GARMIN

GPSMAP 76S
chartplotting receiver

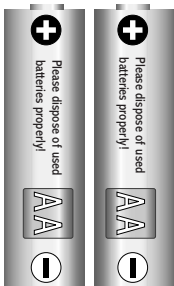Read This First!

quick start guide

Unit Overview

Internal Antenna

Interface keys

180 x 240 Four Level Gray, Backlit Display

External Antenna Connection

Battery Compartment

External Datal/Auxilary Power Port

Unit Overview

Remove the batteries from your GPSMAP 76S if you don't expect to use it for several months. Be sure to observe the proper polarity when inserting the batteries. Follow the battery manufacturer's instructions on the proper care and handling of the batteries.

Turn D-ring 1/4 turn counter-clockwise and remove cover

Installing the batteries

Installing the batteries:

1. Remove the Battery Cover by turning the D-ring 1/4 turn counter clockwise and pulling the cover loose.

2. Check the battery polarity with the molded diagram in the battery compartment and install the batteries inserting the end toward the spring first.

3. Re-install the Battery Cover by reversing step 1.

Installing the Lanyard

To install the Lanyard:

1. Place the loop of the Lanyard through the slot opening at the bottom of the GPSMAP 76S.

2. Route the strap through the loop and pull tight.

Interface keys

The **IN** and **OUT** keys are used on the Map Page and the Plot Page. When pressed, the **IN** key will decrease the map scale (Map Page) or decrease the horizontal scale (Plot Page) allowing you to view a smaller area with greater detail.

When pressed the **OUT** key will increase the map scale (Map Page) or the horizontal scale (Plot Page) allowing you to view a larger area with less detail.

The **NAV/MOB** key is used to begin or stop navigation. If the **NAV/MOB** key is pressed and held down, the GPS stores the current location (a man overboard point) and gives you the opportunity to begin immediate navigation to that point.

The **PAGE** key will cycle you through the six main display pages in sequence. When held it toggles the compass on and off.

The **POWER** key is used to turn the unit on and off. To turn the unit off press the **POWER** key and hold it. The **POWER** key is also used to display the adjustment window for the backlight and contrast adjustment. To activate the backlight/contrast adjustment window with the unit on, press and release the **POWER** key.

The **MENU** key is used to display page option menus. If pressed twice, the Main Menu will be displayed.

The **QUIT** key will cycle you through the five main display pages in reverse sequence. The **QUIT** key will end an operation in progress and display the previous page.

The **ENTER** key is used to activate a data field or confirm a selection. If the **ENTER** key is pressed and held, the GPSMAP 76S will store the current location and display the Mark Waypoint page.

The **ROCKER** key, located in the center of the keypad, is used to control the Up/Down and Left/Right movement of the cursor on the display pages and during data entry.

This exercise will provide you with the knowledge and skill to navigate the pages and menus of your GPSMAP 76S with confidence.

As we progress through this Quick Start Guide you will often be directed to press a specified Interface key or highlight a field. When you are directed to press a key, you should press, then release the key. If the key needs to be held down for a period of time, the instruction will tell you. The position of the highlight is controlled by the **ROCKER** key. When a field is highlighted, a dark strip will encompass the field.

Let's start by taking a look at the six main display pages. They are the GPS Information Page, Map Page, Compass Page, Highway Page, Active Route Page and the Plot Page. You can cycle through these pages by pressing either the **PAGE** or **QUIT** key. When the GPSMAP 76S is turned on a Welcome Page will be displayed, followed by an Information Page and a Warning Page. Acknowledge each of these pages by pressing the **PAGE** key while they are displayed. The GPS Information Page will now be displayed.
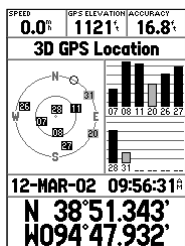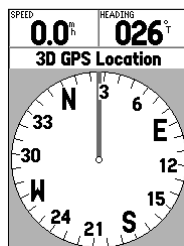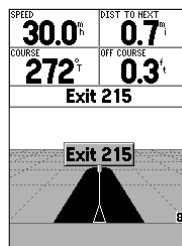
GPS Information Page
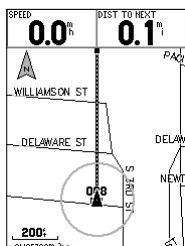
Map Page

Compass Page
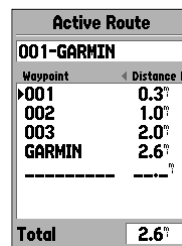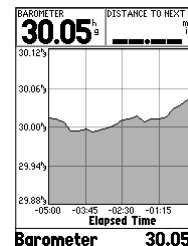

Highway Page

Active Route Page

Plot Page

Using the Built-in Simulator

Highlighted Field

While learning the basic operation of the GPSMAP 76S, let's put the unit into Simulator Mode. The Simulator Mode is great for practicing with the unit while inside and satellite signals are not available. When the GPSMAP 76S is in Simulator Mode, the GPS receiver is turned off (this will help conserve battery power) and the unit cannot be used for actual navigation.

⚠ *NOTE: Do not try to navigate using the Simulator Mode. While in the Simulator Mode, the GPS receiver is turned off. Any Satellite Signal Strength Indicators displayed are only simulations and do not indicate the strength of actual satellite signals.*

Activating the Simulator Mode

Press the **POWER** key to turn the unit on. The Welcome Page will be displayed, press the **PAGE** key twice to display the GPS Information Page.

