



Cobra®

Owner's Manual

GPS 1000

GLOBAL POSITIONING SYSTEM RECEIVER

Nothing comes close to a Cobra®

Printed in China
Part No. 480-038-P

ENGLISH

IMPORTANT INFORMATION

Cautions and Warnings

Caution: The user is responsible for operating this product wisely. This product is intended for use only as a navigational aide and should not be used when precise measurement of direction, location, distance or topography is required.

Caution: GPS (Global Positioning System) is operated by the U.S. government. The U.S. government is solely responsible for its accuracy and maintenance. The system is subject to changes, which could affect the accuracy and performance of GPS equipment.

Caution: Remove the batteries from the receiver if you do not expect to use it for months at a time. As with any batteries, leakage can occur. When re-installing batteries, observe proper polarity.

Warning: If you choose to use this device in a vehicle, it is the sole responsibility of the operator of the vehicle to use this device in a safe manner. Be careful to avoid being distracted from safe and proper driving practices.

Warning: If you choose to use this device in a vehicle, it is the sole responsibility of the operator to secure this GPS receiver so that it will not cause damage or personal injury in the event of an accident.

DO NOT mount this GPS receiver over airbag panels or in a place where the driver or passengers are likely to have an impact with the device in an accident or collision.

Non-English Manuals

This GPS receiver is equipped to communicate in the language of your choice: English, Dutch, French, German, Italian, Portuguese, Spanish or Swedish (see "System Page Settings: Languages," page 83).

For operating instructions in Dutch, French, German, Italian, Portuguese, Spanish, or Swedish please visit www.cobra.com/GPS-manuals.html

FCC Compliance

This device complies with Class B of the FCC rules.

Operation is subject to the condition that this device does not cause harmful interference. It must accept any interference received, including that which may cause undesirable operation.

Cobra Electronics Corporation reserves the right to change or improve information in this manual without notice. Please visit www.cobra.com for updates or questions.

Customer Assistance

In this user's manual, you should find all the information you need to operate your GPS receiver. If you require further assistance after reading through this manual, the Cobra Electronics Corporation offers the following customer support services.

In the USA:

Automated Help Desk is available in English 24 hours a day, 7 days a week at 773-889-3087.

Customer Service Operator Support is available in English and Spanish at 773-889-3087 Monday through Friday, 8:00 a.m. to 6:00 p.m. CST.

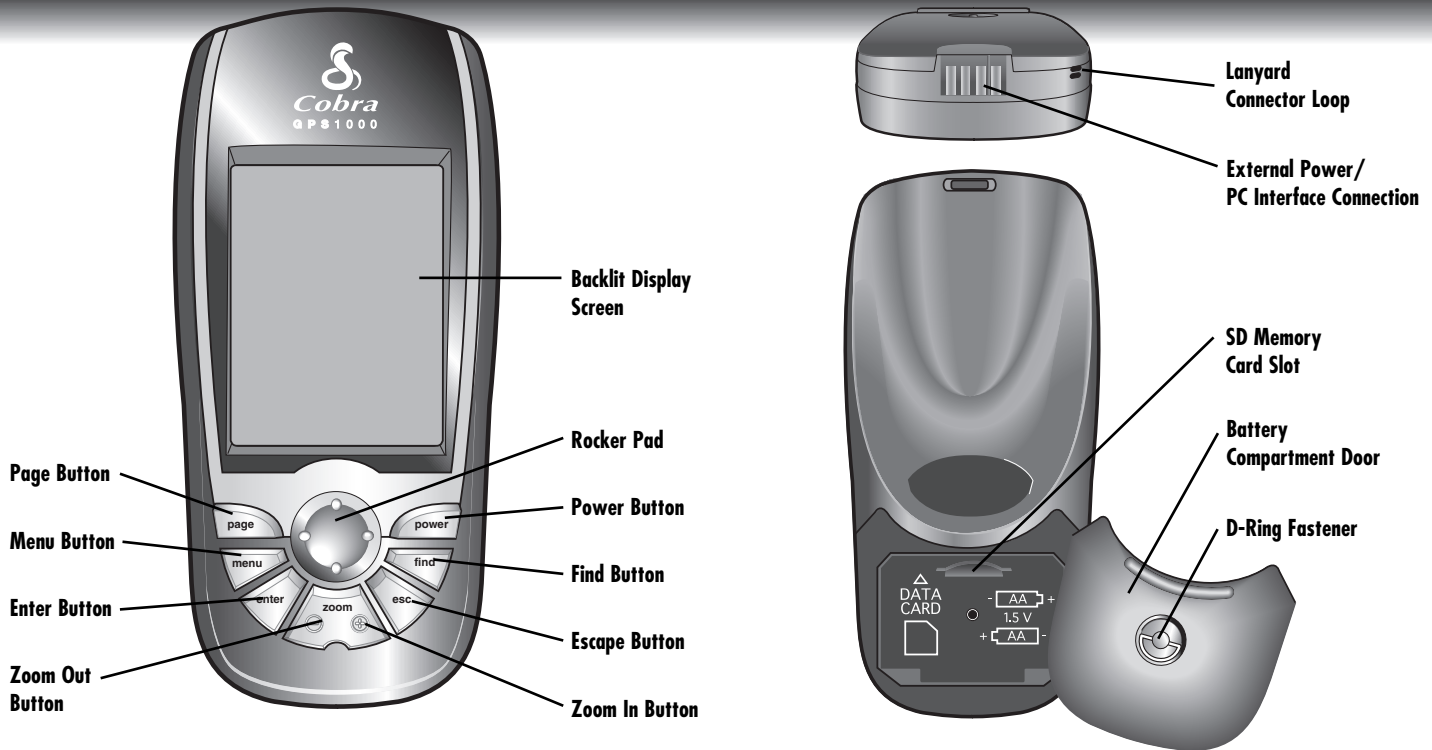
Questions can be faxed to 773-622-2269.

E-Mail Technical Assistance is available in English or Spanish 24 hours, 7 days a week via e-mail at: productinfo@cobra.com

On-line answers to frequently asked questions (in English only) can be found at: www.cobra.com.

Outside the U.S.A., **please contact your local dealer.**

PRODUCT FEATURES



For details of each button's function see page 4.

A3

Congratulations!

You've made a smart choice by purchasing this Global Positioning System receiver. Designed to give access to the most advanced satellite navigation technology available, this GPS receiver offers sophisticated features and capabilities.



Features:

- Cobra's exclusive A.S.A.P. II (Accelerated Satellite Acquisition Protocol II Technology) gets you running up to twice as fast as the other recreational GPS receivers and provides superior reception in urban areas, canyons and dense foliage
- Locks onto signals from satellites. Delivers accurate positioning within as little as 3 meters with WAAS signal correction
- Already programmed with continental U.S. highways
- Already programmed with continental U.S. state, Canadian provincial and European country boundaries
- Lets you program and store up to 50 different navigational routes, using up to 50 points in each route
- With optional mapping software, interface cable and SD memory card you can connect to a PC to transfer data and take advantage of powerful mapping functions*
- Allows you to navigate to cities and exits already programmed into the receiver's memory
- Mapping capabilities for displaying and navigating roads, highways, intersections, addresses and points of interest
- Stores up to 500 navigational waypoints
- Over 100 map datums to choose from
- Automatically tracks your travel and shows you how to return along the same track (up to 10 separate tracks can be stored)
- Indicates direction of travel to your destination with a compass pointer
- Displays current position, altitude, bearing, time of day, current speed of travel, average speed throughout your trip and estimated time of arrival at your destination
- Display screen can be backlit for maximum visibility
- Easy-to-use rocker panel operates like a "joystick" to simplify operation
- Is waterproof to IPX7 standards and can operate in temperatures from 5°F to 158°F (-15°C to 70°C)
- Displays the route to your destination and your progress along that route
- Powered by SiRF, one of the world's most sensitive and reliable GPS engines available



*Windows platform required

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1.0 BASIC OPERATION

Making Travel Easier

Your GPS receiver makes travel easier through the following ways:

Go To a Waypoint 1 – This GPS receiver guides you in a straight line to a single point.

Go to a City/Town 1 – This GPS receiver is already programmed with hundreds of cities/towns worldwide and can guide you in a straight line to a selected city/town.

NOTE: A city/town is much larger than the precise location indicated by the coordinates stored in your GPS receiver. See page 39 for details.

Go to a Point of Interest, Address, Intersection or Exit 2 – With optional computer software and an interface cable, this GPS receiver can be connected to a computer to take advantage of powerful mapping programs and to transfer data back and forth between the computer and your receiver. POI, addresses, intersections and exits transferred from a computer can be saved as waypoints to be used as points within routes for navigation purposes or your receiver can guide you in a straight line to a selected POI, address, intersection or exit.

Navigate a Route 3 – This GPS receiver gives you the opportunity to select two or more points to create a route. You can then use your GPS receiver to guide you in a straight line from point to point through your stored route.

Navigate a Track 4 – This GPS receiver automatically keeps a record of your progress as you travel and gives you a graphic representation of a “track log” of the path or track you have taken. You can use the track log to create a track that you can recall for navigation. The track can be navigated in the forward or the reverse direction of the original travel.

Your GPS receiver is already programmed with a Base Map that includes locations of hundreds of worldwide cities; U.S. state, Canadian provincial and European country boundaries; U.S. interstate freeways, highways and exits; and land cover (inland bodies of water). By using the data interface, optional SD memory card and optional mapping software, you can also download maps and points of interest from your computer.

The manual is designed to help you take advantage of these and many other features. We suggest that you begin by reading the “General Information” and “Instrumentation Information” sections first. If you are not familiar with computer-based satellite navigation technology, these sections will help you understand the basics.

1 2 Go To a Waypoint, City/Town, Point of Interest, Address, Intersection or Exit



3 Navigate a Route



4 Navigate a Track



1.1 BASIC OPERATION

Installation

Battery Installation

Your GPS receiver operates on two standard AA batteries (not included). Always use high quality alkaline batteries.

To install batteries:

1. Twist the D-ring connector counterclockwise **1**.
2. Remove the battery compartment door.
3. Insert two AA batteries, ensuring correct polarity alignment **2**.
4. Replace the battery compartment door.
5. Twist the D-ring clockwise to lock.

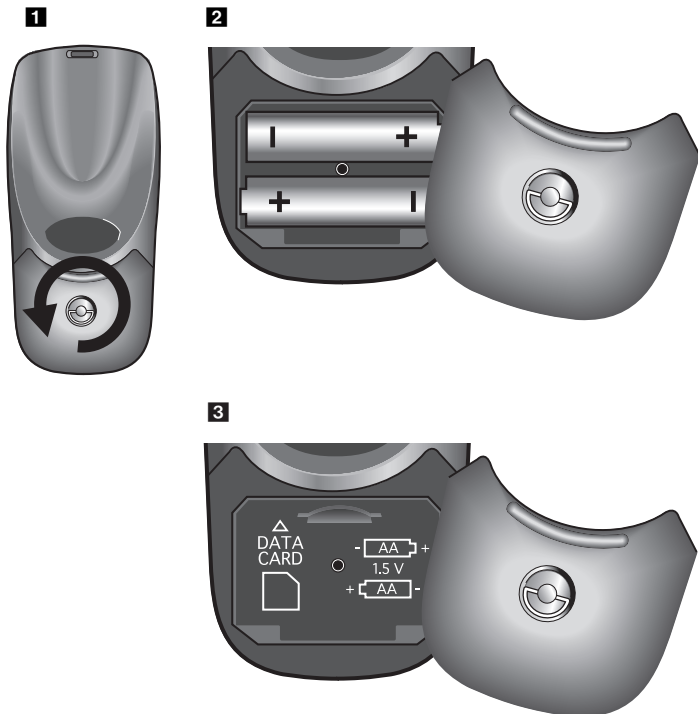
As an optional power source, a vehicle power adapter (see "Optional Accessories," page 100) can be used with your GPS receiver.

SD Memory Card Installation

Your GPS receiver's memory is expandable with use of an optional SD memory card. A SD memory card is required when using the optional mapping software.

To install a SD memory card:

1. Twist the D-ring connector counterclockwise **1**.
2. Remove the battery compartment door.
3. Insert SD memory card according to illustration inside the battery compartment **3**.
4. Replace the battery compartment door.
5. Twist the D-ring clockwise to lock.



1.2 BASIC OPERATION

Buttons and Rocker Pad

Buttons and Rocker Pad

You can access all features of your GPS receiver by using the seven buttons and the Rocker Pad.

The PAGE Button

Pressing the PAGE button allows you to cycle through the six main pages.

If you have proceeded from a main page to any menu or screen, pressing the PAGE button returns you to that main page.

Pressing and holding the PAGE button at any time for 2 seconds will display the "Page List" menu. From this menu you can go directly to any main page.

The ROCKER PAD

Pressing up, down, left or right on the ROCKER PAD allows you to scroll through menus and options. A side scroll bar next to a menu indicates that more selections can be viewed by scrolling beyond the bottom or top of the list that is currently visible.


The ROCKER PAD is used to move or pan around the Map Page.

The POWER Button

Pressing and holding the POWER button for 2 seconds will turn the device on or off.

With the receiver turned on, pressing and releasing the POWER button will turn on or off the display backlight.

The MENU Button

Whenever the menu icon  appears in the upper right hand corner of the display, pressing the MENU button will bring up a menu of selections related to the current screen. Pressing the MENU button again will exit the menu.

The ENTER Button

After using the ROCKER PAD to highlight a selection on any screen, pressing the ENTER button accepts the highlighted selection.

The ENTER button can also be used as a Waypoint Shortcut.

To mark a new waypoint using current location, press and hold the ENTER button for 2 seconds. A confirmation window will pop up.

The ZOOM IN/OUT Button

When a map is displayed, you can use the ZOOM IN/OUT button to zoom in or zoom out on the image of the map.

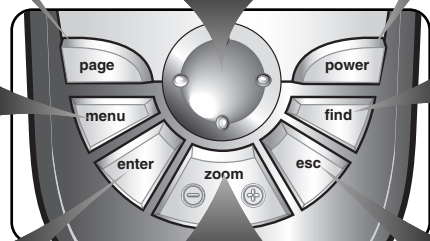
The FIND Button

Pressing the FIND button will display the Find Screen, which allows you to search for various navigation points: waypoints, points of interest, cities, addresses, intersections or exits.

The ESCAPE Button

If you have proceeded from a main page through a series of screens/menus, pressing the ESCAPE button allows you to "back up" to previous screens/menus one at a time.

Pressing the ESCAPE button allows you to cycle through the six main pages in reverse order.



1.3

BASIC OPERATION

Power/Powersaver Mode

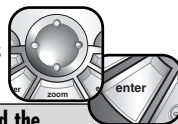
Power

To turn your GPS receiver on or off:

1. Press and hold the POWER button for 2 seconds.

A start-up screen appears for a few seconds **1**, followed by a screen that shows the receiver is attempting to lock onto signals from GPS satellites **2**. Once three satellite signals have been acquired, the screen will automatically switch to the Map Page **3** and the receiver is ready to use.

You can jump to the Map Page while the receiver continues to acquire satellite signals by selecting "Continue Acquiring? – YES." On the Map Page, a pointer arrow **▲** will appear in the middle of the display once three signals have been acquired **3**. To use the non-navigational features of your receiver, select "Continue Acquiring? – No."



CAUTION: For optimum use, when you use this GPS receiver for the first time, have not used the receiver for over 3 months or have changed geographic regions:

- It will take approximately 50 seconds to lock onto the GPS satellites
- Keep the receiver turned on for at least 15 minutes after locking onto the GPS satellites.

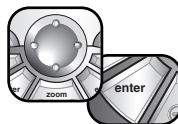
NOTE: The receiver must be outside with a clear view of the sky to acquire satellite signals for navigation.

Powersave Mode

To save battery power while using just the non-navigational features of your receiver, you can turn GPS navigation off. To do so, while still in the Acquiring Satellites screen, highlight using the ROCKER PAD and select "Continue Acquiring? – No," by pressing the ENTER button. See "Turning GPS Off and On," page 73 for details and instructions on turning GPS navigation off after the screen automatically changes to the Map page.

In Powersave Mode, no GPS functions will be available until you turn GPS back on.

NOTE: You can turn GPS off at any time. See "Turning GPS Off and On," page 73 for details and instructions.



1 Startup Screen



2 Startup Screen



3 Map Page



1.4 BASIC OPERATION

Six Main Pages and Find Screen

Six Main Pages and Find Screen

This is a quick introduction to the six main pages and Find Screen that give you access to all of the GPS receiver's features. Detailed information on each page/screen is available as indicated.

Map Page 1

The Map Page displays a map of your current position in relation to any waypoints, points of interest, cities, and roads that you have selected. It can show you the distance between any two points, and details about displayed mapping information. Using navigational features, the Map Page also shows you the direction of travel to a selected destination. If you have created a route or saved a track, the map can show you that route or track and your current position on it. See page 11 for details and instructions.

Gauges Page 2

The Gauges Page displays a compass that shows your current direction of travel or the direction to your next waypoint. The data fields currently showing "TIME TO DEST" (Time to Destination) and "LOCATION" are user selectable. See page 20 for details and instructions.

Trip Meter Page 3

The Trip Meter Page displays a number of user selectable fields with information about your current location, the progress you have made, your direction of travel, your speed of travel and the time of your trip. See page 22 for details and instructions.

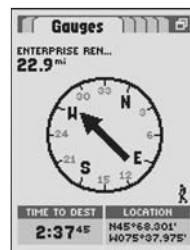
Routes Page 4

The Routes Page allows you to create and edit a string of points for navigation. It also gives you details about routes currently being navigated such as distance to the next point or from the last point. See page 63 for details and instructions.

1 Map Page



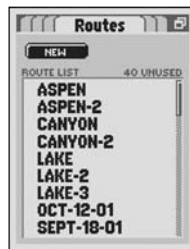
2 Gauges Page



3 Trip Meter Page



4 Routes Page



Tracks Page 5

The Tracks Page allows you to create tracks and clear track logs from the receiver's automatic tracking feature. It also allows you to recall and retrace tracks you have saved. See page 27 for details and instructions.

System Page 6

The System Page allows you to choose the various settings and formats the receiver uses to navigate and display information. It also give you access to the receiver's data interface capabilities. See page 68 for details and instructions.

Find Screen 7

The Find Screen gives you access to Waypoints, Points of Interest, Cities, Addresses, Intersections, and Exits options such as creating new waypoints, downloading POIs, searching for an address or sorting a list of cities. See individual sections under "Navigation Tools" pages 24-67 for details and instructions.

NOTE: Whenever satellite lock is lost or GPS is turned "OFF," certain animation icons (below) appear on screen and continue to loop until GPS is "ON" and/or satellite lock is re-acquired. See page 73 for details and instructions.



Animation sequence that appears when satellite lock is lost.



Animation sequence that appears when GPS is turned OFF.

5 Tracks Page



6 System Page



7 Find Screen



1.5 BASIC OPERATION

Navigation

Navigation

Your GPS receiver receives signals from Global Positioning System satellites that are in fixed orbits (stationary relative to the ground) around the earth. By acquiring—or locking onto—the signals from at least 3 satellites, your receiver can use triangulation to precisely determine your current position, elevation above sea level and bearing (the direction you are traveling). As you travel, the receiver automatically acquires the strongest satellite signals available at your current location.

Your GPS receiver is already programmed with U.S. state, Canadian provincial and European country boundaries; worldwide cities; U.S. interstate freeways and highways; and U.S. interstate freeway and highway exits and exit details. With optional mapping software, interface cable and SD Memory Card (needed for map downloading), you can access a computer mapping database to download additional mapping information that includes points of interest, local roads and streets, intersections and addresses.

By becoming familiar with the receiver's basic operating features, you will be able to use its powerful navigational capabilities.

