the 'OK' prompt and press **ENTER/MARK** to confirm. Be sure you want to delete the waypoints before you press **ENTER/MARK**. You cannot recover deleted waypoints.
4. You will then be asked if you would like to delete all Route Waypoints too. Highlight the 'OK' prompt and press **ENTER/MARK** to confirm or highlight 'Cancel' and press **ENTER/MARK** to not delete Route waypoints. Selecting 'Cancel' at this time will not cancel out of the waypoint deletion. It simply retains waypoints used in routes.



**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 optional PC cable and interface software or write them down by hand.

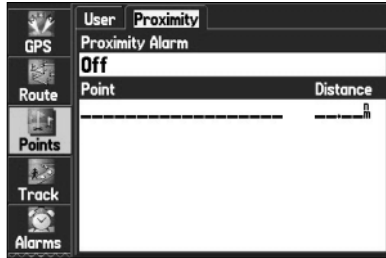


User Points Options Menu



Deleting waypoints based on distance

## Using Waypoints



'Proximity' tab

### 'Proximity' tab

The 'Proximity' tab of the Points Tab lets you define an alarm circle around a stored waypoint position. The alarm circle can be used to help you avoid reefs, rocks, or restricted waters. Up to ten waypoints may be listed with a maximum alarm radius of 99.99 nautical miles, statute miles, or kilometers.

If a proximity alarm circle overlaps with an existing alarm circle, a 'Proximity Overlaps Another Proximity Waypoint' message appears. Since the unit only alerts for one of the overlap points, use caution when navigating in these areas. If you enter an alarm circle overlap, you are only alerted to the closest proximity waypoint.

#### To turn proximity alarms on or off:

1. From the 'Proximity' tab of the Points Tab, use the **ARROW KEYPAD** to highlight the field below 'Proximity Alarm' and press **ENTER/MARK**.
2. Select the desired 'ON' or 'OFF' setting and press **ENTER/MARK**.

#### To add a proximity waypoint:

1. From the 'Proximity' tab of the Points Tab, use the **ARROW KEYPAD** to highlight an empty line on the Proximity List and press **ENTER/MARK**. The Find screen appears.
2. Select the desired waypoint or point of interest from the Find screen. With 'OK' highlighted, press **ENTER/MARK** to select that point. (For complete information about selecting waypoints or points of interest from the Find screen, see "Finding an Item".)
3. The distance field is now highlighted. Press **ENTER/MARK** to begin entry of the proximity radius.
4. Use the **ARROW KEYPAD** to enter a distance value (up to 99.99 units) and press **ENTER/MARK**.

The following options are available by pressing **MENU** on the 'Proximity' tab of the Points Tab:

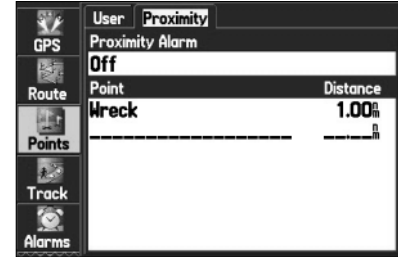
**Remove Point** – removes selected waypoint from the proximity list.

**Remove All** – removes all waypoints from the proximity list.

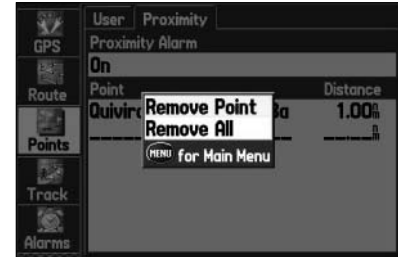
### To clear one or all proximity waypoint(s) from the list:

1. Open the 'Proximity' tab of the Points Tab.
2. Use the **ARROW KEYPAD** to highlight the proximity waypoint to clear and press **MENU**.
3. To clear a single alarm, highlight the 'Remove Point' option and press **ENTER/MARK**.  
To clear all proximity waypoints, select the 'Remove All' option and press **ENTER/MARK**.
4. Use the **ARROW KEYPAD** to highlight the 'OK' prompt and press **ENTER/MARK** to confirm.

## Using Waypoints

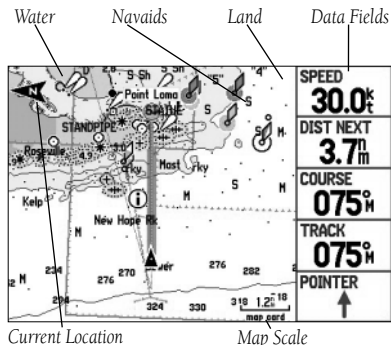


'Proximity' tab



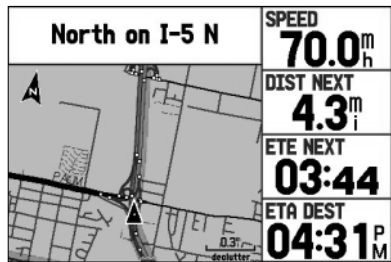
Deleting waypoints based on distance

## Map Page



Map Page (Marine Mode)

shown with optional BlueChart data



Map Page (Automotive Mode)

shown with optional MapSource data

## Using the Map Page

The Map Page provides a comprehensive display of electronic cartography, plotting, and navigational data. When using the unit with optional MapSource BlueChart data (in Marine Mode), the map display shows your location on a digital chart, complete with geographic names, map items, nav aids and a host of other chart features. In Automotive Mode, more detailed map features are available with other optional MapSource data, such as City Select. The Map Page also plots your track and displays any routes and waypoints you create. An on-screen cursor lets you pan and scroll to other map areas, determine the distance and bearing to a position, and perform various route and waypoint functions.

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 is the black triangle vehicle icon ▲ that shows your travel on the Map Page. The GPSMAP 276C always powers up in the position mode, with the last known location centered on the map display.

The GPSMAP 276C enters cursor mode when the **ARROW KEYPAD** is pressed. Cursor mode pans the cartography to keep the cursor within the display area. The cursor is the white pointer arrow icon ↗ used for panning around the Map Page. 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.

## **Panning the Map with the Cursor**

The cursor 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 vehicle icon stays in your present location and may not be visible on the display screen when you pan the map).

### **To move the cursor:**

1. Press UP, DOWN, RIGHT, or LEFT on the **ARROW KEYPAD**.
2. Press **QUIT** to return the cursor to your current location.

As you move the cursor, the distance and bearing from your present position to the cursor is displayed in the data window, along with the cursor's position coordinates. When you zoom in cursor mode, the cursor stays centered on the screen. When the cursor 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:**

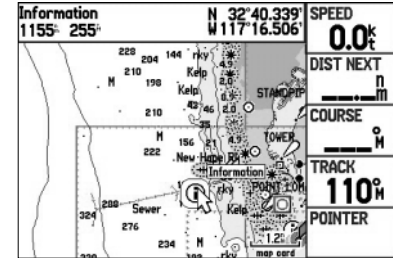
1. When you are finished panning the Map, press the **QUIT** key.
2. The unit automatically returns to position mode.

The cursor 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 cursor:**

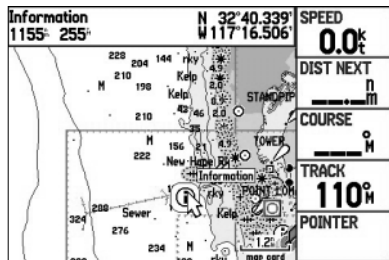
1. Use the **ARROW KEYPAD** to move the cursor to the desired waypoint or map item. If there are several items grouped closely together, zoom in closer for a better view.
2. When a waypoint or map item is selected, it is highlighted on screen with the name and position displayed at the top of the screen,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

## **Map Page**

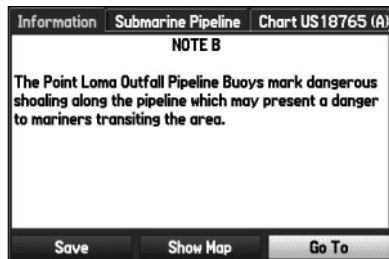


**Panning the Map**  
*Map feature highlighted*

## Map Page



Panning the Map  
Map feature highlighted



Map Feature Information Page

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

1. With the desired waypoint or map item highlighted, press **ENTER/MARK**.
2. If the item is a waypoint, a Waypoint Review 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 ('Show Map'), or begin navigation to the waypoint ('Go To') from your current location. If desired, select an on-screen button and press **ENTER/MARK**, or press **QUIT** to exit the Waypoint Review Page.

If the item is a map feature or a feature of BlueChart or other MapSource data, 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 ('Show Map'), or begin navigation to the item ('Go To') from your current location. If desired, select an on-screen button and press **ENTER/MARK**, or press **QUIT** to exit the Information page.

In some cases, additional information tabs appear at the top of the Information page or Waypoint Review Page. If desired, use the **ARROW KEYPAD** to highlight the extra tabs and view the information.

## 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 right of the data window.

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

- Press the **OUT** key to zoom out
- Press 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 BlueChart or MapSource data. The GPSMAP 276C displays cartography as long as there is chart 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, BlueChart, or other MapSource data.
- When the selected zoom range is covered by both the internal database and BlueChart/MapSource data, 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 MapSource data is displayed, a “map card” label appears below the map scale.

## Map Page



*Using Built-in Basemap*



*Using Map Card Data*

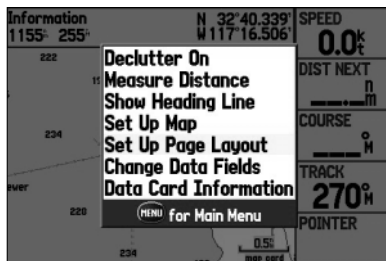


*Overzoom: No additional data available*

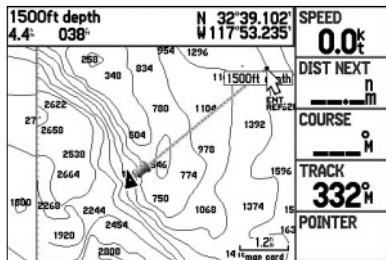


**NOTE:** *The scale value represents the distance from one end of the scale bar to the other.*

## Map Page



Map Page Options Menu (Marine Mode)



Measure Distance

### 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. The data window, located at the right side of the display, provides a user-selectable layout of various types of useful data. Each data field may be configured to display any one of several data options. The data window layout may also be customized to change the actual size of the data displayed.

#### To display the Map Page Options Menu:

1. Press **PAGE** repeatedly until the Map Page is displayed.
2. Press **MENU**.

The available options described below. In the sections following, some options, such as Measure Distance, also have instructions detailing how to use the option. The Options Menu varies slightly between the Marine Mode and Automotive Mode.

**Declutter On/Off** – toggles between showing spot soundings and map outlines for easier viewing.

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

**Show/Hide Heading Line** – (Marine Mode only) toggles between showing or hiding the Heading Line, which projects from the current position (triangle vehicle icon) to show your current heading.

**Show/Hide Directions** – (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. For detailed information on the Map Setup Menu, refer to the “Map Page Setup Menu” section later in this manual.

**Set Up Page Layout** – allows you to choose the size of text 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 a complete list of all data fields used in the GPSMAP 276C.

**Data Card Information** – shows information about the detailed map data stored on the data card, and allows you to select which maps are displayed or not displayed on the Map Page.

## To measure the Bearing/Distance between two points:

1. Highlight the 'Measure Distance' option and press **ENTER/MARK**. An on-screen pointer appears on the map display at your present position with 'ENT REF' below it. A push-pin icon is placed at your present location.
2. Move the cursor to the desired reference point (the point that you want to measure to). Notice the bearing and distance displayed in the data window at the top of the display.

To start measuring from a different location, use the Arrow Keypad to pan to the location and press **ENTER/MARK**. The push-pin icon marks the map cursor's location. Again, 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.

3. Press the **QUIT** key to finish.

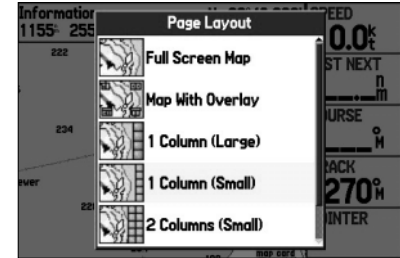
## To set up the page layout:

1. Highlight 'Set Up Page Layout' from the Options Menu and press **ENTER/MARK**.
2. Select the desired option and press **ENTER/MARK**.

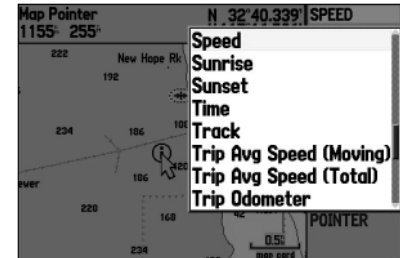
## To change a data field display:

1. From the Options Menu, highlight 'Change Numbers' and press **ENTER/MARK**.
2. Move the field highlight to the data field you want to change and press **ENTER/MARK**.
3. Press UP or DOWN on the **ARROW KEYPAD** to highlight the data you want to display, and press **ENTER/MARK**.
4. Press **QUIT** to exit.

## Map Page

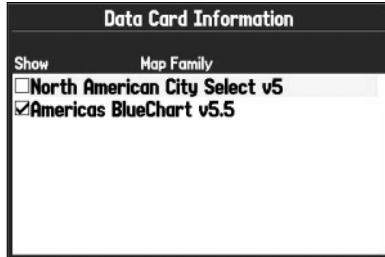


Map Page Layout Options (Marine Mode)

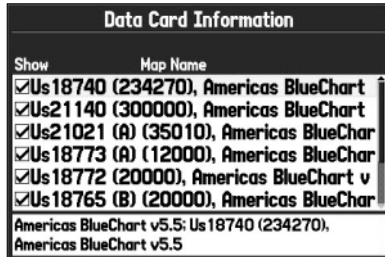


Changing a Data Field

## Map Page



Data Card Information Page



Map Family Information Page

### To review/change data card information:

1. Access the Map Page and press **MENU**.
2. From the Options Menu highlight 'Data Card Information' and press **ENTER/MARK**.
3. The first page shows the Map Families that are stored on the data card and whether they are set to be shown on the Map Page. To change the setting for a Map Family, highlight the box next to the Map Family name and press **ENTER/MARK** to select (check mark) or deselect (no check mark) the 'Show' setting.
4. To view the list of maps within a Map Family, highlight the name of the Map Family and press **ENTER/MARK**.
5. To view detailed information about an individual map, highlight the Map Name and press **ENTER/MARK**. Highlight 'OK' and press **ENTER/MARK** to exit the map information page.
6. To select/deselect individual maps for display on the Map Page, highlight the box next to the desired map, and press **ENTER/MARK** to check/uncheck the 'Show' box.
- Or Press **MENU** and select one of the options ('Show All', 'Hide All', or 'Show Defaults'), and press **ENTER/MARK**.
7. Press **QUIT** to exit the Data Card Information page.



Information page for an individual map

## Map Page Setup Menu

The Map Page Setup Menu uses a “file tab” system, making it easier for you to find the various settings for configuring the map display. The following table outlines the file tab names and the settings available in each tab:

**General** – Detail, Orientation, Auto Zoom, Lock to Roads, Accuracy Circle

**Map** – Basemap, Map Outlines, Lat/Lon Grid

**Line** – Heading Line, Bearing Line, Course Line, Track Log, Saved Tracks

**Waypoint** – Waypoints, Active Route

**Marine** – Services/Facilities, Spot Soundings, Tide Stations, Night Colors

**Nav aids** – Symbol Set, Symbol Size, Light Sectors

**City** – Large City, Medium City, Small City, Small Town

**Road** – Freeway, Highway, Local Road, Local Road Name, Railroad

**Point** – POIs, Geo, Exit

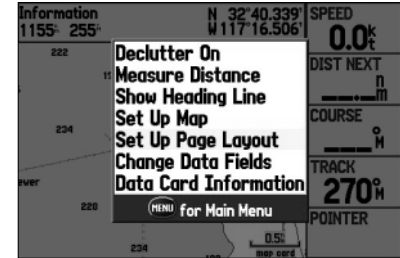
**Area** – River/Lake, Park, Other, Metro

**Topo** – Major Contour, Inter Contour, Minor Contour, Land Cover

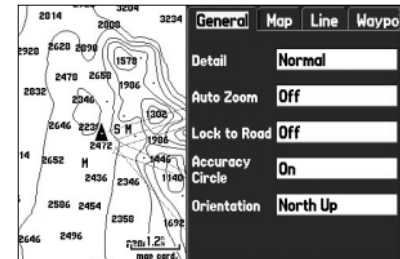
### To change a map setup feature:

1. From the Map Page, press **MENU**, highlight ‘Set Up Map’ and press **ENTER/MARK**.
2. Press **LEFT** or **RIGHT** on the **ARROW KEYPAD** to highlight the desired file tab, then **UP** or **DOWN** on the **ARROW KEYPAD** to highlight to the field you want to change and press **ENTER/MARK**.
3. Press **UP** or **DOWN** on the **ARROW KEYPAD** to highlight to the desired setting and press **ENTER/MARK** to select the new setting.
4. Press **QUIT** to exit.

