



eTrex VentureTM

personal navigator[®]

owner's
manual
and
reference
guide



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About This Manual

Thank you for choosing the Garmin eTrex Venture. To get the most from your new eTrex Venture, take time to read through this owner's manual in order to understand all of the operating features. This manual is organized into three sections.

The **Introduction** section provides FCC, safety, warranty, maintenance and product registration information along with the Table of Contents.

The **Main Pages** section (listed in the same order as viewed on screen) provides details about using the features of the eTrex Venture according to topic. The explanations for each feature in this section are divided into: **(1)** An overview that discusses the feature and how it functions and **(2)** A detailed Step-by-Step instruction for using the feature.

The **Appendices** include information on items such as **Specifications, Accessories, Data Field Definitions, MapSource** information, a **Troubleshooting Guide** and a **Wiring Diagram** followed by the **Index**.

FCC Compliance Statement

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

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

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

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

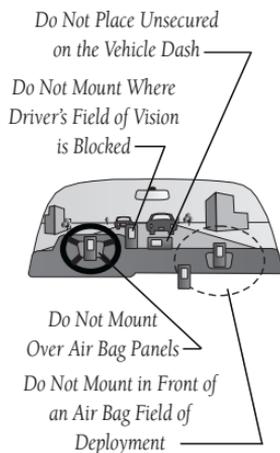
The eTrex Venture does not contain any user-serviceable parts. Repairs should only be made by an authorized Garmin service center. Unauthorized repairs or modifications could result in permanent damage to the equipment, and void your warranty and your authority to operate this device under Part 15 regulations.

WARNING: For use in vehicles, it is the sole responsibility of the owner/operator of the eTrex Venture to secure the GPS unit so that it will not interfere with the vehicle's operating controls, obstruct the driver's view of driving conditions, or cause damage or personal injury in the event of an accident. Do not mount the eTrex Venture over air bag panels or in the field of air bag deployment. Air bags expand with a rapid force that can propel objects in their path toward the driver or passengers causing possible injury. Refer to air bag safety precautions contained in the vehicle owner's manual. Do not mount the eTrex Venture in a place where the driver or passengers are likely to impact it in an accident or collision. The mounting hardware provided by Garmin is not warranted against collision damage or the consequences thereof.

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

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

Warnings and Precautions



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

Warnings and Precautions

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

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

Maintenance

Cleaning

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

Storage

Storing alkaline batteries in the unit is not recommended. To reduce the chance for battery leakage, remove the batteries when storing the unit for more than six months.

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

Water Immersion

The eTrex Venture is waterproof to IEC Standard 529 IPX7. The internal electronics case can withstand immersion in 1 meter of water for 30 minutes although water will enter the battery compartment. Prolonged submersion can cause damage to the unit. After submersion, be certain to remove the batteries and dry out the battery compartment before reuse.

BY USING THE ETREX VENTURE, YOU AGREE TO BE BOUND BY THE TERMS AND CONDITIONS OF THE FOLLOWING SOFTWARE LICENSE AGREEMENT. PLEASE READ THIS AGREEMENT CAREFULLY.

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

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Maintenance

Software License Agreement

Garmin Limited Warranty

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

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

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

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

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

Garmin Limited Warranty

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

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Product Registration

Help us to better support you by completing our on-line registration today!

Have the serial number of your eTrex Venture handy and connect to our website (www.garmin.com). Look for the Product Registration link on the Home Page.

Serial Number

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

Serial Number:

* *



NOTE: Do not confuse this external serial number with the unit i.d. number that is displayed in the System Setup Page. The internal serial number is relevant to the operating software and is required only when transferring certain types of Garmin MapSource Data to your unit.

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Before you begin to explore the eTrex Venture's operating features, you should be familiar with the information contained in the Quick Start which includes instructions for installing batteries, how the buttons function, starting the eTrex Venture, adjusting the screen contrast, and basic navigation techniques to help you start enjoying your eTrex Venture immediately.

Five Main Pages are your primary access to operating the eTrex Venture. Each page provides either a basic navigation function or access to features which enhance navigation or customize the unit's operation.

This manual is arranged on the Main Pages structure with detailed instructions on using the eTrex Venture's features and their options.

Features include:

Storage for 500 Waypoints with name and graphic symbol.

An automatic Track Log with storage capability for 2,048 points, or 10 saved Tracks with 250 points each.

Route building capability, with storage for 20 Routes with 50 Waypoints each.

A Trip Computer for displaying a variety of navigation data such as speed, ETA, ETE, heading, odometer, etc.

A Find Feature for locating Waypoints, Cities, and Points of Interest (POI).*

1 MB of detailed POI data storage, allowing transfer from Garmin MapSource CD-ROM's.

Wide Area Augmentation System (WAAS) capability.**

Setup and Features

** Points of Interest (POI) data must be transferred to the unit using a Garmin MapSource Points of Interest CD-ROM. See page 54 for more information.*

**** About WAAS**

Because the Wide Area Augmentation System (WAAS) is currently under development and is not fully supported by geo-stationary satellites, effective use of the WAAS feature may be limited by your geographic location in relation to those satellites now in service.

There are two WAAS satellites in service in geo-stationary orbit above the Equator, one over the Atlantic Ocean and one over the Pacific Ocean.

Currently, WAAS satellite signal reception requires an absolute clear view of the sky and works best when there are no nearby obstructions such as buildings, mountains, etc. In fact, you may not be able to receive or easily maintain a WAAS satellite signal until full satellite support for this program is complete.

Not enabling WAAS when you cannot receive a signal speeds unit map drawing and conserves battery power.

See pages 5 and 45 for enabling WAAS and satellite reception techniques.

Features and Button Function



The **THUMB STICK** (5-way)

- Press in to enter highlighted options and to confirm messages
- Move Up/Down or Right/Left to move through lists, highlight fields, on-screen buttons, icons, enter data or move the map panning arrow
- Press in and hold for two seconds to mark your current location as a waypoint

Internal Antenna



LCD Display

The **PAGE** button:

- Press to cycle through main pages.

The **POWER** button:

- Press and hold to turn the unit On/Off.
- Press to toggle display backlighting On/Off.

Power/Data Connector Cover

External Power and Data Connector with Alignment Bar



The **ZOOM IN/OUT** buttons:

- When on the Map Page, press to Zoom in and out.
- When on the Satellite Page, press to adjust the screen contrast.

The **FIND** button:

- Press to access the Find Menu



Installing the lanyard

Carry Lanyard Slot

Battery Compartment Cover



NOTE: The eTrex Venture is designed to be held and operated in the left hand, but it can be held and operated using the right hand as well to suit your preference.

Installing the Batteries

The eTrex Venture operates on two “AA” batteries (not included), which are placed into the back of the unit. Rechargeable Alkaline, NiMH, NiCad or Lithium batteries may be used.

Stored data is not lost when the batteries are removed.

To install batteries:

1. Remove the battery cover on the back of the unit. Turn the D-ring 1/4 turn counter-clockwise & pull away.
2. Insert batteries observing the polarity.
3. Reinstall the battery cover by turning the D-ring 1/4 turn clockwise.



Display Backlighting and Contrast Set Up

If lighting conditions make it hard for you to see the display screen, you can adjust the contrast or turn on the backlight.

To turn on the backlighting:

1. Press the **POWER** button to turn on the backlight from any page on the unit. The backlight remains on until the set timeout period is completed or the **POWER** button is pressed again.

The unit is factory set to timeout 15 seconds after the last button press. (To reset the backlight timeout, refer to page 43.)

To adjust the screen contrast:

1. When on the Satellite Page, use the **ZOOM IN** or **OUT** buttons to adjust the contrast.

Battery Installation and Backlight/Contrast

Important Note:

When replacing batteries, use only new or fully recharged batteries and do not mix Alkaline, NiMH, NiCad or Lithium batteries.

Rechargeable batteries typically display less capacity than Alkaline batteries.

Follow the battery manufacturer's instructions for proper care and disposal of used batteries.

When using 'Battery Saver' or 'Use With GPS Off' mode when not navigating, Alkaline batteries can last up to 18 hours.

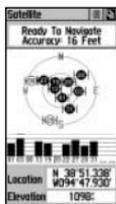


Press & Release **POWER** Button quickly to turn Backlighting On/Off



Use **ZOOM IN & OUT** Buttons while on the Satellite Page to Adjust Contrast

Main Page Basics



Satellite Page(1) Map Page(2) Navigation Page(3) Trip Computer(4) Main Menu(5)

All of the information you need to operate the eTrex Venture can be found on five main pages (or display screens). You can press and release the **PAGE** button to cycle through the Satellite Page, Map Page, Navigation Page, Trip Computer, and Main Menu Page.



While these five pages provide you with different types of navigation information, they all share common features like an Option Menu and a Main Page Menu, both of which are accessed by on-screen buttons located in the top right corner. To display these menus, highlight the on-screen button and press in on the **THUMB STICK**.



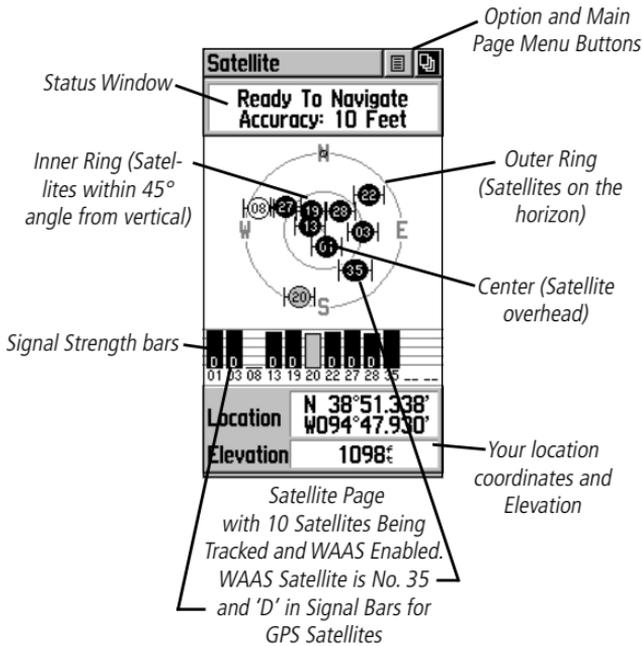
Option Menu
This menu provide additional features or allows you to customize the unit to your preferences.
*To exit these and other pop-up type menus, move the **THUMB STICK** to the left or right.*



Main Page Menu
Use to go directly to a Main Page and as an alternate to cycling through the Main Pages.

*Double-clicking the Main Page Menu with the **THUMB STICK** will toggle between the current and previously viewed main page.*

The Main Page

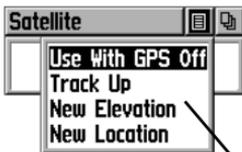


The Satellite Page provides a picture of satellite signal tracking, tells you when the unit is ready for navigation, and shows your location coordinates.

The Skyview graphic represents a view looking up at the sky from your current location showing satellites and their assigned numbers. The outer ring represents the horizon around you, the inner ring represents a view above you at a 45° angle from vertical, and the center represents directly overhead. Signal Strength Bars for each satellite are shown just below the Skyview. Satellites and their signals appear as hollow shapes until a signal is received and then they appear darkened in. The stronger the signal, the taller the signal bar.

The Wide Area Augmentation System (WAAS) capability produces a more accurate position fix. When enabled (the GPS mode set to 'Normal' and the interface set to other than RTCM mode), this feature searches for a WAAS satellite near your location and then receives data for correcting differentials in the GPS satellite signals and the WAAS satellite numbers (Number 33 or above) display on the Satellite Page. When differential correction data has been received for GPS satellites (number 32 or below), a 'D' displays in the signal bar beneath the skyview. It is helpful to orient the unit antenna toward the WAAS satellite shown in the skyview. To learn more about the WAAS System, access the Federal Aviation Administration web site (<http://gps.faa.gov/>).

Options



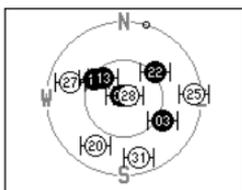
Satellite Page Options Menu
Highlight the on-screen button at the top of the page & press in on the **THUMB STICK**.



The Satellite Page Options Menu



*"GPS Off"
Message*



'North Up' Skyview Orientation

The Satellite Page options include:

Use With GPS Off - Use this option when you are indoors, a clear view of the sky is obstructed, or you want to save battery power. You can enter data, create routes, etc., but cannot navigate in this mode.

Track Up/North Up - You can orient the satellite skyview by selecting 'Track Up' (your direction of travel) or 'North Up' (the satellite skyview oriented to the north).

New Elevation - You can manually enter a new, more accurate elevation, if known, to increase position accuracy.

New Location - If you are more than 600 miles from where you last used the unit, select the 'New Location' and then the 'Use Map' options to approximate your location. This gives the unit reference information and speeds satellite acquisition.