Tracks 1

Your GPS receiver automatically keeps a record of your travel, called a track. The receiver shows you a map-like picture of your track. You can create and store up to 10 different tracks. Each track can be recalled and used for navigation as the receiver shows you how to retrace the track again (either forward or in the reverse direction), how far off course you are in relationship to the track and information such as your current speed or distance to destination in your track navigation. When traveling in unfamiliar territory, this is a quick and easy way to make sure you always know how to get back to your starting point. *See page 27 for details and instructions.*

Waypoints 2

In this manual, you will learn how to mark your current location as a waypoint, save cities, addresses, intersections, points of interests or exits as waypoints or set the coordinates for a waypoint anywhere in the world. You can create and store up to 500 waypoints. You can have the receiver show you the direction of travel to an individual waypoint or how to navigate along a series of waypoints in a route. The receiver can also show you how far off course you are in relationship to the waypoint navigation and information such as your current speed or distance to the destination in your waypoint navigation. *See page 32 for details and instructions.*

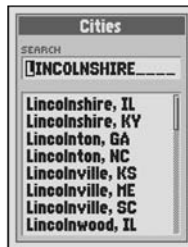
1 Track



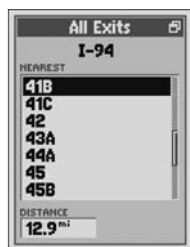
2 Waypoints



3 Cities



4 Exits



Cities or Exits 3 4

Already stored in your GPS receiver are coordinates for cities throughout the world; U.S. interstate freeways and highways; U.S. interstate freeway and highway exits and exit details; and continental U.S. state, Canadian provincial and European country boundaries. You can have the receiver show you the direction of travel to an individual city or exit or select the city or exit as a point to be used to navigate along a series of points in a route. The receiver can also show you how far off course you are in relationship to the current navigation and information such as your current speed or distance to the destination in your navigation. See page 39 for "Cities" details and instructions. See page 58 for "Exits" details and instructions.

Points of Interest, Addresses or Intersections 5 6 7

With optional mapping software and interface cable, you can access a computer mapping database to download hundreds of points of interest, addresses and intersections. You can use these for navigation. You can have the receiver show you the direction of travel to an individual POI, address or intersection; or use the POI, address or intersection as a point to be used to navigate along a series of points in a route. The receiver can also show you how far off course you are in relationship to the navigation and information such as your current speed or distance to the destination in your navigation. See page 44 for "Points of Interest" details and instructions. See page 50 for "Addresses" details and instructions. See page 54 for "Intersections" details and instructions.

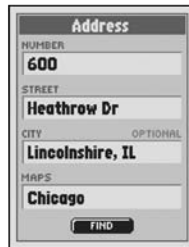
Routes 8

A route is a series of points which you choose that can be used in forward or reverse navigation. You can create and store up to 50 separate routes. As many as 50 points may be stored in each route. Once you have created a route, your GPS receiver will guide you in a straight line from point to point. As you reach each point, the receiver automatically begins navigating to the next one. The receiver can also show you how far off course you are in relationship to the route and information such as your current speed or distance to the destination in your route navigation. See page 63 for details and instructions.

5 Points of Interest



6 Address



7 Intersection



8 Route



Instrumentation Information

The GPS receiver instrumentation helps you see where you are, plan where to go, get there and then retrace your path.



Map Page



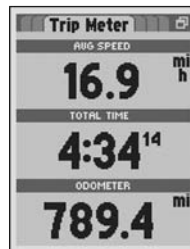
Selected Point's Details



Gauges Page
Bearing Pointer



Gauges Page
Course Pointer



Trip Meter Page
3 Fields Option



Trip Meter Page
10 Fields Option

The Map Page shows your location on the relevant map and provides information such as your speed, odometer reading or direction of travel. You can “pan” to see more of the map in any direction. See page 11 for details and instructions.

The Gauges Page displays a compass and provides information such as location, distance to a destination or accuracy in relationship to a current navigation. The Gauges Page also includes the direction in which you are currently traveling or the direction of travel to your next point. See page 20 for details and instructions.

The Trip Meter Page can display from 3 to 10 information fields with up to 20 different types of data. These can include your current position as well as details about the navigation in process such as speed, time and trip odometer. See page 22 for details and instructions.

2.1 INSTRUMENTATION INFORMATION

Map Page

Map Page

The Map Page displays a graphic representation of the navigation currently in progress. Your GPS receiver comes equipped with a Base Map that includes locations of hundreds of worldwide cities; U.S. state, Canadian provincial and European country boundaries; U.S. interstate freeways, highways and exits; and land cover (inland bodies of water). You can choose to display or hide any waypoints, points of interest, cities, exits, route line, latitude and longitude grid, GoTo line, track line or track log.

You can use optional computer software, interface cable and SD Memory Card (needed for map downloading) to download more detailed mapping data from a computer database. With this additional information, the Map Page could include local roads and streets, additional waypoints and points of interest.

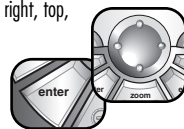
In normal display mode, a black triangle ▲ in the middle of the map points in the direction you are currently traveling. As you travel, the map adjusts while the black triangle remains in the center of the display. Up to two data fields at the bottom of the screen show you information of your choosing about your position or navigation. If navigation is in progress, a small "hiker" icon 🧑 will appear at the lower right of the map image. You have various options for customizing the display, and a number of useful features including the ZOOM IN/OUT button are available.

Panning Mode

Press on the ROCKER PAD to enter the Panning Mode and see any portion of the map image that is beyond the left, right, top, or bottom edge of the screen. See "Moving Around the Map," page 18 for details and instructions.

Viewing Details 3 4

While in the Panning Mode, highlight and/or select any map detail such as a waypoint, city, POI, road, track, route or exit to access information and other options of that map detail. See "Moving Around the Map," page 18 for details and instructions.



1 Map Page



2 Panning Mode




3 Panning and Highlighting Point

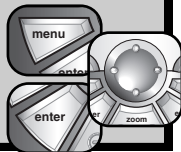


4 Viewing Details



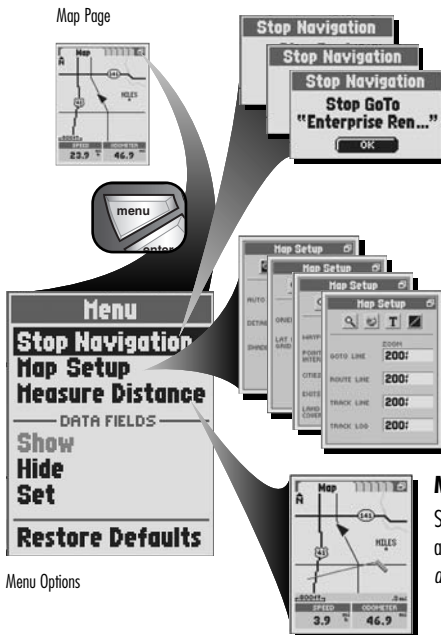
Selecting Options

From the Map Page, when you see the menu icon  press the MENU button to display the available menu options. Press on the ROCKER PAD to scroll up or down through a screen or to highlight various options. Press the ENTER button to select an option.



Menu Options

From the Map Page, press the MENU button to access the Map Page Menu Options.



Stop Navigation

Select "Stop Navigation" to stop your current type of navigation. One of three screens will appear, depending on the type of navigation currently in progress: "Stop GoTo," "Stop Route," or "Stop Track." Select "OK" to stop current navigation and return to the Map. To return to the Map Page without stopping navigation, press the ESCAPE button.

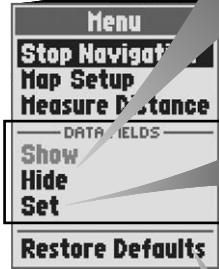
Map Setup

Select "Map Setup" to cycle through four Map Setup Screens that will allow you to set the parameters used by the Map Page. See "Map Setup," page 14 for details and instructions.

Measure Distance

Select "Measure Distance" to have the receiver show the distance between any two points you select. See "Measure Distance Function," page 17 for details and instructions.

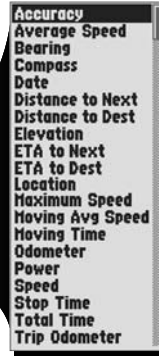
Map Page



Menu Options

Data Fields

Under Data Fields, select "Show" or "Hide" to show or hide data fields at the bottom of the map. The current option is grayed out. Select "Set" to set the data that is to be displayed in each information field. After selecting "Set," select the field you want to change then select the new data from the data choices list. See "Data Field Descriptions," page 92 for details.



Restore Defaults

Select "Restore Defaults" to restore all Map Page default settings. Select "YES" to restore original settings (see page 72 for a complete list of defaults). Select "NO" to maintain all current settings.

Map Setup

To set the parameters used by the Map Page:

1. On the Map Page, press the MENU button to display the available options **1**.
2. On the Map Menu, select "Map Setup" **1**.
3. On the Map Setup Screens, choose from the following options:

- The  icon **2** lets you set the following:

AUTO ZOOM

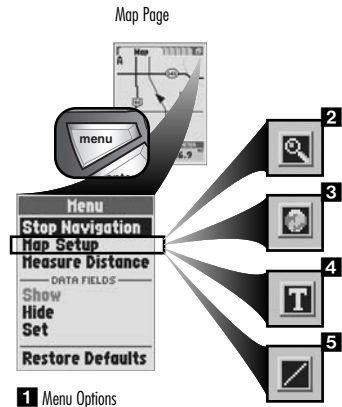
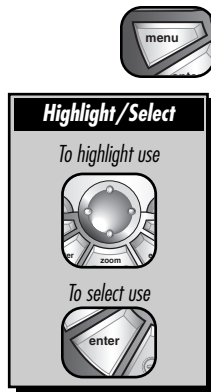
- On Display automatically zooms in or out to keep the entire navigation (GoTo, route or track) shown on the map.
- Off Display can be zoomed in or out manually.

DETAIL

- High Map shows all streets that have been downloaded, major U.S. state and interstate highways, and U.S. state, Canadian provincial and European country boundaries.
- Medium Map only shows main local streets (if map data has been downloaded) and major highways.
- Low Map only shows major state and interstate highways.

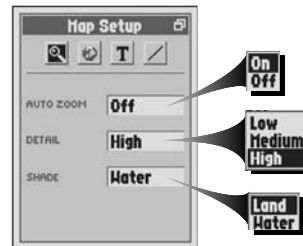
SHADE

- Land Land areas will be shaded, water areas clear.
- Water Water areas will be shaded, land areas clear.



1 Menu Options

2 Map Setup - Magnifying Icon



- The  icon **3** lets you set the following:

ORIENTATION

- North Up** Screen always represents magnetic north to the top of the screen. The ▲ black triangle will rotate with your change in direction.
- Track Up** Screen always represents your direction of travel to the top of the screen. The map rotates around a stationary ▲ black triangle.

LAT & LON GRID

- Off:** Grid for the selected map will not appear on the map.
- Level:** Sets the zoom level value at which the grid for the selected map will begin to appear on the map. (Zoom level appears at the lower left of the map image.)

- The **T** icon **4** lets you set the following for waypoints, points of interest, cities, exits and land cover (inland bodies of water):

TEXT

- Off:** Label text for the selected map element will not appear on the map.
- Small:** Label text for the selected map element is small.
- Medium:** Label text for the selected map element is medium.
- Large:** Label text for the selected map element is large.

ZOOM

- Off:** Icon and label text for the selected map element will not appear on the map.
- Level:** Sets the zoom level value at which the icon and label text for the selected element will begin to appear on the map. (Zoom level appears at the lower left of the map image.)

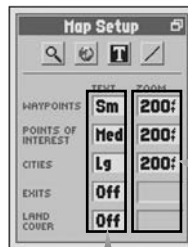
3 Map Setup - World Icon



North Up
Track Up

- Off
- 20:
- 30:
- 50:
- 80:
- 120:
- 200:
- 300:
- 500:
- 800:
- 0.2[°]
- 0.3[°]
- 0.5[°]
- 0.8[°]
- 1.2[°]
- 3[°]
- 5[°]
- 8[°]
- 12[°]
- 20[°]
- 30[°]
- 50[°]
- 80[°]
- 120[°]
- 200[°]
- 300[°]
- 500[°]
- 800[°]


4 Map Setup - Text Icon



Off
Small
Medium
Large

- Off
- 20:
- 30:
- 50:
- 80:
- 120:
- 200:
- 300:
- 500:
- 800:
- 0.2[°]
- 0.3[°]
- 0.5[°]
- 0.8[°]
- 1.2[°]
- 3[°]
- 5[°]
- 8[°]
- 12[°]
- 20[°]
- 30[°]
- 50[°]
- 80[°]
- 120[°]
- 200[°]
- 300[°]
- 500[°]
- 800[°]

continued

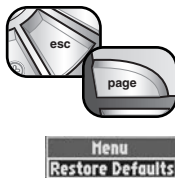
- The  icon **5** lets you set the following for the GoTo line, route line, track line and track log

ZOOM

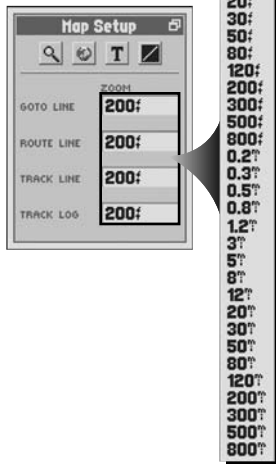
- Off:** The selected element will not appear on the map from 20 feet to 800 miles.
- Level** Sets the zoom level value at which the selected element will begin to appear on the map (zoom level appears at the lower left of the map image).

- Press the ESCAPE button or the PAGE button to return to the main Map Page.

NOTE: To restore default settings for any individual Map Setup Screen, press the MENU button, while in the selected Setup Screen, then select "Restore Defaults".




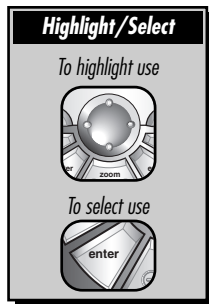
5 Map Setup - Line Icon



Measure Distance Function

To have the receiver display the distance in a straight line between any two points:

1. On the Map Page, press the MENU button to display the available options **1**.
2. On the Map Menu, select "Measure Distance" **1**. A ruler-shaped cursor  will appear at your current location **2** and a measure field will appear in the lower right corner of the map **3**.
3. On the Map Page, use the ROCKER PAD to position the cursor at the point from which you wish to measure and press the ENTER button.
4. Use the ROCKER PAD to move the cursor to the destination point. A line will appear connecting the first measuring point and the cursor **3**. The distance between the two points is displayed in the measure field.
5. Press the ESCAPE button to return to the main Map Page.



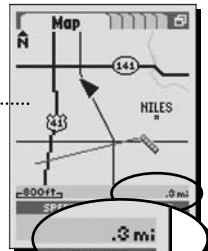
Map Page



1 Options Menu



2 Measure Distance




3
Measure
Distance

Moving Around the Map

From the Map Page, you can zoom in or zoom out on the map image by pressing the ZOOM IN/OUT button. The data fields on the map image can be hidden by selecting "Hide" (see "Menu Options," page 12). A section of map outside the current viewing area can be seen by panning. Information and other options about map details such as a waypoint, city, POI, road, track, route or exit can be accessed while in the panning mode.

Panning Mode

To see any portion of the map image that is beyond the left, right, top, or bottom edge of the screen:

1. On the Map Page **1**, press on the ROCKER PAD in any direction to enter panning mode. An arrow-shaped cursor  will appear **2**.
2. Move the cursor in any direction by pressing left, right, up or down on the ROCKER PAD. When the cursor reaches an edge of the map image, the image will "pan" in that direction **3**.
3. To exit panning mode and have your current location again in the center, press the ESCAPE button.



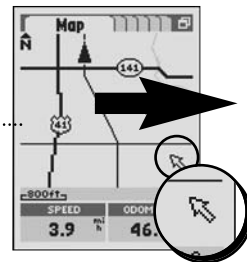
1 Map Page



2 Panning Mode



3 Panning

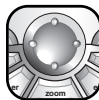


Various Features in Panning Mode

To access information and other options of waypoints, cities, points of interest, roads, exits, a track or a route shown on the map while in panning mode:

1. On the Map Page **1**, press on the ROCKER PAD in any direction to enter panning mode. An arrow-shaped cursor will appear **2**.
2. Move the cursor to the map detail about which you want to access information **3**. Selectable map details will highlight when panned over by the cursor.
 - If the cursor reaches an edge of the map, the image will “pan” in that direction.
 - Distance from your current location to the highlighted map detail is displayed in the bottom right of the screen.
3. Press the ENTER button to select the map detail.
4. Select from the detail’s options **4** or press the ESCAPE button to return to the Map Page.

NOTE: Some map details will not have other options available.



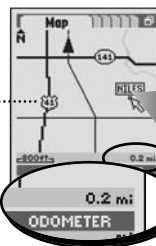
1 Map Page



2 Panning Mode



3 Select Map Detail



4 Detail Options



Gauges Page

The Gauges Page displays a compass that indicates direction of travel. It can show the direction you are currently traveling or the direction from your current position to the next point in your navigation.

The two data fields at the bottom can show you further information. If a navigation is in progress, a small "hiker" icon appears to the lower right of the compass and the name of the next destination (plus your current distance from it) are shown to the upper left of the display. You have various options for customizing the display.

Menu Options

From the Gauges Page, press the MENU button to access the Gauges Page Menu Options.

The diagram illustrates the Gauges Page menu options and their corresponding display screens. A central 'Menu' button is shown with a list of options: **Menu**, **Stop Navigation**, **Bearing Pointer**, **Course Pointer**, **Set Data Field**, and **Restore Defaults**. A 'menu' button icon is also shown. The 'Gauges Page' screen is shown at the top left, displaying a compass, 'ENTERPRISE REL. 22.9"', and '2:37 AM'. The 'Menu Options' screen is shown at the bottom left, displaying the same menu list. The 'Stop Navigation' screen is shown at the top right, displaying 'Stop Navigation' and 'Stop Track "CAMP1"'. The 'Bearing Pointer' screen is shown in the middle right, displaying a compass with a bearing arrow and 'OFF COURSE 0"'. The 'Course Pointer' screen is shown at the bottom right, displaying a compass with a course arrow and 'OFF COURSE 120"'. The 'Set Data Field' screen is shown at the bottom right, displaying a compass with a data field arrow and 'OFF COURSE 120"'. The 'Restore Defaults' screen is shown at the bottom right, displaying a compass with a restore arrow and 'OFF COURSE 120"'. The 'Pointer Options' screen is shown at the bottom right, displaying a compass with a pointer arrow and 'OFF COURSE 120"'. The 'Gauges Page' screen is also shown at the bottom right, displaying a compass with a hiker icon and 'ENTERPRISE REL. 22.9"', '2:37 AM', and 'LOCATION: 44°48.000'N 142°10.970'W'.

Stop Navigation

Select "Stop Navigation" to stop your current type of navigation. One of three screens will appear, depending on the type of navigation currently in progress: "Stop GoTo," "Stop Route," or "Stop Track." Select "OK" to stop current navigation and return to the Map. To return to the Gauges Page without stopping navigation, press the ESCAPE button.

Pointer Options

Choose from the following Pointer Options to set the compass gauge. The current option is grayed out.


Bearing Pointer

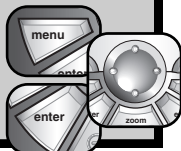
Select "Bearing Pointer" to show your direction of travel.

Course Pointer

Select "Course Pointer" to show the direction to your next destination if navigation is in progress. The arrows next to the pointer indicate if you are on course, left of course or right of course. The upper right of the display also shows how many feet off course you are currently.

Selecting Menu and Options

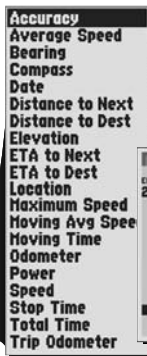
From the Gauges Page, when you see the menu icon  press the MENU button to display the available menu options. Press on the ROCKER PAD to scroll up or down through a screen or to highlight various options. Press the ENTER button to select an option.