## Map Page

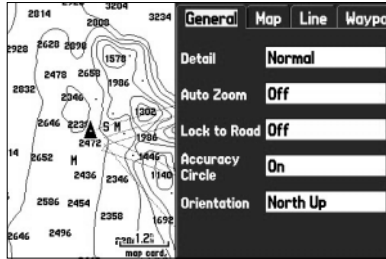


Map Page Options (Marine Mode)

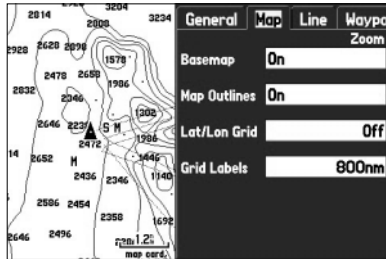


Map Page Setup Menu

## Map Page



General Tab of Map Page Setup Menu



Map Tab of Map Page Setup Menu

### 'General' tab

**Detail** – Most, More, Normal, Less, Least: controls how much map detail is displayed. This setting only applies to any map feature set to 'Auto'. Those features that have a specified scale or that are turned 'Off' are unaffected by this setting.

**AutoZoom** – On/Off: when 'On,' the map automatically adjusts the map scale to a lower scale as you approach your destination point.

**Lock to Roads** – On/Off: When 'On,' if the vehicle's position is close enough to a road, the Map Page displays the current position icon as "locked" to the road.

**Accuracy Circle** – On/Off: When 'On,' the circle represents the approximate accuracy of the unit based on EPE, DOP, and basemap quality. Your current position is displayed within the circle.

**Orientation** – North Up: fixes the top of the map display to a north heading. Track Up: fixes the top of the map display to the current track heading. Course Up: fixes the map so the direction of navigation is always "up" and turns the navigation leg line vertical on the screen.

### 'Map' tab

**Basemap** – On/Off: turns the built in basemap on or off.

**Map Outlines** – On/Off: turns outlines of data card maps on or off.

**Lat/Lon Grid** – Off, Auto, 20 ft. to 800 nm/mi: sets the maximum scale at which the Lat/Lon grid appears on the screen. Some types of data are only displayed to certain zoom scales.

**Grid Labels** – Off, Auto, 20 ft. to 800 nm/mi: sets the maximum scale at which the grid labels appear on the screen. Some types of data are only displayed to certain zoom scales.

**'Line' tab**

**Heading Line** – Off, Distance, Time: turns the Heading Line off, or configures it for distance or time. The Heading Line projects (using time or distance) from the position marker (triangle vehicle icon) showing your current heading.

**Bearing Line** – Auto, Off, 20 ft. to 800 nm/mi: sets the maximum scale at which the Bearing Line appears on the screen. The Bearing Line shows the bearing from your current location to a destination waypoint.

**Course Line** – Auto, Off, 20 ft. to 800 nm/mi: sets the maximum scale at which the Course Line appears on the screen. The Course Line shows a direct navigation line from the point navigation was initiated to a destination waypoint.

**Track Log** – Auto, Off, 20 ft. to 800 nm/mi: sets the maximum scale at which the track log appears on the screen. Some types of data are only displayed to certain zoom scales.

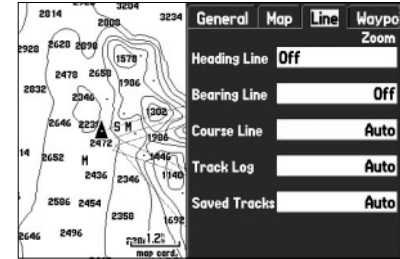
**Saved Tracks** – Auto, Off, 20 ft. to 800 nm/mi: sets the maximum scale at which saved tracks appear on the screen. Some types of data are only displayed to certain zoom scales.

**'Waypoint' tab**

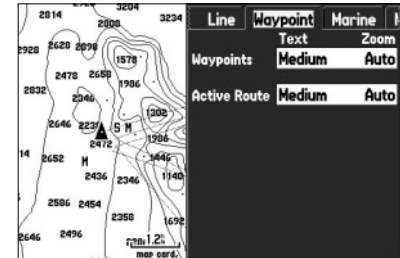
**Waypoints, Active Route** – controls the text size and zoom scale for waypoints and active routes.

**Text** – Off, Small, Medium, and Large: controls the screen size of the name.

**Zoom** – Auto, Off, 20 ft. to 800 nm/mi: sets the maximum scale at which the feature appears on the screen. Some types of data are only displayed to certain zoom scales.

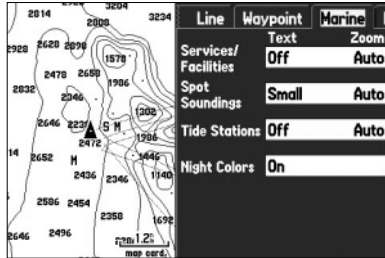
**Map Page**

Line Tab of Map Page Setup Menu

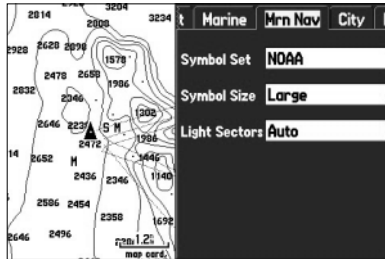


Waypoint Tab of Map Page Setup Menu

## Map Page



Marine Tab of Map Page Setup Menu



Mrn Nav Tab of Map Page Setup Menu

### 'Marine' tab

**Services/Facilities, Spot Soundings, Tide Stations, Night Colors** – controls the text size and zoom scale for marine map items.

**Text** – Off, Small, Medium, and Large: controls the screen size of the name.

**Zoom** – Auto, Off, 20 ft. to 800 nm/mi: sets the maximum scale at which the feature appears on the screen. Some types of data are only displayed to certain zoom scales.

### 'Mrn Nav' (Marine Nav aids) tab

**Symbol Set** – controls which symbol set to use:

- Auto: BlueChart maps are drawn using symbols similar to the NOAA/NIMA standard. Non-BlueChart maps are drawn using traditional Garmin symbols.
- Garmin: All maps are drawn using traditional Garmin symbols.
- NOAA: All maps are drawn using a symbol set similar to NOAA/NIMA.
- International: All maps are drawn using a symbol set similar to the IALA symbol set.

**Symbol Size** – Small, Medium, and Large: controls the size of the symbols.

**Light Sectors** – Off, Auto, On:

### 'City' tab

**Large City, Medium City, Small City, Small Town** – controls the text size and zoom scale for cities.

**Text** – Off, Small, Medium, and Large: controls the screen size of the name.

**Zoom** – Auto, Off, 20 ft. to 800 nm/mi: sets the maximum scale at which the cities appear on the screen. Some types of data are only displayed to certain zoom scales.

**'Road' tab**

**Freeway, Highway, Local Road, Local Road Name, Railroad** – controls the text size and zoom scale for roads.

**Text** – Off, Small, Medium, and Large: controls the screen size of the name.

**Zoom** – Auto, Off, 20 ft. to 800 nm/mi: sets the maximum scale at which the roads appear on the screen. Some types of data are only displayed to certain zoom scales.

**'Point' tab**

**POIs, Geo, Exit** – controls the text size and zoom scale for points, such as exits.

**Text** – Off, Small, Medium, and Large: controls the screen size of the name.

**Zoom** – Auto, Off, 20 ft. to 800 nm/mi: sets the maximum scale at which the points appear on the screen. Some types of data are only displayed to certain zoom scales.

**'Area' tab**

**River/Lake, Park, Other, Metro** – controls the text size and zoom scale for areas such as rivers.

**Text** – Off, Small, Medium, and Large: controls the screen size of the name.

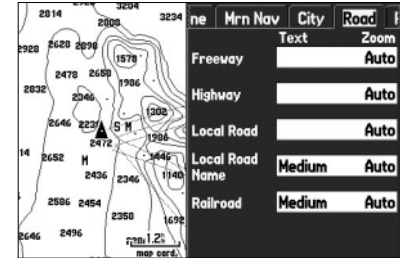
**Zoom** – Auto, Off, 20 ft. to 800 mi: sets the maximum scale at which the areas appears on the screen. Some types of data are only displayed to certain zoom scales.

**'Topo' tab**

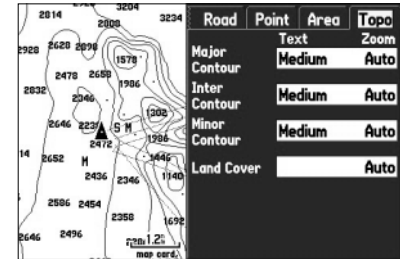
**Major Contour, Inter Contour, Minor Contour, Land Cover** – controls the text size and zoom scale for topographic contours.

**Text** – Off, Small, Medium, and Large: controls the screen size of the name.

**Zoom** – Auto, Off, 20 ft. to 800 nm/mi: sets the maximum scale at which the contours appear on the screen. Some types of data are only displayed to certain zoom scales.

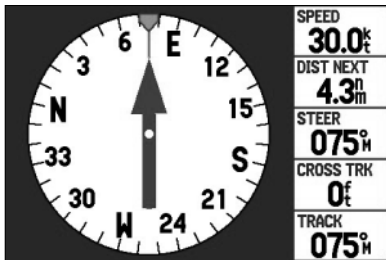
**Map Page**

Road Tab of Map Page Setup Menu



Topo Tab of Map Page Setup Menu

## Compass Page



Compass Page (Marine Mode)



Compass Page (Automotive Mode)

### Using the Compass Page

The Compass Page is standard in Marine Mode and optional in Automotive Mode. During active navigation, the Compass Page guides you to your destination with digital data field readouts and a graphic compass display with a bearing pointer.

#### To show the Compass Page in Automotive Mode:

1. While in Automotive Mode, press **MENU** twice to display the Main Menu.
2. Use the **ARROW KEYPAD** to highlight the Display Tab.
3. Highlight the Compass Page field and press **ENTER/MARK**. Select 'On' and press **ENTER/MARK**.

The middle of the page features a rotating “compass ring” that shows your course over ground (track) while you are moving. Your present course over ground is indicated at the top of the compass ring. The direction of the destination (bearing) relative to the course over ground is indicated by a bearing pointer in the middle of the compass ring and a bearing “bug” on the outside of the compass ring (Note: the bearing bug is a feature of Marine mode only). The compass ring and bearing indicators work independently to show, at a glance, the direction of your movement and the direction to your destination. For instance, if the arrow points up, you are going directly to the waypoint. If the arrow points any direction other than up, turn toward the arrow until it points up, then continue in that direction.



**NOTE:** You must be moving for the compass to accurately update and display your heading.

The right side of the Compass Pages features user-selectable data fields that display helpful information during active navigation. For definitions of data field settings, refer to the Appendix.

During active navigation in Automotive Mode, the Compass Page displays navigation information at the top of the screen, such as automatic turn-by-turn directions. Automotive Mode features larger data fields with default settings that are more desirable for land navigation than those in Marine Mode.

## Compass Page Options Menu

The Options Menu on the Compass Page allows you to customize the Compass Page to your preferences in both Marine and Automotive modes. Like the Map Page, the Compass Page features user-selectable data fields on the right side of the display. 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 Compass Page Options Menu:

1. Press **PAGE** repeatedly until the Compass Page is displayed.
2. Press **MENU**.

### To select a menu option:

1. Use the **ARROW KEYPAD** to highlight the option.
2. Press **ENTER/MARK**.

The options available on the Compass Page Options Menu are:

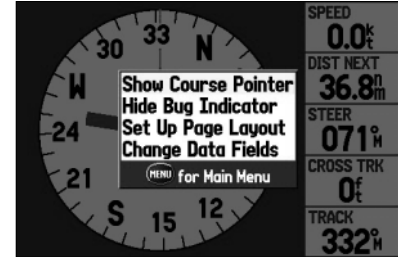
**Show Course Pointer/Show Compass** – (Marine Mode only) displays the Course Pointer, which shows how far off you are from your desired course and how to get back on course. Also referred to as a CDI, Course Deviation Indicator.

**Show/Hide Bug Indicator** – (Marine Mode only) toggles between showing and hiding the bearing bug indicator (the small purple tick mark on the compass ring).

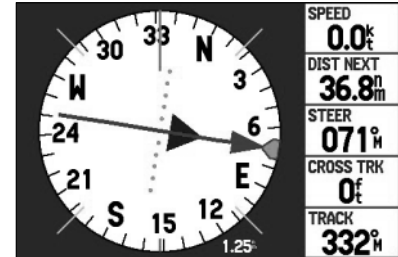
**Set Up Page Layout** – allows you to choose the size of text and number of data fields.

**Change Data Fields** – allows you to specify the type of data displayed in each data field on the page. For a list of data field display options, refer to the Appendix.

## Compass Page

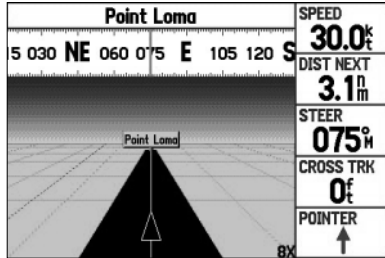


Compass Page (Marine Mode) Options Menu

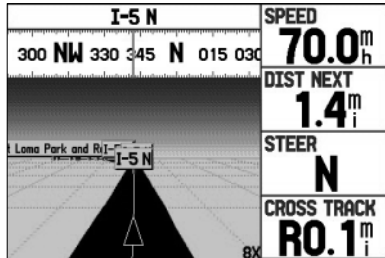


Compass Page (Marine Mode)  
with Course Pointer showing

## Highway Page



Highway Page (Marine Mode)



Highway Page (Automotive Mode)

### Highway Page Overview

Whenever a 'Go To', 'TracBack' or 'Route' has been activated, the Highway Page provides digital and graphic steering guidance to the destination. The right side of the Highway Page features user-selectable data fields that display useful navigation information. A compass ribbon is displayed at the top of the page to show your current heading as the violet bar and a red vertical bar indicates the bearing to your course. To stay on course, steer towards the red vertical indicator (or arrows) until it lines up with the violet bar in the middle. The bottom section of the screen provides visual guidance to the waypoint on a graphic highway display. The line down the center of the highway represents your desired track line.

#### To hide/show the Highway Page:

1. Press **MENU** twice to display the Main Menu.
2. Use the **ARROW KEYPAD** to highlight the Display Tab.
3. Highlight the Highway Page field and press **ENTER/MARK**.
4. Select 'Off' to hide or 'On' to show, and press **ENTER/MARK**.

### Using the Highway Page

As you head toward your destination, the highway perspective moves to indicate your progress to the waypoint and which direction you should steer to stay on course. If you are navigating a route, the Highway Page shows each route waypoint in sequence connected by a black "road" with a white line down the middle, which is your desired track line. Nearby waypoints not in the active route can also be displayed. The highway perspective scale may also be zoomed in or out to display a larger or smaller view of the highway. Five settings are available from 1X to 16X, with a default setting of 8X.

## To change the highway perspective scale:

- Press **IN** to zoom in.
- Press **OUT** to zoom out.

## Highway Page Options Menu

The Highway Page Options Menu allows you to define the data fields and select which waypoints and track are displayed on screen. The data window, located at the top of the page, provides Highway Page options allows you to define the data fields and select which waypoints and track are displayed on screen. The data fields, located along the right side of the page, provide a user-selectable layout of various types of useful data. Each data field may be configured to display several data options. The data window layout may also be changed to display additional data fields and change the actual size of the data displayed.