To select the 'Use With GPS Off' option:

1. Use the **THUMB STICK** to highlight the Option Menu button at the top of the page and then press it in to display the Options Menu.
2. Use the **THUMB STICK** to highlight the 'Use With GPS Off' option and then press it in to activate.

The eTrex Venture stops tracking satellites and should not be used for navigation. However, the next time you turn the unit on, it returns to Normal GPS operation.

To select 'Track Up' or 'North Up':

1. Use the **THUMB STICK** to highlight the Option Menu button at the top of the page and then press it in to display the Options Menu.
2. Highlight either the 'Track Up' or 'North Up' option (depending on which is currently in use), and press in on the **THUMB STICK** to activate.

To enter a new elevation:

1. Use the **THUMB STICK** to display the Options Menu.

- Highlight 'New Elevation' and then press in on the **THUMB STICK**.
- Enter the desired elevation by using the **THUMB STICK** to highlight the desired numerals and pressing it in. Highlight 'OK' and press in to complete entry.

To enter a new location:

- Use the **THUMB STICK** to highlight the Option Menu button at the top of the page and then press it in to display the Options Menu.
- Highlight 'New Location' and press in on the **THUMB STICK** to display choices of 'Auto' or 'Use Map'.

If you choose 'Auto' the eTrex Venture determines your new location automatically.

If you choose 'Use Map' a map page displays with instructions stating, "Point to your approximate location and press ENTER". Use the **THUMB STICK** to move the map pointer to your location on the map and press it in.

The eTrex Venture relies on satellite signals to provide navigational guidance, so getting a clear view of the sky is necessary because GPS signals do not travel through rocks, buildings, people, metal, or heavy tree cover. At least three satellite signals are needed to determine your location, otherwise the unit displays a "Poor Satellite Reception" message. This message provides four options and a brief explanation to guide your choice:

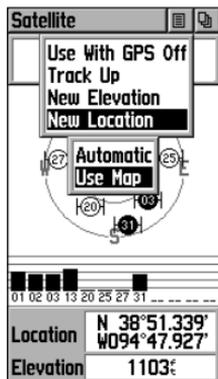
Use with GPS Off - Select this option if you want GPS off (for faster map drawing).

New Location - Select this option if you have moved hundreds of miles (from where you last used the unit).

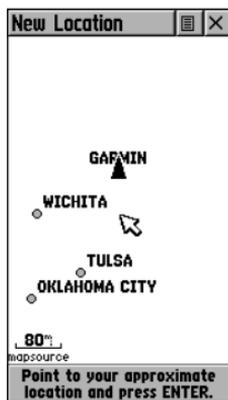
Restart Search - Select this option if today is not (date provided).

Continue Acquiring - Select this option if no other option applies. (The unit will attempt to gather GPS signals.)

Options



'Use Map' option helps to speed acquisition.

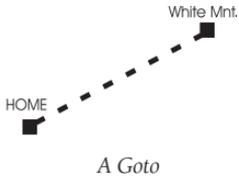


Pan the map moving the arrow to locate your new position.

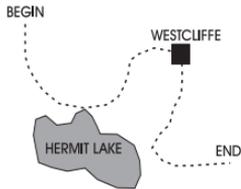


There are four options for the "Poor Satellite Reception" message.

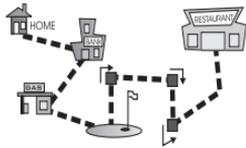
Navigating with eTrex Venture



A Goto



A Track



A Route



When not navigating on a Goto, following a Track, or Route, your travel is indicated by the 'Pointer Icon' and a dotted line indicating your path.

Active Navigation is supported by three of the five Main Pages: the Map Page, Navigation Page and Trip Computer Page.

The Map Page graphically shows you map details, your current location, marks your route to a destination with a route line, and leaves a trail (track log) of where you've been.

The Navigation Page tells you what direction to go and the direction you are traveling.

The Trip Computer Page records and displays travel data, such as the distance you have traveled, your speed, the time spent moving or stopped, and other options can be chosen to display the elevation, the time of day or the time remaining before reaching a destination.

There are three methods of navigating when using the eTrex Venture and each is graphically displayed on the Map Page.

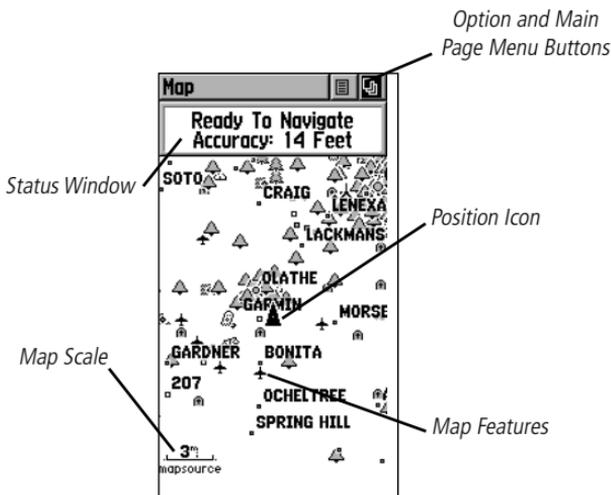
Goto - A direct path to a selected destination (waypoint, city, and Point of Interest).

Track - A previous path of travel that has been stored (logged) in the eTrex Venture. A Track allows you to repeat a path or to return to your starting point on the same path using the Garmin TracBack feature.

Route - A path to a destination consisting of intermediate stops along the way (waypoints, cities, highway exits, points of interest, intersections, etc.).

Travel that does not involve navigating on a Goto, Track or Route is best explained as travel without entering a destination in the eTrex Venture. The Map Page displays your real-time movement as you travel with the unit turned on and receiving satellite signals.

The Main Page



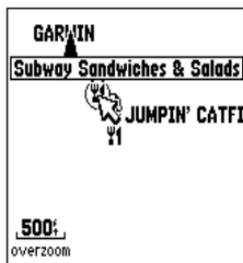
The Map Page displays your present position and direction of movement using a triangular 'Position Icon' that is centered on the map. As you travel, the map display leaves a track log ("trail") of your movements.

The map shown above displays a higher level of detail than the basemap provided with the unit, because Garmin MapSource Points of Interest data has been downloaded to the unit from the mapping program on the optional CD-ROM.

To allow you to view the map from different perspectives, the scale can be changed from 20 feet to 500 miles. The **ZOOM IN** and **OUT** buttons on the side of the unit allow you to zoom in or out on the map. Pressing and holding these buttons causes the scale to change rapidly instead of changing in increments. The **IN** button displays less area but more map detail, while the **OUT** button shows you a larger area with less map detail.

A Status Window at the top of the page provides you with current satellite tracking and position accuracy information.

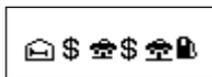
The Main Page



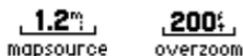
Zoom In



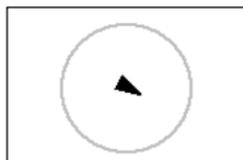
Zoom Out



Map Features



Map Scales



Accuracy Circle



Panning Arrow
(Map Pointer)

The Map Page

The Map Page shows your present position and direction of movement as a triangular 'Position Icon', in the center of the map. The basemap displays the map scale, and cities.

Use the **ZOOM IN** and **OUT** buttons to change the map scale in order to show more map area with less detail or less map area with more detail. Press and hold to **ZOOM** the map scale rapidly. The map scale in the lower left hand side of the display is shown in units of measurement selected in the 'Units' field of the Unit Setup Page (not to be confused with the Map Setup Page). If you zoom in so far that the resolution of the map data is exceeded and the appearance of the map is no longer accurate, the word, "overzoom" displays just below the map scale.

In many instances the map displays an 'Accuracy Circle' surrounding the 'Position Icon'. The eTrex Venture uses both map resolution and GPS accuracy in defining your location to a point within the circle. The smaller the circle, the more accurate your location.

When using the 'Pan Map' feature, a small outline arrow (Map Pointer) can be moved about the page to highlight and identify map items or to scroll the map to view areas not shown on the display screen.

A Status Field at the top of the page provides satellite tracking and location accuracy information.

Two optional Data fields at the bottom of the page can be programmed to provide a variety of travel and navigation information.

More detailed map features as well as information about those features can be downloaded to the unit from an optional Garmin MapSource Points of Interest CD-ROM. When using MapSource data, the word 'mapsource' displays below the map scale whenever you zoom in to view map details.

Options

Map Page options allow a variety of operating and custom features for your eTrex Venture.

Not all of the Map Page options are available at the same time. Many are replaced by an opposite option when they are selected, such as Hide Data Fields/Show Data Fields. The Map Page options are:

Pan Map - Allows you to move the Panning Arrow (Map Pointer) about on the map.

Stop Navigation - Stops navigating to a destination.

Hide Nav Status/Show Nav Status - Removes the navigation status window to expand the map area or inserts the navigation status window.

Hide Data Fields/Show Data Fields - Removes or inserts two programmable data fields at the bottom of the page and expands or reduces the map area.

Setup Map - Displays the Setup Map Pages, which allows you to tailor the map to your requirements such as changing text size, map orientation, and map detail.

Measure Distance - Displays the distance from one point on the map to another.

Restore Defaults - Returns the Map Page to the original factory settings (defaults).

To select a map page option:

1. Highlight the Option Menu on-screen button at the top right of the display screen and then press in on the **THUMB STICK** to open the menu.
2. Highlight the desired option on the menu and then press in on the **THUMB STICK** to activate the option.
3. To close without making a selection, move the **THUMB STICK** to the left or right, or press the **PAGE** button.

On-screen Map Page Options Menu button



Map Page Options Menu with 'Pan Map' selected.

When no active navigation is being used, 'Stop Navigation' cannot be selected.

If 'Show Data Fields' is selected, it is replaced by the 'Hide Data Fields' option.

The 'Setup Map' option consists of five sub-pages.

Options

Using the Pan Map Option

The Map Page pan function allows you to display an arrow used to point at and identify items on the map, and to move the map in order to view areas beyond the current viewing area on the display.

The map panning function is activated from the Options Menu on the Map Page. The **THUMB STICK** moves the panning arrow (also referred to as the map pointer) in the desired direction on the map page. If the arrow moves to the edge of the map display, the map also moves to reveal more area but redraws the map slowly.

Whenever the panning arrow is placed on a map item, the name of that item is highlighted. This feature applies to waypoints, cities, points of interest...nearly everything that is displayed.

Pressing the **THUMB STICK** marks the arrow location or displays the map item information page. An Options Menu allows you to: add it to the Favorites list, add it to a route, project a waypoint from it, save it as a waypoint, view the sun and moon phase from it, or view the hunt and fish from it. On-screen buttons at the bottom of the page allow you to Goto the map item, display it on the map or to select 'OK' and return to the Map Page.

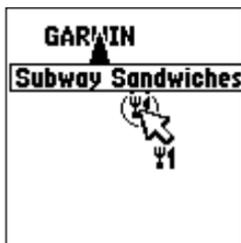
When using the panning arrow, pressing the **FIND** button displays items with the panning arrow (map pointer) location used as a reference point for nearest items instead of your current location. Press the **PAGE** button to return to the Main Map Page.

To find details about or Goto a map item:

1. Use the **THUMB STICK** to move the panning arrow to the map item that you want to learn more about.
2. When the item's name is highlighted, press in the **THUMB STICK** to display the Information Page.
3. Use the **THUMB STICK** to highlight and press the 'Goto' button on the page to navigate to the item.



Map Page with Panning Arrow



Highlighted Map Item



Map Item Information

Stop Navigation

The 'Stop Navigation' option allows you to quit navigating on a Goto, Route or Track in progress, called a TracBack.

To stop navigation:

1. Select 'Stop Navigation' and then press in on the **THUMB STICK**.

When there is no active navigation, the 'Stop Navigation' option is "grayed out" and is non-functional.

Hide/Show Navigation Status

The 'Hide Nav Status/Show Nav Status' option allows you to view GPS navigation data in a window at the top of the page that lists the status of satellite tracking and accuracy of GPS positioning. When hidden, more map area is displayed.

To hide or show Nav Status:

1. Select 'Hide' or 'Show' from the option list and then press in on the **THUMB STICK**.

Hide/Show Data Fields

The 'Hide Data Fields/Show Data Fields' option allows you to view two programmable data fields. When hidden, more map area is displayed.

To hide or show Data Fields:

1. Select 'Hide' or 'Show' from the option list and then press in on the **THUMB STICK**.

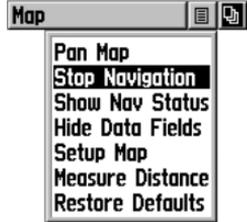
To program a data field:

1. Use the **THUMB STICK** to highlight the data field and then press it in to display the list of options.
2. Highlight the desired option and then press in on the **THUMB STICK** to place it in the data field.