Gauges Page



Menu Options



Set Data Field

Select "Set Data Field" to set the data that is to be in the information fields at the bottom of the screen. Select the field you want to change then select the new data from the list. See "Data Field Descriptions," page 92 for details.



Restore Defaults

Select "Restore Defaults" to restore all Gauges Page default settings. Select "YES" to restore original settings (see page 72 for a complete list of defaults). Select "NO" to maintain all current settings.

2.3

INSTRUMENTATION INFORMATION

Trip Meter Page

Trip Meter Page

The Trip Meter Page displays information about your current position, the navigation in progress and the other available data. The receiver displays 6 data fields by default. It can also display your choice of 3 to 10 information fields from a total of 20 different types of data.

Menu Options

From the Trip Meter Page, press the MENU button to access the Trip Meter Menu Options.

The diagram illustrates the navigation process. It starts with the Trip Meter Page showing data: 16.9, 00:13, 434, 17, 789.4, and Saturday Nov-22-01. Pressing the 'menu' button leads to the Menu screen. From the Menu screen, several options are available: Stop Navigation, Set Data Fields, Reset, and Restore Defaults. The 'Set Data Fields' option is highlighted, leading to a screen where users can select from 3, 6, or 10 fields. The 'Accuracy' option is also shown, leading to a list of 20 data fields: Average Speed, Bearing, Compass, Date, Distance to Next, Distance to Dest, Elevation, ETA to Next, ETA to Dest, Location, Maximum Speed, Moving Avg Speed, Moving Time, Odometer, Power, Speed, Stop Time, Total Time, and Trip Odometer. A 'Stop Navigation' screen is also shown, with the option to stop the current route ('LAKE').

Trip Meter Page

16.9	00:13
434	17
789.4	Saturday Nov-22-01

menu

Menu

- Stop Navigation
- Set Data Fields
- Reset
- Restore Defaults

DISPLAY

3 Fields

6 Fields

10 Fields

Menu Options

Accuracy

- Average Speed
- Bearing
- Compass
- Date
- Distance to Next
- Distance to Dest
- Elevation
- ETA to Next
- ETA to Dest
- Location
- Maximum Speed
- Moving Avg Speed
- Moving Time
- Odometer
- Power
- Speed
- Stop Time
- Total Time
- Trip Odometer

Stop Navigation

Stop Navigation

Stop Navigation

Stop Route "LAKE"

OK

Trip Meter

AVG SPEED	STOP TIME
16.9	00:13
TOTAL TIME	ACCURACY
4:34	17
ODOMETER	DATE
789.4	SATURDAY NOV-22-02
MOVING TIME	MOVING SPEED
04:21	17.3
AVG SPEED	TRIP ODOMETER
46.9	86.7


Stop Navigation

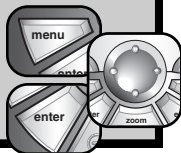
Select "Stop Navigation" to stop your current type of navigation. One of three screens will appear, depending on the type of navigation currently in progress: "Stop GoTo," "Stop Route," or "Stop Track." Select "OK" to stop current navigation and return to the Map. To return to the Trip Meter Page without stopping navigation, press the ESCAPE button.

Set Data Fields

Select "Set Data Fields" to set the data that is to be displayed in the information fields. Select the field you want to change, then select the new data from the list. See "Data Field Descriptions," page 92 for details.

Selecting Menu and Options

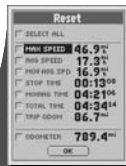
From the Trip Meter Page, when you see the menu icon  press the MENU button to display the available menu options. Press on the ROCKER PAD to scroll up or down through a screen or to highlight various options. Press the ENTER button to select an option.



Trip Meter Page



Menu Options



Reset

Select "Reset" to reset any or all Trip Meter values to zero. Select "SELECT ALL" to reset all data field values to 0 [zero]. Select individual information field choices: "MAX SPEED" (maximum speed), "AVG SPEED" (average speed), "MOV AVG SPEED" (moving average speed), "STOP TIME," "MOVING TIME," "TOTAL TIME," "TRIP ODOM" (trip odometer) or "ODOMETER" to reset individual values to 0 [zero]. See "Data Field Descriptions," page 92 for details.

Display

This lets you choose the number of fields displayed. Select "3 Fields" to display 3 data fields with large type. Select "6 Fields" to display 6 data fields with medium type. Select "10 Fields" to display 10 data fields with small type.



Restore Defaults

Select "Restore Defaults" to restore all Trip Meter Page default settings. Select "YES" to restore original settings (see page 72 for a complete list of defaults). Select "NO" to maintain all current settings.

NAVIGATION TOOLS

Navigation Tools

Your GPS receiver automatically keeps a record of your travel as a track log. You can save all or part of the track log as up to 10 tracks for future navigation. When traveling in unfamiliar territory, this is a quick and easy way to make sure you always know how to get back to your starting point. See "Tracks," page 27 for details and instructions.

This GPS receiver comes equipped with mapping data including locations of hundreds of worldwide cities; U.S. state, Canadian provincial and European country boundaries; and U.S. interstate freeways, highways and exits. By using the Data Interface to download additional mapping data such as points of interest, local

streets from a computer (see "Interface Options," page 75), you will also be able to find addresses or intersections. You can save any of these locations as waypoints.

Waypoints are specific locations you have the receiver record. In the following sections, you can learn how to mark your current location as a waypoint; save cities, addresses, intersections, points of interest or exits as waypoints; and set coordinates for a waypoint anywhere in the world. This GPS receiver can store up to 500 waypoints which can be recalled to show you the direction of travel to the individual point or in a series of points or route navigation. See "Waypoints," page 32 for details and instructions.

You can use a series of up to 50 points (waypoints, cities, points of interest, addresses, intersection or exits) to create up to 50 routes. See "Routes," page 63 for details and instructions.

The following sections will explore your options, such as navigation and editing, for tracks, waypoints, cities, points of interest, addresses, intersections, exits and routes.

Track



Waypoints



Cities



Address



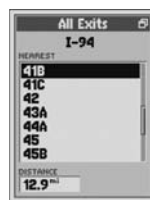
Intersection



Points of Interest



Exits



Route



3.1 NAVIGATION TOOLS

Editing or Entering Text and Symbols

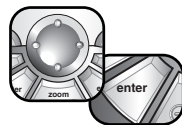
Editing or Entering Text and Symbols

To enter or change the information displayed for a waypoint, track or route:

1. From any screen that allows you to enter letters or numbers (names of waypoints/tracks/routes, dates, etc.), highlight and select the field you want to edit **1**.
2. Pressing left or right on the ROCKER PAD, highlight the space where you want to insert or change a character or symbol **2**.
3. Press up or down on the ROCKER PAD to scroll through the characters or symbols to choose from. Press left or right on the ROCKER PAD to accept the new character or symbol and move to the next space or character. The next character or symbol is highlighted **3**.
 - To clear a selected character and all characters that follow it, highlight the Large Dash “-” symbol (it comes after the 9.)When editing characters, repeat the same procedure to change the next character if desired. Press left or right on the ROCKER PAD to skip characters you do not want to change.

4. Press the ENTER button to accept the new characters or symbol.

If necessary, press up or down on the ROCKER PAD to scroll to the next field you want to edit and follow the same procedure to enter or change characters or symbols.



- 1** Highlight Field to Edit



- 2** Highlight Character



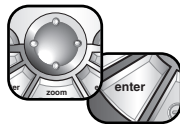
- 3** Next Character is Highlighted



continued

To enter information into a search field:

1. From any screen that allows you to enter letters or numbers (names of cities, POIs, streets, etc.), highlight and select the field you want to search **1**.
2. Press left or right on the ROCKER PAD to highlight the first space in the line in the search field **2**.
3. Press up or down on the ROCKER PAD to scroll through the characters or symbols to choose from. Press left or right on the ROCKER PAD to accept the new character or symbol and move to the next space or character. The next character or symbol is highlighted. A list of available data starting with that new character will appear below the search field **2**.

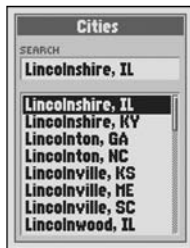


Repeat the same procedure to change the next character if desired **3**. Press left or right on the ROCKER PAD to skip characters you do not want to change. The list of available data will update with each new character.

4. Press the ENTER button to accept the current data in the search field.
5. Choose from the following:

- Press the ENTER button to accept the current highlighted data on the list **4**.
- Scroll to the data you are searching for and press the ENTER button to accept the highlighted data on the list.

If necessary, press up or down on the ROCKER PAD to scroll to the next field you want to search in and follow the same procedure to enter characters.

1 Address**2** Highlight First Space**3** Enter Other Characters**4** Available Data

3.2 NAVIGATION TOOLS

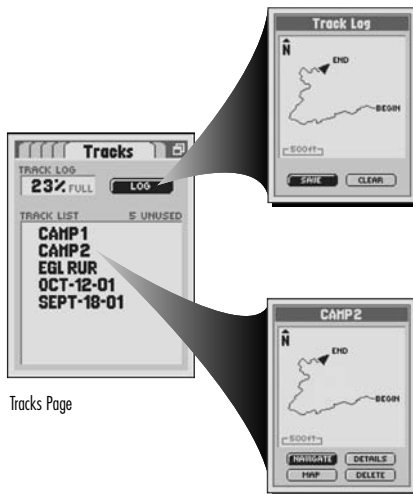
Tracks

Tracks

This GPS receiver automatically keeps a record of your progress as you travel and gives you a graphic representation or “track log” of the path or track you have taken. Each time you turn the receiver on, it begins a new track log recording, called a “session.” You can use the track log to create a track that you can recall for navigation.

You can create and store up to 10 different tracks. Each track can be recalled and used for navigation as the receiver shows you how to retrace the track again, either forward or in the reverse direction. When traveling in unfamiliar territory, this is a quick and easy way to make sure you always know how to get back to your starting point.

To assist in your Track navigation, your GPS receiver is already programmed with locations of hundreds of worldwide cities; U.S. state, Canadian provincial and European country boundaries; and U.S. interstate freeways, highways and exits. With optional computer software, interface cable and SD Memory Card (needed for map downloading), you can access a computer mapping database to transfer in additional mapping information that includes points of interest, local roads and streets, intersections and addresses.



Tracks Page

Log Options

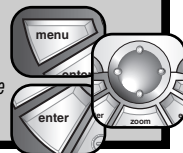
Select “LOG” to save a session as a track or to clear the track log. Select “SAVE” to save “This Session” (the track log recorded since the receiver was last turned on) or to save the “Entire Log.” Select “CLEAR” to delete the entire track log. See “Track Log Options,” page 29 for details and instructions.

Saved Track Options


Select any saved track on the Track List to “NAVIGATE” through that track, to see that track on the “MAP,” to see “DETAILS” of that selected track such as the name and total distance or to “DELETE” that individual track. See “Saved Track Options,” page 30 for details and instructions.

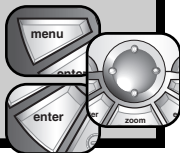
Selecting Options

From the Tracks Page, press on the **ROCKER PAD** to scroll up or down through a screen or to highlight various options. Press the **ENTER** button to select an option.



Selecting Menu and Options

From the Tracks Page, press on the **ROCKER PAD** to scroll up or down through a screen or to highlight various options. Press the **ENTER** button to select an option. When you see the menu icon , press the **MENU** button to display the available menu options.



Menu Options

From the Tracks Page, press the **MENU** button to access the Tracks Page Menu Options.

Tracks Page



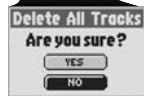
Menu Options



Stop Navigation

Select "Stop Navigation" to stop your current type of navigation. One of three screens will appear, depending on the type of navigation currently in progress: "Stop GoTo," "Stop Route," or "Stop Track." Select "OK" to stop current navigation and return to the Tracks Page. To return to the Tracks Page without stopping navigation, press the **ESCAPE** button.

A track that is currently being navigated will have a flashing hiker icon  beside it.



Delete All Tracks

Select "Delete All Tracks" to delete all saved tracks. Select "YES" to delete all saved tracks. Select "NO" to maintain all current saved tracks.

Track Log Options

This GPS receiver automatically keeps a record of your progress as you travel and gives you a graphic representation or “track log” of the path or track you have taken. Each time you turn the receiver on, it begins a new track log recording, called a session. You can use the track log to create a track that you can recall for navigation (see “Saved Track Options,” page 30.)

To save all or part of the track log as a track:

1. On the Tracks Page **1**, select “LOG.”
2. On the Track Log Preview Screen, select “SAVE” **2**.
3. On the Save Menu, choose from the following:
 - Select “This Session” to save only the track log recorded since the last time the receiver was turned on **3**.
 - Select “Entire Log” to save all track log recorded by the receiver since the last time the track log was cleared **3**.
4. The Details Screen will appear with a default name (current date) and total distance of the track displayed **4**. You can either:
 - accept the default name by selecting “OK.”
 - rename the track (see “Editing or Entering Text and Symbols,” page 25) and then accept the new name by selecting “OK.”

Selecting “OK” will return you to the Tracks Page.

To clear the track log:

1. On the Tracks Page **1**, select “LOG.”
2. On the Track Log Preview Screen, select “CLEAR” **2**.
3. Select “YES” to delete all track log recordings **5**.



1 Tracks Page



2 Track Log

3 Save Options



4 Details



5 Clear Log Confirmation

Saved Track Options

This GPS receiver automatically keeps a record of your progress as you travel as a track log. You can use the track log to create a track that you can recall for navigation. You can create and store up to 10 different tracks (see "Track Log Options," page 29.) Each track can be recalled and used for navigation as the receiver shows you how to retrace the track again, either forward or in the reverse direction.

To start navigation on a select track:

1. On the Tracks Page **1**, select a saved track from the Track List.
2. On the Track Preview Screen, select "NAVIGATE" **2**.
3. On the Start At Menu **3**, choose from the following:

- Select "Begin" to start at the beginning of the track or navigate forward through the track.
- Select "End" to start at the end of the track or navigate in reverse through the track.

This will jump you to the Map Page **4** and show you the selected track and your current location in relationship to that track.

To see a select track on the Map Page:

1. On the Tracks Page **1**, select a saved track from the Track List.
2. On the Track Preview Screen, select "MAP" **2**. This will jump you to the Map Page and show you the selected track and your current location in relationship to that track **5**.



1 Tracks Page



2 Track Preview

3 Start At Options



4 Map Page



5 Map Page

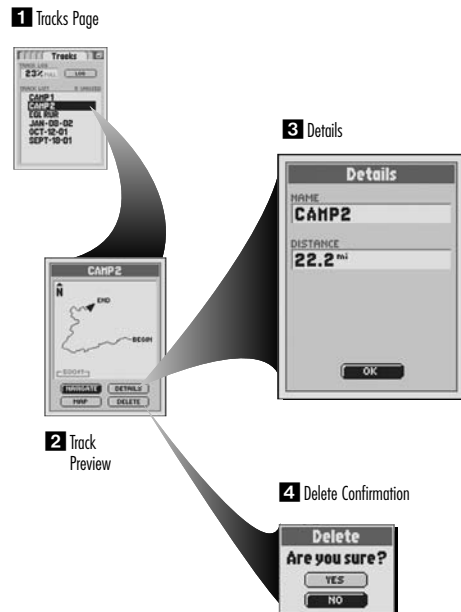


To see name and total distance details about a select track:

1. On the Tracks Page **1**, select a saved track from the Track List.
2. On the Track Preview Screen, select "DETAILS" **2** to see name and total distance of that track. In the Details Screen, the track name can be edited **3** (see "Editing or Entering Text and Symbols," page 25.)
3. Select "OK" to return to the Track Preview Screen.

To delete a select track:

1. On the Tracks Page **1**, select a saved track from the Track List.
2. On the Track Preview Screen, select "DELETE" **2**.
3. Select "YES" to delete the selected track **4**.



3.3

NAVIGATION TOOLS

Waypoints

Waypoints

Waypoints are specific locations you have the receiver record. You can mark your current location as a waypoint or manually set coordinates for a waypoint anywhere in the world.

This GPS receiver can store up to 500 waypoints which can be recalled to show you the direction of travel to the individual point or in a series of points or route navigation. See "Routes," page 63 for details and instructions.

To assist in your navigation, your GPS receiver is already programmed with locations of hundreds of worldwide cities; U.S. state, Canadian provincial and European country boundaries; and U.S. interstate freeways, highways and exits. With optional computer software, interface cable and SD Memory Card (needed for map downloading), you can access a computer mapping database to transfer in additional mapping information that includes points of interest, local roads and streets, intersections and addresses.

Find Screen



Search Option

Select "Search" to search through the Waypoints List alphabetically by name. Select an individual waypoint to navigate or GoTo that point, see that point on the Map Page in relationship to your current position or delete the individual point. See "Search the Waypoint List," page 36 for details and instructions.



Waypoint Options



New Waypoint Option

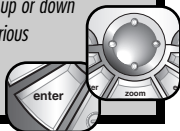
Select "New Waypt" (New Waypoint) to create a new waypoint. An editable default name and symbol will be assigned to your current location and elevation. The location and elevation can also be edited. See "Marking a New Waypoint," page 35 for details and instructions.

Find Screen and Selecting Options

There are three ways to get to the Find Screen:

- by pressing the FIND button
- by inserting a point into a route (see “Editing a Route,” page 67)
- by setting a proximity alert to a point (see “Proximity Settings,” page 79)

Press on the ROCKER PAD to scroll up or down through a screen or to highlight various options. Press the ENTER button to select an option.



Sort Options

Choose from the following Sort Options to sort the Waypoints List. See “Sort the Waypoint List,” page 37 for details and instructions.

Find Screen



Waypoint Options



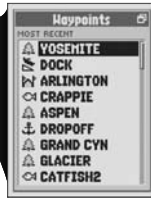
Nearest

Select “Nearest” to sort the Waypoints List by the nearest point to your current location. Select an individual waypoint to navigate or GoTo that point, see that point on the Map Page in relationship to your current position or delete the individual point.



Symbol


Select “Symbol” to sort the Waypoints List by common symbol. Points with the same symbol will be sorted alphabetically by name. Select an individual waypoint to navigate or GoTo that point, see that point on the Map Page in relationship to your current position or delete the individual point.

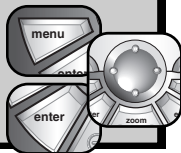


Most Recent

Select “Most Recent” to sort the Waypoints List by most recently saved points. Select an individual waypoint to navigate or GoTo that point, see that point on the Map Page in relationship to your current position or delete the individual point.

Selecting Menu and Options

Press on the **ROCKER PAD** to scroll up or down through a screen or to highlight various options. Press the **ENTER** button to select an option. From the **Waypoints Screen**, when you see the menu icon  press the **MENU** button to display the available menu options.



Waypoints List



Individual Waypoint Options

Select any saved waypoint on a Waypoints List to “GOTO” or navigate to that waypoint, to see that waypoint on the “MAP” in relationship to your current position or to “DELETE” that individual waypoint. See “*Saved Waypoint Options*,” page 36 for details and instructions.

Menu Options

From a Waypoints List, press the **MENU** button to access the Waypoints Screen Menu Options.

Waypoints List



New Waypoint

Select “New Waypt” (New Waypoint) to create a new waypoint. An editable default name and symbol will be assigned to your current location and elevation. The location and elevation can also be edited. See “*Marking a New Waypoint*,” page 35 for details and instructions.



Menu Options



Delete All Waypoints

Select “Delete All Waypts” (Delete All Waypoints) to delete all saved waypoints. Select “YES” to delete all saved waypoints. Select “NO” to maintain all currently saved waypoints. See “*Deleting a Select or All Waypoints*,” page 38 for details and instructions.

New Waypoint Option

A waypoint can be created new or from other points that are preprogrammed in the receiver (such as cities or exits) or that are downloaded from a computer (such as POIs or intersections.) The following instructions explain how to create a new waypoint through the Find Screen using or editing your current location.

Waypoint Shortcut: To mark a new waypoint using current location, press and hold the ENTER button for 2 seconds. A confirmation window will pop up.