### To display the Highway Page Options Menu:

1. Press **PAGE** repeatedly until the Highway Page is displayed.
2. Press **MENU**.

### To select a menu option:

1. Use the **ARROW KEYPAD** to highlight the desired option.
2. Press **ENTER/MARK**.

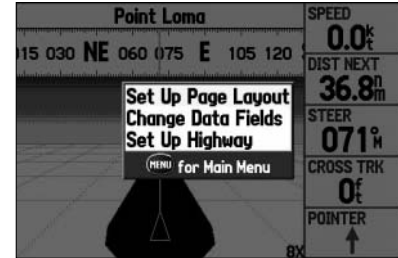
The following options are available from the Highway Page menu:

**Setup Page Layout** – allows you to choose the size of text and number of data fields.

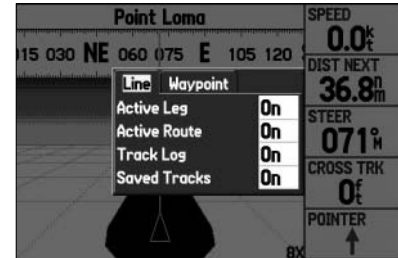
**Change Data Fields** – allows you to specify the type of data displayed in each data field used on the map display. This option is available from any of the main pages. See the Appendix for a listing of the data fields.

**Set Up Highway** – displays an Options Menu with two tabs: Line, and Waypoint. Each tab has On/Off settings for several options.

## Highway Page

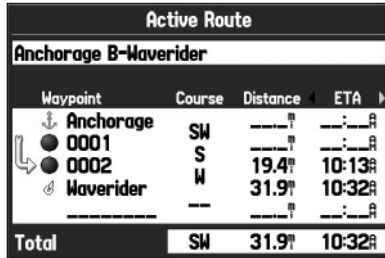


Highway Page (Marine Mode) Options Menu



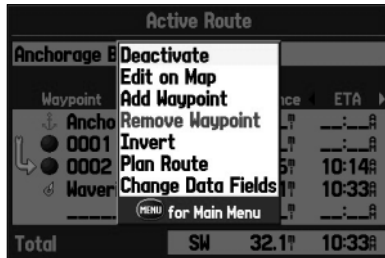
Set Up Highway

## Active Route Page: Marine Mode



| Active Route          |        |                   |                                      |
|-----------------------|--------|-------------------|--------------------------------------|
| Anchorage B-Waverider |        |                   |                                      |
| Waypoint              | Course | Distance          | ETA                                  |
| ↓ Anchorage           | SW     | ---               | ---                                  |
| ● 0001                | S      | ---               | ---                                  |
| ↓ 0002                | W      | 19.4 <sup>m</sup> | 10:13 <sup>A</sup>                   |
| ↻ Waverider           | ---    | 31.9 <sup>m</sup> | 10:32 <sup>A</sup>                   |
| Total                 |        | SW                | 31.9 <sup>m</sup> 10:32 <sup>A</sup> |

Active Route Page (Marine Mode)



| Active Route          |        |                   |                                      |
|-----------------------|--------|-------------------|--------------------------------------|
| Anchorage B-Waverider |        |                   |                                      |
| Waypoint              | Course | Distance          | ETA                                  |
| ↓ Ancho               | SW     | ---               | ---                                  |
| ● 0001                | S      | ---               | ---                                  |
| ↓ 0002                | W      | 19.4 <sup>m</sup> | 10:14 <sup>A</sup>                   |
| ↻ Waver               | ---    | 31.9 <sup>m</sup> | 10:33 <sup>A</sup>                   |
| Total                 |        | SW                | 32.1 <sup>m</sup> 10:33 <sup>A</sup> |

Options Menu:

- Deactivate
- Edit on Map
- Add Waypoint
- Remove Waypoint
- Invert
- Plan Route
- Change Data Fields
- (MENU) for Main Menu

Active Route Page (Marine Mode)  
Options Menu

### Active Route Page

Whenever you have activated a route in the GPSMAP 276C, 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.

### Active Route Page Options Menu

The following route options are available by pressing **MENU** on the Active Route Page:

**Deactivate** – stops route navigation.

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

**Add Waypoint** – inserts a waypoint (or point from the Find Menu) before the highlighted waypoint or add a point(s) onto the end of the route.

**Remove Waypoint** – deletes the selected waypoint from the route.

**Invert** – reverses the order of the route.

**Plan Route** – allows you to enter information about your route to more accurately provide you with arrival times.

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

## Current Route Page

Whenever you have activated a route in the GPSMAP 276C 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/MARK** 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.

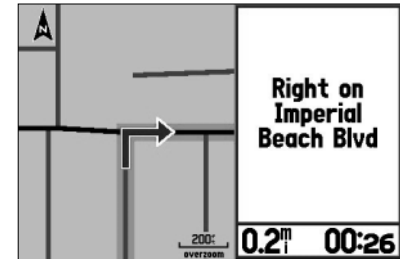
## Saving the Current Route

You can save the current route from the Current Route Page. Press **MENU** to save the route. Press **ENTER/MARK** when ‘Save Route’ is highlighted. Your route is automatically saved, using the starting point and destination as the route name. Press **ENTER/MARK** when ‘OK’ is highlighted to complete saving the route.

## Current Route Page: Automotive Mode

|   |                   |   |                             |
|---|-------------------|---|-----------------------------|
|  | 0.1 <sup>m</sup>  | Turn right on Imperial Beach Blvd           | 00:13<br>04:10 <sup>R</sup> |
|  | 1.4 <sup>m</sup>  | Take ramp to I-5 N on right                 | 02:26<br>04:12 <sup>R</sup> |
|  | 6.4 <sup>m</sup>  | Keep left on I-5 N                          | 06:53<br>04:17 <sup>R</sup> |
|  | 9.8 <sup>m</sup>  | Keep left on I-5 N                          | 09:51<br>04:20 <sup>R</sup> |
|  | 22.1 <sup>m</sup> | Arrive at Point Loma Park and Recre on left | 21:55<br>04:32 <sup>R</sup> |

Current Route Page (Automotive Mode)



Next Turn Page (Automotive Mode)

## Position Data Page: Marine Mode

Position Data Page (Marine Mode)

|                                    |                               |                              |
|------------------------------------|-------------------------------|------------------------------|
| 060 075 E                          | NEXT WPT<br>Point Loma        | ETE NEXT<br>05:21            |
| N 32°39.969'<br>W 117°17.117'      | TTL AVG SPD<br>0.0k           | MAX SPEED<br>1.0k            |
| 09:59:41 <sup>A</sup><br>26-FEB-04 | TRIP ODOM<br>19.6k            | MOVE TIMER<br>00:18          |
| From Coronado, CA:                 | SUNRISE<br>08:21 <sup>A</sup> | SUNSET<br>07:42 <sup>P</sup> |
| 5.6k 246k                          | BATTERY                       | POWER                        |

*'Waypoint' is selected as the 'Nearest Type'. The Coronado, CA waypoint is the nearest waypoint.*

|                               |                              |                     |
|-------------------------------|------------------------------|---------------------|
| 060 075 E                     | NEXT WPT                     | ETE NEXT            |
| N 32°39.969'<br>W 117°17.117' | MAX SPEED<br>1.5k            | MOVE TIMER<br>00:25 |
| 04:43<br>25-FEB               | SUNSET<br>07:44 <sup>P</sup> | POWER               |
| From Coronado                 | (MENU for Main Menu)         |                     |
| 39.6k 250k                    | 12:10                        |                     |

Position Data Page (Marine Mode)  
Options Menu

## 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 Marine Mode. The default page displays a compass ribbon, your current latitude and longitude, the current date and time, the location you are traveling from, and eight user-selectable data fields. The compass ribbon is displayed at the top of the page to show your current heading along with a red, vertical bar that indicates the bearing to your course. To stay on course, steer towards the violet, vertical indicator (or arrows) until it lines up with the red bar in the middle.

## Position Data Page Options Menu

The following options are available from the Position Data Page:

**Set Up Page Layout** – allows you to choose the layout and number of data fields.

**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: Automatic, City, or Waypoint. As shown in the image to the right, 'Waypoint' is selected as the 'Nearest Type' and the Coronado waypoint is the nearest waypoint to the unit's current location.

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

**Reset Max Speed** – clears the maximum speed.

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

**Reset All** – clears all trip information including the maximum speed and odometer.

## Understanding the Trip Computer Page

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

Reset the Trip Computer before beginning a trip. If you make frequent stops, leave the GPSMAP 276C powered on in order to receive satellites. This allows the unit to accurately measure elapsed time during the trip.

## Trip Computer Page Options Menu

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

**Setup Page Layout** – allows you to choose the layout and number of data fields. You can change the layout of the Trip Computer to the Position Data Page layout while still in Automotive Mode. This will provide more detailed information of your trip. You can also then change the data fields on the Position Data Page to be more useful while in Automotive Mode. For more information about the Position Data Page layout, see the previous page.

**Change Nearest Type** – allows you to specify the type of item to be used as the nearest item: Automatic, Intersection, City, or Waypoint.

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

**Reset Max Speed** – clears the maximum speed.

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

**Reset All** – clears all trip information including the maximum speed and odometer.

## Trip Computer Page: Automotive Mode

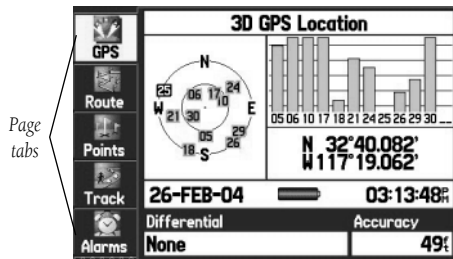
| Trip Computer   |  |  |
|---|--|--|
| <b>NW</b><br>09:31:35 <sup>A</sup>                    | <b>70.0<sup>m</sup><sub>h</sub></b><br>000000.8 <sup>T</sup> | <b>35.5<sup>m</sup><sub>i</sub></b><br>000035.5 <sup>T</sup> |
| Moving Average<br><b>35.8<sup>m</sup><sub>h</sub></b> | Total Average<br><b>13.5<sup>m</sup><sub>h</sub></b>         | Maximum Speed<br><b>78.5<sup>m</sup><sub>h</sub></b>         |
| Moving Time<br><b>00:59:22</b>                        | Stopped Time<br><b>01:38:36</b>                              | Total Time<br><b>02:37:57</b>                                |

Trip Computer Page (Automotive Mode)

| Trip Computer   |   |  |
|---|---|--|
| <b>NW</b><br>09:31:35 <sup>A</sup>                    | Set Up Page Layout<br>Reset Trip<br>Reset Max Speed<br>Reset Odometer<br>Reset All<br><small>(MENU) For Main Menu</small> | <b>35.5<sup>m</sup><sub>i</sub></b><br>000035.5 <sup>T</sup> |
| Moving Average<br><b>35.8<sup>m</sup><sub>h</sub></b> |   | Maximum Speed<br><b>78.5<sup>m</sup><sub>h</sub></b>         |
| Moving Time<br><b>00:59:22</b>                        | Stopped Time<br><b>01:38:36</b>   | Total Time<br><b>02:37:57</b>                                |

Trip Computer Page (Automotive Mode)  
Options Menu

## Overview



Main Menu: GPS Tab

### Using the Main Menu

The Main Menu provides access to various waypoint, system, navigation and interface management, and setup menus. The Main Menu is available from any page in the system by pressing the **MENU** key.

#### To access and use Main Menu:

1. Press **MENU** twice. The Main Menu is divided into categories by function, such as GPS and Route.
2. Move the **ARROW KEYPAD** UP or DOWN to highlight the tab you want to view. The information for the highlighted tab automatically appears. Press to the RIGHT on the **ARROW KEYPAD**, then move UP or DOWN to select individual items on that page.
3. Press **MENU** for additional menu options or **ENTER** to make changes to the highlighted item. Press LEFT on the **ARROW KEYPAD** to get back to the menu tab list. Press **QUIT** to exit the Main Menu.

The Main Menu pages, listed below, are discussed in-depth in the following pages.

**GPS** – shows satellite status, accuracy, DOP, and differential information.

**Route** – allows you to create, edit, activate, or delete routes.

**Points** – allows you to create, edit, or delete waypoints and proximity points.

**Track** – allows you to save the active track, edit saved tracks, and navigate a TracBack.

**Alarms** – sets up alarms for navigation (such as anchor drag), the system (such as accuracy), and the sonar features (such as shallow water).

**Celestial** – displays tide information, sun and moon information, and hunting and fishing information.

**Message** – displays system messages, such as “Lost Satellite Reception”. You can also filter the messages that are displayed.

**Display** – adjusts various aspects of the display, such as backlight timeout and intensity.

**Sound** – sets the volume level, voice language, attention tone, and beeper action.

**Setup** – provides several tabs to setup the GPSMAP 276C to suit your needs.

## Using the GPS Tab

The GPS Tab provides a visual reference of satellite acquisition, receiver status, and accuracy. The status information show what the receiver is doing at any given moment. The skyview and signal strength bars give an indication of what satellites are visible to the receiver and whether they are being tracked. The signal strength is shown on a bar graph for each satellite in view, with the satellite number below. As the receiver locks onto satellites, a signal strength bar appears for each satellite in view, with the appropriate satellite number underneath each bar.

The progress of satellite acquisition is shown in three stages:

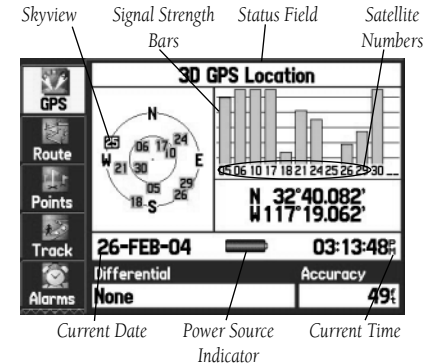
- No signal strength bars: The receiver is looking for the satellites indicated.
- White signal strength bars: The receiver has found the satellite(s) and is collecting data.
- Green signal strength bars: The receiver has collected the necessary data and the satellite(s) are ready for use.

As soon as the GPSMAP 276C has collected the necessary data from the best satellites in view to calculate a fix, the status field indicates the status. The unit then updates the position, date and time.

You can use the skyview to help determine if any satellites are being blocked, and whether you have a current position fix (indicated by a '2D', '2D Differential', '3D', or '3D Differential' in the status field). The skyview shows a bird's-eye view of the position of each satellite relative to the receiver's last known position. The outer circle represents the horizon (north up), the inner circle 45° above the horizon, and the center point a position directly overhead. You can also set the skyview to a 'Track Up' configuration, causing the top of the skyview to align along your current track heading.

The GPS Tab also displays the current date and time near the bottom of the page. A power source indicator shows the battery level (🔋), shows that the unit is charging (🔌), or shows that an external power source is in use (🔌).

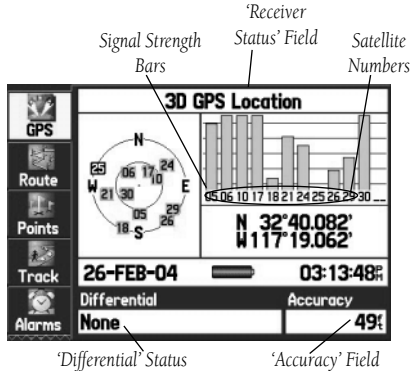
## GPS Tab



Main Menu: GPS Tab

# Main Menu

## GPS Tab



Main Menu: GPS Tab

## Receiver Status

The Receiver Status field, located at the top field of the page, displays one of the following conditions:

- **Searching the Sky:** The receiver is looking for any satellites.
- **AutoLocate:** The receiver is looking for any satellite whose almanac has been collected. This process can take up to five minutes.
- **Acquiring Satellites:** The receiver is looking for and collecting data from satellites visible at its last known or initialized position, but has not collected enough data to calculate a fix.
- **2D GPS Location:** At least three satellites with good geometry have been acquired and a 2 dimensional position fix (latitude and longitude) is being calculated. '2D Differential' will appear when you are receiving DGPS corrections in 2D mode and a 'D' will show on the strength bar of satellites being corrected.
- **3D GPS Location:** At least four satellites with good geometry have been acquired and your position is now being calculated in latitude, longitude and altitude. '3D Differential' will appear when you are receiving DGPS corrections in 3D mode and a 'D' will show on the strength bar of satellites being corrected.
- **Lost Satellite Reception:** The receiver is no longer tracking enough satellites for a 2D or 3D fix.
- **Receiver Not Usable:** The receiver is unusable, possibly due to interference or abnormal satellite conditions. Turn the unit off and back on to reset.
- **Simulating GPS:** The receiver is in simulator mode.
- **GPS Off:** The GPS receiver is turned off.