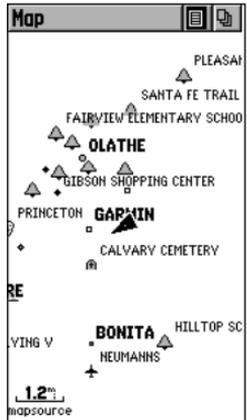
Bearing
Course
Current Destination
Current Distance
Current ETA

Current ETE
Elevation
Final Destination
Final Distance
(Continued)

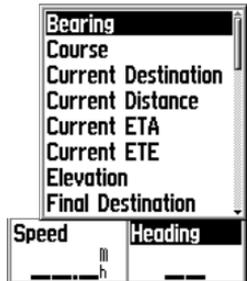
Options



'Stop Navigation' Option



Map Page with Nav Status and Data Fields Hidden

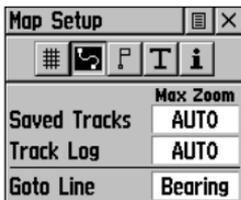


Map Data Fields with Options Menu

Setup Map Options



Page Setup



Tracks Setup



Map Features Setup



Text Setup

(Continued)

Final ETA
Final ETE
Heading
Maximum Speed
Moving Avg. Speed
Odometer
Off Course
Overall Avg. Speed
Pointer
Speed

Sunrise
Sunset
Time of Day
To Course
Trip Odometer
Trip Time - Moving
Trip Time - Stopped
Trip Time - Total
Turn
Velocity Made Good
Vertical Speed

(For definitions, see Appendix C, pages 52-53.)

The 'Setup Map' option displays the five Map Setup Pages, each accessed by an on-screen button. A list of options displays for the features listed. Scale options indicate the point at which Tracks, Tracks Logs, Map Features, or Text Boxes are visible, allowing you to remove map clutter and define map features.

Page - Orientation: *Track Up* or *North Up*; fixes the top of the map display to the current track heading or to a north heading.

Auto Zoom: *On* or *Off*; automatically scales the map to display both your current location and the next point to which you are navigating.

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

Lat/Lon Grid: *On* or *Off*; turns the latitude and longitude grid lines on or off.

Tracks - Saved Tracks and Track Log: *Scale options*; 'Off', 'Auto', or 20 ft.-500 miles, sets the maximum scale at which the feature should appear on the screen. Some types of data will display only to certain zoom scales.

Goto Line: *Bearing* or *Course*; determines which pointer displays.

Map Features - Points of Interest, Waypoints, *Scale options*; 'Off', 'Auto', or 20 ft.-500 miles, sets the maximum scale at which the feature should appear on the screen. Some types of data will display only to certain zoom scales.

Text - Points of Interest, Waypoints, *Text sizes*; 'None', 'Small', 'Medium', or 'Large'*control the screen size of the name.*

MapSource Info - displays a list of either pre-loaded POI data or downloaded MapSource Points of Interest detail, Check box; *check mark determines if map data is displayed on the map page.*

To use Setup Map options:

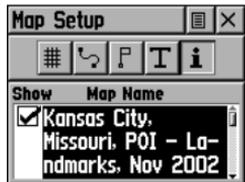
1. Select 'Setup Map' from the Options Menu and then press in on the **THUMB STICK** to display the Map Setup Page.
2. Highlight the desired sub-page button to display the features list for that sub-page.
3. Highlight a feature on the list and press in on the **THUMB STICK** to display the options list for that feature.
4. Use the **THUMB STICK** to highlight the desired option and then press it in to activate.
5. Press the **PAGE** button or the on-screen 'X' button to return to the Map Page.

The Measure Distance Option

To use the Measure Distance option:

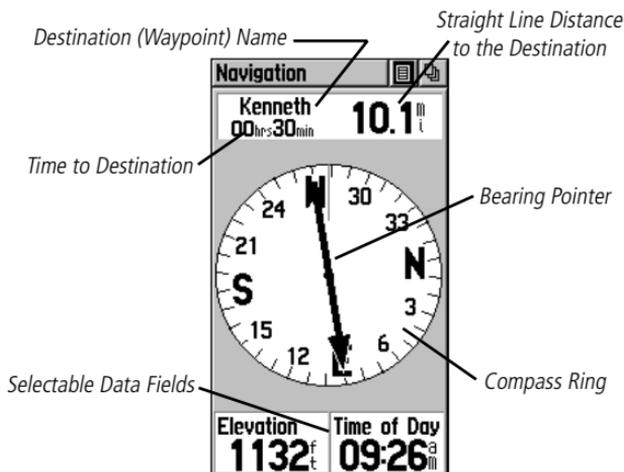
1. Select 'Measure Distance' from the Options Menu and then press in on the **THUMB STICK** to display the Panning Arrow.
2. Use the **THUMB STICK** to move about on the Map Page until you reach the point to which you want to measure. A new 'Map Pointer' field displays showing the location of the pointer and the direction and distance from where you began measuring.

Setup Map Options



Map Data

The Main Page



The Navigation Page provides active guidance with a rotating compass ring that shows your course over ground (track) while you're moving and a bearing pointer to indicate the current direction to your destination (bearing) relative to the course over ground.

The Status Window at the top of the page shows you the name of your destination, the distance, and the time to go. Two Data Fields are provided, and can be programmed to display a variety of navigation data.

When you are not on an active Goto, Track or Route (in other words: not traveling to a recorded destination), the window at the top of the page displays the status of the GPS Receiver and the approximate accuracy of your current position. The Compass Ring displays your heading while you are moving, but the data fields at the bottom of the page will not display any destination related data, such as Estimated Time of Arrival.

Navigation Page

The options include:

Stop Navigation - “Grayed out” unless you are navigating on a Goto, Track, or Route.

Bearing Pointer/Course Pointer - Toggles between Bearing (always directed at destination) and Course (distinctive with dots across center of compass, shows amount of correction needed to be back on course.)

Big Numbers/Big Compass - toggles to display data fields in large text format while removing the Status Window and reducing the size of the compass ring.

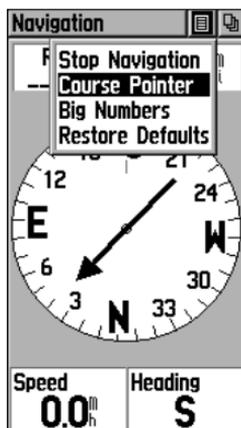
Restore Defaults - Returns options and data field choices to factory designations.

At the bottom of the page are two data fields that are user programmable with a choice of different data options:

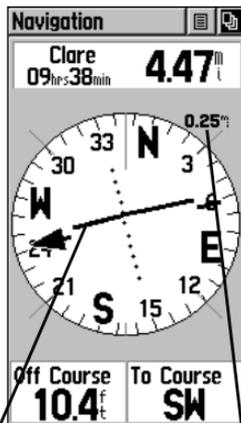
The Bearing Pointer and Compass Ring work independently of the direction of your movement and the direction to your destination. The Bearing Pointer always points directly to the destination, no matter what your current location might be.

For example: if the arrow is pointing straight up, you are going directly to your destination. If it points any direction other than up, turn towards that direction until the arrow is pointing up and then continue in that direction. If you are using the ‘Course Pointer’ option instead and you drift away from the line of travel to your destination, the Course Deviation Indicator (CDI) provides graphic indication of drift (right or left) and displays the distance off course.

Options



Navigation Page
Options Menu



Navigation Page with
Course Pointer and
Course Deviation Indicator
(CDI) Scale active.

Use the ZOOM buttons to
adjust the CDI scale setting.

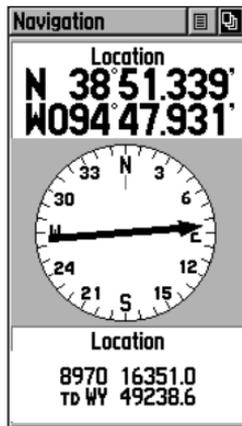
Options



Navigation Page Data Fields

Options Menu

(The slider at the side of the menu indicates a multi-page list of options.)



Your current position can be displayed in two different position formats at the same time*

To Setup the Navigation Page:

1. With the Navigation Page displayed, use the **THUMB STICK** to highlight the Options Menu button at the top right of the page. Then press it in to display the menu.
2. Use the **THUMB STICK** to highlight your selection and then press in to select it.

To change data fields:

1. Use the **THUMB STICK** to highlight the desired data field and then press it in to display the list of data options.
2. Select the desired option from the list and press in on the **THUMB STICK**.

Bearing	Odometer
Course	Off Course
Current Destination	Overall Avg. Speed
Current Distance	Pointer
Current ETA	Speed
Current ETE	Sunrise
Elevation	Sunset
Final Destination	Time of Day
Final Distance	To Course
Final ETA	Trip Odometer
Final ETE	Trip Time - Moving
Heading	Trip Time - Stopped
Location (lat/lon)*	Trip Time - Total
Location (selected)*	Turn
Maximum Speed	Velocity Made Good
Moving Avg. Speed	Vertical Speed

(For definitions, see Appendix C, pages 52-53.)

* Only available when data fields are set to 'Big Numbers' from the Options Menu. It is possible on the Navigation Page to see your current position with two different position formats at the same time, see page 21 for instructions.

The Main Page

Selectable Data Fields

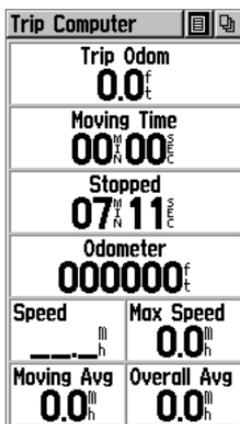
Trip Computer	
Trip Odom 0.0 _f	
Moving Time 00:00 _N	
Stopped 07:11 _N	
Odometer 000000 _f	
Speed _____ _m _h	Max Speed 0.0 _m _h
Moving Avg 0.0 _m _h	Overall Avg 0.0 _m _h

The Trip Computer Page displays up to eight different types of navigation data and are user programmable. Each data field is selectable and can contain one of many data information options. The default settings for these fields are shown in the illustration.

By selecting the information options that you prefer and arranging them in a desired order on the page, you can customize the Trip Computer Page to meet your navigation needs.

The Options Menu allows you to reset the Trip Computer data when you are ready to start a new trip.

Options



Trip Computer Page

Trip Computer Page

The Trip Computer provides a variety of data fields with read-outs of current information as you travel.

The Option Menu for this page provides the following options: **Reset**, **Big Numbers**, and **Restore Defaults**.

To program a data field:

1. Use the **THUMB STICK** to highlight the desired data field and then press it in to open the data field Options Menu.
2. Use the **THUMB STICK** to move Up or Down the menu to highlight a desired data option.
3. Press in on the **THUMB STICK** to select the option and place it in the data field.

To access the page Options Menu:

1. Use the **THUMB STICK** to highlight the Options Menu on-screen button and press it in to display the Options Menu.
2. Highlight the desired option and then press in on the **THUMB STICK** to activate.
3. To activate individual 'Reset' options, highlight the item on the list and then press in on the **THUMB STICK** to place or remove the check mark.
4. Highlight the Apply button with the **THUMB STICK** and press it in to activate all checked items on the list.



Reset Options Menu

Useful when starting a new trip to clear old data.



NOTE: Use care when choosing the 'Delete' options, as all stored Tracks, Waypoints, and Routes can be permanently deleted when resetting the Trip Computer.

Trip Computer Page Data Fields

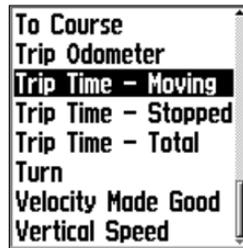
The list of data field options with definitions is in Appendix C, pages 52-53.