To mark a new waypoint:

1. On the Find Screen **1**, select "WAYPOINTS."
2. On the Waypoints Options Menu, select "New Waypoint" **2**.
3. A New Waypoint Screen will appear **3**. Choose from the following:
 - Edit the default name, default symbol, current location or current elevation (see "Editing or Entering Text and Symbols," page 25.) Accept the changes by selecting "SAVE."
 - Accept the default name and symbol and current location and elevation by selecting "SAVE."

NOTE: Elevation does not need to be entered to save your new waypoint.

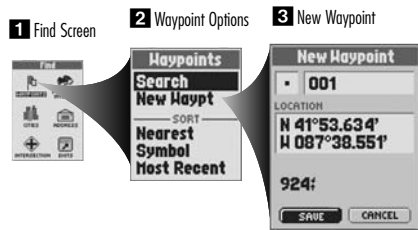
To save a city, POI, address, intersection or exit as a waypoint, see their respective instructions.



Getting to the Find Screen

There are three ways to get to the Find Screen:

- by pressing the FIND button
- by inserting a point into a route (see "Editing a Route," page 67)
- by setting a proximity alert to a point (see "Proximity Settings," page 79)

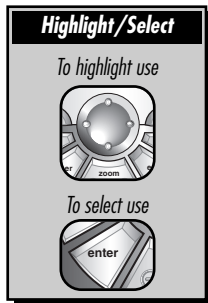


Saved Waypoints Options

Once you have saved one or more waypoints, you can search or sort the Waypoint List to use individual waypoints for navigation or a GoTo, see an individual waypoint on the Map Page in relationship to your current location or delete an individual or all waypoints.

To search the Waypoint List for a select point:

1. On the Find Screen **1**, select "WAYPOINTS."
 2. On the Waypoints Options Menu, select "Search" **2**.
 3. Select the "SEARCH" field.
 4. Press left or right on the ROCKER PAD to highlight the first space in the line in the search field **3**.
 5. Press up or down on the ROCKER PAD to scroll through the available characters. Press left or right on the ROCKER PAD to accept the character and move to the next space or character. The next character is highlighted. A list of available data starting with that new character will appear below the search field.
- Repeat steps 4 through 5 to change the next character if desired. Press left or right on the ROCKER PAD to skip characters you do not want to change. The list of available data will update with each new character.
6. Press the ENTER button to accept the current data in the search field **4**.
 7. Choose from the following:
 - Press the ENTER button to accept the current highlighted data on the list.
 - Scroll to the data you are searching for and press the ENTER button to accept the highlighted data on the list.
 8. Continue your previous activities.



1 Find Screen



2 Waypoint Options

Getting to the Find Screen

There are three ways to get to the Find Screen:

- by pressing the FIND button
- by inserting a point into a route (see "Editing a Route," page 67)
- by setting a proximity alert to a point (see "Proximity Settings," page 79)

3 Highlight First Space



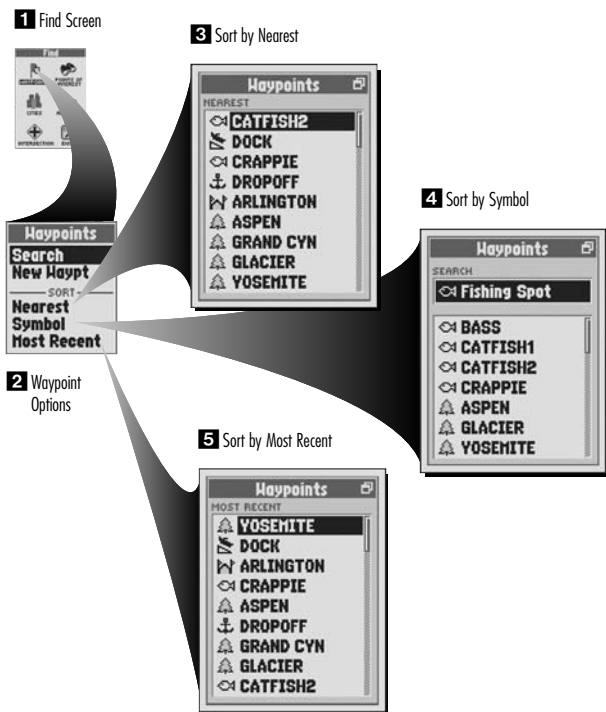
4 Select a Waypoint



To sort the Waypoint List for a select point by nearest point to your current location, by common symbol or by most recently saved point:

1. On the Find Screen **1**, select "WAYPOINTS."
2. Choose from the following:
 - On the Waypoints Options Menu **2**, select "Nearest" to sort the Waypoints List by the nearest point to your current location **3**.
 - On the Waypoints Options Menu **2**, select "Symbol" to sort the Waypoints List by common symbol. Points with the same symbol will be sorted alphabetically by name **4**.
 - On the Waypoints Options Menu **2**, select "Most Recent" to sort the Waypoints List by most recently saved points **5**.
3. Select a point.
4. Continue your previous activities.

continued



To navigate or GoTo a select point:

1. After using the Search or Sort Options to organize the Waypoints List (see "Search the Waypoint List," page 36 or "Sort the Waypoint List," page 37), select a waypoint.
2. On the Waypoint Details Screen **1**, select "GOTO." This will jump you to the Map Page and show you the straight-line path between your current position and your selected point **2**

To see a select waypoint on the Map Page in relation to your current location

1. After using the Search or Sort Options to organize the Waypoints List (see "Search the Waypoint List," page 36 or "Sort the Waypoint List," page 37), select a waypoint.
2. On the Waypoint Details Screen **1**, select "MAP." This will jump you to the Map Page and show you the relationship between your current position and your selected point **3**.


Deleting a Select or All Waypoints

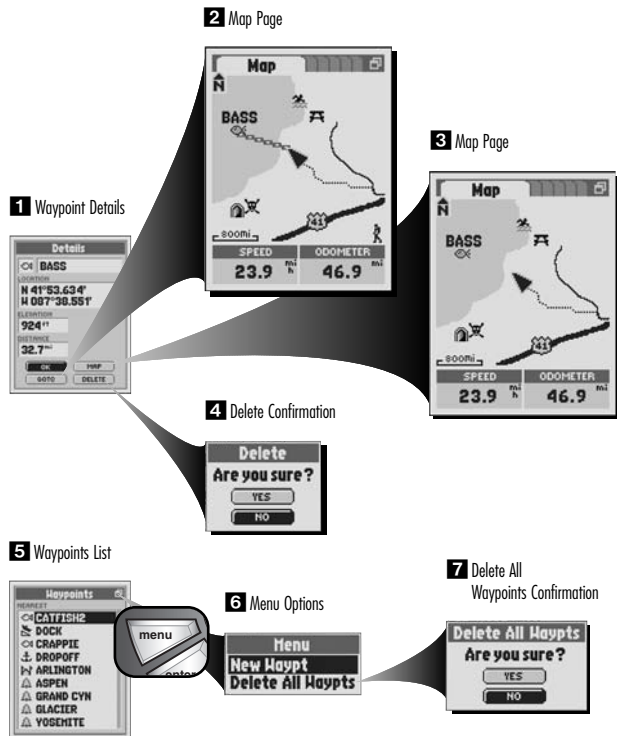
To delete a select point:

1. After using the Search or Sort Options to organize the Waypoints List (see "Search the Waypoint List," page 36 or "Sort the Waypoint List," page 37), select a waypoint.
2. On the Waypoint Details Screen **1**, select "DELETE."
3. Select "YES" to delete the selected waypoint **4**.

NOTE: Once a waypoint has been deleted, it cannot be retrieved again.

To delete all waypoints:

1. On the Waypoints Screen **5** when you see the menu icon  press the MENU button.
2. From the Waypoints Menu **6**, select "Delete All Waypt" (Delete All Waypoints.)
3. Select "YES" to delete all saved waypoints **7**.



3.4 NAVIGATION TOOLS

Cities

Cities

Already stored in your GPS receiver are coordinates for hundreds of cities throughout the world. You can have the receiver show you the direction of travel to an individual city or select the city as a point to be used to navigate along a series of points in a route.

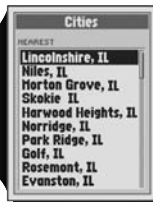
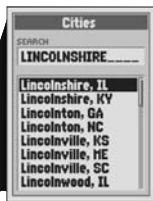
A city is much larger than the precise location indicated by the coordinates stored in your GPS receiver. The coordinates assigned to a city correspond to a location somewhere within the city's limits. These coordinates are intended only for navigation to the city, and not for finding a specific location such as the downtown, commercial area or geographic center. A waypoint or point of interest can be used for more precise navigation within a city.

To assist in your navigation, your GPS receiver is already programmed with locations of hundreds of worldwide cities; U.S. state, Canadian provincial and European country boundaries; and U.S. interstate freeways, highways and exits. With optional computer software, interface cable and SD Memory Card (needed for map downloading), you can access a computer mapping database to transfer in additional mapping information that includes points of interest, local roads and streets, intersections and addresses.

Find Screen



Cities Options



Search Options

Select "Search" to search through the Cities List alphabetically by name. Select an individual city to see details including name, state, postal code, country and distance from your current location and to navigate or GoTo that point or see that point on the Map Page in relationship to your current position. See "Search the Cities List," page 41 for details and instructions.

Sort Options

Choose from the following Sort Options to sort the Cities List. See "Sort the Cities List," page 42 for details and instructions.

Nearest

Select "Nearest" to sort the Cities List by the nearest point to your current location. Select an individual city to see details including name, state, postal code, country and distance from your current location and to navigate or GoTo that point or see that point on the Map Page in relationship to your current position.

Last Selected


Select "Last Selected" to sort the Cities List by most recently selected city. Select an individual city to see details including name, state, postal code, country and distance from your current location and to navigate or GoTo that point or see that point on the Map Page in relationship to your current position.

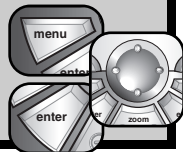
Find Screen and Selecting Options

There are three ways to get to the Find Screen:

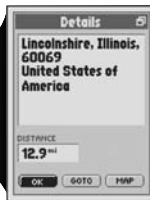
- by pressing the FIND button
- by inserting a point into a route (see “Editing a Route,” page 67)
- by setting a proximity alert to a point (see “Proximity Settings,” page 79)



Press on the ROCKER PAD to scroll up or down through a screen or to highlight various options. Press the ENTER button to select an option. From the City Details Screen, when you see the menu icon  press the MENU button to display the available menu options.



Cities List



City Details Options

Select any city on a City List to “GOTO” or navigate to that city or to see that city on the “MAP” in relationship to your current position. See “Stored Cities Options,” page 41 for details and instructions.

Menu Options

From the Cities Details Screen, press the MENU button to access the Cities Details Menu Options.

City Details



Save as Waypoint

Select “Save as Waypoint” to save the city as a waypoint. An editable default name and symbol will be assigned to the city’s location and elevation. The location and elevation can also be edited. See “Saving as a Waypoint,” page 43 for details and instructions



Menu Option

Stored Cities Options

Already stored in your GPS receiver are coordinates for hundreds of cities throughout the world. You can search or sort the Cities List to use individual cities for navigation or a GoTo, see an individual city on the Map Page in relationship to your current location or save a city as a waypoint.

NOTE: A city is much larger than the precise location indicated by the coordinates stored in your GPS receiver. The coordinates assigned to a city correspond to a location somewhere within the city's limits. These coordinates are intended only for navigation to the city, and not for finding a specific location such as the downtown, commercial area or geographic center. A waypoint or point of interest can be used for more precise navigation within a city.

To search the Cities List for a select city:

1. On the Find Screen **1**, select "CITIES."
2. On the Cities Options Menu **2**, select "Search."
3. Select the "SEARCH" field.
4. Press left or right on the ROCKER PAD to highlight the first space in the line in the search field **3**.
5. Press up or down on the ROCKER PAD to scroll through the available characters. Press left or right on the ROCKER PAD to accept the character and move to the next space or character. The next character is highlighted. A list of available data starting with that new character will appear below the search field.

Repeat steps 4 through 5 to change the next character if desired. Press left or right on the ROCKER PAD to skip characters you do not want to change. The list of available data will update with each new character.


6. Press the ENTER button to accept the current data in the search field **4**.



Getting to the Find Screen

There are three ways to get to the Find Screen:

- by pressing the FIND button
- by inserting a point into a route (see "Editing a Route," page 67)
- by setting a proximity alert to a point (see "Proximity Settings," page 79)

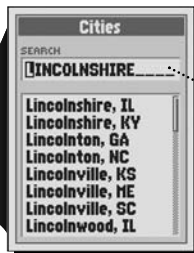


1 Find Screen

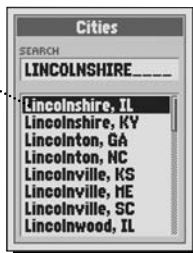


2 Cities Options

3 Select by Name



4 Select a City



continued

7. Choose from the following:

- Press the ENTER button to accept the current highlighted data on the list.
- Scroll to the data you are searching for and press the ENTER button to accept the highlighted data on the list.

8. Continue your previous activities.

To sort the Cities List for a select city by the nearest to your current location or by the city you last selected:

1. On the Find Screen **1**, select "CITIES."

2. Choose from the following:

- On the Cities Options Menu **2**, select "Nearest" to sort the Cities List by the nearest city to your current location **3**.
- On the Cities Options Menu **2**, select "Last Selected" to sort the Cities List by most recently selected city **4**.

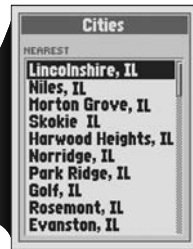
3. Select a city.

4. Continue your previous activities.

1 Find Screen



3 Sort by Nearest



4 Sort by Last Selected



2 Cities Options




To navigate or GoTo a select city:

1. After using the Search or Sort Options to organize the Cities List (see "Search the Cities List," page 41 or "Sort the Cities List," page 42), select a city.
2. On the City Details Screen **1**, select "GOTO." This will jump you to the Map Page and show you the straight-line path between your current position and your selected city **2**.

To see a select city on the Map Page in relation to your current location:

1. After using the Search or Sort Options to organize the Cities List (see "Search the Cities List," page 41 or "Sort the Cities List," page 42), select a city.
2. On the City Details Screen **1**, select "MAP." This will jump you to the Map Page and show you the relationship between your current position and your selected city **3**.

To save the city as a waypoint:

1. After using the Search or Sort Options to organize the Cities List (see "Search the Cities List," page 41 or "Sort the Cities List," page 42), select a city.
2. On the City Details Screen **4** when you see the menu icon , press the MENU button.
3. Select "Save as Waypoint" **5**.
4. A New Waypoint Screen will appear. Choose from the following **6**:
 - Edit the default name, default symbol, current location or current elevation (see "Editing or Entering Text and Symbols," page 25.) Accept the changes by selecting "SAVE."
 - Accept the default name, default symbol, current location and current elevation by selecting "SAVE."

NOTE: Elevation does not need to be entered to save a city as a waypoint.

2 Map Page



3 Map Page



1 City Details



4 City Details



5 Menu Option



6 New Waypoint



3.5

NAVIGATION TOOLS

Points of Interest

Points of Interest

With optional computer software and interface cable, you can access a computer mapping database to download hundreds of points of interest. POIs will be directly downloaded into categories and subcategories already programmed in the receiver. Within these categories and subcategories, you can have the receiver show you the direction of travel to an individual POI or use the POI as a point to be used to navigate along a series of points in a route.

To assist in your navigation, your GPS receiver is already programmed with locations of hundreds of worldwide cities; U.S. state, Canadian provincial and European country boundaries; and U.S. interstate freeways, highways and exits. With optional computer software, interface cable and SD Memory Card (needed for map downloading), you can access a computer mapping database to transfer in additional mapping information that includes points of interest, local roads and streets, intersections and addresses.

Find Screen



POI Options



Points of Interest Categories

POI Subcategories


Search Option

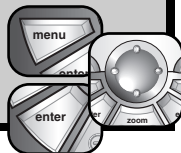
Select the category and, when offered, subcategory for the type of POI for which you are searching. Select "Search" to search through the POI List alphabetically by name. Select an individual POI to see details including name, address, phone number and distance from your current location and to navigate or GoTo that point or see that point on the Map Page in relationship to your current position. See "Search the POI List," page 47 for details and instructions.

Find Screen and Selecting Options

There are three ways to get to the Find Screen:

- by pressing the FIND button
- by inserting a point into a route (see “Editing a Route,” page 67)
- by setting a proximity alert to a point (see “Proximity Settings,” page 79)

Press on the ROCKER PAD to scroll up or down through a screen or to highlight various options. Press the ENTER button to select an option. From the Points of Interest Details Screen, when you see the menu icon  press the MENU button to display the available menu options.



Sort Options

Choose from the following Sort Options to sort the POI List. See “Sort the POI List,” page 48 for details and instructions.

Find Screen



POI Options



Points of Interest Categories



POI Subcategories



Nearest

Select the category and, when offered, subcategory for the type of POI for which you are searching. Select “Nearest” to sort the POI List by the nearest point to your current location. Select an individual POI to see details including name, address, phone number and distance from your current location and to navigate or GoTo that point or see that point on the Map Page in relationship to your current position.



Last Selected

Select the category and, when offered, subcategory for the type of POI for which you are searching. Select “Last Selected” to sort the POI List by most recently selected POI. Select an individual POI to see details including name, address, phone number and distance from your current location and to navigate or GoTo that point or see that point on the Map Page in relationship to your current position.

Points of Interest List

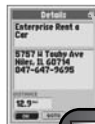
**Points of Interest Options**

Select any Point of Interest on a Point of Interest List to “GOTO” or navigate to that POI or to see that POI on the “MAP” in relationship to your current position. See “Downloaded Points of Interest Options,” page 47 for details and instructions.

Menu Options

From the POI Details Screen, press the MENU button to access the POI Details Menu Options.

Point of Interest Details

**Save as Waypoint**

Select “Save as Waypoint” to save the POI as a waypoint. An editable default name and symbol will be assigned to the POI’s location and elevation. The location and elevation can also be edited. See “Save as a Waypoint,” page 49 for details and instructions.



Menu Option

Downloaded Points of Interest Options

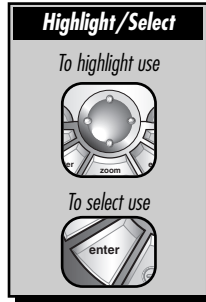
Once you have downloaded one or more points of interest, you can search or sort the POI List to use individual POIs for navigation or a GoTo, see an individual POI on the Map Page in relationship to your current location or save a POI as a waypoint.

To search the POI List for a select POI:

1. On the Find Screen **1**, select "POINTS OF INTEREST."
2. On the Points of Interest Category List **2**, select type of POI for which you are searching.
3. If an option, select a subcategory for the type of POI for which you are searching.
4. On the Points of Interest Options Menu, select "Search" **3**.
5. Select the "SEARCH" field.
6. Press left or right on the ROCKER PAD to highlight the first space in the line in the search field **4**.
7. Press up or down on the ROCKER PAD to scroll through the available characters. Press left or right on the ROCKER PAD to accept the character and move to the next space or character. The next character is highlighted. A list of available data starting with that new character will appear below the search field.

Repeat steps 6 through 7 to change the next character if desired. Press left or right on the ROCKER PAD to skip characters you do not want to change. The list of available data will update with each new character.

8. Press the ENTER button to accept the current data in the search field **5**.
9. Choose from the following:
 - Press the ENTER button to accept the current highlighted data on the list.
 - Scroll to the data you are searching for and press the ENTER button to accept the highlighted data on the list.
10. Continue your previous activities.