## Differential Field

Differential receiver status is indicated in the bottom left field of the page and will show one of the following conditions:

- None: No optional beacon receiver is attached or enabled in the Comm tab (Main Menu) or WAAS is turned Off.
- Searching for WAAS: WAAS is enabled and the receiver is searching for WAAS signal.
- Using WAAS: WAAS capability is enabled and the unit is receiving WAAS corrections.
- Check Beacon Wiring: The DGPS setting is enabled in the Comm tab (Main Menu) but no DGPS device is detected.
- No Beacon Signal: DGPS receiver is attached, but not transmitting RTCM data to GPS.
- Tuning Beacon: Receiver is tuning manual DGPS frequency.
- Using Differential: Unit is receiving DGPS corrections.
- Scanning for Beacon: DGPS receiver is scanning for available frequency.

## GPS Tab Options Menu

When the GPS Tab is open, press the **MENU** key to open the GPS Tab Options Menu:

**Start/Stop Simulator** – activates and deactivates simulator mode, which is particularly helpful when learning how to use your unit.

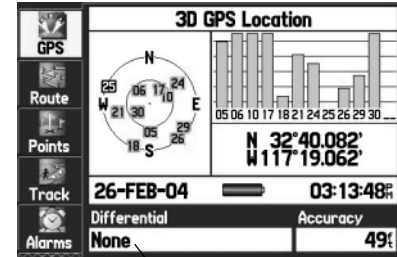
**WAAS On** – enables WAAS capability. Refer to the Appendix for more information about WAAS.

**Track Up Skyview/North Up Skyview** – orients the skyview display between a north up or track up for the GPS Tab only.

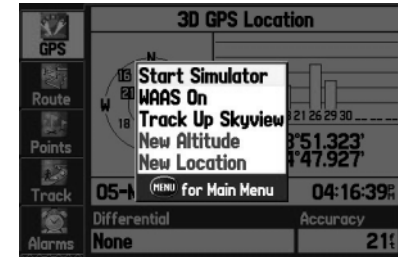
**New Altitude** – allows you to manually enter your altitude.

**New Location** – allows you to enter a new location automatically or using the map.

## GPS Tab

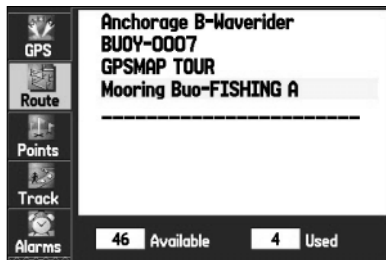


Differential Status  
Main Menu: GPS Tab



GPS Tab Options Menu

## Route Tab



Route Tab  
displaying the Route List



Route Tab Options Menu

### Using the Route Tab

As discussed in the “Using Routes” section of this manual, the Route Tab displays the routes you have created in your GPSMAP 276C unit. For complete information on routes, refer to the “Using Routes” topic that appears in the “Basic Operation” section in this manual.

#### **To access the Route Tab of the Main Menu:**

1. Press **MENU** twice to open the Main Menu.
2. Highlight ‘Route’ from the vertical menu of tabs using the **ARROW KEYPAD**.

### Route Tab Options Menu

The Route Tab in the Main Menu displays all the routes currently stored in memory, along with a descriptive name for each route. By pressing the **MENU** button on the Route Tab, the following menu options appear:

**Activate Route** – begins navigating the route.

**New Route** – opens a blank Route Review Page so you can create a new route.

**Copy Route** – copies the highlighted route.

**Delete Route** – erases the highlighted route.

**Delete All** – erases all routes from the GPSMAP 276C.

**Set Up Routes** – allows you to set the route leg transition (or waypoint transition). Select from ‘Auto’ or ‘Manual’. When you select ‘Manual’, while navigating a route you can transition to the next waypoint when you want. Simply press **NAV/MOB** while you are navigating the route. Highlight ‘Next Route Waypoint’ from the Navigate Menu and press **ENTER/MARK**.

## Points Tab Overview

The Points Tab of the Main Menu features two tabs, 'User' and 'Proximity', that let you manage a large number of waypoints quickly and efficiently. For complete information about creating, editing, and deleting waypoints, refer to the "Using Waypoints" topic that appears in the "Basic Operation" section in this manual.

### To access the Points Tab of the Main Menu:

1. Press **MENU** twice to open the Main Menu.
2. Highlight 'Points' from the vertical list of tabs using the **ARROW KEYPAD**.

### 'User' tab

The 'User' tab displays a master list of all waypoints currently stored in memory. From the User list, you may review, edit, rename, or delete individual waypoints or delete all user waypoints. The total number of stored and available waypoints is displayed at the bottom of the User page, with the stored waypoints arranged in numerical/alphabetical order.

### 'Proximity' tab

The 'Proximity' tab of the Points Tab lets you define an alarm circle around a stored waypoint position. The alarm circle can be used to help you avoid reefs, rocks, or restricted waters. Up to ten waypoints may be listed with a maximum alarm radius of 99.99 nautical miles, statute miles, or kilometers.

## Points Tab

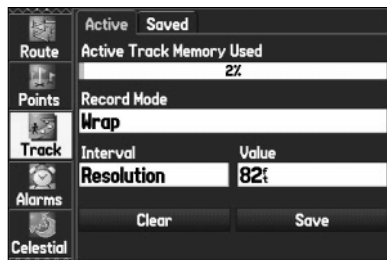
| User           | Proximity |        |  |
|----------------|-----------|--------|--|
| <b>0001</b>    |           |        |  |
| 0001           | 347M      | 0      |  |
| GARMIN         | 052M      | 1157M  |  |
| GRMEUR         | 022M      | 4763M  |  |
| GRMTWN         | 295M      | 5983M  |  |
| TOUR1          | 062M      | 2036M  |  |
| TOUR2          | 062M      | 2036M  |  |
| TOUR3          | 061M      | 2035M  |  |
| 2991 Available |           | 9 Used |  |

Points Tab  
displaying the 'User' tab

| User                   | Proximity |          |
|------------------------|-----------|----------|
| <b>Proximity Alarm</b> |           |          |
| <b>Off</b>             |           |          |
| Point                  |           | Distance |
| Wreck                  |           | 1.00M    |
| -----                  |           | M        |

Proximity Points Tab

## Track Tab



Track Tab: 'Active' tab

### Track Tab Overview

The GPSMAP 276C draws an electronic breadcrumb trail or 'track log' on the Map Page as you travel. The track log contains information about points along its path, including time and position. The GPSMAP 276C uses this information to allow you to navigate using the saved track.

The track log starts recording as soon as the GPSMAP 276C gets a location fix. For the best results, clear the track log before you start traveling because when the track log is full, the new track points overwrite the oldest track points. The percentage of memory used by the current track log displays at the top of the 'Active' tab. After the track log is cleared, it displays zero percent. When the display reaches 100%, the most recent track points start to overwrite the least recent track points (if 'Wrap' is selected for 'Record Mode'). To avoid losing track points, save the track log when it approaches the 99% mark.

You must first save the track log before you can use the 'Navigate Track' feature. The Save feature allows you to store up to 15 track logs from certain times and dates.

### **To access the Track Tab of the Main Menu:**

1. Press **MENU** twice to open the Main Menu.
2. Highlight 'Track' from the vertical list of tabs using the **ARROW KEYPAD**.

## 'Active' tab

The 'Active' tab allows you to save and clear the track log as well as set up how the unit records tracks.

**Record Mode** – 'Wrap' records over the oldest tracks when the track log reaches 100%. 'Fill' records a track log until the track log is full (100%). 'Off' does not record tracks.

**Interval** – 'Distance' creates track points after a specified distance has been traveled. 'Time' creates track points after a specified time has elapsed. 'Resolution' creates track points based upon the resolution. The higher the resolution entered, the more points the unit creates to make the track.

**Value** – creates a track according to the 'Interval' and 'Value'. Enter a specific distance, time, or resolution.

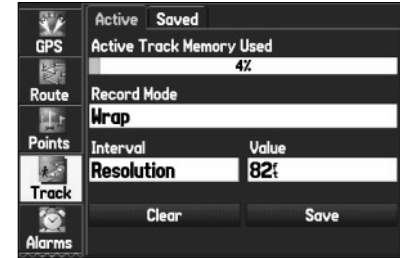
### To clear the track log:

1. Press **MENU** twice to display the Main Menu.
2. Using the **ARROW KEYPAD**, highlight 'Track', then highlight the 'Active' tab to the right.
3. Use the **ARROW KEYPAD** to select the 'Clear' button and press **ENTER/MARK**.
4. Highlight the 'OK' field and press **ENTER/MARK**. Press **QUIT** to exit.

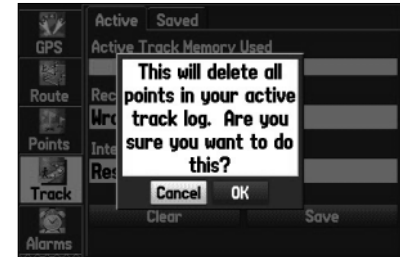
### To save the entire track log:

1. Press the **MENU** key twice to open the Main Menu.
2. Use the **ARROW KEYPAD** to highlight 'Track', then highlight the 'Active' tab to the right.
3. Use the **ARROW KEYPAD** to select 'Save' and press **ENTER/MARK**.
4. A window pops up asking if you want to save the entire track log. To save the entire track, highlight 'Yes' and press **ENTER/MARK**.

## Track Tab



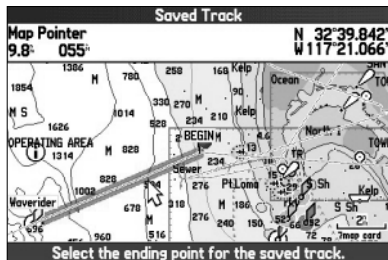
*Saving a portion of the track log*



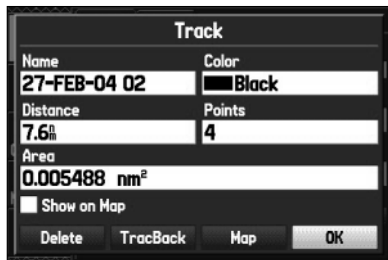
*Clearing the track log*

# Main Menu

## Track Tab



*Saving a portion of the track log*



Track Review Page

### To save a portion of the track log:

1. Press the **MENU** key twice to open the Main Menu.
2. Use the **ARROW KEYPAD** to highlight the Track Tab, then highlight the 'Active' tab to the right.
3. Use the **ARROW KEYPAD** to select 'Save' and press **ENTER/MARK**.
4. A window pops up asking if you want to save the entire track log. To save only a portion of the track, highlight 'No' and press **ENTER/MARK**.
5. Use the **ARROW KEYPAD** to select a beginning point and press **ENTER/MARK**. Use the **ARROW KEYPAD** to select an ending point and press **ENTER/MARK**.
6. The Track Review Page automatically opens.

To change the name of the track, highlight the name field and press **ENTER/MARK**, make your changes and press **ENTER/MARK** again.

To delete the track on the map, highlight 'Delete' and press **ENTER/MARK**.

To begin a TracBack, highlight 'TracBack' and press **ENTER/MARK**. For more information about the TracBack feature, refer to the "Navigating" section in the "Basic Operation" chapter of this manual.

To display the track on the map, highlight 'Map' and press **ENTER/MARK**. Press **QUIT** to return to the Track Tab.

7. Highlight 'OK' and press **ENTER/MARK** to save the track. Press **QUIT** to exit.

## Track Tab

### To restore the 'Active' tab defaults:

1. Press the **MENU** key twice to open the Main Menu.
2. Use the **ARROW KEYPAD** to highlight the Track Tab, then highlight the 'Active' tab to the right.
3. Press **MENU**.
4. Press **ENTER/MARK** to restore the 'Active' tab to defaults.

### 'Saved' tab

The 'Saved' tab lists all of the saved tracks in your unit. Press the **MENU** key to open the 'Saved' tab Options Menu:

**Review on Map** – displays the highlighted track on the map page.

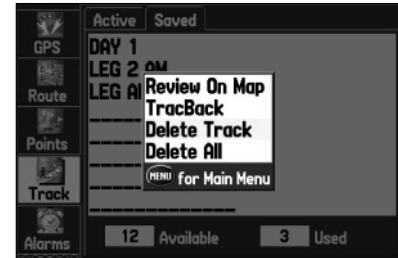
**TracBack** – navigates the track. You can either navigate the track as it is saved, or you can navigate the reverse of the track. For more information about the TracBack feature, refer to the “Navigating” section in the “Basic Operation” chapter of this manual.

**Delete Track** – erases highlighted track from the unit's memory.

**Delete All** – erases all tracks from the unit's memory.

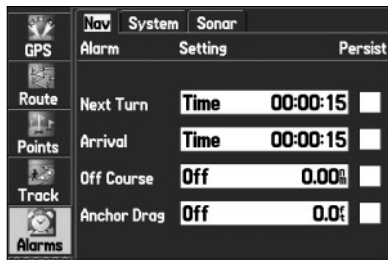


'Saved' tab



'Saved' tab Options Menu

## Alarms Tab



Alarms Tab: 'Nav' tab

### Using the Alarms Tab

The Alarms Tab of the Main Menu allows you to define alarm settings.

#### **To access the Alarms Tab of the Main Menu:**

1. Press **MENU** twice to open the Main Menu.
2. Highlight 'Alarms' from the vertical list of tabs using the **ARROW KEYPAD**.

#### **To set an alarm:**

1. Press **MENU** twice to open the Main Menu.
2. Use the **ARROW KEYPAD** to open the Alarms Tab.
3. Use the **ARROW KEYPAD** to highlight the field to the right of the alarm name you wish activate and press **ENTER/MARK**.
4. Change the mode to 'On' (Dist or Time for the 'Arrival' alarm) and press **ENTER/MARK**.
5. Highlight the next field to the right and press **ENTER/MARK**, then enter the desired settings and press **ENTER/MARK** to finish.

When an alarm goes off, 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/MARK** to acknowledge the alarm.

#### **To set a persistent alarm:**

1. Press **MENU** twice to open the Main Menu.
2. Use the **ARROW KEYPAD** to open the Alarms Tab.
3. Use the **ARROW KEYPAD** to highlight the box next to the alarm you would like to make persistent (for example, 'Anchor Drag').
4. Press **ENTER/MARK** to place a check mark in the 'Persist' box. When an alarm goes off, it sounds until you acknowledge the alarm message by pressing **ENTER/MARK**.

## Alarms Tab

### To restore alarm defaults:

1. Press **MENU** twice to open the Main Menu.
2. Use the **ARROW KEYPAD** to open the Alarms Tab.
3. Press **MENU**.
4. Select 'Restore Default' to restore the defaults of the current tab. Select 'All Alarm Defaults' to restore all tabs in the Alarms Tab to the factory defaults.

### 'Nav' (Navigation) Alarms

**Next Turn** – sets an alarm for next turn in route. Select 'Off' for no 'Next Turn' alarm. Select 'Dist' to enter a specific distance that the 'Next Turn' alarm will go off. 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.

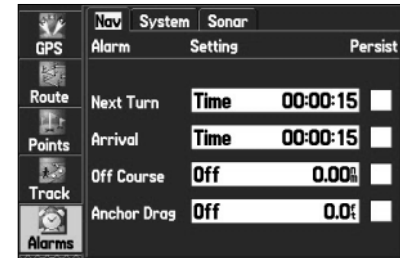
**Arrival** – sets an alarm to sound when you are a specified distance or time away from a destination waypoint. Select 'Off' for no 'Arrival' alarm. Select 'Dist' to enter a specific distance that the 'Arrival' alarm will go off. For example, if you enter 1 nm, the 'Arrival' alarm will sound one nautical mile before you reach the next turn. Select 'Time' to enter a specific time before the destination for the alarm to go off. For example, if you enter 00:02:00 the 'Arrival' alarm will sound two minutes before you reach the destination. Select 'Auto' for the unit to provide an 'Arrival' alarm at its discretion.

**Off Course** – sets an alarm to sound when you are off your desired course. Select 'On' to turn this alarm on and then enter a distance.

**Anchor Drag** – sets an alarm to sound when you have exceeded a specified drift distance. Select 'On' to turn this alarm on and then enter a distance.