Bearing	Odometer
Course	Off Course
Current Destination	Overall Avg. Speed
Current Distance	Pointer
Current ETA	Speed
Current ETE	Sunrise
Elevation	Sunset
Final Destination	Time of Day
Final Distance	To Course
Final ETA	Trip Odometer
Final ETE	Trip Time - Moving
Heading	Trip Time - Stopped
Location (lat/lon)	Trip Time - Total
Location (selected)	Turn
Maximum Speed	Velocity Made Good
Moving Avg. Speed	Vertical Speed

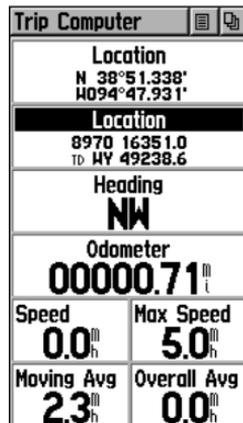
To display current position in 2 different position formats at the same time:

1. Use the **THUMB STICK** to highlight the desired data field and then press it in to open the data field Options Menu.
2. Select 'Location (lat/lon)' to display your current position in the latitude and longitude format.
3. Use the **THUMB STICK** to highlight the next data field of choice and then press it in to open the data field Options Menu.
4. Select 'Location (selected)' to display your current position in a different format, e. g. MGRS, UTM, or Loran TD. In order to see a different position format in this field, you will need to change this option by going to MAIN MENU, then SETUP, then UNITS. (Refer to p. 42 for additional help)

Options

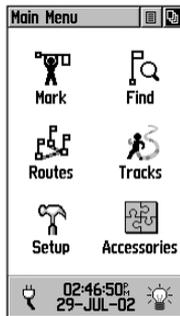


Data Field Options Menu



Your current position can be displayed in two different position formats at the same time

The Main Page



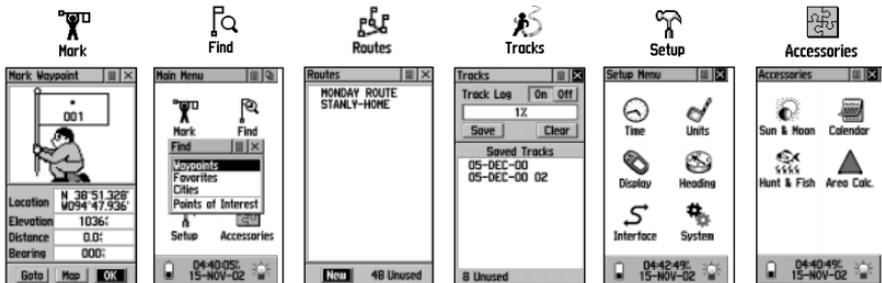
The Main Menu Page with Feature Icons and Battery Capacity, Time/Date, and Backlighting Status Bar.

The Main Menu provides you with a directory of the eTrex Venture's advanced features. From the Main Menu page you can mark and create new waypoints; find map items such as cities, Points of Interest, etc.; create routes; save tracks; setup system operating features; or access and use unit accessories.



To exit these pages, highlight the on-screen 'X' button and press in on the THUMB STICK.

Main Menu Pages



Setting the Correct Time Zone

If the time displayed in the field at the bottom of the Main Menu does not match the time for your current location (time zone), use the Main Menu to access the Setup Pages, select the Time Icon and then follow instructions for setting the time on page 41.

The Main Menu Page

Using the Main Menu

The Main Menu provides access to additional eTrex Venture feature pages. The pages listed below provide enhancements to eTrex Venture operation. Press the **PAGE** button repeatedly to cycle to the Main Menu or select it from the page list at the top of each main page.

Mark Waypoint Page - Allows you to mark and store a waypoint for your current location or a map pointer location.

Find Menu - Allows you to locate, and Goto, or use as part of a Route; Waypoints, Favorite Locations, Cities, and Points of Interest. (Points of Interest requires use of the MapSource CD.)

Route Page - Allows you to create and store routes for repeated use.

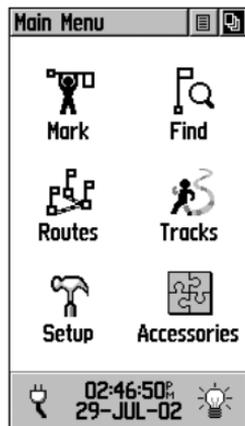
Tracks Page - Provides access to the track log and saved tracks.

Setup Page - Allows tailoring of items such as time format, units of measure, display backlighting timeout and contrast adjustment, interface setups, heading selection and system software information.

Accessories Page - Allows you to access Sun and Moon data, a Calendar, Hunting and Fishing data, and an Area Calculator.

Information about the status of backlighting, time and date, and unit power are displayed in the window at the bottom of the Main Menu Page.

The battery icon displays the approximate amount of reserve power available. When the unit is powered by a cigarette lighter adapter, a power plug icon replaces the battery icon. The date and time are displayed in the center of the window and when backlighting is active the light bulb to the right appears illuminated.



Main Menu with Feature Icons and Power, Date/Time, and Backlight Status Window



Power, Date/Time, and Backlight Status Window

Mark



Mark Waypoint Page



Map Symbol List

The Mark Waypoint Page

The Mark Waypoint Page allows you to mark and record your current (or any other) location as a waypoint and appears with a graphic name block (man with a flag) that displays the assigned number for that waypoint and a waypoint symbol.

To mark your current location as a waypoint:

1. Press in and hold the **THUMB STICK** until the Mark Waypoint Page appears. You can also access this page by highlighting the Mark Icon on the Main Menu Page and then pressing in on the **THUMB STICK**. It automatically is assigned a 3-digit number.
2. To change the name of the waypoint, use the **THUMB STICK** to highlight the waypoint name field and press it in to choose the appropriate letters or numbers one at a time.
3. To assign an identifying symbol to a waypoint, use the **THUMB STICK** to highlight the symbol block just above the waypoint name. Press the **THUMB STICK** and choose the symbol of your choice from the available list.
4. To save the waypoint, highlight 'OK' and press in on the **THUMB STICK**.
5. If you do not want to save it as a new waypoint, press the **PAGE** button before pressing any other to cancel.

To create a waypoint using the map panning arrow:

1. With the Pan Map feature active, move the panning arrow to the map item you want and highlight it.
2. Press in and release the **THUMB STICK** to display the item information page.
3. Highlight the Options Menu button at the top of the page and then press the **THUMB STICK** to open the menu.
4. Highlight the 'Save As Waypoint' option and press the **THUMB STICK** to save the map item as a waypoint.

To create a waypoint using the panning arrow when a map item is not highlighted:

1. With the Pan Map feature active, move the panning arrow (map pointer) on the map to the location you want to mark and then, press the **THUMB STICK**.
2. The Mark Waypoint Page displays, automatically assigning a number to the waypoint.

Be certain to press and release the **THUMB STICK** for this operation. BE CAREFUL not to press in and hold the **THUMB STICK** because it marks a waypoint of your current location.

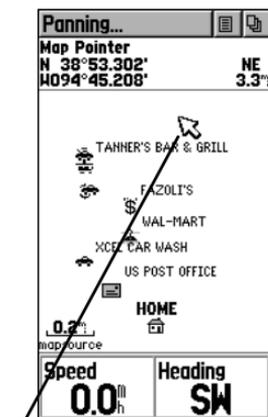
To create a waypoint by manually entering its coordinates (lat/lon):

1. Press in and hold the **THUMB STICK** to access the Mark Waypoint Page.
2. Highlight the Location Field on the Mark Waypoint Page, press the **THUMB STICK** and enter the new coordinates using the numerical keyboard. Highlight and press 'OK' when finished.
3. You may also change the waypoint name and/or symbol.

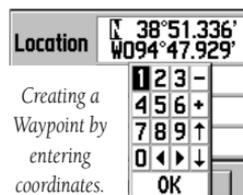
To move a waypoint:

1. Use the Find Menu to locate the waypoint you want to move.
2. On the Waypoint Information Page, highlight and press the 'Map' on-screen button to display the map for the waypoint.
3. With the waypoint highlighted by the panning arrow, press in and release the **THUMB STICK**. The word "Move" displays beneath the panning arrow.
4. Use the panning arrow to drag the waypoint to the new location and then press in on the **THUMB STICK** to place it.
5. Press the **PAGE** button before pressing the **THUMB STICK** to cancel moving of the waypoint and return to the Main Pages.

Mark Options



Marking a Waypoint on the map without highlighting a map item.

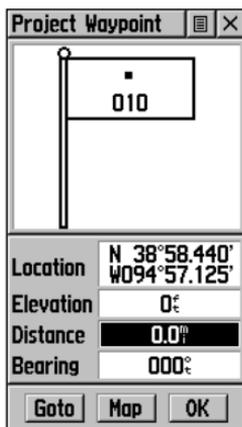


Creating a Waypoint by entering coordinates.



Moving a Waypoint

Mark Options



Enter Distance and Bearing to Project a Waypoint

Waypoint Symbol Field



Waypoint Name Field



Using the keyboard to edit

Projecting a Waypoint

Projecting a waypoint from any map item (another waypoint, etc.) allows you to establish a new waypoint on a bearing and distance projected from that map item.

To project a waypoint:

1. Select a map item from the Find Menu.
2. Highlight the Option Menu on-screen button at the top of the Information Page and press the **THUMB STICK** to display the Project Waypoint Page.
3. Press the **THUMB STICK** to display the numerical keyboard for entering the distance. Move from numeral to numeral pressing the **THUMB STICK** to enter numbers.
4. Enter the distance and bearing to the projected waypoint in the appropriate fields and then select 'OK' and press the **THUMB STICK** to complete.

Editing a Waypoint

You can personalize a Waypoint by changing the Name field and Symbol field to make them easier to recognize or can change the coordinates or elevation. It can also be deleted.

To edit a waypoint:

1. Use the Find Menu to display the waypoint.
2. Use the **THUMB STICK** to highlight the Waypoint symbol field and then press in to display the symbol list. Use the **THUMB STICK** to move up and down the list to highlight a symbol and then press in to place the symbol in the symbol field.
3. Use the **THUMB STICK** to highlight the Waypoint name, location or elevation fields, and then press in to display the keyboard.
4. Use the **THUMB STICK** to highlight the desired character and then press in to select it. Repeat the process until you are through.
5. Highlight 'OK', and then press the **THUMB STICK** to save the changes and close the keyboard.

To delete a waypoint:

1. Use the Find feature to display the waypoint.
2. Open the Options Menu at the top of the page, highlight the 'Delete Waypoint' button and then press on the **THUMB STICK**.

To save Map or Find Menu items as waypoints:

1. Access the Information Page for the desired item (highlighted from the map or selected from the Find Menu).
2. Open the Options Menu at the top of the page, highlight 'Save As Waypoint' and press in on the **THUMB STICK** to switch to the Mark Waypoint page.
3. Highlight 'Ok' and press in on the **THUMB STICK** to save the selected item as a waypoint.

To save Map or Find Menu items as a favorite:

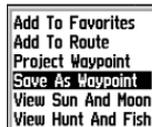
1. Access the Information Page for the desired item (highlighted from the map or selected from the Find Menu).
2. Open the Options Menu at the top of the page, highlight 'Add to Favorites' and press in on the **THUMB STICK** to add the item to the Favorites List.

The Find Menu

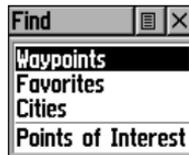
The Find Menu allows you to find stored locations, waypoints, cities, Points of Interest. They can be found by name or by those nearest to your current location (Position Icon). If you are using MapSource Points of Interest CD-ROM, the list of find locations is expanded to include categories for Points of Interest.

Press the **FIND** button to access the Find Menu.

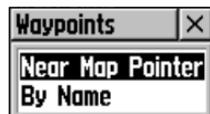
For some categories, there are two methods of listing. The "By Name" list contains every item in the map database for the selected category, while the "Nearest" list contains only those items that are near to your Current Location or the Map Pointer. Categories listed by either method displays a choose prompt.

Find Menu

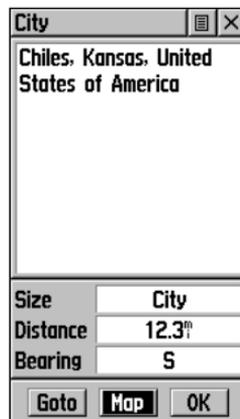
Any Map or Find Menu item can be saved as a Waypoint.



Find Page using your current location as a point of reference



'Near Map Pointer' or 'By Name' Prompt displays when using Map Pointer

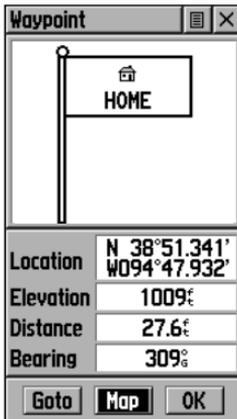


Item Information Page

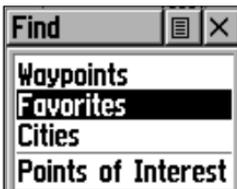
Find Options



Waypoint Find List



Waypoint Information Page



Favorites Category

These pages are structured with a set of sub-menus and location information pages that guide you through the process of finding locations. Use them to construct a Route, establish a direct line of travel (Goto), or when gathering information.

Finding a Waypoint

Waypoints that you have created and stored in the eTrex Venture can be found by selecting the “Waypoint” option from the Find Menu. You can find a waypoint from the list of waypoints using the ‘By Name’ or ‘Nearest’ options as explained on the previous page. When selected from the list, the waypoint displays on the Waypoint Information Page.

The Waypoint Information Page displays the waypoint name or number, a map symbol, the location in lat/lon, elevation, distance, bearing, and three on-screen buttons for ‘Goto’, ‘Map’, and ‘OK’ functions.