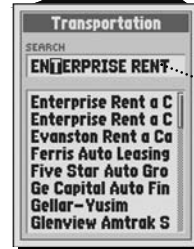


1 Find Screen

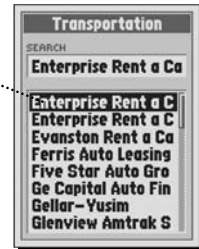


2 Points of Interest Categories and Subcategories

3 POI Options



4 Enter Text



5 Select POI

Getting to the Find Screen

There are three ways to get to the Find Screen:

- by pressing the FIND button
- by inserting a point into a route (see "Editing a Route," page 67)
- by setting a proximity alert to a point (see "Proximity Settings," page 79)



To sort the POI List for a select POI by nearest to your current location or by the POI you last selected:

1. On the Find Screen **1**, select "POINTS OF INTEREST."
2. On the Points of Interest Category List, select type of POI for which you are searching **2**.
3. If an option, select a subcategory for the type of POI for which you are searching **3**.
4. Choose from the following:
 - On the POI Options Menu, select "Nearest" to sort the POI List by the nearest POI to your current location **4**.
 - On the POI Options Menu, select "Last Selected" to sort the POI List by most recently selected POI **5**.
5. Select a POI.
6. Continue your previous activities.

1 Find Screen



4 Sort by Nearest



3 POI Options



5 Sort by Last Selected



2 Points of Interest Categories and Subcategories




To navigate or GoTo a select POI:

1. After using the Search or Sort Options to organize the Points of Interest List (see "Search the POI List," page 47 or "Sort the POI List," page 48), select a POI.
2. On the POI Details Screen **1**, select "GOTO." This will jump you to the Map Page and show you the straight-line path between your current position and your selected POI **2**.

To see a select POI on the Map Page in relation to your current location:

1. After using the Search or Sort Options to organize the Points of Interest List (see "Search the POI List," page 47 or "Sort the POI List," page 48), select a POI.
2. On the POI Details Screen, select "MAP" **1**. This will jump you to the Map Page and show you the relationship between your current position and your selected POI **3**.

To save the POI as a waypoint:

1. After using the Search or Sort Options to organize the Points of Interest List (see "Search the POI List," page 47 or "Sort the POI List," page 48), select a POI.
2. On the POI Details Screen **4** when you see the menu icon , press the MENU button.
3. Select "Save as Waypoint" **5**.
4. A New Waypoint Screen will appear. Choose from the following **6**:
 - Edit the default name, default symbol, current location or current elevation (see "Editing or Entering Text and Symbols," page 25.) Accept the changes by selecting "SAVE."
 - Accept the default name, default symbol, current location and current elevation by selecting "SAVE."

NOTE: Elevation does not need to be entered to save a POI as a waypoint.

2 Map Page



3 Map Page



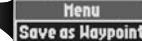
1 POI Details



4 POI Details



5 Menu Option



6 New Waypoint



3.6

NAVIGATION TOOLS

Addresses

Addresses

With optional computer software and interface cable, you can access a computer mapping database to download street level maps. With additional maps downloaded, you can have the receiver show you the direction of travel to an individual address or use the address as a point to be used to navigate along a series of points in a route.

To assist in your navigation, your GPS receiver is already programmed with locations of hundreds of worldwide cities; U.S. state, Canadian provincial and European country boundaries; and U.S. interstate freeways, highways and exits. With optional computer software, interface cable and SD Memory Card (needed for map downloading), you can access a computer mapping database to transfer in additional mapping information that includes points of interest, local roads and streets, intersections and addresses.

Find Screen



Matches List

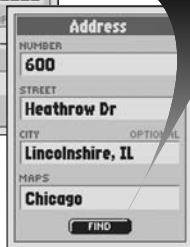


Find Options

Select the "NUMBER" field to enter the street number. Select the "STREET" field to enter the street name. If necessary, select the "CITY" field to enter the city. If necessary, select the "MAPS" field to change the current map database. Select "FIND." Select an address from the Matches List to see details including address and distance from your current location and to navigate or GoTo that address or see that address on the Map Page in relationship to your current position. See "Find an Address," page 52 for details and instructions.




Address Screen

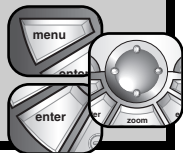


Find Screen and Selecting Options

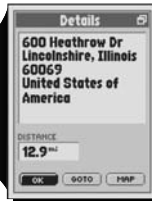
There are three ways to get to the Find Screen:

- by pressing the **FIND** button
- by inserting a point into a route (see “Editing a Route,” page 67)
- by setting a proximity alert to a point (see “Proximity Settings,” page 79)

Press on the **ROCKER PAD** to scroll up or down through a screen or to highlight various options. Press the **ENTER** button to select an option. From the Address Details Screen, when you see the menu icon  press the **MENU** button to display the available menu options.



Matches List



Address Options

Select any address on the Matches List to “GOTO” or navigate to that address or to see that address on the “MAP” in relationship to your current position. See “Address Options,” page 52 for details and instructions.

Menu Options

From the Address Details Screen, press the MENU button to access the Address Details Menu Options.

Address Details



Save as Waypoint

Select “Save as Waypoint” to save the address as a waypoint. An editable default name and symbol will be assigned to the address’ location and elevation. The location and elevation can also be edited. See “Saving as a Waypoint,” page 53 for details and instructions.



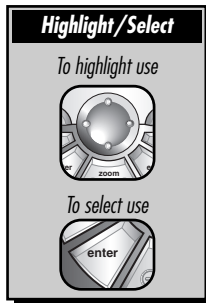
Menu Option

Address Options

Once you have downloaded street level map information, you can search the address/intersection data by the street number, street and/or city to use individual addresses for navigation or a GoTo, see an individual address on the Map Page in relationship to your current location or save an address as a waypoint.

To find an address by entering the street number, street and/or city:

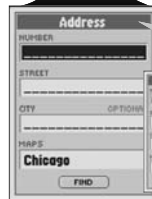
1. On the Find Screen **1**, select "ADDRESS."
2. a) On the Address Screen **2**, select the "NUMBER" field.
b) Enter the street number **3** (see "Editing or Entering Text and Symbols," page 25.)
3. a) On the Address Screen **2**, select the "STREET" field.
b) On the Street Screen, select the "SEARCH" field **3**.
c) Enter the street name (see "Editing or Entering Text and Symbols," page 25.)
4. a) If necessary, on the Address Screen **2**, select the "CITY" field.
b) On the Cities Screen, select the "SEARCH" field **3**.
c) Enter the city (see "Editing or Entering Text and Symbols," page 25.)
5. a) If necessary, on the Address Screen **2**, select the "MAPS" field.
b) Select a map **3**.
6. Select "FIND" **4**.
7. Select an address from the Matches List **5**.
8. Continue your previous activities.



1 Find Screen



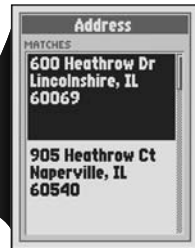
2 Address Screen



3 Enter or Select Information



4 Select Find



5 Matches List

Getting to the Find Screen

There are three ways to get to the Find Screen:

- by pressing the FIND button
- by inserting a point into a route (see "Editing a Route," page 67)
- by setting a proximity alert to a point (see "Proximity Settings," page 79)




To navigate or GoTo an address:

1. After using the Find Option to organize the Address Matches List (see "Find an Address," page 52), select an address.
2. On the Address Details Screen **1** select "GOTO." This will jump you to the Map Page and show you the straight-line path between your current position and your selected address **2**.

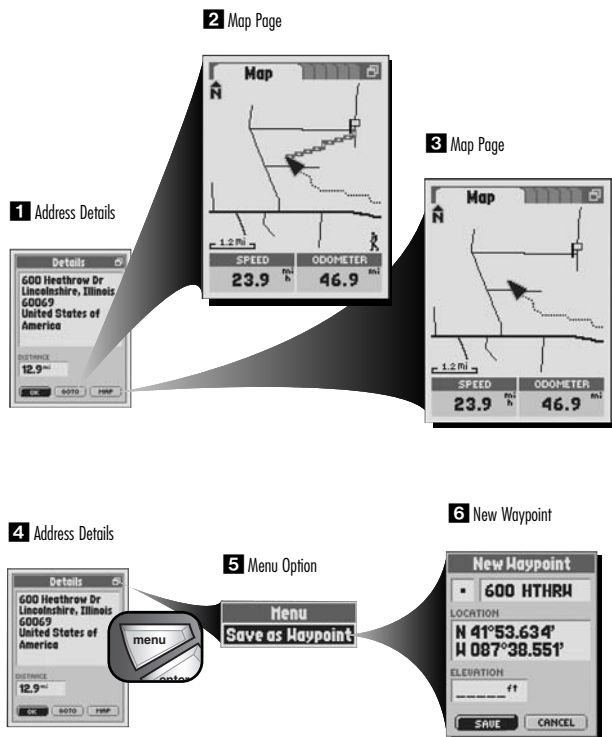
To see an address on the Map Page in relation to your current location:

1. After using the Find Option to organize the Address Matches List (see "Find an Address," page 52), select an address.
2. On the Address Details Screen **1**, select "MAP." This will jump you to the Map Page and show you the relationship between your current position and your selected address **3**.

To save an address as a waypoint:

1. After using the Find Option to organize the Address Matches List (see "Find an Address," page 52), select an address.
2. On the Address Details Screen **4** when you see the menu icon , press the MENU button.
3. Select "Save as Waypoint" **5**.
4. A New Waypoint Screen will appear **6**. Choose from the following:
 - Edit the default name, default symbol, current location or current elevation (see "Editing or Entering Text and Symbols," page 25.) Accept the changes by selecting "SAVE."
 - Accept the default name, default symbol, current location and current elevation by selecting "SAVE."

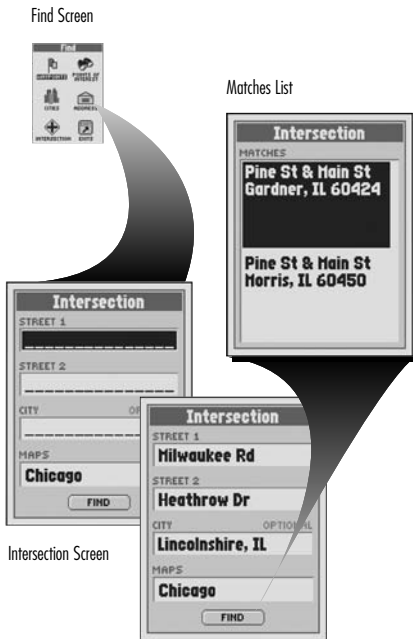
NOTE: Elevation does not need to be entered to save an address as a waypoint.



Intersections

With optional computer software and interface cable, you can access a computer mapping database to download street level maps. With additional maps downloaded, you can have the receiver show you the direction of travel to an individual intersection or use the intersection as a point to be used to navigate along a series of points in a route.

To assist in your navigation, your GPS receiver is already programmed with locations of hundreds of worldwide cities; U.S. state, Canadian provincial and European country boundaries; and U.S. interstate freeways, highways and exits. With optional computer software, interface cable and SD Memory Card (needed for map downloading), you can access a computer mapping database to transfer in additional mapping information that includes points of interest, local roads and streets, intersections and addresses.







Find Options

Select the "STREET 1" field to enter a street name. Select the "STREET 2" field to enter a street name. If necessary, select the "CITY" field to enter the city. If necessary, select the "MAPS" field to change the current map database. Select "FIND." Select an intersection from the Matches List to see details including street names and distance from your current location and to navigate or GoTo that intersection or see that intersection on the Map Page in relationship to your current position. See "Find an Intersection," page 56 for details and instructions.

Find Screen and Selecting Options

There are three ways to get to the Find Screen:

- by pressing the FIND button 
- by inserting a point into a route
- by setting a proximity alert to a point (see "Proximity Settings," page 79)

Press on the ROCKER PAD to scroll up or down through a screen or to highlight various options. Press the ENTER button to select an option. From the Intersection Details Screen, when you see the menu icon  press the MENU button to display the available menu options.  

Matches List



Intersection Options

Select any intersection on the Matches List to "GOTO" or navigate to that intersection or to see that intersection on the "MAP" in relationship to your current position. See "Intersection Options," page 56 for details and instructions.

Menu Options

From the Intersection Details Screen, press the MENU button to access Intersections Details Menu Options.

Intersection Details



Save as Waypoint

Select "Save as Waypoint" to save the intersection as a waypoint. An editable default name and symbol will be assigned to the intersection's location and elevation. The location and elevation can also be edited. See "Saving as a Waypoint," page 57 for details and instructions.

Menu

Save as Waypoint

Menu Option

Intersection Options

Once you have downloaded street level map information, you can search the address/intersection data by street, city and/or postal code to use an individual intersection for navigation or a GoTo, see an individual intersection on the Map Page in relationship to your current location or save an intersection as a waypoint.

To find an intersection by entering the street number, street and/or city:

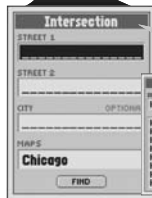
1. On the Find Screen **1**, select "INTERSECTION."
2. a) On the Intersection Screen **2**, select the "STREET 1" field.
b) On the Street Screen, select the "SEARCH" field.
c) Enter the street name **3** (see "Editing or Entering Text and Symbols," page 25.)
3. a) On the Intersection Screen **2**, select the "STREET 2" field.
b) On the Street Screen, select the "SEARCH" field.
c) Enter the street name **3** (see "Editing or Entering Text and Symbols," page 25.)
4. a) If necessary, on the Intersection Screen **2**, select the "CITY" field.
b) On the Cities Screen, select the "SEARCH" field.
c) Enter the city **3** (see "Editing or Entering Text and Symbols," page 25.)
5. a) If necessary, on the Intersection Screen **2**, select the "MAPS" field.
b) Select a map **3**.
6. Select "FIND" **4**.
7. Select an intersection from the Matches List **5**.
8. Continue your previous activities.



1 Find Screen



2 Intersection Screen



3 Enter or Select Information



4 Select Find



5 Matches List



Getting to the Find Screen

There are three ways to get to the Find Screen:

- by pressing the FIND button
- by inserting a point into a route (see "Editing a Route," page 67)
- by setting a proximity alert to a point (see "Proximity Settings," page 79)




To navigate or GoTo an intersection:

1. After using the Find Option to organize the Intersection Matches List (see "Find an Intersection," page 56), select an intersection.
2. On the Intersection Details Screen **1** select "GOTO." This will jump you to the Map Page and show you the straight-line path between your current position and your selected intersection **2**.

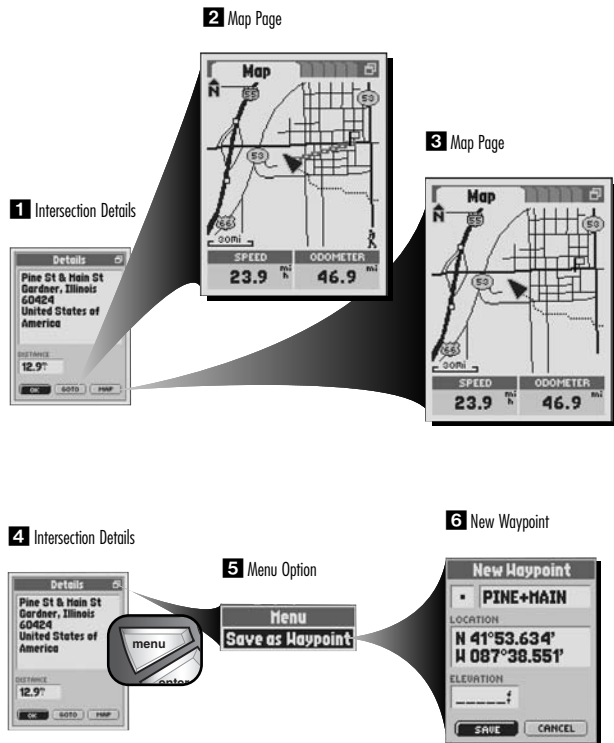
To see an intersection on the Map Page in relation to your current location:

1. After using the Find Option to organize the Intersection Matches List (see "Find an Intersection," page 56), select an intersection.
2. On the Intersection Details Screen **1**, select "MAP." This will jump you to the Map Page and show you the relationship between your current position and your selected intersection **3**.

To save an intersection as a waypoint:

1. After using the Find Option to organize the Intersection Matches List (see "Find an Intersection," page 56), select an intersection.
2. On the Intersection Details Screen **4** when you see the menu icon , press the MENU button.
3. Select "Save as Waypoint" **5**.
4. A New Waypoint Screen will appear **6**. Choose from the following:
 - Edit the default name, default symbol, current location or current elevation (see "Editing or Entering Text and Symbols," page 25.) Accept the changes by selecting "SAVE."
 - Accept the default name, default symbol, current location and current elevation by selecting "SAVE."

NOTE: Elevation does not need to be entered to save an intersection as a waypoint.



3.8

NAVIGATION TOOLS

Exits

Exits

Already stored in your receiver are coordinates and details for hundreds of exits across the U.S. Organized into categories, you can have the receiver show you the direction of travel to an individual exit or use the exit as a point to be used to navigate along a series of points in a route.

To assist in your navigation, your GPS receiver is already programmed with locations of hundreds of worldwide cities; U.S. state, Canadian provincial and European country boundaries; and U.S. interstate freeways, highways and exits. With optional computer software, interface cable and SD Memory Card (needed for map downloading), you can access a computer mapping database to transfer in additional mapping information that includes points of interest, local roads and streets, intersections and addresses.

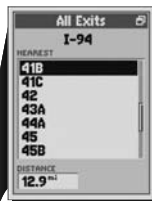
Find Screen



Menu Options

Exits List Menu Options

From the Exits List Screen, press the MENU button to access Exits List Menu Options.



Nearest Road

Select "Nearest Road" to sort the Exits List by exit nearest to your current location on the current nearest road. Select an exit from the Exits List to see details including available services and distance from your current location and to navigate or GoTo that exit or see that exit on the Map Page in relationship to your current position. See "Sort the Exit List," page 60 for details and instructions.




Select Road

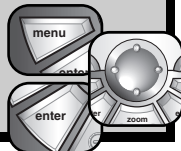
Select "Select Road" to sort the Exits List by exit nearest to your current location on a selected specific road. Select an exit from the Exits List to see details including available services and distance from your current location and to navigate or GoTo that exit or see that exit on the Map Page in relationship to your current position. See "Sort the Exit List," page 61 for details and instructions.

Find Screen and Selecting Options

There are three ways to get to the Find Screen:

- by pressing the FIND button
- by inserting a point into a route (see "Editing a Route," page 67)
- by setting a proximity alert to a point (see "Proximity Settings," page 79)

Press on the ROCKER PAD to scroll up or down through a screen or to highlight various options. Press the ENTER button to select an option. From the Exit Screen or Exit Details Screen Screen, when you see the menu icon  press the MENU button to display the available menu options.



Exits List



Exit Details Options

Select any exit on a Exit List to "GOTO" or navigate to that exit or to see that exit on the "MAP" in relationship to your current position. See "Exit Options," page 60 for details and instructions.

Exit Details Screen Menu Options

From the Exit Details Screen, press the MENU button to access Exits Detail Menu Options.

Exit Details



Save as Waypoint

Select "Save as Waypoint" to save the exit as a waypoint. An editable default name and symbol will be assigned to exit's location and elevation. The location and elevation can also be edited. See "Saving as a Waypoint," page 62 for details and instructions.



Menu Option

Exits Options


You can search the exit data by nearest road or a select road to use individual exits for navigation or a GoTo, see an individual exit on the Map Page in relationship to your current location or save an exit as a waypoint.

To sort the Exits List for nearest exits to your current location by the nearest road to your current location:

1. On the Find Screen **1**, select "EXITS."

2. On the Exits Categories List **2**, select the type of exit for which you are searching.

The current road the exits are on is displayed at the top of the screen. As you scroll through the Exits List the distance to that exit from your current location is displayed at the bottom of the screen.

3. On the Exits List **3** when you see the menu icon , press the MENU button.

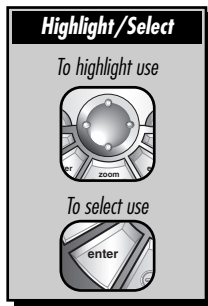
4. On the Exits Options Menu **4**, select "Nearest Road."