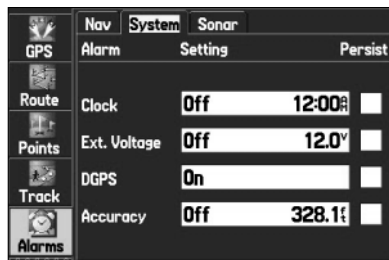


Alarms Tab: 'Nav' tab

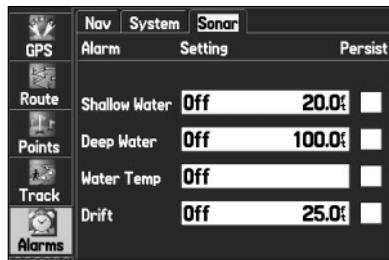


Alarms Tab: 'Nav' tab

## Alarms Tab



Alarms Tab: 'System' tab



Alarms Tab: 'Sonar' tab

### 'System' Alarms

**Clock** – sets an alarm based on the unit's clock. Select 'On' and then enter a specific time that you want the alarm to sound. The unit must be on for the clock alarm to work.

**Ext. (External) Voltage** – sets an alarm to sound when the external voltage drops below a specified amount. Select 'On' and then enter a specific voltage.

**DGPS** – sets an alarm to sound when the unit loses a differential fix.

**Accuracy** – sets an alarm to sound when GPS accuracy falls outside of the user-set value. Select 'On' and then enter a specific 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.

**Water Temp** – sets an alarm to indicate if the water temperature has exceeded or dropped below a specific temperature, or fallen outside/inside a specific temperature range. Select 'Above' or 'Below' and then enter a specific temperature, or select 'Inside' or 'Outside' and enter a range of temperatures. You must be receiving sonar NMEA data for this function to work.

**Drift** – sets an alarm to sound when you have exceeded a specified drift distance. Select 'On' to turn this alarm on and then enter a distance.

## Using the Celestial Tab

The Celestial Tab of the Main Menu displays data for the tide, Sun & Moon information, and hunting and fishing information. You may display this data for your current position, a position from the map, or a waypoint location. Also, you may select a different date and time, or use the current data.

### To access the Celestial Tab of the Main Menu:

1. Press **MENU** twice to open the Main Menu.
2. Highlight 'Celestial' from the vertical list of tabs using the **ARROW KEYPAD**.

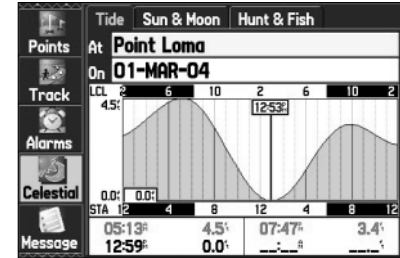
### 'Tide' tab

The 'Tide' tab shows a graphical chart that displays tide station information in a 24-hour span starting at midnight station time. You can choose from different dates and over 3000 tide stations.

The top of the page displays the tide station being referenced, below that the date. The top of the chart shows a 24-hour block of local time (LCL) for your position, with the reported station time (STA) appearing at the bottom. Daytime (light bar) and nighttime (dark bar) show across the time scale, with the time progressing from left to right (local time scales and sunrise/sunset info may not be available for a few stations). The solid, light vertical lines represent 4-hour increments, and the light, dotted vertical lines are 1-hour increments. A vertical line (with a block at the top or bottom displaying time) indicates the time of day.

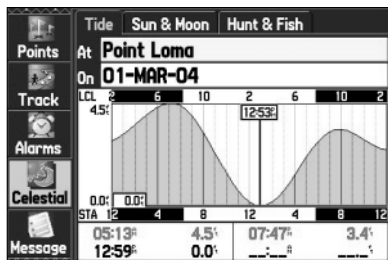
The tide curve shows as a shaded area, with higher tides being taller and lower tides shorter. The horizontal line (with a block at the left displaying depth) indicates the current tide height. The Mean Lower Low Water (MLLW) appears as a solid, horizontal line near the bottom of the chart (this line only appears if the tide ranges to the zero value or below). The bottom of the page indicates the times with the largest and smallest tides.

## Celestial Tab

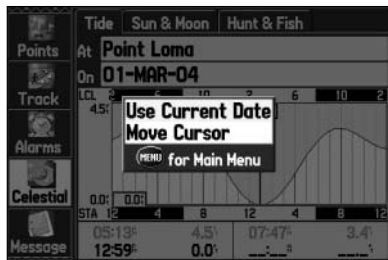


Celestial Tab of the Main Menu

## Celestial Tab



Celestial Tab: 'Tide' tab



'Tide' tab Options Menu

### To view a tide chart for a different tide station:

1. From the 'Tide' tab, highlight the 'At' field and press **ENTER/MARK**. The Find Menu automatically opens showing the Tide Stations.
2. Press **MENU** and select 'Near Current Location', 'Near Current Route', 'Near Other' (select another location using the map), or 'Near Destination' if desired. The list is then updated with your search requirements.
3. Select the desired station from the list and press **ENTER/MARK**.
4. The Tide Station Information page opens. Highlight 'OK' and press **ENTER/MARK**.
5. The 'Tide' tab displays again showing the tide chart for the selected tide station.

### To view the tide chart for another date:

1. From the 'Tide' tab with the desired chart displayed, highlight the 'On' field and press **ENTER/MARK**.
2. Enter the desired date with the **ARROW KEYPAD** and press **ENTER/MARK**. You can also use the Zoom **IN** and **OUT** keys to view information for another date. Press and hold IN or OUT to quickly scroll through dates.
3. Press **ENTER/MARK** when finished. The unit displays the chart for the date you entered or selected.

To use the current date again, highlight the 'Date' field. Press **MENU**, highlight 'Use Current Date', and press **ENTER/MARK**.

### To view a chart's details for another time during the day (other than current time):

1. From the 'Tide' tab with the desired chart displayed, press **MENU** and select 'Move Cursor'.
2. Press the **ARROW KEYPAD** RIGHT or LEFT to view the chart at another time.
3. To return to the current time, press **MENU** and select 'Stop Moving Cursor'.

### To automatically start cursor mode to scroll the chart:

1. Use the **ARROW KEYPAD** to highlight the date field. Then press DOWN to activate the cursor mode.
2. Scroll the chart RIGHT to view the next day or LEFT to view the previous day.

## 'Sun & Moon' tab

The 'Sun & Moon' tab provides you with sun rise/set and moon rise/set times. A graphic display of the moon phase is also displayed. You may view sun and moon information for any date or location. You can also use the play, fast forward, and stop buttons to view an animation of the 'Sun & Moon' tab. Press **MENU** to change the orientation of the skyview on the 'Sun & Moon' tab to Track Up or North Up.

## Celestial Tab

### To display the Sun & Moon information:

1. Press **MENU** twice to open the Main Menu.
2. Highlight 'Celestial' from the vertical list of tabs using the **ARROW KEYPAD**.
3. Use the Arrow Keypad to display the 'Sun & Moon' tab.

### To view Sun & Moon information for a different date:

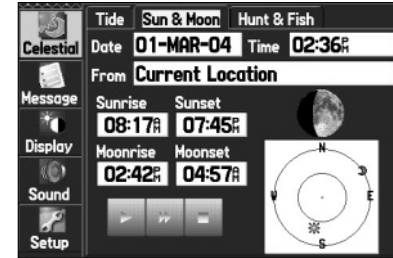
1. Use the **ARROW KEYPAD** to highlight the 'Date' field and press **ENTER/MARK**.
2. Use the **ARROW KEYPAD** to change the digits of the date to the desired date. You can also use the Zoom **IN** and **OUT** keys to jump to another date. Press and hold **IN** or **OUT** to quickly scroll the date.
3. Press **ENTER/MARK** when finished. The unit displays the chart for the date you entered or selected.

To use the current date again, highlight the 'Date' field. Press **MENU**, highlight 'Use Current Date', and press **ENTER/MARK**.

### To view Sun & Moon information for a different location:

1. Use the **ARROW KEYPAD** to highlight the 'From' field and press **ENTER/MARK**.
2. Highlight 'Use Find Menu' and press **ENTER/MARK**. The Find Menu automatically opens.
3. Select a waypoint or point of interest and press **ENTER/MARK**.
4. On the waypoint/point information page, press **ENTER/MARK**. The unit displays the Sun & Moon information for the location you selected.

To use the current location, highlight the 'From' field. Press **ENTER/MARK**, highlight 'Current Location', and press **ENTER/MARK**.



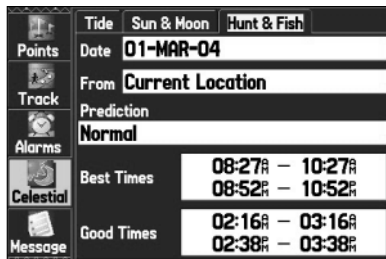
Celestial Tab: Sun & Moon Tab



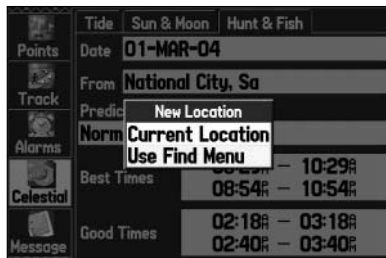
New Location Options

# Main Menu

## Celestial Tab



Celestial Tab: Hunt & Fish Tab



New Location Options

### 'Hunt & Fish' tab

The 'Hunt & Fish' tab provides you with predictions of the good and best times to hunt and fish in a selected location on a specific date.

#### To display the Hunt & Fish information:

1. Press **MENU** twice to open the Main Menu.
2. Highlight 'Celestial' from the vertical list of tabs using the **ARROW KEYPAD**.
3. Use the Arrow Keypad to display the 'Hunt & Fish' tab.

#### To view Hunt & Fish information for a different date:

1. Use the **ARROW KEYPAD** to highlight the 'Date' field and press **ENTER/MARK**.
2. Use the **ARROW KEYPAD** to change the digits of the date to the desired date. You can also use the Zoom **IN** and **OUT** keys to view information for another date. Press and hold **IN** or **OUT** to quickly scroll through dates.
3. Press **ENTER/MARK** when finished. The unit displays the information for the date you entered.

To use the current date again, highlight the 'Date' field. Press **MENU**, highlight 'Use Current Date', and press **ENTER/MARK**.

#### To view Hunt & Fish information for a different location:

1. Use the **ARROW KEYPAD** to highlight the 'From' field and press **ENTER/MARK**.
2. Highlight 'Use Find Menu' and press **ENTER/MARK**. The Find Menu automatically opens.
3. Select a waypoint or point of interest and press **ENTER/MARK**.
4. On the waypoint/point information page, press **ENTER/MARK**. The unit displays the Hunt & Fish information for the location you selected.

To use the current location, highlight the 'From' field. Press **ENTER/MARK**, highlight 'Current Location', and press **ENTER/MARK**.

## Viewing the Message Tab

The Message Tab of the Main Menu displays a list of messages generated by your GPSMAP 276C. Use the **ARROW KEYPAD** to scroll the entire list of messages on the 'Log' tab. You can also use the 'Log Filter' tab to filter the messages to only display a certain kind of message.

### To view the messages:

1. Press **MENU** twice to open the Main Menu.
2. Highlight 'Message' from the vertical list of tabs using the **ARROW KEYPAD**.
3. Use the **ARROW KEYPAD** to highlight the desired message. Press **ENTER/MARK** to view detailed information about that message.

### To show/hide messages using the Log Filter:

1. Open the Message Tab. Use the **ARROW KEYPAD** to highlight the 'Log Filter' tab. By default all messages are displayed.
2. Use the **ARROW KEYPAD** to highlight the message you want to hide and press **ENTER/MARK**.
3. The message name then appears in the 'Hide' window. Highlight the message again and press **ENTER/MARK** to show it again.

## Message Tab



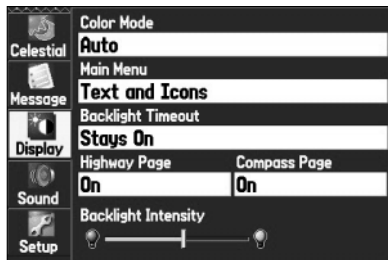
Message Tab: 'Log' tab



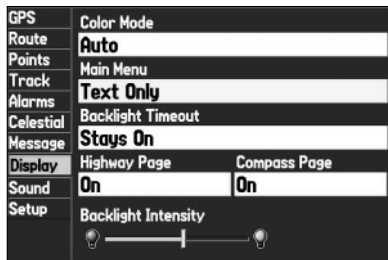
Message Tab: 'Log Filter' tab

# Main Menu

## Display Tab



Main Menu: Display Tab



Main Menu displayed as Text Only

### Adjusting the Display using the Display Tab

The Display Tab of the Main Menu allows you to set several features of the display, such as what pages to display in the Main Page Sequence and how long the backlight stays on.

**Color Mode** – sets the display to a ‘Day’, ‘Night’, or ‘Auto’ display. Auto switches from day to night at sunset and changes back at sunrise.

**Main Menu** – enables the main menu tabs to be displayed as text and icons (default) or text tabs only.

**Backlight Timeout** – sets the backlight to stay on once it is turned on, or to time out after a selected period of time has elapsed (when using the battery. The backlight stays on regardless of this setting when external power is used) .

**Highway Page** – enables the page and places it in the Main Page Sequence when ‘On’ is selected.

**Compass Page** – enables the page and places it in the Main Page Sequence when ‘On’ is selected.

**Backlight Intensity** – turns the backlight up or down. Press the **ARROW KEYPAD UP** to raise the intensity or **DOWN** to lower.

#### **To view the Display Tab:**

1. Press **MENU** twice to open the Main Menu.
2. Highlight ‘Display’ from the vertical list of tabs using the **ARROW KEYPAD**.

#### **To restore the display to defaults:**

1. Access the Display Tab.
2. Press **MENU**.
3. Highlight ‘Restore Defaults’ and press **ENTER/MARK**.

## **Adjusting the Unit's Sound**

The Sound Tab of the Main Menu allows you to customize the sounds your GPSMAP 276C makes to suit your needs.

**Beeper** – sets the beeper to chime during keypresses and alarms ('Key and Alarm') or on 'Alarms Only'. Select 'Off' to turn the beeper off.

**Attention Tone** – turns the attention tone that sounds before the vocal prompts on and off.

**Voice Language** – sets the language for vocal prompts.

**Speaker Volume** – sets the speaker volume when using an external speaker. Press the **ARROW KEY-PAD RIGHT** to raise the volume or **LEFT** to lower.

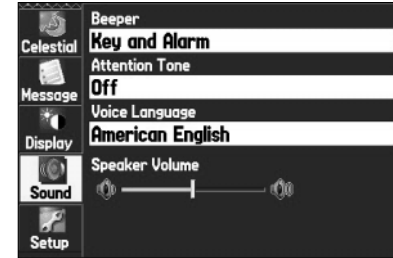
### **To view the Sound Tab:**

1. Press **MENU** twice to open the Main Menu.
2. Highlight 'Sound' from the vertical list of tabs using the **ARROW KEYPAD**.

### **To restore the sound to defaults:**

1. Access the Sound Tab.
2. Press **MENU**.
3. Highlight 'Restore Defaults' and press **ENTER/MARK**.

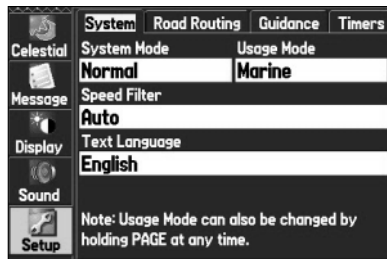
## Sound Tab



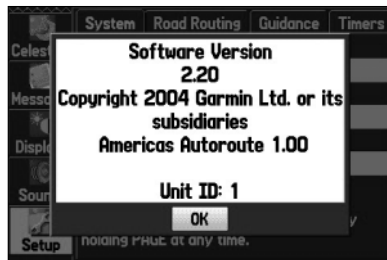
Main Menu: Display Tab

# Main Menu

## Setup Tab



Main Menu: Setup Tab



System Information

## Setup Tab Overview

The Setup Tab has several tabs containing different types of information for you to customize your GPSMAP 276C. Use the **ARROW KEYPAD** to scroll to the RIGHT and LEFT to view all of the tabs.