To find a waypoint:

1. Use the **THUMB STICK** to select the Waypoint option from the Find List and then press it in to display a prompt to select ‘By Name’ or ‘Nearest’. Select, then press the **THUMB STICK** to display the Waypoints List.
2. Use the **THUMB STICK** to select the desired waypoint from the list and then press it in to display the Information Page for that waypoint.
3. With the Information Page displayed, you can select ‘Goto’ to create a direct line of travel to the waypoint. Select ‘Map’ to view the waypoint location on the map or select ‘OK’ to close the page.
4. Use the Options Menu to add the waypoints to the ‘Favorites’ list, add it to an existing route, project a new waypoint from this location, view sun and moon, and best fishing and hunting time information for this waypoint.

Finding a Favorite

Favorites are map items and waypoints designated as those you would like to give a special status, as they are frequently used or have other special significance. The process for finding favorite waypoints from the 'Favorites' list is the same as finding a regular waypoint.

To find a 'Favorite':

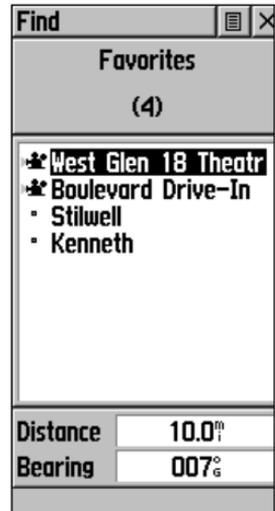
1. Use the **THUMB STICK** to select the 'Favorites' option from the Find List and then press it in to display the list. Use the list Options Menu to select 'By Name' or 'Nearest'.
2. Use the **THUMB STICK** to select the desired Favorite from the list and then press it in to display the Information Page for that item.
3. With the Information Page displayed, you can select 'Goto' to create a direct line of travel to the item. Select 'Map' to view the waypoint location or select 'OK'.
4. Use the page Options Menu to add the item to an existing route, project a new waypoint from this location, or view sun and moon position data for this time and date.

Finding a City

Cities can be found by selecting the 'Cities' option of the Find Menu, selecting the city from the list of 'Nearest' or 'By Name', and then displaying the City Information Page.

The City Information Page for the selected city displays the city name, the size by population, and distance from your location. You can view it on the map or create a Goto direct route to the city from your current location, or from a location defined by the Panning Arrow (Map Pointer). You can also save it as a waypoint, or add it to an existing route.

Find Options



Favorites List

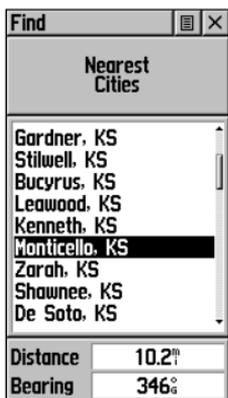


City Information Page

Find Options



Find List of Cities By Name



Find List for Nearest Cities



Points of Interest List

To find a city:

1. Use the **THUMB STICK** to select the 'Cities' option, then press it in to display the find 'By Name' or find by 'Nearest' prompt. Selecting 'By Name', displays the keyboard to eliminate scrolling through the list of cities.
2. If using find 'By Name', begin spelling the name of the city by using the keyboard. When you have entered enough characters to define the name, a match list displays. If you are using find 'By Nearest' scroll through the list to find the city you want. Use the **THUMB STICK** to select the desired city from the list and then press it in to display the Information Page for that city.
3. With the Information Page displayed, you can select 'Goto', 'Map', or 'OK' options.

Finding a Point of Interest

You can use the Find Points of Interest option to locate a nearby restaurant, lodging, landmark, public building, park, etc. However, you must have transferred a MapSource Points of Interest map to the eTrex Venture's map database otherwise this option displays grayed out and is not functional.

Here is a list of Point of Interest categories:*

Food & Drink

Lodging

Attractions

Entertainment

Shopping

Services

Transportation

Emergency & Govt.

Manmade Places

Water Features

Land Features

* Some items on the above list may not appear unless those particular Points of Interest have been downloaded into the eTrex Venture GPS using MapSource Points of Interest CD-ROM.

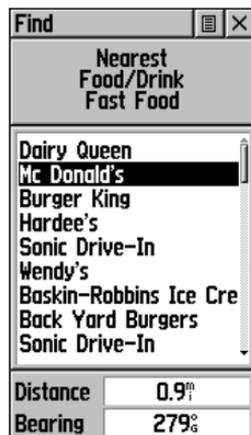
In many instances, these categories are subdivided into types, such as in the instance of Food & Drink. When you select Food and Drink from the list of categories, you are then presented with a list of types which includes 'All Types' and cuisine options such as American, Asian, Barbecue, Chinese and many more

Once you have selected an item, you can display the Information Page for that item. You can then use the on-screen buttons to 'Goto' or view the location on the 'Map'; or use the Options Menu for more choices.

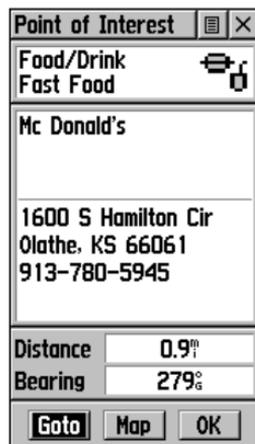
To find a point of interest:

1. Press the **FIND** button to display the Find Menu.
2. Use the **THUMB STICK** to highlight 'Points of Interest' and then press it in to display the Points of Interest Categories List.
3. Choose either 'Nearest' or 'By Name'. Use the **THUMB STICK** to select the desired category and then press it in to display the Types List.
4. Use the **THUMB STICK** to select the desired type and then press it in to display the list for that type.
5. Selecting 'By Name' displays a keyboard allowing you to enter the characters of the name you want. A list of matches displays when enough characters are entered. Selecting 'Nearest' displays a list of Points of Interest nearest to your location of the map pointer.
6. Use the **THUMB STICK** to highlight your selection from the list and then press it in to display the Information Page for that item.
7. Use the on-screen buttons to 'Goto' or view on the 'Map'.
8. Use the page Options Menu to add to favorites, add to route, project a waypoint, save as a waypoint, view sun and moon phase, or view hunt and fish.

Find Options



Nearest Fast Food List



Point of Interest Info Page

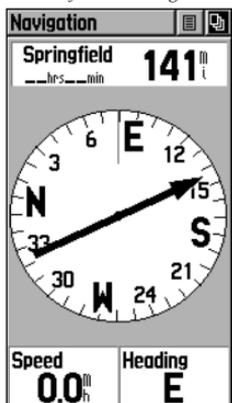


NOTE: Saving a Point of Interest as a waypoint gives the waypoint a meaningful name.

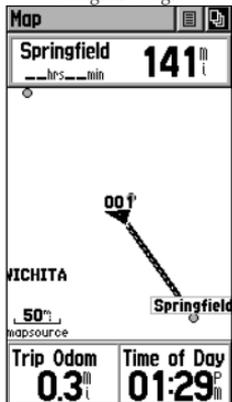
Find Options



Information Page



Navigation Page



A Map Page Goto

Using a Goto to Navigate to a Destination

The Goto function allows you to create a direct route to a destination, (waypoint, city, or point of interest). Once you have accessed the Information Page for an item, use the Goto button at the bottom of the page to initiate travel to a map item using the Map and Navigation Pages for guidance.

To activate a Goto:

1. Use the Find Menu to access the Information Page for any desired destination and use the **THUMB STICK** to highlight the Goto button.
2. Press in on the **THUMB STICK** to start navigation.
3. Observe the Navigation Page, it displays the name of your destination, the distance from your current location, and a Bearing Pointer indicating the direction you should travel. The time required to reach your destination displays when you begin to travel and establish a predicted rate of movement. The Data Fields at the bottom of the page displays information relative to your travel as appropriate for the type of data selected to appear in those fields.
4. Use the **PAGE** button or Main Page Menu to access the Map Page and observe your movements and a dark line indicating the direct path from your current location to your destination.
5. Use the Bearing Pointer on the Navigation Page to maintain travel in the right direction and observe distance and time information to monitor your progress.
6. When you are close to your destination, an "Arriving at Destination" message appears. If you move past the destination the Bearing Pointer reverses and the distance display increases.

To stop navigation:

1. Highlight the on-screen Options Menu button at the top of the Navigation or Map Page and press in on the **THUMB STICK**.
2. Select 'Stop Navigation', then press in on the **THUMB STICK**.

Creating and Using a Route

Route navigation allows you to create a sequence of intermediate waypoints which lead you to your final destination. The eTrex Venture stores 20 routes, each with up to 50 waypoints. A route can be created and modified from the Route Page, and waypoints can be added to a route from the Find Menu. More complex routes can be created using a PC and MapSource Points of Interest program and then transferred to the unit's memory.

To create a route:

1. Access the 'Routes' page from the Main Menu. The page has a 'New' button, a list of routes, and the number of unused routes.
2. Use the **THUMB STICK** to highlight the 'New' button and press it in to display the route Setup Page.
3. With an empty row (dashed) in the route list highlighted, press in on the **THUMB STICK** to display the Find Menu.
4. Use the Find Menu to select a route waypoint from one of the Find Menu categories and display the Information Page for the selected waypoint, city, exit, point of interest, etc. Highlight the on-screen 'OK' button and press in on the **THUMB STICK** to place it on the Routes List.
5. To add more waypoints to the route, repeat the process in Steps 3 and 4. The route is named for the first and last waypoints on the route.

You can add waypoints to the end of an existing route at any time by using the Find Menu.

To add a Find Menu item to a route:

1. Select an item from the Find Menu and display its Information Page.
2. Display the page Options Menu and select the 'Add To Route' option to display the Routes List.
3. Highlight and select the route desired and then press in on the **THUMB STICK**. A "Waypoint Added Successfully" message displays.

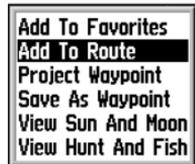
Routes



The Routes Page with a list of Routes and the number of Unused Routes.

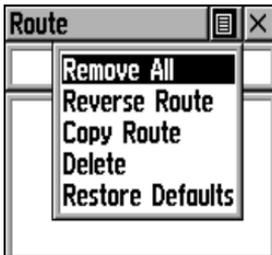


A Route with list of waypoints.

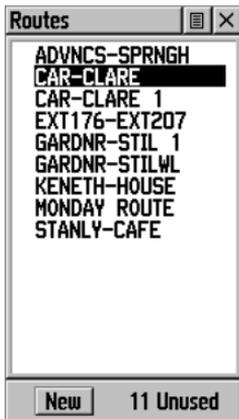


"Add To Route" option from the Find Menu Information Pages

Routes Options



A Route Options Menu



Routes List With Two Copied Routes
Copied Routes have a '1' Suffix



Delete Route Prompt

Editing a Route

To remove all waypoints:

1. Select the Route Page options button and press the **THUMB STICK** in to access the Options Menu.
2. Highlight the 'Remove All' option and then press in on the **THUMB STICK**. At the prompt "Do you really want to remove all waypoints from the route?", select "Yes".

To reverse the route:

1. Select the Route Page options button and press the **THUMB STICK** in to access the Options Menu.
2. Highlight the 'Reverse Route' option and then press in on the **THUMB STICK** to reverse the order of waypoints in the list. To change the route back to the original order, repeat this process.

To copy the route:

1. Select the Route Page options button and press the **THUMB STICK** in to access the Options Menu.
2. Highlight the 'Copy Route' option and then press in on the **THUMB STICK** to copy. The copied route displays on the Routes Page and is named the same but followed by a numeral 1. You may then rename and/or modify the copied route.

To delete the route:

1. Select the Route Page options button and press the **THUMB STICK** in to access the Options Menu.
2. Select 'Delete' and then press in on the **THUMB STICK**. When you see the prompt "Do you really want to delete route?", select "Yes".

To restore default settings for the route:

1. Select the Route Page options button and press the **THUMB STICK** in to access the Options Menu.
2. Select 'Restore Defaults' and then press in on the **THUMB STICK** to restore factory settings.

To review a waypoint:

1. Select the waypoint from the Route Waypoints List and press the **THUMB STICK** in to access the Options Menu for the waypoint.
2. Highlight 'Review' and then press in on the **THUMB STICK** to display the Information Page.
3. Highlight the on-screen 'OK' button and then press in on the **THUMB STICK** to return to the Route List.

To insert a new waypoint on the route list:

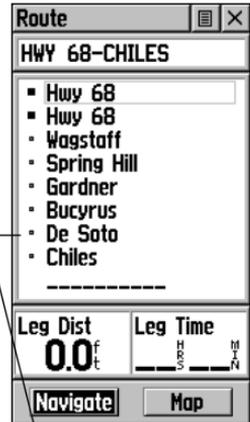
1. Select the row where you want the new waypoint inserted before. Press the **THUMB STICK** in to access the Options Menu.
2. Highlight 'Insert' and press in on the **THUMB STICK** to display the Find Menu and select a new waypoint, city, exit, point of interest, etc.
3. With the new waypoint highlighted, press in on the **THUMB STICK** to display the Information Page for the new waypoint and then select the on-screen 'OK' button to add it to the route.