5. Exits will be sorted by nearest to your current location **5**. The road the exit is on is displayed at the top of the screen. Choose from the following:

- Press the ENTER button to accept the current highlighted exit on the list.
- Scroll to the exit you are searching for and press the ENTER button to accept the highlighted exit on the list.

On the Exits Details Screen, if available, the exit's services are displayed in the "SERVICES" field.

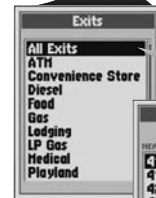
6. Continue your previous activities.



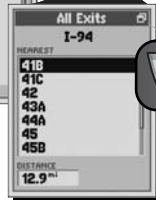
1 Find Screen



2 Exits Categories



3 Exits List



Getting to the Find Screen

There are three ways to get to the Find Screen:

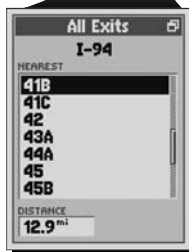
- by pressing the FIND button
- by inserting a point into a route (see "Editing a Route," page 67)
- by setting a proximity alert to a point (see "Proximity Settings," page 79)




4 Menu Options



5 Exits List

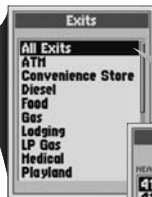


To sort the Exits List for nearest exits to your current location by a select specific road:

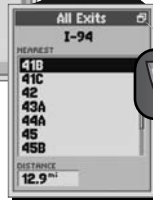
1. On the Find Screen **1**, select "EXITS."
 2. On the Exits Categories List **2**, select the type of exit for which you are searching.
The current road the exits are on is displayed at the top of the screen. As you scroll through the Exits List the distance to that exit from your current location is displayed at the bottom of the screen.
 3. On the Exits List **3** when you see the menu icon , press the MENU button.
 4. On the Exits Options Menu **4**, select "Select Road."
 5. Select the "SEARCH ROADS" field **5** and then use the ROCKER PAD to scroll and enter available characters. A list of available roads will appear below the search field. As you continue entering new characters, the list of available roads will update. Press the ENTER button to accept the current road in the search field **6**.
 6. Exits will be sorted by nearest to your current location on the selected road. The road the exit is on is displayed at the top of the screen. Choose from the following:
 - Press the ENTER button to accept the current highlighted exit on the list.
 - Scroll to the exit you are searching for and press the ENTER button to accept the highlighted exit on the list.
- On the Exits Details Screen, if available, the exit's services are displayed in the "SERVICES" field.
7. Continue your previous activities.

continued

1 Find Screen

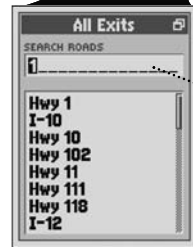


2 Exits Categories



3 Exits List

4 Menu Options



5 Highlight First Space



6 Select Road

To view an exit's services:

1. After sorting to organize the Exits List (see "Sort the Exits List," page 60), select an exit **1**.
2. Continue your previous activities.


To navigate or GoTo an exit:

1. After sorting to organize the Exits List (see "Sort the Exits List," page 60-61), select an exit.
2. On the Exits Details Screen **1**, select "GOTO." This will jump you to the Map Page and show you the straight-line path between your current position and your selected exit **2**.

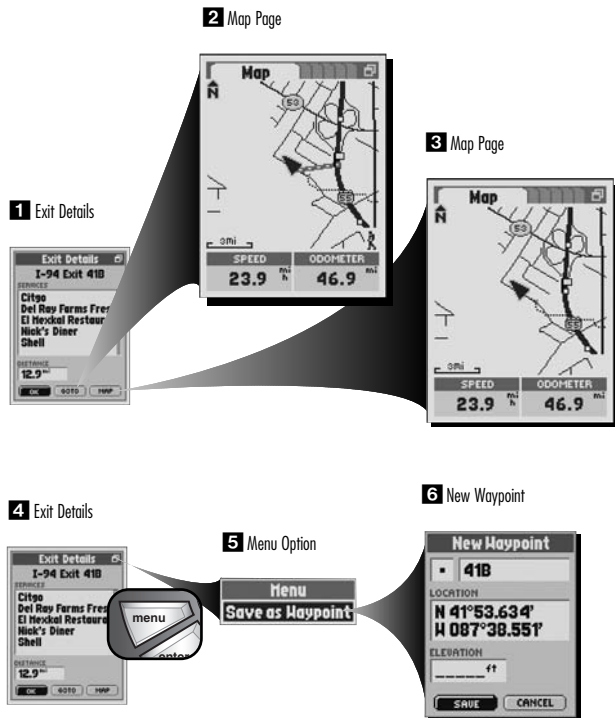
To see an exit or exit's service on the Map Page in relation to your current location:

1. After sorting to organize the Exits List (see "Sort the Exits List," page 60-61), select an exit.
2. On the Exits Details Screen **1**, select "MAP." This will jump you to the Map Page and show you the relationship between your current position and your selected exit **3**.

To save an exit or exit's service as a waypoint:

1. After sorting to organize the Exits List (see "Sort the Exits List," page 60-61), select an exit.
2. On the Exits Details Screen **4** when you see the menu icon , press the MENU button.
3. Select "Save as Waypoint" **5**.
4. A New Waypoint Screen will appear **6**. Choose from the following:
 - Edit the default name, default symbol, current location or current elevation (see "Editing or Entering Text or Symbols," page 25.) Accept the changes by selecting "SAVE."
 - Accept the default name, default symbol, current location and current elevation by selecting "SAVE."

NOTE: Elevation does not need to be entered to save an exit as a waypoint.



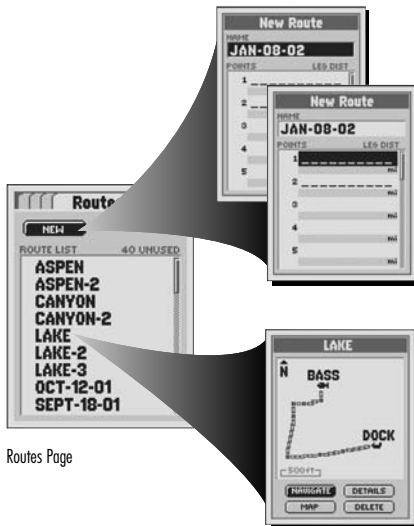
3.9 NAVIGATION TOOLS

Routes

Routes

A route is a series of points which you choose that can be used in forward or reverse navigation. You can create and store up to 50 separate routes. As many as 50 points (waypoints, cities, points of interest, addresses, intersections or exits) may be stored in each route. Once you have created a route, your GPS receiver will guide you in a straight line from point to point. As you reach each point, the receiver automatically begins navigating to the next one.

To assist in your navigation, your GPS receiver is already programmed with locations of hundreds of worldwide cities; U.S. state, Canadian provincial and European country boundaries; and U.S. interstate freeways, highways and exits. With optional computer software, interface cable and SD Memory Card (needed for map downloading), you can access a computer mapping database to transfer in additional mapping information that includes points of interest, local roads and streets, intersections and addresses.



Routes Page


New Route

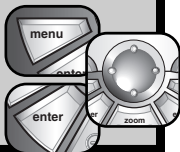
Select "NEW" to create a new series of points or a route. As an option, you can select the "NAME" field to edit the default name. Select the first blank row in the "POINTS" field to insert a point. Continue inserting points to create the new route. See "New Route Option," page 65 for details and instructions.

Saved Route Options

Select any saved route on the Route List to "NAVIGATE" through that route, to see that route on the "MAP," to see "DETAILS" of that selected route such as the name, points and distance to or from a point or to "DELETE" that individual route. See "Saved Route Options," page 66 for details and instructions.

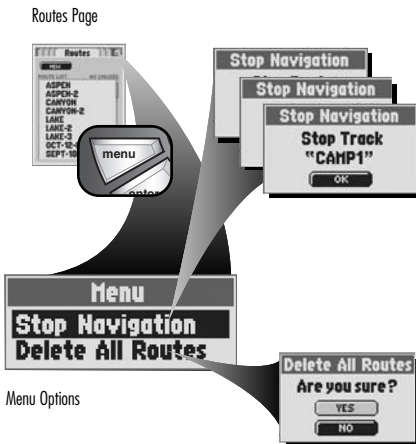
Selecting Menu and Options

From the Routes Page, when you see the menu icon  press the MENU button to display the available menu options. Press on the ROCKER PAD to scroll up or down through a screen or to highlight various options. Press the ENTER button to select an option.



Menu Options

From the Routes Page, press the MENU button to access Routes Page Menu Options.



Stop Navigation

Select "Stop Navigation" to stop your current type of navigation. One of three screens will appear, depending on the type of navigation currently in progress: "Stop GoTo," "Stop Route," or "Stop Track." Select "OK" to stop current navigation and return to the Routes Page. To return to the Routes Page without stopping navigation, press the ESCAPE button.

A route that is currently being navigated will have a flashing hiker icon  beside it.

Delete All Routes

Select "Delete All Routes" to delete all saved routes. Select "YES" to delete all saved routes. Select "NO" to maintain all current saved routes.

New Route Option

A route is created from up to 50 points (waypoints, cities, points of interest, addresses, intersections or exits.)

To create a new route:

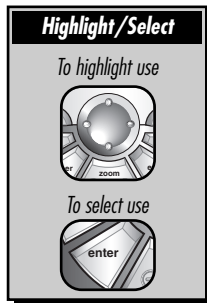
1. On the Routes Page **1**, select "NEW."
2. On the New Route Screen **2**, choose from the following:
 - accept the default name by scrolling to the next field.
 - rename the route (see "Editing or Entering Text or Symbols," page 25) and then scroll to the next field.
3. Select the first (or next when adding more points) blank line in the "POINTS" field **3**.
4. On the Edit Route Menu, select "Insert Point" **4**.
5. Using the Find Screen **5**, find and select the first point (waypoint, city, point of interest, address, intersection or exit) you want in the route (see "Waypoints," page 32; "Cities," page 39; "Points of Interest," page 44; "Addresses," page 50; "Intersections," page 54; "Exits," page 58.)

Repeat steps 3 through 5 adding up to 50 points in a sequence you want the route to follow.

6. Press the ESCAPE button or PAGE button to save the new route and return to the main Routes Page.

The distance between points in the route is displayed on the Route Details Screen in the Points Screen under Leg Distance.

See "Editing a Route," page 67, to insert or remove a point in the route.



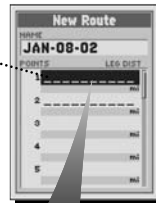
1 Routes Page



3 New Point



2 New Route



4 Edit Route Options



5 Find Screen

Saved Routes Options

Once you have created a route, you can navigate that route in forward or reverse, review details about a route such as name, points and distance to or from each point, insert or remove points, see a select route on the Map Page in relationship to your current location or delete the entire route.

To start navigation on a select route:

1. On the Routes Page **1**, select a route from the Route List.
2. On the Route Preview Screen **2**, select "NAVIGATE."
3. On the Start At Menu **3**, choose the point from which you want to start navigating.

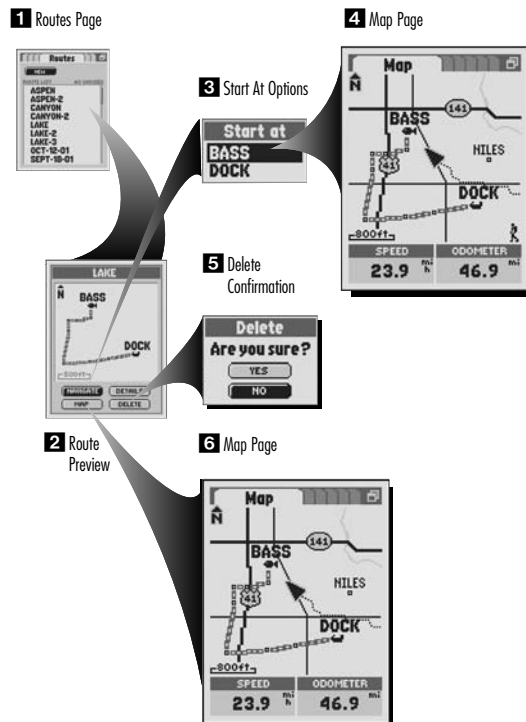
The Map Page **4** will appear with your selected route and your current location in relationship to that route.

To see a select route in the Map Page:

1. On the Routes Page **1**, select a route from the Route List.
2. On the Route Preview Screen **2**, select "MAP." This will jump you to the Map Page and show you the selected route and your current location in relationship to that route **5**.

To delete a select route:

1. On the Routes Page **1**, select a route from the Route List.
2. On the Route Preview Screen **2**, select "DELETE."
3. Select "YES" to delete the selected route **6**.



To see details including name, points and distance to or from each point:

1. On the Routes Page **1**, select a route from the Route List.
2. On the Route Preview Screen **2**, select "DETAILS."

The Route Details Screen will appear **3**. From this screen, you can edit the route (see "Editing a Route," below.)

Editing a Route:

To insert a point into a route:

1. On the Routes Page **1**, select a route from the Route List.
2. On the Route Preview Screen **2**, select "DETAILS."
3. On the Route Details Screen **3**, select the point that will come immediately before the one you want to add.
4. On the Edit Route Menu, select "Insert Point" **4**.
5. Using the Find Screen **5**, find and select the waypoint, city, point of interest, address, intersection or exit you want in the route (see "Waypoints," page 32; "Cities," page 39; "Points of Interest," page 44; "Addresses," page 50; "Intersections," page 54; "Exits," page 58.)

An updated Route Details Screen will appear.

To remove a point from a route:

1. On the Routes Page **1**, select a route from the Route List.
2. On the Route Preview Screen **2**, select "DETAILS."
3. On the Route Details Screen, select the point that you want to remove **3**.
4. On the Edit Route Menu, select "Remove Point" **4**.

An updated Route Details Screen will appear.

1 Routes Page



3 Route Details



4 Edit Route Options



2 Route Preview



5 Find Screen

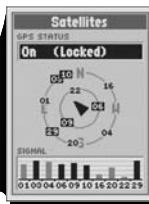
System Page

The System Page gives you various options for changing the system settings used by your GPS receiver. From this page you can turn GPS navigation on and off, and adjust the settings for the features such as display, sounds, time, compass, map, method of navigation, activate WAAS, change map datums, etc.

You can also turn on your GPS receiver's data port to enable data exchange with computer mapping software. Optional accessories, are required. See "Setting the Data Port," page 75.



System Page



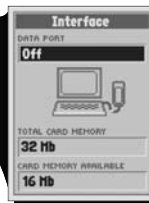
Satellites Options

To turn GPS navigation On or Off or to reset satellite acquisition, select "SATELLITES" from the System Page. Select "On" to access your receiver's navigational features. Select "Off" to disable receiver's navigational features. Select "Reset" to clear and reacquire the receiver's navigational features. (Turning GPS Status Off preserves the battery power.) See "Turning GPS Off and On," page 73 for details and instructions.



Display Options

To adjust the display and Backlight settings, select "DISPLAY." Select "BACKLIGHT TIME OUT" to change the length of time the backlight remains on. Select "CONTRAST" to increase or decrease the screen contrast by pressing left or right on the ROCKER PAD. See "Adjusting the Backlight and Contrast," page 74 for details and instructions.

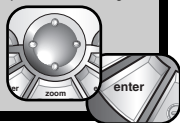


Interface Options

Select "INTERFACE" and then select "DATA PORT" to set the data port settings to transfer information from a computer-based mapping program. Select "On" to activate the data port. Select "Off" to deactivate the data port. Select "NMEA" to activate the data port with a direct connection to a computer running a GPS-compatible software resulting in a real-time display of your position on the computer screen. See "Setting the Data Port," page 75 for details and instructions.

Selecting Options

Press on the **ROCKER PAD** to scroll up or down through a screen or to highlight various options. Press the **ENTER** button to select an option.



Extras Options

From the Systems Page, select "EXTRAS" to access the Alerts Screen Options, Proximity Screen Options and Maps Screen Options.

Find Screen

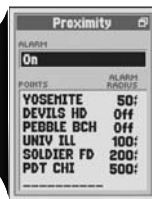


Extras



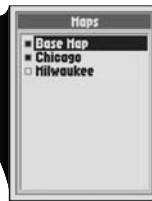
Alerts Screen

Select "Alerts" to turn the Alert Alarm (an automatic alarm sound when you come within a certain distance or Alarm Radius from the following) for the Anchor Drag Alert, Approach Alert, Arrival Alert or Off Course Alert to "On" or "Off" and to set the individual Alarm Radius for each alert. You can restore the Alerts defaults through the Alerts Menu. See "Alerts Screen," page 76 for details and instructions.



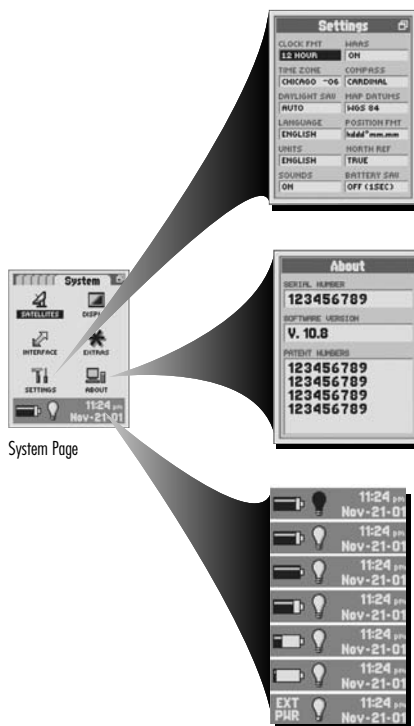
Proximity Screen

Select "Proximity" to automatically sound an alarm when you come within a certain distance or Alarm Radius of any point you choose. To use Proximity, you must add points you wish to use to the Proximity List and select an Alarm Radius for each one. You can restore the Proximity defaults and remove all added points through the Proximity Menu. See "Proximity Screen," page 78 for details and instructions.



Maps Screen

Select "Maps" to Include, Exclude or Delete a specific map you have transferred from a computer. The "Base Map" cannot be deleted. See "Excluding/Including or Deleting Maps," page 81 for details and instructions.



System Page

Settings Options

Select "SETTINGS" to change the following system settings: Clock Format, Time Zone, Daylight Savings Time (Summer Time), Language, Measurement Units, Sounds, WAAS, Compass, Map Datum, Positions Format, North Reference, Battery Saver (Refresh Rate.) You can restore the Settings Screen defaults through the Settings Screen Menu. See "Using the Settings Screen," page 82 for details and instructions.


About

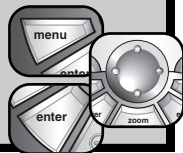
Select "ABOUT" to display Serial Number, Software Version and Patent Numbers.

Status Bar Indicators

The status bar at the bottom of the System Page updates information automatically. You can see whether the backlight is on or off, current date and time. You can also determine the present status of the battery as the battery symbol decreases the amount of black from right to left as it discharges. "EXT PWR" will be displayed when using external power. See "Optional Accessories," page 100 for details.

Selecting Menu and Options

From the System Page, when you see the menu icon  press the MENU button to display the available menu options. Press on the ROCKER PAD to scroll up or down through a screen or to highlight various options. Press the ENTER button to select an option.



Menu Options

From the System Page, press the MENU button to access System Page Menu Options.

System Page



Restore All Defaults

Select "Restore All Defaults" to restore all original defaults settings for the entire GPS receiver system. Select "YES" to restore original settings (see charts on page 72.) Select "NO" to maintain all current settings.



Menu Options



Delete Saved Data

Select "Delete Saved Data" to delete all user saved data including waypoints, tracks and routes. Select "YES" to delete all user saved data. Select "NO" to maintain all current settings.