### To view the Setup Tab:

1. Press **MENU** twice to open the Main Menu.
2. Highlight 'Setup' from the vertical list of tabs using the **ARROW KEYPAD**.
3. Use the Arrow Keypad to highlight the desired tab from the top row of tabs: System, Road Routing, Guidance, Timer, Time, Units, Location, Owner, Com 1, and Com 2.

### To restore system defaults:

1. Open the Main Menu. Highlight 'Setup' from the vertical list of tabs. Press **MENU**.
2. Highlight 'Restore Defaults' and press **ENTER/MARK**. Highlight 'All Unit Defaults' to restore all units settings to the factory defaults.

To view information about your GPSMAP 276C, press **MENU**. Highlight 'System Information' and press **ENTER/MARK**.

### 'System' tab

To open the 'System' tab, press the **MENU** key twice to open the Main Menu. Select 'Setup' from the vertical tab list. Then select 'System' from the row of tabs along the top of the page.

**System Mode** – sets the unit to operate in 'Normal' mode (normal navigation), 'Battery Saver' mode, or 'Simulator' mode (for practice ONLY).

**Usage Mode** – sets the unit to 'Marine' or 'Automotive' mode.

**Speed Filter** – allows the unit to average speed-readings. Choose from 'Off', 'Auto' (automatically controls filtering), or 'On' (allows you to enter a value in seconds).

**Text Language** – allows you to select from various languages for the unit's on-screen display.

## 'Road Routing' tab

To open the 'Road Routing' tab, press the **MENU** key twice to open the Main Menu. Select 'Setup' from the vertical tab list. Then select 'Road Routing' from the row of tabs along the top of the page.

**Route Preference** – allows the unit to calculate a route for:

- **Faster Time:** Time is used as the criterion for calculating your route. Routes calculated with this setting are faster to drive but may be longer in distance.
- **Shorter Distance:** Distance is used as the criterion for calculating your route. Routes calculated with this setting are shorter in distance but may take more time to drive.
- **Off Road:** A direct line from your current physical location to your destination is displayed. This is useful when you are travelling outside of detailed map coverage areas or where no roads exist.

**Ask Me My Preference** – determines whether you will be asked to select a 'Route Preference' (Faster Time, Shorter Distance, or Off Road) before route calculations.

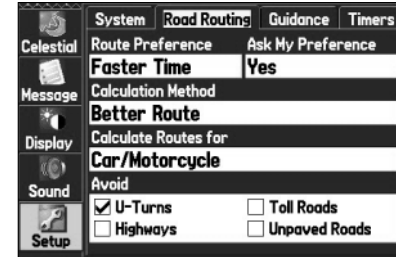
**Calculation Method** – sets how the unit searches for the perfect route.

- **Quickest Calculation:** Fastest results, but it might not find the best route.
- **Quick Calculation:** Takes a bit more time to calculate, but generates a better quality route.
- **Better Route:** Even better quality route, but uses a longer calculation time.
- **Best Route:** Most optimal route, but takes the longest time to calculate.

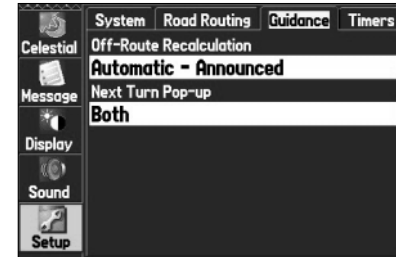
**Calculate Routes for** – sets the route calculation for the particular vehicle you are in. By specifying which vehicle type you are driving, you optimize the route for your vehicle type because some roads have vehicle-based restrictions. For example, a street or gate may be accessible by emergency vehicles only, or a residential street may not allow commercial trucking traffic.

**Avoid** – allows you to avoid certain road types and maneuvers on your route. The unit uses these road types only if alternative routes take you too far out of your way or if no other road is available. You can select to avoid 'U-Turns', 'Toll Roads', 'Highways', and/or 'Unpaved Roads'.

## Setup Tab

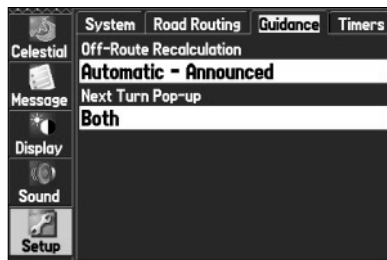


'Road Routing' tab of the Setup Tab

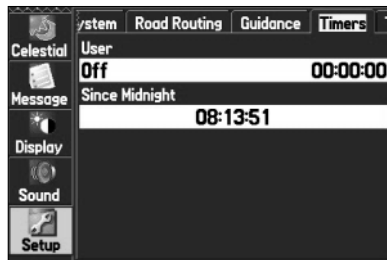


'Guidance' tab of the Setup Tab

## Setup Tab



'Guidance' tab of the Setup Tab



'Timers' tab of the Setup Tab

### 'Guidance' tab

To open the 'Guidance' tab, press the **MENU** key twice to open the Main Menu. Select 'Setup' from the vertical tab list. Then select 'Guidance' from the row of tabs along the top of the page.

**Off-Route Recalculation** – allows you to set whether the unit prompts you when it is recalculating your route ('Prompted'), or whether the unit recalculates automatically. You can also set whether the unit announces the recalculation ('Automatic - Announced') or recalculates silently ('Automatic - Silent'). You can also turn route recalculation 'Off'.

**Next Turn Pop-up** – turns the Next Turn Pop-up window 'Off', or opens the window when the NAV/MOB key is held ('Held NAV Key Only'), opens automatically ('Automatically Only') or 'Both'.

### 'Timers' tab

To open the 'Timers' tab, press the **MENU** key twice to open the Main Menu. Select 'Setup' from the vertical tab list. Then select 'Timers' from the row of tabs along the top of the 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.

**Since Midnight** – displays the time the unit has been turned on since midnight. This will reset if you restore 'All Unit Defaults' from the 'System' tab.

## 'Time' tab

The 'Time' tab allows you to set the time format and zone. You can also set the unit to conform to Daylight Savings. The current time and date is displayed at the bottom of the page.

To open the 'Time' tab, press the **MENU** key twice to open the Main Menu. Select 'Setup' from the vertical tab list. Then select 'Time' from the row of tabs along the top of the page.

**Time Format** – enables 12 or 24 hour (military) time format.

**Time Zone** – allows you to choose your correct time zone to show correct local time. Select 'UTC' for Greenwich Time or select 'Other' to enter a UTC Offset. The UTC Offset is how many hours you are ahead or behind the time line. See the Appendix for a list of time offsets.

**Daylight Savings** – allows you to choose from 'Auto', 'On', or 'Off' to adjust for daylight savings.

## 'Units' tab

The 'Units' tab allows you to customize measurement units for the entire system. To open the 'Units' tab, press the **MENU** key twice to open the Main Menu. Select 'Setup' from the vertical tab list. Then select 'Units' from the row of tabs along the top of the page.

**Distance and Speed** – sets the units to Nautical (nm, kt), 'Statute (mi, mh)', or 'Metric (km, kh)'.

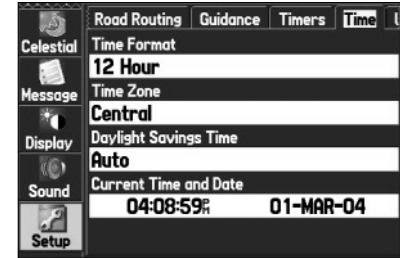
**Direction Display** – sets the units to use 'Cardinal Letter', 'Numeric Degrees', or 'Mils'. Mils is a unit of angle measurement used in military settings, in which 17.78 mils equal one degree.

**Temperature** – sets the units to 'Fahrenheit (°F)' or 'Celsius (°C)'.

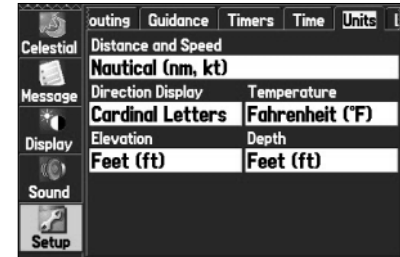
**Elevation** – sets the units to 'Feet (ft)' or 'Meters (m)'.

**Depth** – sets the units to 'Feet (ft)', 'Fathoms (fa)', or 'Meters (m)'.

## Setup Tab



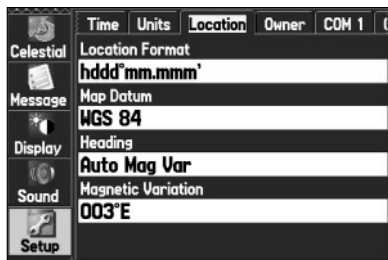
'Time' tab of the Setup Tab



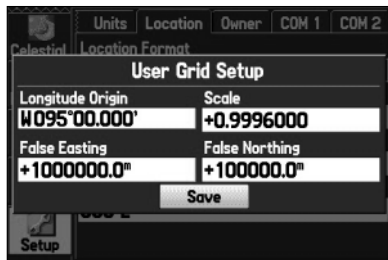
'Units' tab of the Setup Tab

# Main Menu

## Setup Tab



'Location' tab of the Setup Tab



Specifying the User Grid Setup

### 'Location' tab

The 'Location' tab allows you to define settings for Location 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.

**Location 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. For more information about using paper maps with your Garmin unit, refer to “Using a Garmin GPS with Paper Land Maps”, available for download at [http://www.garmin.com/manuals/UsingaGarminGPSwithPaperLandMaps\\_Manual.pdf](http://www.garmin.com/manuals/UsingaGarminGPSwithPaperLandMaps_Manual.pdf).

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** – lets you 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 compass.*

## ‘Owner’ tab

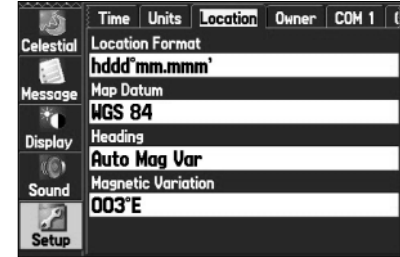
The ‘Owner’ tab allows you to enter information about yourself, such as your name and address, and the unit can display that information when it is turned on. This can be very helpful if your GPSMAP 276C is ever misplaced.

To open the ‘Owner’ tab, press the **MENU** key twice to open the Main Menu. Select ‘Setup’ from the vertical tab list. Then select ‘Owner’ from the row of tabs along the top of the page.

Enter the desired information in the fields. You do not need to enter information in every field.

To display this information at power up, highlight the box next to ‘Show At Power-up’. Press **ENTER/MARK** to place a check mark in the box. To hide the owner information at power-up, remove the check mark from the box.

## Setup Tab

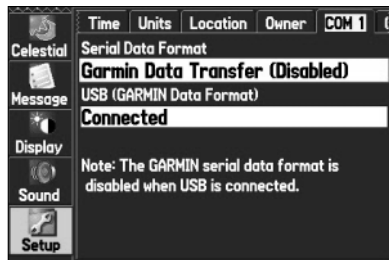


‘Location’ tab of the Setup Tab



‘Owner’ tab of the Setup Tab

## Setup Tab



'COM 1' tab of the Setup Tab

### 'COM 1' and 'COM 2' tabs

The 'COM 1' and 'COM 2' tabs allow you to control the input/output format used when connecting your unit to external devices, such as a NMEA device, a DGPS beacon receiver, a personal computer, or another Garmin GPSMAP 276C. If a DGPS receiver is used, WAAS capability is automatically turned off.

To open the Com 1 or 'COM 2' tab, press the **MENU** key twice to open the Main Menu. Select 'Setup' from the vertical tab list. Then select 'Com 1' or 'Com 2' from the row of tabs along the top of the page.

**Serial Data Format** – sets the data format to one of the following:

- Garmin Data Transfer – the proprietary format used to upload/download MapSource data, exchange waypoint, route, track, almanac, and proximity data with a PC or another Garmin GPSMAP 276C. 'Garmin Data Transfer' is disabled when the USB is connected and the unit automatically switches to USB format.
- When the USB is disconnected, the 'USB' field changes to 'Transfer Mode'. There are 11 Transfer Modes to choose from.
- GARMIN DGPS – used to connect the GPSMAP 276C with a Garmin DGPS beacon receiver.
  - NMEA In/NMEA Out – supports the input/output of standard NMEA 0183 version 3.01 data, and sonar NMEA input support for the DPT, MTW and VHW sentences.
  - Text Out – allows the unit to output simple text data that includes, data, time, position and velocity. The Baud can be set to 1200, 2400, 4800, or 9600.
  - RTCM In – allows Differential GPS (DGPS) input using a standard RTCM format.
  - RTCM In/NMEA Out – allows Differential GPS (DGPS) input using a standard RTCM format and also provides NMEA 0183 version 3.01 output.
  - RTCM In/Text Out – allows Differential GPS (DGPS) input using a standard RTCM format and also outputs simple text data that includes, data, time, position and velocity.
  - None – provides no interfacing capabilities.

If 'GARMIN DGPS' or 'RTCM In/NMEA Out' format is selected, additional fields are provided to control a Garmin differential beacon receiver directly from your GPSMAP 276C. You may have the unit automatically scan for the DGPS beacon signal or you can enter the beacon frequency and bit rate on the unit and the information will be used to tune the beacon receiver.

## To have the unit automatically scan for a frequency:

1. With the unit set to 'GARMIN DGPS' or 'RTCM In/NMEA Out', use the **ARROW KEYPAD** to highlight the 'Beacon' field and press **ENTER/MARK**.
2. Highlight 'Scan' and press **ENTER/MARK**. The numbers in the 'Frequency' field change as the unit scans from '284 kHz' to '325 kHz', '200' bit rate, then '100', at 6-second intervals.

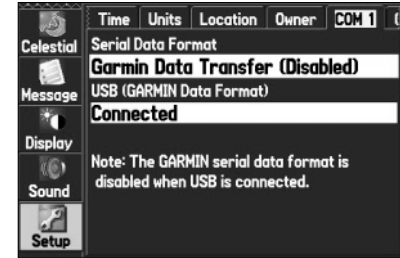
## To restart the scan:

1. Press **MENU**.
2. Highlight 'Restart Scan' and press **ENTER/MARK**.

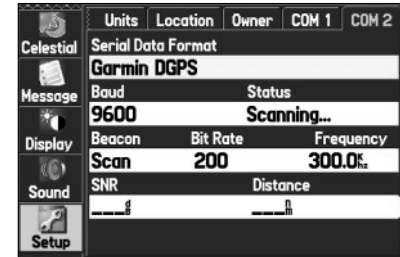
## To manually enter a frequency and bit rate:

1. With the unit set to 'GARMIN DGPS' or 'RTCM In/NMEA Out', use the **ARROW KEYPAD** to highlight the "Beacon" field and press **ENTER/MARK**.
2. Highlight 'User' and press **ENTER/MARK**.
3. Highlight the 'Frequency' or 'Bit Rate' field, press **ENTER/MARK**, then enter a frequency or bit rate and press **ENTER/MARK** when done.

## Setup Tab

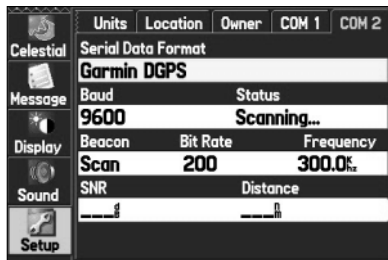


'COM 1' tab of the Setup Tab



'COM 2' tab of the Setup Tab with GARMIN DGPS selected

## Setup Tab



'COM 2' tab of the Setup Tab with GARMIN DGPS selected

The 'Status' field displays one of the following:

- Tuning: Unit is attempting to tune to the specified frequency and bit rate.
- Scanning: Unit is automatically scanning through the frequencies and bit rates.
- Receiving: Unit is receiving DGPS signal and ready for operation.
- Check Wiring: Unit is not making connection with DGPS receiver.

When the unit is receiving a DGPS signal, the 'SNR' (Signal to Noise Ratio) and 'Distance' fields will show data. The SNR range is 0dB to 30dB, with 30 being the best. The Distance may or may not show data, depending upon the signal being broadcast from the DGPS site.

The DGPS beacon transmitters are operated by the U.S. Coast Guard (or similar government agency in other countries), which is responsible for their accuracy and maintenance. For DGPS transmitter problems or to find the most updated list of frequencies and coverage areas, contact your local USCG, or see their Web site at <http://www.navcen.uscg.mil/>.