To remove a waypoint from the route list:

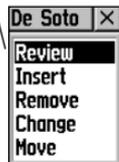
1. Select the waypoint that you want to remove from the Route Waypoints List and press in on the **THUMB STICK** to display the Options Menu.
2. Highlight 'Remove' and press in on the **THUMB STICK** to remove the waypoint from the list.

To change a route waypoint:

1. Select the waypoint that you want to change from the Route Waypoints List and press in on the **THUMB STICK** to display the Options Menu.
2. Highlight 'Change' and press in on the **THUMB STICK** to display the Find Menu or create a new waypoint and add it to the Waypoints list.
3. Select a new waypoint, access its Information Page and press the on-screen 'OK' button to replace the old route waypoint.

Routes Options

*Route Page with
Waypoint List*

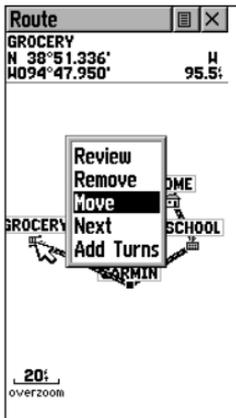


*Route Waypoint
Options Menu*



*Using the Find Menu to change
a Route Waypoint*

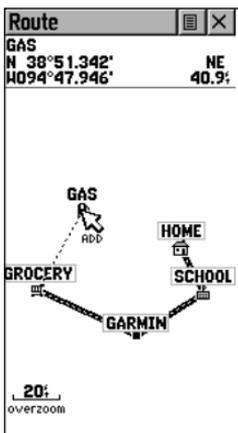
Routes Options



Moving a Route Waypoint by clicking and dragging.



Map Page Route Options



Adding a Route Waypoint to an end point on the Route Map Page

To move a route waypoint:

1. Select the waypoint from the Route Waypoints List and press the **THUMB STICK** in to access the Options Menu for the waypoint.
2. Highlight the 'Move' option and press in on the **THUMB STICK** to select the waypoint.
3. Use the **THUMB STICK** to move the waypoint up or down in the list. Press in on the **THUMB STICK** to leave the waypoint in the new list order.

Adding or Editing from the Route Map Page

You can use the panning arrow with the Route Map Page displayed to add or edit route waypoints.

To add a waypoint at either end of a route:

1. Select the Route from the Routes List and press the **THUMB STICK** in to display the Route Page.
2. Highlight the on-screen 'Map' button at the bottom of the page and press in on the **THUMB STICK** to display the Route Map Page.
3. Use the **THUMB STICK** to move the panning arrow to either end of the displayed route until the end waypoint is highlighted. Then press it in to display the map Options Menu and select 'Add Turns'. This option appears only when highlighting the end point of a route.
4. Move the panning arrow to a map item or location where you would like to extend the route and press in on the **THUMB STICK** to display the Information Page for the new waypoint. Press the on-screen 'OK' button to return to the map page and then press it again to place the new waypoint.

To add a route waypoint within a route:

1. Follow steps 1 and 2 in the previous instruction.
2. Use the **THUMB STICK** to move the panning arrow to a route line. When the arrow touches the line, the line becomes thin. Press in on the **THUMB STICK** to display the word 'ADD' next to the line.

3. Drag the line to a map item or other location where you want to establish a new waypoint and then press in on the **THUMB STICK** to place the new waypoint. A waypoint information page displays. Press the on-screen 'OK' button to save the new waypoint, then press it again after returning to the Route Map.

To review or remove a route waypoint:

1. Select the Route from the Routes List and press the **THUMB STICK** in to display the Route Page.
2. Use the **THUMB STICK** to highlight the desired route and press in to display the Route Page for that route.
3. Use the **THUMB STICK** to move the map panning arrow to the waypoint you want to review and press in to pop-up the Options Menu. Select 'Review' or 'Remove' and press in again to either display the Information Page or remove it from the route.

To view the next waypoint in the route:

1. Follow Steps 1 and 2 above.
2. Place the map panning arrow on the waypoint you are currently viewing and press in to display the Options Menu. Select 'Next' and press in again to view the next waypoint.

Navigating a Route

A Route can be navigated using the Map Page or the Navigation Page. The Map Page displays your movement, the route line, and waypoints on the route. The Navigation Page shows compass direction and a bearing pointer.

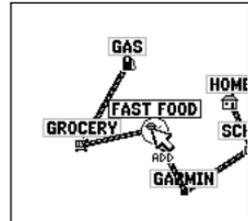
To navigate a route:

1. Select a route from the Routes List and then press in on the **THUMB STICK** to display the Route Page.
2. Highlight the on-screen 'Navigate' button at the bottom of the page and then press in on the **THUMB STICK** to begin navigating the route.

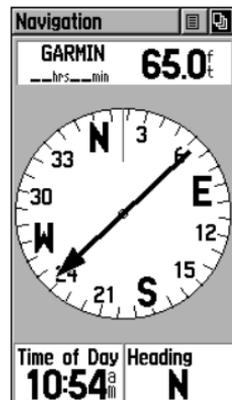
The screen changes to the Navigation Page.

(Continued)

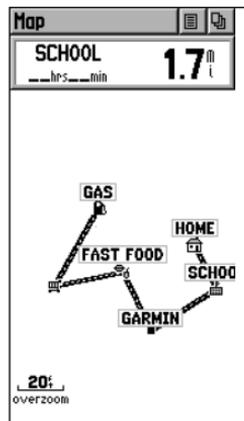
Routes Options



Adding a new waypoint within a Route

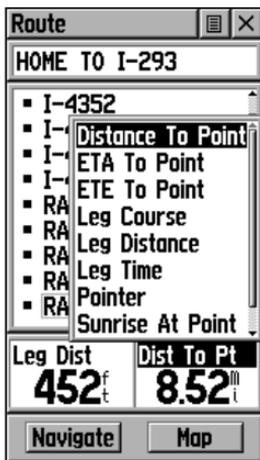


Navigation Page with Bearing Pointer



Navigating a Route on the Map Page

Routes Options



Data Field Options Menu



Distance to Point vs Leg Distance. To view Leg information, highlight the end waypoint on a leg.

3. Move to the Map Page to view the route and the position icon indicating your current location.
4. Begin moving, watching directional information on the Navigation Page or progress on the Map Page.

To stop navigation:

1. Highlight the 'Stop Navigation' option on either the Navigation or Map page or select the 'Stop' button on the Route Page.

Data Fields for the Route Page

When navigating a Route, the data displayed in the data fields on the Route Page may be customized to provide useful navigation information that is specifically related to route navigation.

Data options (for Route Page only) include:

Distance to Point - The distance from your current location to a route waypoint.

ETA To Point - Estimated Time of Arrival at a route waypoint (in sequence).

ETE To Point - Estimated Time Enroute to a route waypoint.

Leg Course - The line of travel between two route waypoints.

Leg Distance - The distance between two route waypoints.

Leg Time - The time required to travel from a route waypoint to the next.

Pointer - Direction pointer to a route waypoint.

Sunrise At Point - Time of sunrise at a route waypoint.

Sunset At Point - Time of sunset at a route waypoint.

To select data field options:

1. Use the **THUMB STICK** to highlight a data field and then press in to display the Data Field Options Menu.
2. Use the **THUMB STICK** to highlight the desired option and then press in to enter the option in the data field.

Tracks

Using Track Logs

The eTrex Venture draws an electronic bread crumb trail on the Map Page as you travel along. This bread crumb trail is the 'Track Log'. The Track Log contains information about points along its path, including time, and position. The eTrex Venture uses this information to allow you to navigate using the saved track.

The 'TracBack' feature allows you to return along a traveled path without marking any waypoints. When you are ready to return to where you started, the eTrex Venture takes you back by following the 'Track Log' that you left behind. You can save a total of ten tracks in the unit memory. The Track Log starts recording as soon as the unit gets a satellite location fix and the Track Log feature is turned on. When you no longer need a Track Log you can press the on-screen 'Clear' button to remove it.

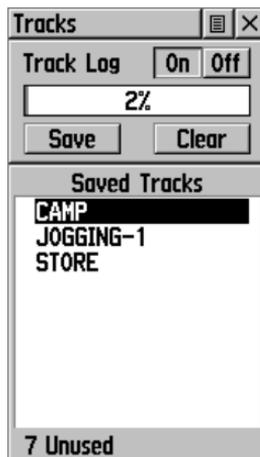
If you want to keep a record of a certain track log or use the 'TracBack' feature, clear the Track Log before you start traveling. The percentage of memory used by the current track log displays at the top of the page. After the Track Log is 'Cleared', it displays zero percent. When the last track point (bread crumb) is dropped, the most recent track points start to overwrite the least recent if the default setting 'Wrap When Full' remains selected on the track log setup. If it is not selected, after the last bread crumb is dropped, the Track Log stops. To avoid losing track points, save the Track Log when it approaches the 99% mark.

The Saved Track Page displays the track and it also can be displayed on the Main Map Page as you navigate.

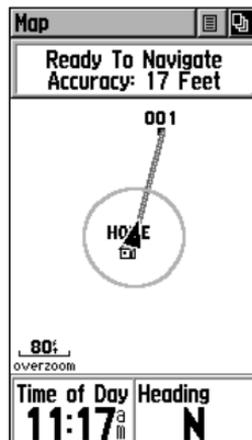
The 'TracBack' feature allows you to retrace your track in both directions. Tracks are marked BEGIN and END.

The Recording Method allows you to control how often the track points (bread crumb) are dropped. It is based on Distance (from 0 to 9.99 miles), Time (up to 99 hours, 59 minutes, and 59 seconds), or Automatic (More Often, Normal, Less Often, or Least Often).

Use the Options Menu to delete all saved tracks.



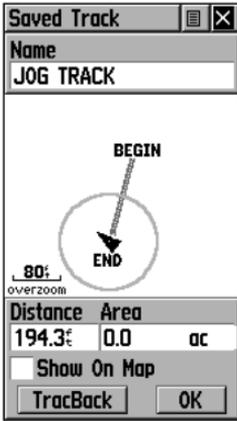
Tracks Page



Track on Main Map Page

For effective use of the "TracBack" feature, clear the Track Log before starting a new trip or after saving the Track Log.
Rename saved Track Logs to help indentify them later.

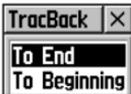
Tracks Options



Saved Track Page



Save Track Options



TracBack Options



Track Log Setup Menu



Record Method Options

If you choose Auto-record, you can set the recording interval from More to Least Often. You can set recording intervals for Time or Distance as desired.

To save and use a Track Log:

1. Access the 'Tracks' page from the Main Menu. The page has On/Off buttons, a list of tracks, and the number of unused tracks.
2. You can press in on the on-screen 'Off' button to pause track logging. When track logging is active the 'On' button appears to be recessed.
3. Highlight the 'Save' on-screen button and then press the **THUMB STICK** to display the track log 'Save Back Through' list.
4. Use the **THUMB STICK** to select the time and date that you would like to save the track through.
5. Press in on the **THUMB STICK** to save the track log and display the Track Page.

The Track Page shows the track name, the total distance of the track, the number of points along the track, a 'Show on Map' option, and on-screen buttons for 'Map', 'OK', and 'TracBack'.

6. To enable the TracBack feature, highlight the 'TracBack' button and then press in on the **THUMB STICK**. This displays the TracBack Menu with two options. Highlight the desired option ('To Beginning' or 'To End') and then press in on the **THUMB STICK** to enable. Access the Map Page or the Navigation Page to navigate the Track.

To use Track Log Setup options:

1. Highlight the Tracks Page Options Menu button at the top of the page and press in on the **THUMB STICK** to display the menu.
2. Highlight the 'Tracks Log Setup' option and then press in on the **THUMB STICK**.

You can check the 'Wrap When Full' option by highlighting it and then pressing in on the **THUMB STICK**.

You can highlight the 'Record Method' and 'Interval' fields and press in on the **THUMB STICK** to display their options. 'Interval' options change to accommodate the 'Record Method' choices. -See page 39 for a description of these options.

The Setup Menu

The Setup Pages allow you to customize your eTrex Venture to your personal preferences. You can choose time settings, units of measure, display backlighting and contrast settings, heading measurement, interface options and system operating mode.

By highlighting the icons on the Setup Menu and then pressing in on the **THUMB STICK**, you can display the Setup Page for each of the menu items.

Time Page

You can set the time to match your location or for a projected location anywhere in the world.