Map Page Defaults

Function	Default
Data Fields	Speed Odometer
Auto Zoom	On
Detail	High
Shade	Water
Waypoints	Small
Points of Interest	Medium
Cities	Small
Exits	Off
Land Cover	Off
GoTo Line	800 ft
Route Line	800 ft
Track Line	800 ft
Track Log	800 ft
Orientation	North Up
Latitude & Longitude Grid	Off

Gauges Page Defaults

Function	Default
Pointer	Bearing
Data Fields	Speed Location

Trip Meter Page Defaults

Function	Default
Data Fields	Average Speed Stop Time Total Time Accuracy Odometer Date
Data Fields	Average Speed Stop Time Total Time
Data Fields	Average Speed Stop Time Total Time Accuracy Odometer Date Moving Time Moving Average Speed Maximum Speed Trip Odometer
Reset Values	All

System Page Defaults

Function	Default
GPS Status	On
Backlight Timeout	15 Seconds
Data Port	Off
Clock Format	12 Hour
Time Zone	Current Location
Daylight Savings Time (Summer Time)	Auto
Language	English
Measurement Units	English
Sounds	On
WAAS	On
Compass	Cardinal
Map Datum	WGS 84
Position Format	hddd°mm.mm
North Reference	True
Battery Saver	Refresh 1 sec
Alert Alarms	On
Alarm Radius	50 ft
Proximity Alarms	On
Alarm Radius	50 ft
Maps	Base Map

4.1 SYSTEM PAGE

Satellites

Satellites

When indoors, you can turn GPS navigation off, allowing you to use the non-navigational features of your GPS receiver while preserving battery power. When you turn GPS off, the receiver stops searching for signals from satellites. When you turn GPS back on to receive signals, the receiver must re-acquire signals from at least three satellites before it can begin navigation.

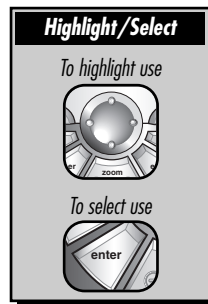
NOTE: The receiver must be outside with a clear view of the sky to acquire satellite signals for navigation.

To turn GPS off:

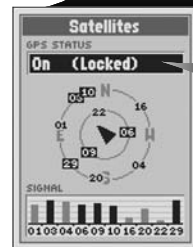
1. On the System Page **1**, select "SATELLITES." The Satellites screen appears **2**, showing the satellite signals being received with the signal strength of each indicated. The satellites that are currently acquired by the receiver for navigation are highlighted.
2. Select "GPS STATUS."
3. Select "Off" **3**. The receiver will immediately turn GPS off and stop receiving satellite signals.
4. Press the PAGE button to return to the System Page.

To turn GPS on:

1. On the System Page **1**, select "SATELLITES." A blank Satellites screen appears **2**.
2. Select "GPS STATUS."
3. Select "On" **3**. The receiver will begin searching for satellite signals from at least three satellites.
4. Press the PAGE button to return to the System Page.



1 System Page



3 Options

On
Off
Reset

2 Satellites Screen

4.2 SYSTEM PAGE

Display Options

Display Options

To adjust the backlight timeout and contrast settings for your receiver's display:

1. On the System page **1**, select "DISPLAY." "BACKLIGHT TIMEOUT" and "CONTRAST" appear **2**.

2. Choose from the following (you only need to select the settings you want to change.)

• Backlight Timeout

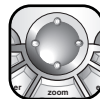
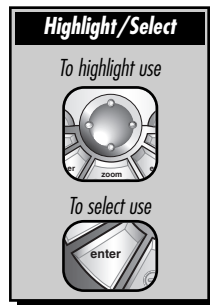
- Select the "BACKLIGHT TIMEOUT" field to change the length of time the screen's backlight remains lit each time you turn it on or when you press and release the POWER button.
- Select "15 Seconds," "30 Seconds," "60 Seconds" or "Stay On" **3**.

WARNING: If you choose "Stay On," battery life will significantly decrease.

• Contrast

- Select the "CONTRAST" field.
- Press left or right on the ROCKER PAD to increase or decrease the screen contrast **4**.
- Press the ENTER button to complete your contrast adjustment.

3. Press the PAGE button to return to the System Page.



1 System Page



3 Options



4 Options



2 Display Screen

4.3 SYSTEM PAGE

Interface Options

Interface Options

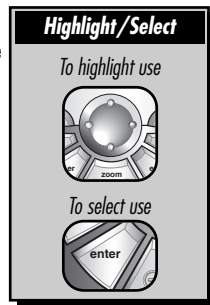
Your GPS receiver is designed to let you exchange data with computer mapping programs. With optional software, interface cable and SD Memory Card (needed for map downloading, see "Optional Accessories," page 100) you will be able to:

- Download maps to your receiver from the computer to enable the receiver's mapping capabilities and for assistance in navigation.
- Download to your receiver worldwide points of interest, addresses or intersections from the computer for use in navigation.
- Upload your waypoints, tracks and routes into the computer and view your travel with powerful mapping software.

To set the receiver's data port (see optional CD-ROM for further instructions):

1. On the System Page **1**, select "INTERFACE." The receiver will display the current status of the data port, the total card memory in the receiver and the current card memory available **2**.
2. Select "DATA PORT."
3. Choose from the following:
 - Select "On" to turn the data port on **3**. The data port must be set to "On" before you can use the data interface.
 - Select "Off" to turn the data port off **3**.
 - Select "NMEA" to activate the data port with a direct connection to a computer running a GPS-compatible software resulting in a real-time display of your position on the computer screen.
4. Press the PAGE button to return to the System Page.

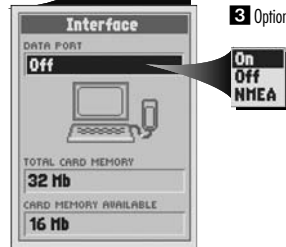
NOTE: In order to conserve battery power, make sure the data port is set to "Off" whenever you are not using the interface.



1 System Page



3 Options



2 Interface Screen

4.4

SYSTEM PAGE

Alerts Screen Options

Alerts Screen Options

The Alerts Screen allows you to set the Alert Alarm (an automatic alarm sound when you come within a certain distance or Alarm Radius from the following) for the Anchor Drag Alert, Approach Alert, Arrival Alert or Off Course Alert to "On" or "Off" and to set the individual Alarm Radius for each alert. You can restore the Alerts defaults through the Alerts Menu.

Anchor Drag Alert – sounds when you drift more than the specified distance from a particular location.

Approach Alert – sounds when you reach the specified distance from the next point in your current navigation.

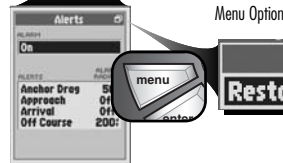
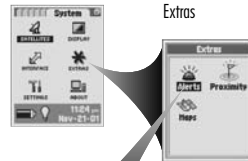
Arrival Alert – sounds when you reach the specified distance from your final destination.

Off Course Alert – sounds when you deviate the specified distance from your course.

Menu Options

From the Alerts Screen, press the MENU button to access the Alerts Screen Menu Option.

System Page




Alerts Screen

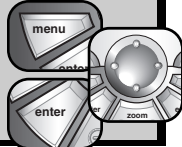


Selecting Menu and Options

To get to the Alerts Screen:

- on the System Page, select "Extras"
- on the Extras Screen, select "Alerts"

From the Alerts Screen, when you see the menu icon  press the MENU button to display the available menu options. Press on the ROCKER PAD to scroll up or down through a screen or to highlight various options. Press the ENTER button to select an option.



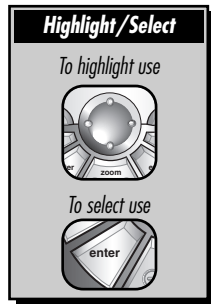
Restore Defaults

Select "Restore Defaults" to restore all Alerts Screen defaults to original Alerts Screen settings. Select "YES" to restore original settings (see page 72 for a complete list of defaults.) Select "NO" to maintain all current settings.

Alerts Settings

To set the Alert Alarm:

1. On the System Page **1**, select "EXTRAS."
2. Select "Alerts" **2**.
3. Select the "ALARM" field **3**.
4. Choose from the following:
 - Select "On" to automatically sound an alarm within an Alarm Radius set for the Anchor Drag Alert, Approach Alert, Arrival Alert or Off Course Alert **4**.
 - Select "Off" to override all individual alert alarm settings to "Off" **4**. The individual values set for each Alert will not change.
5. Press the PAGE button to return to the System Page.



To set the Alarm Radius for the Anchor Drag Alert, Approach Alert, Arrival Alert or Off Course Alert:

1. From the System Page **1**, select "EXTRAS."
2. Select "Alerts" **2**.
3. Select the individual "Alarm Radius" in the "ALERTS" field you want to change **3**.
4. Select the value at which you want an automatic alarm to sound **5**.
5. Press the PAGE button to return to the System Page.



1 System Page



2 Extras

3 Alerts Screen



4 Options



5 Options


Proximity Screen Options

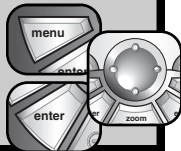
The Proximity Screen allows you to set the Proximity Alarm (an automatic alarm sound when you come within a certain distance or Alarm Radius from the listed points) for any point saved in the receiver that you add to the Proximity List to "On" or "Off" and to set the individual Alarm Radius for each point. You can restore the Proximity defaults and remove all listed points through the Proximity Menu.

Selecting Menu and Options

To get to the Proximity Screen:

- on the System Page, select "Extras"
- on the Extras Screen, select "Proximity"

From the Proximity Screen, when you see the menu icon  press the MENU button to display the available menu options. Press on the ROCKER PAD to scroll up or down through a screen or to highlight various options. Press the ENTER button to select an option.



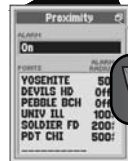
Menu Options

From the Proximity Screen, press the MENU button to access the Proximity Screen Menu Options.

System Page



Extras



Menu Options



Proximity Screen



Restore Defaults

Select "Restore Defaults" to restore all Proximity Screen defaults to original Proximity Screen settings. Select "YES" to restore original settings (see page 72 for a complete list of defaults.) Select "NO" to maintain all current settings.



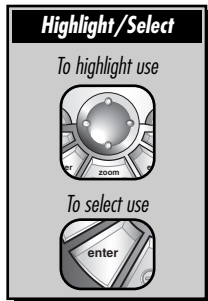
Remove All

Select "Remove All" to remove all points listed in the Proximity List. This will not delete or remove the point from the receiver. Select "YES" to remove all listed points. Select "NO" to maintain all points currently listed.

Proximity Settings

To set the Proximity Alarm:

1. On the System Page **1**, select "EXTRAS."
2. Select "Proximity" **2**.
3. Select the "ALARM" field **3**.
4. Choose from the following:
 - Select "On" to automatically sound an alarm within an Alarm Radius set for each individual point **4**.
 - Select "Off" to override all individual alert alarm settings to "Off" **4**. The individual values set for each point will not change.
5. Press the PAGE button to return to the System Page.



To add a point to the Proximity List:

1. On the System Page **1**, select "EXTRAS."
2. Select "Proximity" **2**.
3. Scroll down the Points List to highlight and select the blank space **3**.
4. Using the Find Screen **5**, select the point at which you want an automatic alarm to sound (see "Waypoints," page 32; "Cities," page 39; "Points of Interest," page 44; "Addresses," page 50; "Intersections," page 54; or "Exits," page 58.)
5. Choose from the following:
 - Set the Proximity Alarm Radius (see next page.)
 - Accept the default Alarm Radius by pressing the PAGE button to return to the System Page.

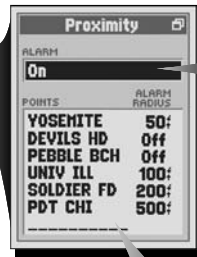
continued

1 System Page



2 Extras

3 Proximity Screen



4 Options



6 Find Screen

To see details about or remove a point on the Proximity List:

1. On the System Page **1**, select "EXTRAS."
2. Select "Proximity" **2**.
3. Select the point from the Proximity List you want to see details about or remove from the list **3**.
4. Choose from the following **4**:
 - Select "See Details" to see details about that specific point such as location and elevation.
 - Select "Remove" to delete the individual point from the Proximity List.
5. Press the PAGE button to return to the System Page.

To set the Alarm Radius for an individual point:

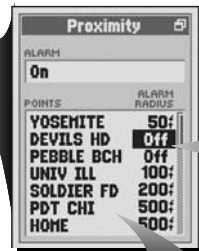
1. From the System Page **1**, select "EXTRAS."
2. Select "Proximity" **2**.
3. Select the individual "Alarm Radius" in the "POINTS" field you want to change **3**.
4. Select the value at which you want an automatic alarm to sound **5**.
5. Press the PAGE button to return to the System Page.

1 System Page



2 Extras

3 Proximity Screen



**See Details
Remove**

4 Options



5 Options

4.6

SYSTEM PAGE

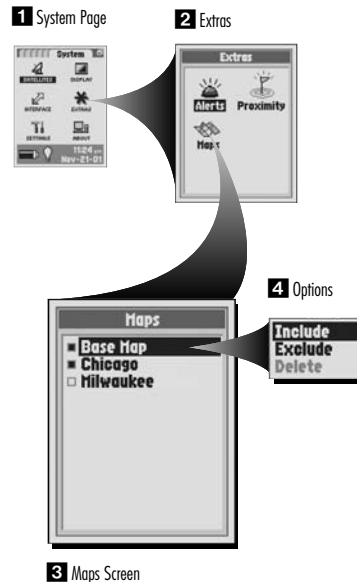
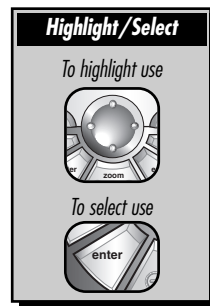
Maps Screen Options

Maps Screen Options

The Map Page allows you to Include, Exclude or Delete a map you have transferred from a computer. The "Base Map" cannot be deleted.

To include, exclude or delete a map:


1. On the System Page **1**, select "EXTRAS."
2. Select "Maps" **2**.
3. Select the Map you want to Include, Exclude or Delete **3**. The "Base Map" cannot be deleted.
4. Choose from the following **4**:
 - Select "Include" to include the map in the map display, search screens or sort screens.
 - Select "Exclude" to exclude the map from the map display, search screens or sort screens.
 - Select "Delete" to remove the map from the receiver.
5. Press the PAGE button to return to the System Page.

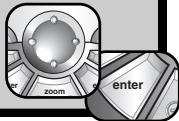


Settings Screen Options

The Settings Screen allows you to change the following system settings: Clock Format, Time Zone, Daylight Savings Time (Summer Time), Language, Measurement Units, Sounds, WAAS, Compass, Map Datum, Positions Format, North Reference and Battery Saver (Refresh Rate.) You can restore the Settings Screen defaults through the Settings Screen Menu.

Selecting Menu and Options

From the Settings Screen, when you see the menu icon  press the MENU button to display the available menu options. Press on the ROCKER PAD to scroll up or down through a screen or to highlight various options. Press the ENTER button to select an option.



Menu Options

From the Settings Screen, press the MENU button to access the Settings Screen Menu Option.

System Page



Menu Option

Menu
Restore Defaults



Settings Screen



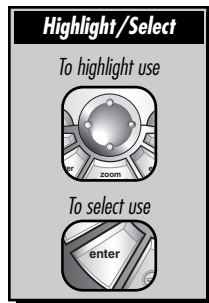
Restore Defaults

Select "Restore Defaults" to restore all Settings Screen defaults to original Settings Screen settings. Select "YES" to restore original settings (see page 72 for a complete list of defaults.) Select "NO" to maintain all current settings.

Settings Screen Settings

To change the various settings listed below:

1. On the System Page **1**, select "SETTINGS."
2. Select the field you want to change **2**.
3. Choose from the following (you only need to select the fields you want to change.)



• Clock Format **3**

Select the "CLOCK FMT" (Clock Format) field to set the receiver to use a 12 hour or 24 hour clock display format.

• Time Zone **4**

Select the "TIME ZONE" field to set the time zone in which you want the receiver to format the time and date. Select "Use Current Location" to have the receiver use the time zone at your current location. Select a specific city within a time zone to have the receiver use a specific time zone. See "Worldwide City Time Zones," page 90 for details. The small window at the top of the screen shows you the difference in hours from the Universal Time Coordinate.

• Daylight Savings Time (Summer Time) **5**

Select the "DAYLIGHT SAV" (Daylight Savings) field to set the receiver to use Daylight Saving Time (Summer Time) in the time and date. Select "Auto" to have the clock switch to Daylight Savings Time automatically. Select "On" to manually switch to Daylight Savings Time. Select "Off" to manually switch to Standard Time (Winter Time [GMT].)

• Language **6**

Select the "LANGUAGE" field to set the receiver's screen language to "English," "Dutch," "French," "German," "Italian," "Portuguese," "Spanish" or "Swedish."

• Measurement Units **7**

Select the "UNITS" field to set the receiver's measurement system to "English," "Metric" or "Nautical."

• Sounds **8**

Select the "SOUNDS" field to set the receiver's sounds to "On" or "Off."

1 System Page



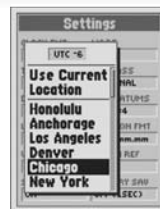
2 Settings Screen



3 Clock Format



4 Time Zone



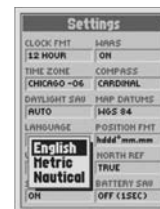
5 Daylight Savings



6 Language



7 Measurement



8 Sounds



continued

- **WAAS 9**

Select the "WAAS" field to turn the WAAS receiver "On" or "Off." See "WAAS," page 93 for details.

- **Compass 10**

Select the "COMPASS" field to set the method of indicating direction. Select your choice of "Cardinal" (standard N-S-E-W), "Degrees" (0°-360°) or "Mils" (0000-6400).

- **Map Datum 11**

Select the "MAP DATUMS" field to change the datum used by your receiver when comparing information with a paper map or other navigational reference. Select your choice from those listed. See "Map Datum," page 93 for details.

NOTE: The most widely used datum is WGS 84.

- **Position Format 12**

Select the "POSITION FMT" (Position Format) field to change the format the receiver uses to display the location coordinates. Select your choice from those listed.

- **North Reference 13**

Select the "NORTH REF" (North Reference) field to change the receiver's method of orientation to the earth's magnetic field. Select "True" for true north, "Magnetic" for magnetic north, or "Grid" for grid north. See "North Reference" page 93 for details.

- **Battery Saver (Refresh Rate) 14**

Select the "BATTERY SAV" (Batter Saver) field to set the interval at which your receiver updates or refreshes its navigational information. The "Off" interval uses more power, draining the receiver's battery more quickly. Select from the following: "Off," "Extended," "Maximum."

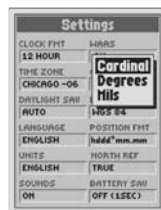
4. Press the PAGE button to return to the System Page.



- 9 WAAS



- 10 Compass



- 11 Map Datum



- 12 Position Format



- 13 North Reference



- 14 Battery Saver

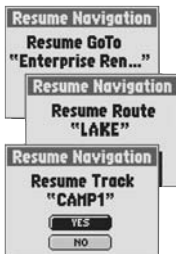


5.0 ALERTS

- 1** Can't Acquire Satellites
Continue Searching?



- 2** Resume Navigation
GoTo, Route, Track



Alerts

As you use your GPS receiver, you may see the following alert messages.

Can't Acquire Satellites **1**

Continue Searching?

You will see this alert if, for any reason, satellite lock is lost. When you see this message, the receiver is automatically trying to re-acquire satellite signals. If you do nothing, the receiver will continue to search for signals and the message will disappear when satellite lock is regained. Select "YES" to continue searching and clear the alert message. If satellite lock is not regained within 5 minutes, the alert will reappear. Select "NO" to turn off GPS navigation and clear the message.

Resume Navigation **2**

Resume GoTo "[specified point],"

Resume Route "[specified route],"

Resume Track "[specified track]"

If a navigation (GoTo, route, or track) was in progress when you last turned the receiver off, you will see this alert after satellite lock is achieved when you turn the receiver on again. Select "YES" to resume the same navigation. Select "NO" to stop navigation.