## Advanced NMEA Output Setup

If you are going to interface the GPSMAP 276C with another piece of equipment (such as a radar or autopilot), the unit needs to be set to output NMEA data. The NMEA data can be customized to shorten the update time from the unit. If too many NMEA sentences are activated, the unit may take longer than two seconds to update.

The GPSMAP 276C NMEA data transmission can be customized to keep the output rate at two seconds. If the unit is set up to output all of the available NMEA sentences, the output rate may exceed two seconds.

### To access the Advanced NMEA Output Setup:

1. Press the **MENU** key twice to open the Main Menu.
2. Use the **ARROW KEYPAD** to select 'Setup' from the vertical tab list.
3. Use the **ARROW KEYPAD** to select 'Com 1' or 'Com 2' from the row of tabs along the top of the page.
4. Use the **ARROW KEYPAD** to highlight the field below 'Serial Data Format'. Press **ENTER/MARK**.
5. Use the **ARROW KEYPAD** to select 'NMEA In/NMEA Out'. Press **ENTER/MARK**.
6. Press **MENU**. Select 'Advanced NMEA Setup' and press **ENTER/MARK**.

The 'Advanced NMEA Output Setup' page allows you to turn on/off the GPS status (GSA, GSV), Waypoint/Route (WPL, RTE), the GARMIN Proprietary sentences, and Waypoint IDs. You can also change the precision of the Lat/Lon minutes.

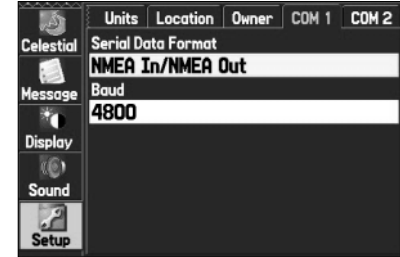
### GPSMAP 276C NMEA Sentence Output (NMEA version 3.01 compliant)

Always transmitted: GPRMC, GPGGA, GPGLL, GPBWC, GPVTG, GPXTE, GPRMB

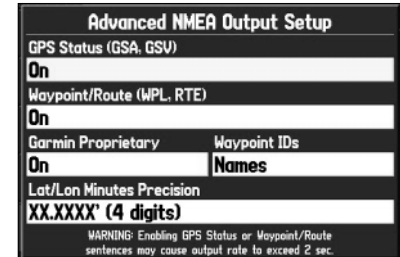
Switchable sentences: GPGSA, GPGSV, GPWPL, GPRTE

GARMIN proprietary: PGRME, PGRMZ, PGRMM

## Setup Tab



'COM 1' tab of the Setup Tab



'COM 2' tab of the Setup Tab with GARMIN DGPS selected

## Specifications

### **Physical Specifications**

|              |   |
|--------------|---|
| Size:        | 5.7" W x 3.2" H x 1.9" D<br>(14.5 x 8.1 x 4.8 cm)   |
| Weight:      | 13.6 ozs (.39 kg)   |
| Display:     | 3.75" diagonal (9.5 cm)<br>Transflective, 256-color display with<br>backlighting (480 x 320 pixels) |
| Case:        | Fully-gasketed, high-impact plastic<br>alloy, waterproof to IEC<br>60529 IPX7                       |
| Temp. Range: | 5°F to 140°F (-15°C to 60°C)  |

### **Performance**

|                       |  |
|-----------------------|--|
| Battery Life:         | 5 to 15 hours depending upon the backlight setting   |
| Receiver:             | Differential-ready 12 parallel channel receiver  |
| Acquisition Times:    | Approx. 15 seconds (warm start)<br>Approx. 45 seconds (cold start)<br>Approx. 5 minutes (First Time/AutoLocate™) |
| Update Rate:          | 1/second, continuous   |
| GPS Accuracy:         | * < 15 meters (49 feet) RMS 95% typical  |
| DGPS (USCG) Accuracy: | 3-5 meters (10-16 ft), 95% typical   |
| DGPS (WAAS) Accuracy: | 3 meters (10 ft) 95% typical with DGPS corrections   |
| Velocity Accuracy:    | 0.1 knot RMS steady state  |
| Dynamics:             | 6g's   |

\* Subject to accuracy degradation to 100m 2DRMS under the U.S. DOD-imposed Selective Availability Program.

### **Power**

|          |                          |
|----------|--------------------------|
| Battery: | Rechargeable Lithium ion |
| Source:  | 11-35V DC                |
| Fuse:    | 3AG - 1.5 Amp            |

## Care Information

### **Cleaning the Unit**

The GPSMAP 276C is constructed of high quality materials and does not require user maintenance other than cleaning. Clean the unit using a cloth dampened with a mild detergent solution and then wipe dry. Avoid chemical cleaners and solvents that may damage plastic components.

### **Storing the GPSMAP 276C**

Do not store the GPSMAP 276C where prolonged exposure to temperature extremes may occur (such as in the trunk of a car) as permanent damage may result. User information, such as waypoints and routes are retained in the unit's memory without the need for external power. It is always a good practice to back up important user data by manually recording it or downloading it to a PC (transferring it to MapSource).

### **Immersing the Unit in Water**

The GPSMAP 276C is waterproof to IEC Standard 60529 IPX7. It can withstand immersion in 1 meter of water for 30 minutes. Prolonged submersion can cause damage to the unit. After submersion, be certain to wipe and air dry the unit before reuse or charging.

To resolve problems that cannot be remedied using this guide, contact Garmin Product Support in the U.S.A. at 800/800.1020 or Garmin Europe at 44/1794.519944.

## Accessories

### **Standard Accessories**

The following standard accessories are included with your GPSMAP 276C:

Owner' Manual

Quick Reference Guide

Marine Mount

PC USB Cable

AC Power Cable

Bare Wire Power/Data Cable

Trip & Waypoint Manager CD-ROM

### **Optional Accessories**

In addition to the standard accessories included with your GPSMAP 276C, the optional accessories listed on the next page are designed to enhance the operation of the GPSMAP 276C.

To obtain replacement parts and optional accessories, contact your Garmin Dealer, Garmin Customer Support in the U.S.A. at 800-800-1020, or Garmin Europe at 44-1794-519944.



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**WARNING:** *Garmin accessories have been designed and specifically tested for use with Garmin products. Accessories offered for sale by other manufacturers have not been tested or approved for use with Garmin products. Use of such accessories could cause damage to the GPSMAP 276C and void the warranty.*

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### Accessories

**Auto Navigation Kit** – Provides the necessary parts to use the GPSMAP 276C in an automobile.

**GA 29, GA 29E, and GA 26C Antennas** – Garmin remote antennas.

**Non-Skid Friction Mount** – Portable vehicle mount, no installation required.

**Permanent and Temporary Adhesive Disks** – Adhesive disks for using the unit in a vehicle.

**External Speaker with 12/24-Volt Adapter Cable** – Allows the GPSMAP 276C to operate from the vehicle's power system through the cigarette lighter adapter. Provides a speaker for vocal prompts.

**PC Interface Cable** – Connects your GPSMAP 276C to a serial port on your computer.

**Cigarette Lighter Adapter** – Allows you to connect the GPSMAP 276C to a vehicle's electrical system.

**Programmable Data Cards** – Blank data cards available in 8 MB, 16 MB, 32 MB, 64 MB, and 128 MB sizes. Download street-level map detail, points of interest, business addresses and phone numbers, marine data, topographical information and more from MapSource CD-ROMs to a data card, either directly through your GPSMAP 276C using the PC USB Cable, the optional PC Interface Cable, or with the optional USB Data Card Programmer.

**USB Data Card Programmer** – Programs blank data cards at high speed through a PC.

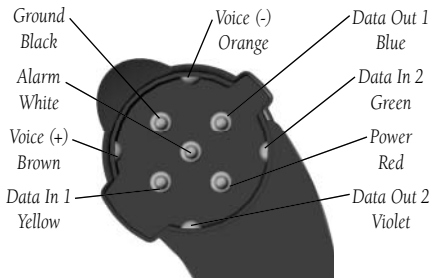
**Carrying Case** – Protects the GPSMAP 276C when not in use; with storage for data cards.

**Protective Cover** – Snaps on the front of the unit to protect the screen from damage.

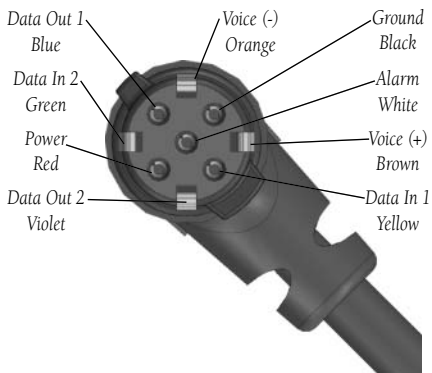
**MapSource Software CD-ROMs** – Offers several detailed mapping options that are compatible with the GPSMAP 276C, including City Select, BlueChart, Fishing Hot Spots and Topo.

**Pre-Programmed Data Cards** – Data cards pre-programmed with either Garmin BlueChart or Fishing Hot Spots map data.

## Wiring and Interfacing



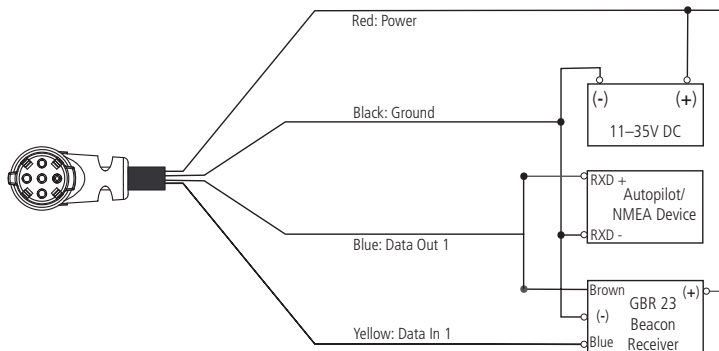
**Unit Power/Data Connector**



**Power/Data Cable Connector**

### Connecting the Power/Data Cable

The power/data cable connects the GPSMAP 276C to an 11–35-Volt DC system and provides interface capabilities for connecting external devices. The color code in the diagram below indicates the appropriate harness connections. Replacement fuse is a 3AG - 1.5 Amp fuse.



### Interfacing

The following formats are supported for connection of external devices: GARMIN proprietary Differential GPS (DGPS), NMEA 0180, 0182, 0183 (versions 1.5, 2.0, 2.3, 3.01), ASCII Text Output, and RTCM SC-104 input (version 2.0).

The following are the Approved Sentences for NMEA 0183, version 3.01 output: GPRMC, GPGLL, GPBOD, GPRTE, and GPWPL. The following are the Proprietary Sentences for NMEA 0183, version 3.01 output: PGRME, PGRMZ, and PSLIB.

The GPSMAP 276C also includes NMEA input with support for the BWC, DBT, DPT, MTW, VHW, and XTE sentences.

Garmin's proprietary communication protocol is available from the Web site ([www.garmin.com](http://www.garmin.com)).

### **What are Map Datums and which should I use?**

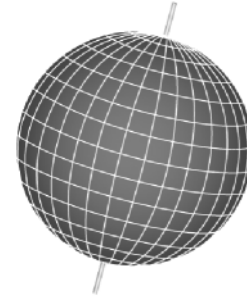
A datum is a mathematical model of the Earth which approximates the shape of the Earth, and enables calculations to be carried out in a consistent and accurate manner. The datum is physically represented by a framework of ground monuments (such as trig. stations) whose positions have been accurately 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 276C 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 Location 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. You may choose to change the location format to use with other coordinate systems in Location Preferences. 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.

## Map Datums and Location Formats



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

## Map Datum List

|                 |   |
|-----------------|---|
| Adindan         | Adindan- Ethiopia, Mali, Senegal, Sudan                       |
| Afgooye         | Afgooye- Somalia  |
| AIN EL ABD '70  | AIN EL ANBD 1970- Bahrain Island, Saudi Arabia                |
| Anna 1 Ast '65  | Anna 1 Astro '65- Cocos I.                                    |
| ARC 1950        | ARC 1950- Botswana, Lesotho, Malawi, Swaziland, Zaire, Zambia |
| ARC 1960        | Kenya, Tanzania   |
| Ascnsn Isld '58 | Ascension Island '58- Ascension Island                        |
| Astro Dos 71/4  | Astro Dos 71/4- St. Helena                                    |
| Astro B4 Sorol  | Sorol Atoll- Tern Island                                      |
| Astro Bcn "E"   | Astro Beacon "E"- Iwo Jima                                    |
| Astr Stn '52    | Astronomic Stn '52- Marcus Island                             |
| Aus Geod '66    | Australian Geod '66- Australia, Tasmania Island               |
| Aus Geod '84    | Australian Geod '84- Australia, Tasmania Island               |
| Austria         | Austria   |
| Bellevue (IGN)  | Efate and Erromango Islands                                   |
| Bermuda 1957    | Bermuda 1957- Bermuda Islands                                 |
| Bogota Observ   | Bogota Observatry- Colombia                                   |
| Campo Inchspe   | Campo Inchauspe- Argentina                                    |
| Canton Ast '66  | Canton Astro 1966- Phoenix Islands                            |
| Cape            | Cape- South Africa  |
| Cape Canavrl    | Cape Canaveral- Florida, Bahama Islands                       |
| Carthage        | Carthage- Tunisia   |
| CH-1903         | CH 1903- Switzerland  |
| Chatham 1971    | Chatham 1971- Chatham Island (New Zealand)                    |

|                 |   |
|-----------------|---|
| Chua Astro      | Chua Astro- Paraguay  |
| Corrego Alegre  | Corrego Alegre- Brazil  |
| Croatia         | Croatia   |
| Djakarta        | Djakarta (Batavia)- Sumatra Island (Indonesia)  |
| Dos 1968        | Dos 1968- Gizo Island (New Georgia Islands)   |
| Dutch           | Dutch   |
| Easter Isld 67  | Easter Island 1967  |
| European 1950   | European 1950- Austria, Belgium, Denmark, Finland, France, Germany, Gibraltar, Greece, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland |
| European 1979   | European 1979- Austria, Finland, Netherlands, Norway, Spain, Sweden, Switzerland  |
| Finland Hayfrd  | Finland Hayford- Finland  |
| Gandajika Base  | Gandajika Base- Republic of Maldives  |
| GDA             | Geocentric Datum of Australia   |
| Geod Datm '49   | Geodetic Datum '49- New Zealand   |
| Guam 1963       | Guam 1963- Guam Island  |
| Gux 1 Astro     | Guadalcanal Island  |
| Hjorsey 1955    | Hjorsey 1955- Iceland   |
| Hong Kong '63   | Hong Kong   |
| Hu-Tzu-Shan     | Taiwan  |
| Indian Bngldsh  | Indian- Bangladesh, India, Nepal  |
| Indian Thailand | Indian- Thailand, Vietnam   |
| Indonesia 74    | Indonesia 1974- Indonesia   |
| Ireland 1965    | Ireland 1965- Ireland   |
| ISTS 073 Astro  | ISTS 073 ASTRO '69- Diego Garcia  |
| Johnston Island | Johnston Island NAD27 Central   |
| Kandawala       | Kandawala- Sri Lanka  |
| Kergueln Isld   | Kerguelen Island  |
| Kertau 1948     | West Malaysia, Singapore  |

|                 |   |
|-----------------|---|
| L.C. 5 Astro    | Cayman Brac Island  |
| Liberia 1964    | Liberia 1964- Liberia   |
| Luzon Mindanao  | Luzon- Mindanao Island  |
| Luzon Philippne | Luzon- Philippines (excluding Mindanao Isl.)  |
| Mahe 1971       | Mahe 1971- Mahe Island  |
| Marco Astro     | Marco Astro- Salvage Isl.   |
| Massawa         | Massawa- Eritrea (Ethiopia)   |
| Merchich        | Merchich- Morocco   |
| Midway Ast '61  | Midway Astro '61- Midway  |
| Minna           | Minna- Nigeria  |
| NAD27 Alaska    | North American 1927- Alaska   |
| NAD27 Bahamas   | North American 1927- Bahamas  |
| NAD27 Canada    | North American 1927- Canada and Newfoundland  |
| NAD27 Canal Zn  | North American 1927- Canal Zone   |
| NAD27 Caribbn   | North American 1927- Caribbean (Barbados, Caicos Islands, Cuba, Dominican Republic, Grand Cayman, Jamaica, Leeward and Turks Islands) |
| NAD27 Central   | North American 1927- Central America (Belize, Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua)                                |
| NAD27 CONUS     | North American 1927- Mean Value (CONUS)   |
| NAD27 Cuba      | North American 1927- Cuba   |
| NAD27 Grnland   | North American 1927- Greenland (Hayes Peninsula)  |
| NAD27 Mexico    | North American 1927- Mexico   |
| NAD27 San Sal   | North American 1927- San Salvador Island  |
| NAD83           | North American 1983- Alaska, Canada, Central America, CONUS, Mexico   |
| Naparima BWI    | Naparima BWI- Trinidad and Tobago   |
| Nhrwn Masirah   | Nahrwn- Masirah Island (Oman)   |
| Nhrwn Saudi A   | Nahrwn- Saudi Arabia  |
| Nhrwn United A  | Nahrwn- United Arab Emirates  |