Time Format - Allows you to choose from 12 or 24 hour time format so the clock displays like a standard clock with 12-hour AM and PM cycles or display a 24-hour cycle (Military Time).

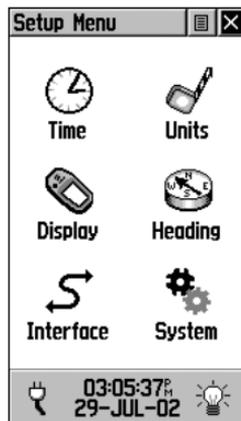
Time Zone - Can be set to one of the eight US Time Zones, or 24 International Time Zones (nearest city or geographical region). Select 'Other' so you can enter the UTC Time Offset.

Daylight Savings Time - Can be turned On or Off or set to Automatic.

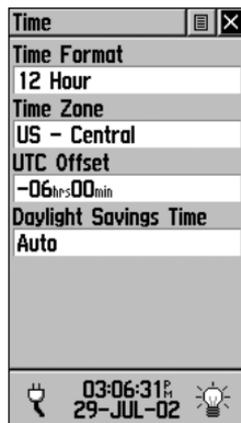
To set the time:

1. Use the **PAGE** button to access the Main Menu.
2. Use the **THUMB STICK** to highlight the Setup Icon and then press it in to display the Setup Menu.
3. Use the **THUMB STICK** to highlight the Time Icon and then press it in to display the Time Page.
4. Use the **THUMB STICK** to highlight the 'Time Zone' field then press it in to display the time zone list.
5. Highlight a time zone from the list and then press in on the **THUMB STICK**.
6. The correct time displays at the bottom of the page.

Setup



Setup Menu



Time Setup Page

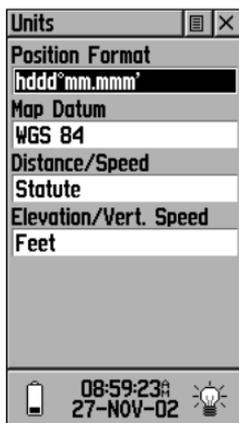


Time Format Options



Time Zone Options

Setup Options



Units Page



Position Format
Options Menu



Map Datum Options
Menu



Distance/Speed
Options



Elevation Options

Units Page

The Units features are best used by individuals with a working knowledge of map grids and datums. To learn more about these subjects, visit the National Imagery and Mapping Agency at <http://www.nima.mil> or inquire at your library.

Position Format - Allows you to choose from different grid formats. The default position format, 'hddd°mm.mmm' displays the latitude and longitude in degrees and minutes and is most commonly used.

Map Datum - Offers a selection of nearly all map datums in common use. Every map is based on a map datum (a reference model of the earth's shape) and is usually listed in the title block of the map. If you are comparing GPS coordinates to a paper map, chart, or other reference, the map datum in this field must match the horizontal map datum used to generate the map or other reference. The default datum is WGS 84 (World Geodetic Survey 1984). If a map does specify a datum, use the options list to find datums applicable to the region of the map, selecting the one that provides the best positioning at a known point. If necessary, you also may choose the 'User' datum for custom designed grids.

Distance/Speed - You can choose from four units of measure to display your rate of travel, e.g. in Yards.

Elevation - You can choose from two units of measure to display your elevation.

To select Units Page options:

1. For all fields on this page, highlight the field and then press the **THUMB STICK** to display the Options Menu for the field.
2. Highlight the desired option on the menu and then press the **THUMB STICK** to place it in the field.

Display Page

You can adjust the amount of time that the backlighting feature stays on and adjust the screen contrast.

Backlighting Timeout - Choose from Stays On, to delays of 15 seconds, 30 seconds, one, or two minutes before timing out.

Contrast Adjustment - Can be adjusted from light to dark using the slider adjacent to the contrast bar.

To set the backlighting timeout:

1. Highlight the Backlight Timeout field and then press in on the **THUMB STICK** to display options.
2. Highlight the desired option and then press in on the **THUMB STICK** to activate it.

To adjust the contrast:

1. Highlight the contrast slider and then press in on the **THUMB STICK** to activate.
2. Move the **THUMB STICK** up or down to move the slider until the desired contrast has been set.

Heading Page

You can select the type of heading displays, the types of North References, or enter the magnetic variation.

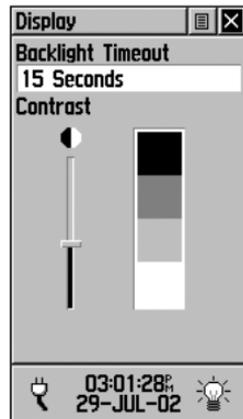
Display - Allows you to choose from Cardinal Letters, Degrees or Mils.

North Reference - You can choose from True, Magnetic, Grid or User options. If 'User' is chosen, you must correct for the Magnetic Variation.

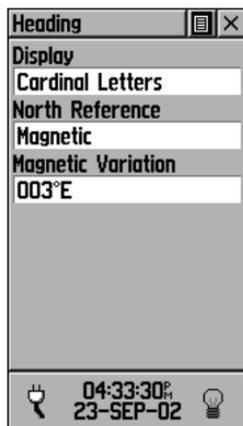
To select either option:

1. Highlight the field and then press in on the **THUMB STICK** to display the options.
2. Highlight the option and press in on the **THUMB STICK** to activate.

Setup Options



Display Page



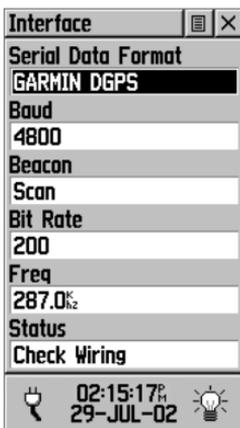
Heading Page



Setup Options



Garmin Mode
with No Options



Garmin Differential GPS Mode
with Data and Options Fields

Interface Page

The Interface Settings Page allows you to choose from different input/output serial data formats. This feature is used when connecting to external NMEA devices, a DGPS beacon receiver, a personal computer, etc. Effective use of this feature requires a working knowledge of these formats:

Garmin - The proprietary format used to exchange waypoint, track, and map data with a PC.

Garmin DGPS - Allows DGPS input using a Garmin beacon receiver and a standard RTCM SC-104 and DGPS tuning.

NMEA In/Out - Supports the input and output of standard NMEA 0183 version 3.0 data.

Text Out - Allows ASCII text output of location and velocity information without input capabilities.

RTCM In - Allows DGPS input using a standard RTCM SC-104 format without output capabilities.

RTCM In/NMEA Out - Allows DGPS input using a standard RTCM SC-104 format and supports the output of standard NMEA 0183 version 3.0 data.

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

None - Provides no interfacing capabilities.

If 'Garmin DGPS' or 'RTCM in/NMEA Out' format is selected, additional fields are provided to control a Garmin differential beacon receiver (e.g. GBR 21 & GBR 23) directly from your unit. Tuning is automatic with 'Scan' or you can enter the beacon frequency and bit rate when you select 'User' from the Beacon list to manually tune the receiver. Refer to the beacon receiver instructions.

To select a serial data format:

1. Highlight the Serial Data Format field and then press in on the **THUMB STICK** to display options.
2. Highlight an option and then press in on the **THUMB STICK** to activate it.

System Page

The System Setup Page allows you to change:

GPS - Choose one of the four GPS options other than 'Normal' to significantly save battery power. The 'Battery Saver' mode reduces the rate of satellite signal position updating and the 'Use With GPS Off' option stops satellite signal reception altogether. The 'Demo Mode' simulates navigation.

WAAS - Switch between 'Enabled' and 'Disabled'. See page 5 for an explanation of WAAS capabilities.

Language - Change the display to any of 6 choices.

Also shown on this page is the Amount of Memory Used, Power Status, Time, Date, and Backlighting Status.

The 'Memory Used' figure refers to the non-volatile memory within your unit and cannot be adjusted directly. Saving a number of track logs and waypoints may affect the percentage but normally will not cause any problems. The 'Memory Used' does not reflect the 1 MB of memory storage reserved for MapSource Points of Interest CD-ROM.

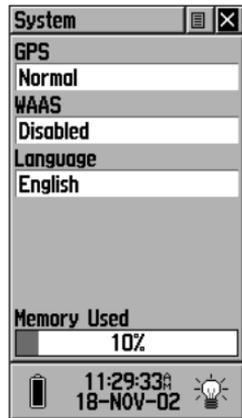
The 'Power Status' icon changes from a "battery" to an "electric plug" when external power is connected. The 'Backlight' icon changes from a dark outline to a "bright" outline when you press and release the **POWER** button.

The Option Menu allows you restore defaults or display the current version of unit operating software and the Unit I.D. Number.

To adjust System Page options:

1. Use the **THUMB STICK** to highlight the field and then press in to display options. Then use the **THUMB STICK** to select.

Setup Options



System Setup Page in Normal Mode, WAAS Disabled, and Language set to English.

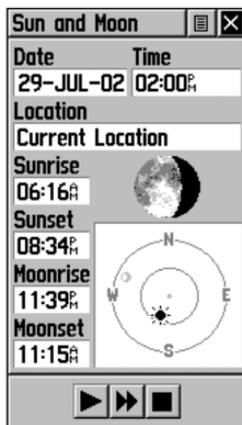


System Page Options Menu

Accessories



Accessory Menu



Sun & Moon Page



Overhead Moon Phase Stop
Animation Buttons



Location Options List

Accessories Menu

The accessory pages (features which enhance the unit operation, but are not essential) include: sun and moon position relative to a location, a calendar, a hunting and fishing best times record, and an area calculator. Highlight the appropriate icon and then press in on the **THUMB STICK** to display the desired accessory.

Sun and Moon

This feature provides you with a graphic display of both sun and moon positioning for a certain date, time and location with times for sunrise, sunset, moonrise, and moonset.

On-screen buttons at the bottom of this page allow you to animate the movement of the sun and moon and stop it at a given date. The first button on the left animates the overhead display of the sun and moon and you can view positions for any given date by observing the date field and stopping movement when the desired date is displayed. You can also display the different phases of the moon by pressing the center button and then the far right 'stop button' when the desired date appears.

To set the date and time:

1. For the Date and Current Time, highlight each field, then press in on the **THUMB STICK** to begin data entry of individual characters.
2. To display the current date and time, highlight the page Options Menu and press in on the **THUMB STICK** to display the 'Use Current Time' option and then press in on the **THUMB STICK**.

To set the location:

1. Highlight the Location field and then press the **THUMB STICK** to display the 'New Location' options list.
2. Highlight the option desired and then press in on the **THUMB STICK** to activate. If you choose 'Current Location' the field values displayed on the page displays your location. If you choose 'Use Map', a map page displays. Use the map pointer to identify the desired location and then press in on the **THUMB STICK**. If you choose 'Use Find Menu' follow instructions for using the Find Menu on page 27.

Calendar

This feature provides you with a monthly calendar with programmable reference notes dates. You can display one monthly calendar of days at a time and mark days on each with reference notes using the data entry keypad. You can create reference notes for multiple months and for months in years yet to come. You can record 100 notes with up to 18 characters each.

To set the month and year:

1. For the month, highlight the month field and then press in on the **THUMB STICK** to begin to enter new data using the data entry keyboard.
2. For the year, highlight the year and then press in on the **THUMB STICK** to begin entering the year using the data entry keyboard.

Or...

Choose 'Set To Current Date' from the Options Menu.

To create a reference note for a selected date:

1. Use the **THUMB STICK** to highlight the day of the month and then press in to display the Options Menu for the date.
2. Highlight and select 'New Note' to begin entering text from the keyboard.

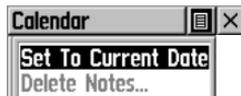
Observe the message as it is created in the message block below the keyboard.

3. To edit or delete a note previously created, highlight the date and press in on the **THUMB STICK**. Options shown include 'Edit Note', 'Delete Note', 'View Sun and Moon', or 'View Hunt and Fish'.

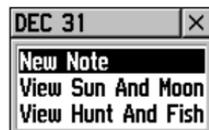
Accessories



Calendar Page



Calendar Page Options

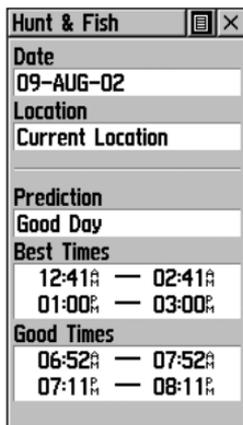


Calendar Date Options



Calendar Page Keyboard and Message Block

Accessories



Hunt & Fish Page



'New Location' Options

Hunt and Fish

This feature provides you with a listing of best times for hunting and fishing for a chosen location and date.

To set the date:

1. Highlight the date field and then press in on the **THUMB STICK** to begin data entry of individual characters. To display the current date, highlight the page Options Menu and press in on the **THUMB STICK** to display the 'Use Current Date' option and then press in on the **THUMB STICK** to activate.