- 3** Alert
Arriving At Destination!



- 4** Alert
Approaching
"[specified point]"



Alert **3**

Arriving At Destination!

If you are navigating, you will see this message when you come within your chosen distance to your destination. Select "OK" to clear the message. The message will reappear if you travel outside your chosen distance and back in again. See "Alerts Screen" page 76 for details.

Alert **4**

Approaching "[specified point]"

You will see this alert when you come within your chosen distance to the next point in your navigation, which is named in the alert. Select "OK" to clear the message. See "Alerts Screen" page 76 for details.

continued

- 5** Alert
Anchor Dragging!



- 6** Alert
Off Course!



- 7** Alert
Within Proximity
"YOSEMITE"



Alert 5

Anchor Dragging!

You will see this alert if you drift more than your specified distance from your chosen location. Select "OK" to clear the message. See "Alerts Screen" page 76 for details.

Alert 6

Off Course!

You will see this alert if you deviate more than your chosen distance from your current navigational course. Select "OK" to clear the message. See "Alerts Screen" page 76 for details.

Alert 7

Within Proximity "[specified point]"

You will see this message when you come within your chosen distance to your chosen location. Select "OK" to clear the message. See "Proximity Screen" page 78 for details.

- 8** Warning
Memory Full!



- 9** Warning
Track Log Almost Full!



- 10** Warning
Track Log Full!



Warning 8

Memory Full!

You will see this message if you try to save a waypoint when the list is full (you can save a maximum of 500 waypoints.) Select "OK" to clear the message. You will continue to see the message when trying to save a waypoint until you delete one or more waypoints from memory. See "Waypoints" page 32 for details.

Warning 9

Track Log Almost Full!

This message appears when the track log memory bank is 90% full. Select "OK" to clear the message. The message will reappear each time you turn on the receiver until you clear the track log or the track log becomes 100% full (see below.) See "Track Log Options" page 29 for instructions on clearing the track log.

Warning 10

Track Log Full!

You will see this message when the track log memory bank is full. The receiver will not be able to store any more track log points until you clear the track log. Select "OK" to clear the message. The message will reappear each time you turn on the receiver until the track log is cleared. See "Track Log Options" page 29 for instructions on clearing the track log.

- 11** Notice
Name Already Used!



- 12** Notice
Too Many Found.
Enter City.



- 13** Notice
None Found.



Notice 11
Name Already Used!

When naming a waypoint, track, or route, you will see this message if the name you enter is already being used. Select "OK" to clear the message. Enter a different name.

Notice 12
**Too Many Found.
Enter City.**

When using Find to search for an address or intersection, you will see this alert if too many entries are found. Select "OK" to clear the message. Enter a city to narrow the search. See "Navigation Tools" page 24 for details.

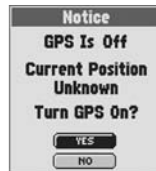
Notice 13
None Found.

When using Find to search for an address or intersection, you will see this alert if no entries are found. Select "OK" to clear the message. See "Navigation Tools," page 24 for details.

- 14** Warning
Batteries Low!



- 15** Notice
GPS is Off
Current Position Unknown
Turn GPS On?



Warning 14
Batteries Low!

This message appears approximately 30 minutes before your batteries need to be replaced. Select "OK" to clear the message. Replace the batteries as soon as possible. The message will reappear every 10 minutes until the batteries are replaced or the receiver automatically shuts off.

Notice 15
**GPS is Off
Current Position Unknown
Turn GPS On?**

This message is displayed any time an action is requested that typically uses GPS satellite tracking (example marking a waypoint or navigating a route). While GPS mode is set off, select "YES" to turn GPS on. Select "NO" to have the GPS receiver assume you are at your last calculated position.

GPS General Information

GPS Basics

The Global Positioning System (GPS) is a space-based radio-navigation system. It consists of 24 satellites which orbit the earth at an altitude of approximately 11,000 miles and ground stations. GPS provides users with accurate information on position, velocity and time. This is available anywhere in the world and in most weather conditions.

GPS was initiated by The United States Department of Defense in 1973 to reduce the proliferation of navigation aids. By creating a robust system that overcame the limitations of many previously existing navigation systems, GPS became attractive to a broader spectrum of users. GPS has been successful in classic applications such as aviation and marine navigation since it was first developed. Since then, it has become useful for a wide range of people because its capabilities are accessible using small, affordable equipment. What was once available only in very expensive equipment, the Cobra Electronics Corporation brings to you with our high quality line of affordable handheld GPS receivers.

How GPS Works

GPS uses a global network of 24 satellites that transmit radio signals to earth from high earth orbit. Thankfully for users, The United States has offered free use of the system to the international community. Many international user groups have accepted GPS as the core for their international civil satellite navigation system.

GPS service provides users with extremely accurate positioning information anywhere on or near the surface of the earth. To accomplish this, each of the 24 satellites emits signals to receivers below. GPS determines location by computing the difference between the time that a signal is sent and the time it is received. GPS satellites carry atomic clocks that provide extremely accurate time information. The time information is placed in the codes broadcast by the satellite so that a receiver can continuously determine the time the signal was broadcast. The signal contains data that your GPS receiver uses to compute the locations of the satellites and to make other adjustments needed for accurate positioning. Your GPS receiver uses the time difference between the time of signal reception and the broadcast time to compute the distance, from the receiver to the satellite. With information about the distance to four satellites and the location of each satellite when the signal was sent, your receiver can compute its own three-dimensional position: latitude, longitude and altitude. People think of GPS as having three segments: control, space and user.

Control Segment

The Control Segment of GPS consists of the Master Control Station, Monitor Stations and Ground Antennas.

The one master control station, located at Falcon Air Force Base in Colorado Springs, Colorado, USA is responsible for overall management of the remote monitoring and transmission sites. As the center for support operations, it calculates any position or clock errors for each individual satellite, based on information received from the monitor stations. Then it "orders" the appropriate ground antennas to relay the corrective information back to that satellite.

Five monitor stations are located at Falcon Air Force Base in Colorado, Hawaii, Ascension Island in the Atlantic Ocean, Diego Garcia Atoll in the Indian Ocean and Kwajalein Island in the South Pacific Ocean. Each of the monitor stations checks the exact altitude, position, speed and overall health of the orbiting satellites. The control segment uses measurements collected by the monitor stations to predict each satellite's orbit and clock. The prediction data is up-linked, or transmitted, to the satellites for transmission back to the users. The control segment also ensures that the GPS satellite orbits and clocks remain as designed. A station can track up to 11 satellites at a time. Each station performs this "check-up" twice a day, as the satellites complete their journeys around the earth.

Noted variations, such as those caused by the gravity of the moon, sun and the pressure of solar radiation, are passed along to the master control station.

The last of the three pieces of the control segment of GPS are the ground antennas. Ground antennas monitor and track the satellites from horizon to horizon. They also transmit correction information to individual satellites.

Space Segment

The space segment includes the satellites and the Delta rockets that launch the satellites from Cape Canaveral in Florida. GPS satellites fly in circular orbits at an altitude of 10,900 miles (17,500 km) and with a period of 12 hours. The orbits are tilted to the earth's equator by 55 degrees to ensure coverage of the polar regions. Powered by solar cells, the satellites continuously orient themselves to point their solar panels toward the sun and their antenna toward the earth. Each of the 24 satellites, positioned in 6 orbital planes, circles the earth twice a day.

The satellites are composed of three major subsystems: Solar Panels, Internal Components and External Components.

Solar Panels

Each satellite is equipped with solar array panels. These panels capture energy from the sun, which provides power for the satellite throughout its life.

Internal Components

Internal Components are subsystems such as atomic clocks and radio transmitters. Each satellite contains four atomic clocks. The

clocks are accurate to a billionth of a second or a nanosecond. The atomic clocks within satellites are so accurate because even an extremely small inaccuracy would translate into an extremely large position difference (1/100 of a second inaccuracy translates to a position difference of 1,860 miles to any GPS receiver.)

External Components

The exterior of the GPS satellite has a variety of antennas. The signals generated by the radio transmitter are sent to your GPS receiver via L-band antennas. Another component of the satellite is the radio transmitter, which generates the signal. Each of the 24 satellites transmits its own unique code in the signal.

User Segment

You and your GPS receiver are a part of the user segment along with many other private individuals and military personnel and their GPS receivers. Military GPS equipment has been integrated into fighters, bombers, tankers, helicopters, ships, submarines, tanks, jeeps and soldiers' equipment. GPS is also used on Space Shuttles.

Cutting edge satellite navigation technology coupled with your GPS receiver can help overcome many of the hardships and hazards associated with recreation. Your GPS receiver allows you to go practically anywhere with confidence knowing precisely where you are at all times. With your GPS receiver, you will be able to accurately record any location and return to that precise spot time and again, anytime, anywhere.

Selectivity Availability (SA)

Selectivity Availability (SA) was used by the U.S. Department of Defense to degrade the accuracy of civilian GPS to within 100 meters (about 300 feet.) This was discontinued on May 1, 2000. The military will only use regional degradation when needed in the future.

Worldwide City Time Zones

Longitudinal Zone	Offset		
E172.50 to W172.50	-12	W052.50 to W037.50	-3
IDLW (International Date Line West)		Rio de Janeiro	
W172.50 to W157.50	-11	W037.50 to W022.50	-2
Nome		Fernando de Noronha	
W157.50 to W142.50	-10	W022.50 to W007.50	-1
Honolulu		Azores Island	
W142.50 to W127.50	-9	W007.50 to E007.50	GMT + 0
Yukon STD		London	
W127.50 to W112.50	-8	E007.50 to E022.50	+1
Los Angeles		Rome	
W112.50 to W097.50	-7	E022.50 to E037.50	+2
Denver		Cairo	
W097.50 to W082.50	-6	E037.50 to E052.50	+3
Chicago		Moscow	
W082.50 to W067.50	-5	E052.50 to E067.50	+4
New York		Abu Dhabi	
W067.50 to W052.50	-4	E067.50 to E082.50	+5
Caracas		Maldives	
		E082.50 to E097.50	+6
		Dhufuri	
		E097.50 to E112.50	+7
		Bangkok	
		E112.50 to E127.50	+8
		Hong Kong	
		E127.50 to E142.50	+9
		Tokyo	
		E142.50 to E157.50	+10
		Sydney	
		E157.50 to E172.50	+11
		Solomon Islands	
		E172.50 to W172.50	+12
		Auckland	

6.3 APPENDIX

Interference/Errors

Interference / Errors

GPS receivers have the potential for position errors due to interference, primarily from the following sources:

Ionosphere and troposphere delays

The satellite signal slows as it passes through the atmosphere. The system uses a built-in model that calculates an average – though not exact – amount of delay.

Signal multi-path

This occurs when the GPS signal is reflected off objects such as tall buildings before it reaches the receiver. This increases the travel time of the signal, causing errors.

Receiver clock errors

The built-in clock can have very slight timing errors.

Orbital errors

Also known as ephemeris errors, these are inaccuracies of the satellite's reported location.

Most common error

Most common error is not having a clear view of the sky, or being under very cloudy conditions, when a satellite signal may not be received.

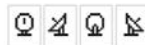
Number of satellites visible

The more satellites the receiver can see, the better the accuracy. Buildings, terrain, electronic interference or even dense foliage can block signal reception, resulting in position errors or possibly no position reading at all. In general, the clearer the view of the sky is at your location, the better the reception will be. GPS receivers will not work indoors, underwater or underground.

Due to the errors that might occur, it is recommended that the serious navigator use a second navigational tool, such as a magnetic compass or map.

When satellite lock is lost

Whenever satellite lock is lost, the following animation sequence appears on screen and continues to loop until satellite lock is re-acquired.



When GPS is turned Off

Whenever GPS is turned Off, the following animation sequence occurs and continues to loop until search is activated by user.



Also, some data fields appear blank until GPS is turned On and satellite lock is re-acquired.



Data Field Choice Descriptions

Your GPS receiver has the ability to display various types of information to you. In order to take advantage of the rich information available to you, it is important that you understand the function of certain data fields. Below is a list of data fields and their descriptions.

Accuracy – the distance within which the receiver can accurately locate a position

Average Speed – average speed throughout the current navigation

Bearing – the direction in which you are currently heading

Compass – your current bearing shown as a compass heading

Date – the current date

Distance to Next – the distance to the next point in your current navigation

Distance to Dest – the distance to the final destination of your current navigation

Elevation – your current elevation above sea level

ETA to Next – your estimated time of arrival at the next point in your current navigation, based on your current average speed

ETA to Dest – your estimated time of arrival at the final destination in your current navigation, based on your current average speed

Location – your current location shown in degrees/minutes of latitude and longitude

Maximum Speed – the highest speed you traveled during the current navigation

Moving Avg Speed – the average speed you traveled while moving

Moving Time – the total time spent moving during your current navigation

Odometer – total cumulative distance traveled since the last time the odometer was reset

Power – power icon showing power source (external or battery), battery charge level, and backlight on or off

Speed – your current speed

Stop Time – the total time spent stopped during your current navigation

Total Time – the total elapsed time during your current navigation

Trip Odometer – the distance traveled since the last time the trip odometer was reset

Accuracy
Average Speed
Bearing
Compass
Date
Distance to Next
Distance to Dest
Elevation
ETA to Next
ETA to Dest
Location
Maximum Speed
Moving Avg Speed
Moving Time
Odometer
Power
Speed
Stop Time
Total Time
Trip Odometer

WAAS

Wide Area Augmentation System (WAAS) is a GPS-based navigation system that provides precision above and beyond what GPS can do on its own. WAAS was designed to improve the accuracy and ensure the integrity of information coming from GPS satellites.

WAAS is a network of 25 ground reference stations that cover the entire U.S. plus parts of Canada and Mexico. Implemented by the Federal Aviation Administration (FAA) for aviation users, these reference stations are located at precisely surveyed spots and compare GPS distance measurements to known values. When the WAAS signal is available, WAAS-capable receivers typically have a much higher accuracy than non-WAAS receivers.

Map Datum

Maps and charts are essentially grids created from a starting reference point called a "datum." Many maps being used today were originally created decades ago. Over the years, technology has allowed us to improve our surveying skills and create more accurate maps. However, there is still a need to adapt GPS receivers to use with older maps.

Most navigational charts and maps will have the datum listed. This GPS receiver includes up to 100 map datums that allow you to switch to a setting that matches your map. The most common US map datums are World Geodetic System 1984 (WGS 84) North American Datum 1983 (NAD 83) and North American Datum 1927 (NAD 27)

NOTE: Using a map datum that does not match the chart you are using can result in significant differences in position information.

North Reference

The vertical grid lines on any map can be aligned in one of three different ways.

"True North" means that the vertical lines are aligned with the geographic north pole. This is the most common method of orienting maps.

"Magnetic North" means that the vertical lines are aligned in the direction indicated as north by a compass, which can differ from True North to varying amounts, depending on where you are on the Earth (this difference is called "inclination" and "declination".)

"Grid North" refers to the direction in which the straight lines on a map are actually aligned, which may be slightly different from True North, because the rounded surface of the Earth can not be accurately depicted on the flat surface of a map.

Specifications

Specifications subject to change.

Temperature rating for this GPS receiver may exceed the usable range of some batteries. Alkaline batteries can rupture at high temperatures.

Alkaline batteries lose a significant amount of the capacity as temperature decreases.

Use lithium batteries when operating this GPS receiver in below freezing conditions.

Extensive use of screen backlighting will significantly reduce battery life.

External power can be applied using the the Cobra Electronics Corporation external power cord.

PERFORMANCE

Receiver:	12 parallel channels
Acquisition Time:	Approximately 8 seconds. (warm) Approximately 38 seconds. (cold) Approximately 45 seconds (first time)
Update Rate:	1/second, continuous (selectable)
Position Accuracy:	up to 3 meters (10 feet)
Velocity Accuracy:	0.1 knot / 0.1 km/h
Dynamics:	Performs to specifications to 6 g's
Antenna:	Built-in patch antenna
Internal Memory:	4MB (megabytes) built-in Expandable with SD card (optional)

PHYSICAL

Case:	Fully gasketed, high impact ABS plastic, waterproof to 1 meter for 30 minutes (IPX7 standards)
Size:	6.1" H x 2.8" W x 1.3" D (15.5 cm x 7.1 cm x 3.3 cm)
Weight:	8.8 ounces (250g)
Operating Temperature:	5°F to 158°F (-15°C to 70°C)
Storage Temperature:	-40°F to 176°F (-40°C to 80°C)

POWER

Input:	Two 1.5 volt AA batteries and/or 12-volt dc external power (vehicle power adapter)
Battery Life:	Up to 14 hours in battery save mode. Up to 10 hours in continuous operation out of save mode.

Maintenance

Your GPS receiver is designed and built to give you years of trouble-free performance without the need for service. No routine maintenance is required.

If your receiver does not appear to be operating properly, please follow these trouble-shooting steps:

- Make sure you are using fresh batteries and they are installed properly.
- Make sure you are outdoors and away from buildings and obstructions. Also, make sure you have a clear view of the sky.
- Make sure you have not accidentally turned GPS off (see page 73.)

Product Service

If you suspect that your receiver requires service, please call 773-889-3087 BEFORE shipping it to Cobra Electronics Corporation. This will ensure that you receive service as quickly as possible.

If you are asked to send your receiver to the the Cobra Electronics Corporation factory, please follow these steps:

1. Send the complete receiver.
2. For warranty repair, enclose some form of proof-of-purchase, such as a photocopy or carbon copy of a sales receipt. If you send the original receipt, it cannot be returned to you.
3. Enclose a typed or clearly written description of the problem you are having with your receiver, plus the name and address where you want the receiver returned.
4. Pack the receiver securely to prevent damage during transit. If possible, use the original packing materials.
5. Ship prepaid and insured using a traceable carrier such as United Parcel Service (UPS), Federal Express or first class mail with delivery confirmation. Ship to:

**Cobra Factory Service
Cobra Electronics Corporation
6500 West Cortland Street
Chicago, IL 60707 USA**

6. Please allow 3 to 4 weeks before contacting us about the status of your service. Call 773-889-3087 for assistance.

If your receiver is under warranty, it will either be repaired or replaced upon receipt, depending on the model. If your receiver is out of warranty, you will receive a letter informing you of the repair or replacement charge.

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7.0 WARRANTY



Cobra Electronics Corporation
6500 West Cortland Street, Chicago, Illinois 60707 USA
www.cobra.com

COBRA ELECTRONICS CORPORATION warrants that its GPS receiver, and the component parts thereof, will be free of defects in workmanship and materials for period of one (1) year from the date of first consumer purchase. This warranty may be enforced by the first consumer purchaser, provided that the product is utilized within the U.S.A.

The Cobra Electronics Corporation will, without charge, repair or replace, at its option, defective GPS receiver, products or component parts upon delivery to the Cobra Factory Service Department, accompanied by proof of the date of first consumer purchase, such as a duplicated copy of a sales receipt.

You must pay any initial shipping charges required to ship the product for warranty service, but the return charges will be at Cobra Electronics Corporation's expense, if the product is repaired or replaced under warranty.

This warranty gives you specific rights, and you may also have other rights which vary from state to state.

Exclusions: This limited warranty does not apply; 1) to any product damaged by accident; 2) in the event of misuse or abuse of the product or as a result of unauthorized alterations or repairs; 3) if the serial number has been altered, defaced or removed; 4) if the owner of the product resides outside the U.S.A.

All implied warranties, including warranties of merchantability and fitness for a particular purpose are limited in duration to the length of this warranty.

The Cobra Electronics Corporation shall not be liable for any incidental, consequential or other damages; including, without limitation, damages resulting from loss of use or cost of installation.

Some states do not allow limitations on how long an implied warranty lasts and/or do not allow the exclusion or limitation of incidental or consequential damages, so the above limitations may not apply to you.

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