## Map Datum List

|                 |   |                 |   |
|-----------------|---|-----------------|---|
| Obsvrtorio '66  | Observatorio 1966- Corvo and Flores Islands (Azores)  | Timbalai 1948   | Timbalai 1948- Brunei and E. Malaysia (Sarawak and Sabah) |
| Old Egyptian    | Old Egyptian- Egypt   | Tokyo           | Tokyo- Japan, Korea, Okinawa                              |
| Old Hawaiian    | Old Hawaiian- Mean Value  | Tristan Ast '68 | Tristan Astro 1968- Tristan da Cunha                      |
| Oman            | Oman- Oman  | Viti Levu 1916  | Viti Levu 1916- Viti Levu/Fiji Islands                    |
| Ord Srvy GB     | Old Survey Great Britain- England, Isle of Man, Scotland, Shetland Isl., Wales  | Wake-Eniwetok   | Wake-Eniwetok- Marshall                                   |
| Pico De Las Nv  | Canary Islands  | WGS 72          | World Geodetic System 72                                  |
| Potsdam         | Potsdam-Germany   | WGS 84          | World Geodetic System 84                                  |
| Prov S Am '56   | Prov So Amrcn '56- Bolivia, Chile, Colombia, Ecuador, Guyana, Peru, Venezuela   | Zanderij        | Zanderij- Surinam (excluding San Salvador Island)         |
| Prov S Chln '63 | So. Chilean '63- S. Chile   | User            | User-defined custom datum                                 |
| Ptcairn Ast '67 | Pitcairn Astro '67- Pitcairn  |                 |   |
| Puerto Rico     | Puerto Rico & Virgin Isl.   |                 |   |
| Qatar National  | Qatar National- Qatar South Greenland   |                 |   |
| Qornoq          | Qornoq- South Greenland   |                 |   |
| Reunion         | Reunion- Mascarene Island   |                 |   |
| Rome 1940       | Rome 1940- Sardinia Isl.  |                 |   |
| RT 90           | Sweden  |                 |   |
| Santo (Dos)     | Santo (Dos)- Espirito Santo   |                 |   |
| Sao Braz        | Sao Braz- Sao Miguel, Santa Maria Islands   |                 |   |
| Sapper Hill '43 | Sapper Hill 1943- East Falkland Island  |                 |   |
| Schwarzeck      | Schwarzeck- Namibia   |                 |   |
| SE Base         | Southeast Base- Porto Santo and Madiera Islands   |                 |   |
| South Asia      | South Asia- Singapore   |                 |   |
| Sth Amrcn '69   | S. American '69- Argentina, Bolivia, Brazil, Chile, Colombia, Ecuador, Guyana, Paraguay, Peru, Venezuela, Trin/Tobago |                 |   |
| SW Base         | Southwest Base- Faial, Graciosa, Pico, Sao Jorge and Terceira   |                 |   |
| Taiwan          | Taiwan  |                 |   |

## Time Offsets

The chart below gives an approximate UTC (Universal Time Coordinate) time offset for the various longitudinal zones. Check with local charts for more detailed information. If you are in daylight savings time, add one hour to the offset.

| <b>Longitudinal Zone</b> | <b>Offset</b> | <b>Longitudinal Zone</b> | <b>Offset</b> |
|--------------------------|---------------|--------------------------|---------------|
| W180.0° to W172.5°       | -12           | E007.5° to E022.5°       | 1             |
| W172.5° to W157.5°       | -11           | E022.5° to E037.5°       | +2            |
| W157.5° to W142.5°       | -10           | E037.5° to E052.5°       | +3            |
| W142.5° to W127.5°       | -9            | E052.5° to E067.5°       | +4            |
| W127.5° to W112.5°       | -8            | E067.5° to E082.5°       | +5            |
| W112.5° to W097.5°       | -7            | E082.5° to E097.5°       | +6            |
| W097.5° to W082.5°       | -6            | E097.5° to E112.5°       | +7            |
| W082.5° to W067.5°       | -5            | E112.5° to E127.5°       | +8            |
| W067.5° to W052.5°       | -4            | E127.5° to E142.5°       | +9            |
| W052.5° to W037.5°       | -3            | E142.5° to E157.5°       | +10           |
| W037.5° to W022.5°       | -2            | E157.5° to E172.5°       | +11           |
| W022.5° to W007.5°       | -1            | E172.5° to E180.0°       | +12           |
| W007.5° to E007.5°       | 0             |                          |               |

## Messages

**Approaching Turn:** You are nearing a turn in a route.

**Arriving at Destination:** You are nearing your destination.

**Batteries Low:** The unit has less than 10 minutes of battery left.

**Cannot display all found, use city or postal code:** The unit found too many items to display. Narrow the search using the city or postal code.

**Cant Unlock Maps:** No applicable unlock code for one or more maps was found. All MapSource map are not accessible.

**Database Error:** Internal problem with the unit. Contact your dealer or Garmin Customer Service to have the unit repaired.

**Deep Water:** The water is deeper than the amount set in the Deep Water Alarm.

**Dragging Anchor:** The distance set in the Anchor Alarm is exceeded.

**Lost Satellite Reception:** The unit is unable to continue receiving satellite signals.

**Memory Full:** Unit memory is full, no further data can be saved.

**Near Proximity Point:** You have reached the distance set for a proximity waypoint.

**No Diff GPS Location:** RTCM is selected but the unit is not receiving DGPS data.

**None Found:** No data matched the search criteria.

**No Tide Stations for that Area:** No tide stations within 100 miles of the area.

**Off Course:** You are off course the distance set in the 'Off Course' Alarm.

**Proximity Memory Full:** No additional proximity waypoints can be saved.

**Proximity Radius Overlaps:** The radius of two proximity waypoints overlap.

**Route Already Exists:** You have entered a route name that already exists.

**Route Memory Full:** No additional routes can be saved.

## Messages

**Route Truncated:** Uploaded route from another device has more than 50 waypoints.

**Route Waypoint Memory Full:** No additional route waypoints can be saved.

**Shallow Water:** The water is shallower than the amount set in the Shallow Water Alarm.

**Track Already Exists:** A saved track with the same name already exists.

**Track Log Full:** Indicates the track log is full and track recording has been turned off. In order to record more track points, you will need to clear the track log and turn track recording on. This will only be displayed when 'Record Mode' is set to 'Off'.

**Track Memory Full:** No more track data can be stored without deleting old data.

**Track Truncated:** A complete uploaded track will not fit in memory. The oldest track log points have been deleted.

**Transfer Complete:** Data transfer has been completed.

**Waypoint Already Exists:** A waypoint with the same name already exists.

**Waypoint Memory Full:** The unit has stored the maximum number of waypoints.

## **LORAN TD System**

LORAN C is a radio navigation aid operated and maintained in the United States by the United States Coast Guard. The name LORAN is an acronym for “LONg RANge Navigation”. The LORAN system covers the entire United States and the U.S. Coastal Confluence Zone. From the perspective of a mariner, the system is used for ocean and coastal navigation. It can be used as a supplemental system for harbor and harbor approach navigation, and it is used for inland navigation by recreational vehicles.

## **LORAN TD Feature**

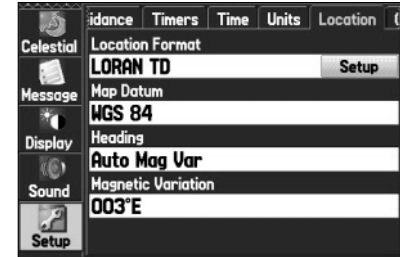
The LORAN TD (Time Delay) feature eases the transition from using LORAN to using GPS. The GPSMAP unit automatically converts GPS coordinates to LORAN TDs for those who have a collection of LORAN fixes for favorite fishing spots and other waypoints recorded as TDs. You can display your position as a TD or enter waypoints as TDs. The accuracy to be expected from this conversion is approximately thirty (30) meters. When the unit is placed in the LORAN TD format mode, it simulates the operation of a LORAN receiver. Position coordinates may be displayed as TDs, and all navigation functions may be used as if the unit was actually receiving LORAN signals.

## **Using the LORAN TD Format**

When creating new waypoints using LORAN TD coordinates, you must set the correct LORAN chain number and secondary stations in the Setup TD field before storing the waypoint. After the waypoint is stored in unit memory, it will always reference the LORAN chain number and secondary stations currently selected in the Setup TD field. If you enter a different LORAN chain number, change the secondary stations or offsets in the Setup TD field, the active waypoint information will reflect those changes. Since the GPSMAP 276C does not rely on the LORAN signal for navigation, it can reference a different GRI chain and/or secondary stations and still navigate to the location stored in memory.

The LORAN Position Format field is located under the ‘Units’ tab in the Main Menu. The ‘LORAN TD Setup’ window contains the fields to select the Loran GRI-Chain Number, Primary and Secondary Stations, and TD Offsets.

## **LORAN TD Setup**

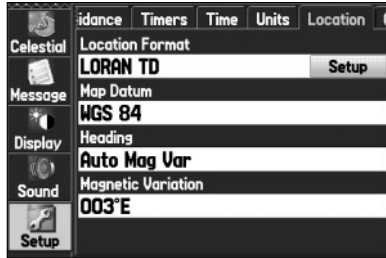


‘Location’ tab of the Setup Tab



LORAN TD Setup

## LORAN TD Setup



'Location' tab of the Setup Tab



LORAN TD Setup

### To set up Loran TD from the Main Menu:

1. Press the **MENU** key twice to display the Main Menu.
2. Use the **ARROW KEYPAD** to highlight 'Setup' on the vertical tab list. Then select 'Location' from the row of tabs along the top of the page.
2. Using the **ARROW KEYPAD**, highlight the 'Location Format' field and press **ENTER/MARK**.
3. Highlight 'Loran TD', press **ENTER/MARK**.
4. Highlight the Setup Button located on the right side of the 'Location Format' field and press **ENTER/MARK**.
5. To change the settings of any of the five fields, highlight the field, press **ENTER/MARK** select/enter the desired setting, then press **ENTER/MARK**.
6. When done, highlight the 'Save' button and press **ENTER/MARK**.

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 GPS 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, 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](http://www.garmin.com/support/userManual.html).

## **Installing and Removing Data Cards**

The GPSMAP 276C uses an optional Garmin data cards to display digital charts and maps on-screen or save user data. Install the data card in the card slots located on the bottom of the unit. Install or remove the data card at any time, whether the unit is on or off.

### **To install a data card:**

1. Insert the card with the label facing the front of the unit into the slot.
2. Firmly push the card into the unit. It is not necessary to force the card. The handle is still exposed when it is properly inserted.
3. If the unit is on, a confirmation tone sounds. The first time you insert a programmed data card, the unit will take a few seconds to read the card. Once the data card has been properly installed and accepted, a summary screen noting the card details appears. Press **ENTER/MARK** to acknowledge.

If you insert a data card and get a 'card format not recognized' message, try removing the card and reinserting it. If the card is still not recognized, contact Garmin or your Garmin dealer for assistance. Data cards are not waterproof, should not be exposed to moisture or excessive static charges, and should be stored in the case supplied with the card.

### **To remove a data card:**

1. Grasp the card handle. The handle expands for easy removal.
2. Pull the card out of the card slot on the bottom of the unit.
3. If the unit is on, a confirmation tone sounds when the data card has been removed.

## **Garmin Data Cards**

## 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 below). 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>.



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**NOTE:** *If you are using the GPSMAP 276C outside of the U.S.A., it is recommended that you turn off WAAS for the most accurate location fix.*

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### **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 a fee.

Please 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.

## Data Field Options

**Accuracy**— Estimated position accuracy in feet or meters.

**Battery Timer**— The estimated time left on the battery (before it will need to be recharged).

**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 (Destination)**— The 'great circle' distance from current location to a Go To destination, or the final waypoint in a route.

**Distance (Next)**— The 'great circle' distance from current location to a Go To destination, or the next waypoint in a route.

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

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

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

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

**Elevation**—(Marine and Automotive Only) The altitude (height) above or below sea level.

**Location (Lat/Lon)**—Your current Latitude and Longitude in hddd° mm.mmm' and WGS 84. (Trip computer only)

**Location (Selected)**—You current GPS location displayed in the format you selected in for the 'POSITION FORMAT' field in the Set Units Page. (Trip computer only)

**Max Speed**—The maximum speed the unit has moved.

**Next Course**— The remaining distance of the route.

**Next Turn**—The remaining distance to the next waypoint on the route.

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

## Data Field Options

**Power**—(Marine and Automotive Only) Display the power indicator icon: Battery, External Power, or Charging.

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

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

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

**Time**—The time for the selected time zone.

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

**Trip Avg Speed (Moving)**— Average speed of unit when moving since last reset.

**Trip Avg Speed (Total)**— Average speed of unit for both moving and stopped speeds since last reset.

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

**Trip Timer (Moving)**— Time the unit has been moving 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.

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

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

**Water Temperature**—(Marine Only) Temperature of the water.

**Waypoint (Destination)**— The final waypoint in the route, or the destination waypoint.

**Waypoint (Next)**— The next waypoint in the route.

### **FCC Compliance**

The GPSMAP 276C 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 276C 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**



## Compliance, License, and Warranty Information

### 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 under the wrist strap

Serial Number:

|  |  |  |  |  |  |  |  |
|--|--|--|--|--|--|--|--|
|  |  |  |  |  |  |  |  |
|--|--|--|--|--|--|--|--|

**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.

### **Software License Agreement**

BY USING THE GPSMAP 276C, 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 276C handy and connect to the Garmin Web site ([www.garmin.com](http://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 left.

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](mailto:sales@garmin.com)**.

### Compliance, License, and Warranty Information

#### **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 to the left 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.

Products sold through online auctions are not eligible for rebates or other special offers from Garmin. 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.

## Safety Information

**WARNING:** *The GPSMAP 276C contains a lithium ion rechargeable battery. The battery used in this device may present a risk of fire or chemical burn if mistreated. Do not recharge out of the unit, disassemble, heat above 140°F (60°C), or incinerate.*

**WARNING:** *If original battery must be removed for replacement, dispose of used battery properly. Contact your local waste disposal department for information on proper disposal of lithium-ion batteries. Keep used battery away from children. Do not disassemble and do not dispose of in fire.*

**WARNING:** *Only replace with Garmin Lithium-Ion Battery Pack (Garmin Part Number 010-10517-00). Use of another battery may present a risk of fire or explosion.*

**CAUTION:** Use the GPSMAP 276C 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 276C 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.

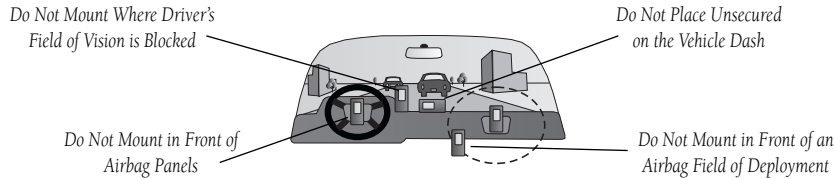
**WARNING:** The Global Positioning System (GPS) is operated by the United States government, which is solely responsible for its accuracy and maintenance. The system is subject to changes which could affect the accuracy and performance of all GPS equipment. Although the Garmin GPSMAP 276C is a precision electronic NAVigation AID (NAVAID), any NAVAID can be misused or misinterpreted, and therefore become unsafe.

Because the Garmin GPSMAP 276C 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 276C 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 276C 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.

## 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>.

## Symbols

- 24-hour format 83
- 2D 61, 62
- 3D 61, 62

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- Accessories 92, 93
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