To set the location:

1. Highlight the Location field and then press in on the **THUMB STICK** to display the 'New Location' options list.
2. Highlight the option desired and then press in on the **THUMB STICK** to activate. If you choose 'Current Location' the field values displayed on the page reflects the times at your current location.
3. If you choose 'Use Map', a map page displays. Use the map pointer to identify the desired location and then press in on the **THUMB STICK**.
If you choose 'Use Find Menu' follow instructions for using the Find Menu on page 27.



NOTE: The times displayed are the recognized best and good times for hunting and fishing. But, be certain that they are not in conflict with state and local game laws which may vary from location to location. It is your responsibility to know and abide by these laws.

Area Calculator

This feature provides you an area calculation as you move about a location or view a saved track. The area calculation displays in acres, hectares, and square feet, square yards, square meters, square kilometers, and square miles.

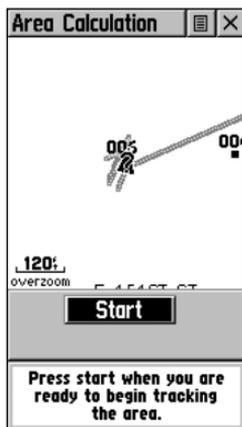
To calculate the area:

1. With the eTrex Venture "Ready to Navigate", press 'Start' when you are ready to begin.
2. Begin walking or traveling the outskirts of the area you want to measure. As soon as you change direction, the eTrex Venture begins to display the area traversed thus far.
3. Continue to the end point, then use the **THUMB STICK** to stop the calculation.
4. Use the **THUMB STICK** to store the area as a saved track.

To review the area of a saved track:

1. On the Tracks page, highlight a Saved Track and press in on the **THUMB STICK** to see a map with the area shown in a data field at the bottom.

Accessories



Area Calculator Start Page



Area Calculator Option

Specifications

Physical

Case:	Fully-gasketed, high-impact plastic alloy, waterproof to IPX7 standards (waterproof to one meter for 30 minutes)
Size:	4.4"H x 2"W x 1.2"D
Weight:	Approx. 5.3 ounces (150 g) w/batteries
Temperature Range:	5° to 158°F (-15° to 70°C) (operating)

Performance

Receiver:	Differential-ready, 12 parallel channel
Acquisition time:	Approx. 15 seconds (warm start) Approx. 45 seconds (EZinit/cold start) Approx. 5 minutes (First Time/AutoLocate™)
Update Rate:	1/second, continuous
GPS Accuracy:	<15 meters (49 ft) RMS, 95% typical ¹
DGPS (USGC) Accuracy:	3-5 meters (10-16 ft), 95% typical with DGPS corrections ²
DGPS (WAAS) Accuracy:	<3 meters (10 ft), 95% typical with DGPS corrections ²
Velocity Accuracy:	0.05 meter/sec steady state
Dynamics:	Performs to specifications to 6 g's
Interfaces:	NMEA 0183, RTCM 104 (for DGPS corrections) and RS-232 for PC interface
Antenna:	Built-In patch

Power

Input:	Two 1.5-volt AA batteries ³
Power Consumption:	0.5 watts max.
Battery Life:	Up to 18 hours of typical use in 'Battery Saver' mode ⁴

Specifications are subject to change without notice.

¹Subject to accuracy degradation to 100m 2DRMS under the U.S. DoD-imposed Selective Availability program.

²With optional Garmin Differential Beacon Receiver Input (such as Garmin GBR 21 or 23).

³The temperature rating for the eTrex Venture may exceed the usable range of some batteries. Alkaline batteries can rupture at high temperatures. External power can only be applied using the Garmin Auto Power Adapter or PC Interface Cable with Auto Power Adapter. These cables contain a 12 Vdc to 3 Vdc voltage regulator. Modifications or other applications voids the product warranty.

⁴Alkaline batteries lose a significant amount of their capacity as temperature decreases. Use lithium batteries when operating the eTrex Venture in below-freezing conditions. Extensive use of screen backlighting and the electronic compass significantly reduces battery life. Different brands of batteries vary in performance.

To obtain accessories, see your local dealer or visit the Garmin web site at www.garmin.com and click on How To Buy.

Automotive Mounting Bracket: Can be temporarily or permanently mounted on the dash. (Shown at right)

Carry Lanyard: Provides convenient method for carrying the eTrex Venture. Attaches to a slot on the bottom of the unit. (Included)

Carrying Case: Protects the eTrex Venture and permits use while in the case.

Carrying Holster: Allows easy access to the eTrex Venture when clipped on a belt.

Cigarette Lighter Adapter: Provides eTrex Venture power from an automobile cigarette lighter.

Data Cable: Wiring harness. Bare wire connections for data input/output.

Handlebar Mounting Bracket: Allows the eTrex Venture to be mounted on bicycle handle bars. (Shown at right)

MapSource™ Map Data CD-ROMs: An excellent tool for creating waypoints and routes on your PC using a background map and downloading them to your eTrex Venture. See your Garmin dealer for MapSource details.

Owner's Manual or Quick Start Guide (Included)

PC Interface Cable: Allows for transfer of data from a PC (RS-232 serial port connector) to an eTrex Venture. (Included)

PC Interface Cable and Cigarette Lighter Power Adapter: Allows transfer of waypoints and routes from a PC to the eTrex Venture and provides unit power from an automobile cigarette lighter. (Shown at right)

Replacement Battery Cover: Replacement for lost or damaged battery compartment cover.

eTrex Venture Accessories



Automotive Mounting Bracket



Handlebar Mounting Bracket



Cigarette Lighter Power Adapter-Converts 12 Vdc output from the lighter to 3 Vdc input to the eTrex Venture. Not interchangeable with power adapters for Garmin VHF 720, 725, and 725e, or GPS 170, 175, 190, and 195.



PC Interface with Cigarette Lighter Power Adapter. Also non-interchangeable with the Garmin power adapters mentioned above.

Data Field Definitions

The following data field options are available on the Map, Navigation, and Trip Computer Main Pages.

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

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

Current Destination - The next waypoint on your route.

Current Distance - The remaining distance to your next waypoint.

Current ETA - The estimated time of day you will arrive at your next waypoint.

Current ETE - The estimated time needed to arrive at the next waypoint on your route.

Elevation - The altitude (height) above or below sea level.

Final Destination - The last waypoint on your route.

Final Distance - The remaining distance to your final destination.

Final ETA - The estimated time of day you will reach your final destination.

Final ETE - The estimated time needed to reach your final destination.

Heading - Your moving direction.

Location (lat/lon) - Your current GPS position.

Location (selected) - The lat/lon of point defined on map.

Maximum Speed - The maximum second-by-second speed recorded since last reset.

Moving Avg. Speed - Average speed while the unit is moving.

Odometer - A running tally of distance travelled, based upon the distance between second-by-second position readings.

Off Course - The distance left or right you are from the original course (path of travel).

Overall Avg. Speed - Average speed for unit for both moving and stopped speeds since last reset.

Pointer - Indicates the direction to the next destination.

Speed - Your rate of travel can be displayed in miles per hour, kilometers per hour, or nautical miles per hour.

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

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

Time of Day - The time for the selected time zone.

Data Field Definitions

To Course - The compass direction you must go in order to get back to the original course.

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

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

Trip Time - Stopped - Total time the unit has been stopped since the last reset of the trip timers.

Trip Time - Total - Total time the unit has been in operation since the last reset of the trip timers.

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

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

Vertical Speed - Your rate of altitude gain/loss over time.

MapSource Setup



Garmin MapSource CD-ROMs offer a variety of detailed mapping data and navigation information.

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

See your Garmin Dealer or visit the Garmin website at: www.garmin.com for information.

Transferring MapSource Map Data

If you have purchased a Garmin MapSource™ CD-ROM mapping program you may want to transfer detailed Points of Interest (POI) data before beginning use, to provide your unit with maximum Find features. The eTrex Venture accepts up to 1 MB of POI data from MapSource Points of Interest.

POI data transfer requires the use of a PC, a Garmin MapSource Points of Interest CD-ROM, and the PC Interface Cable with RS-232 serial port connector supplied with this unit. Follow detailed instructions for data transfer in the MapSource User's Manual.

Transferring Map Data:

You can transfer detailed map data to the eTrex Venture from a Garmin MapSource CD-ROM. The eTrex Venture can accept up to 1 MB of POI data from MapSource Points of Interest program loaded on a PC and connected to the eTrex Venture Data Port. For this function you need the eTrex PC Data Cable provided with your unit.

To transfer data:

1. Remove the Power/Data Port cover on the back of the unit by lifting up on the protective cover on the back of the unit.
2. Connect the cable connector to the back of the eTrex Venture by orienting the slot on the connector with the indexing bar on the back of the unit. Then, slide the connector in place.
3. Connect the remaining serial port connection on the cable to the PC serial port.
4. Turn on the eTrex Venture and follow instructions for map data transfer provided in the MapSource User's Manual.



NOTE: The eTrex Venture's interface mode must be set to "Garmin" in order to transfer waypoints, routes, tracks, or Points of Interest using MapSource.

Troubleshooting Guide

To resolve problems that cannot be remedied using this guide, contact Garmin Customer Service at:

913-397-8200 or 800-800-1020

Symptom	Probable Cause	Remedy
Unit does not turn on.	Batteries are exhausted.	Replace batteries.
Unit does not turn ON, even with new batteries.	Batteries may be installed backwards. You are pressing and <u>releasing</u> the POWER button.	Reinstall batteries. You must press and <u>hold</u> the POWER button for two seconds.
The unit turns On, then turns Off.	Batteries may be nearly exhausted.	Replace batteries.
It takes more than ten minutes to get a location fix.	The unit's view of satellites is obstructed.	Move to a location with a clear view of the sky.
Cannot access a WAAS system satellite after 2 to 5 minutes.	Your view of the satellite is obstructed or you are located too far from satellites currently in service for the Americas. System GPS operation is set to something other 'Normal' and/or interface setting is for RTCM.	Move to a location with a clear view and point the unit antenna in the direction of the satellite. Set system GPS to 'Normal' and interface to other than RTCM.
Cannot obtain a differential position from WAAS.	You have not collected enough information from the WAAS satellite.	Wait 10-20 minutes for the initial collection, then 1-2 minutes afterwards.
Cannot access Point of Interest, Street, or Intersection Find Lists.	MetroGuide map data is not activated.	Access the Map Setup 'Map' option and activate the check box.
Cannot view a track being laid down on the map page when traveling.	The Track Log feature is turned Off.	Access the Tracks Page, highlight the 'ON' button and press in on the THUMB STICK .
Cannot see the panning arrow on the Map Page easily.	There is too much map clutter or the scale is such that map features are too densely displayed.	Use the Map Page Setup Page to reduce map clutter or change the map scale.
Cannot exit a menu or page by moving the THUMB STICK to the left.	Some menus and pages have an 'X' (Exit) on-screen button in the upper right corner.	Highlight the on-screen button and then press in on the THUMB STICK .

The eTrex Venture is programmed to provide "pop-up" messages concerning operational characteristics and conditions. Press in on the **THUMB STICK** to acknowledge a message and return to the current feature.

Wiring Diagram

Interface formats are selected from the Setup 'Interface Page' on page 44 of this manual. The input/output lines on your eTrex Venture unit are RS-232 compatible, allowing easy interface to a wide range of external devices, including PCs, differential beacon receivers, marine autopilots and /or a second GPS receiver.

The NMEA 0183 version 3.0 interface format is supported by the eTrex Venture and enables the unit to drive up to three NMEA devices.

NMEA 0183 Version 3.0 Approved Sentences:

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

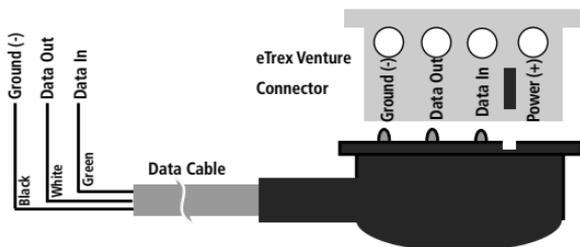
Garmin Proprietary Sentences:

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

DGPS (Differential GPS) corrections are accepted in RTCM SC-104 version 2.0 format through the 'Data In' line. The Garmin GBR 21 and GBR 23 are the recommended beacon receivers for use with the eTrex Venture. Other beacon receivers with the correct RTCM format may be used, but may not correctly display status or allow tuning control from the GPS unit.

The eTrex Venture may be hard-wired to a serial connector using the Data Cable (see Appendix B for more information). Refer to the wiring diagram and the eTrex Venture unit data connection illustrated below.

The PC Interface Cable provided with this unit allows you to connect your eTrex Venture to a PC-compatible computer's serial port.



A

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