Putting the GPSMAP 76S in Simulator Mode:

1. With the GPS Information Page displayed press the **MENU** key.
2. Using the **ROCKER** key, highlight 'Start Simulator' then press the **ENTER** key to activate the simulator.

When the Simulator Mode is active, the message 'Simulating GPS' will be displayed along the top of the GPS Information Page.

The Interface keys are your link with the GPSMAP 76S. Let's take a few minutes and see what some of the Interface keys are used for.

With the GPS Information Page displayed, press the **PAGE** key several times. Notice that each time you press the **PAGE** key, the next main page will be displayed. Do the same with the **QUIT** key. Notice the **QUIT** key acts the same as the **PAGE** key except the pages are displayed in a reverse sequence. Press the **PAGE** key until the Map Page is displayed.

Each main page has an Options Menu. This Option Menu contains the setup options, and/or functions that apply to that page.

To display the Map Page Options Menu:

1. Press the **MENU** key.

Selecting an item on the Options Menu:

1. Using the **ROCKER** key, highlight 'Setup Map'.

2. Press **ENTER**.

Many of the Option and Setup menus in the GPSMAP 76S are arranged in a 'Tab' layout. Use the Left /Right **ROCKER** key to move from Tab to Tab.

The options for each page are covered in depth in the Reference Manual. For now press the **QUIT** key. Notice that when you pressed the **QUIT** key, the current function was stopped and you were returned to the last main page that was displayed. This is good to know as you are learning how to use this unit. If you find that you are lost, or if you start a function that you really did not want, just press the **QUIT** key.

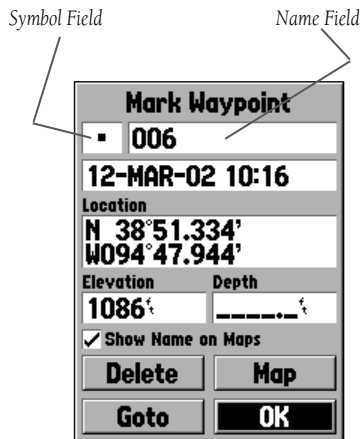## Using the Interface keys

Interface keys

Entering Data

Symbol Field *Name Field*

Mark Waypoint
▪ 006
12-MAR-02 10:16
Location
N 38°51.334'
W094°47.944'
Elevation **Depth**
1086ᶠᵗ ___.ᶠᵗ
✓ Show Name on Maps
Delete **Map**
Goto **OK**

Mark Waypoint Page

There will be many times that you may need to enter data. An example is naming a waypoint. The **ROCKER** key is used to navigate through menu items and to enter data.

Let's combine a couple of lessons. We will create a new waypoint, enter a waypoint name, and assign a symbol to the waypoint.

The term 'Waypoint' may be new to you. You will find the term Waypoint is used frequently when talking about navigation. A Waypoint is a position stored in the unit's memory. Waypoints are used for direct navigation or to build a Route.

Creating or 'Marking' a waypoint with the GPSMAP 76S is easy. The unit has to be turned on, and receiving at least three satellites (or simulating navigation) to mark a waypoint.

Marking a waypoint:

1. Press and hold the **ENTER/MARK** key.

When the **ENTER/MARK** key is held down, the **MARK** function of the key is activated and the GPSMAP 76S will capture it's current position. The unit will then display the Mark Waypoint Page. By default, the unit will assign a square as the symbol and a number as the name and the 'OK' Button will be highlighted. Pressing the **ENTER** key again would save the waypoint using the default name and symbol, but let's change them to something more meaningful.

Changing the symbol:

1. Using the **ROCKER** key, highlight the Symbol Field, then press **ENTER**.
2. Using the **ROCKER** key, highlight the 'Scenic Area' symbol, then press **ENTER**.

Changing the name:

1. Using the **ROCKER** key, highlight the Name Field then press the **ENTER** key.

2. Press the **ROCKER** key to the left, this will clear the name field.

3. Press the **ROCKER** key up, scroll through the alpha-numeric list until the letter 'C' is selected.

4. Press the **ROCKER** key right to move to the next placeholder.

5. Press the **ROCKER** key down, scroll through the alpha-numeric list until the letter 'R' is selected.

You should be starting to get the feel of it. Continue entering letters until you have spelled the word CREEK.

6. With the letter 'K' highlighted, press the **ENTER** key to accept the name.

You can enter any name that you like as long as it does not exceed ten characters, and does not duplicate a previously saved waypoint.

When you have finished renaming the waypoint you will need to store it in the units' memory.

To store the waypoint:

1. Using the **ROCKER** key, highlight the 'OK' Button and press the **ENTER** key.

These are the same steps that you will use to enter names and change numbers and select options in all of the fields in the GPSMAP 76S.
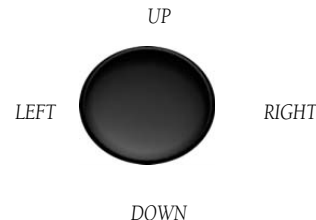
Here are a couple of tips:

1. If you press and hold the **ROCKER** key while scrolling through the alpha-numeric list, it will move quickly.

2. You can scroll through the alpha-numeric list in either direction.

3. Don't press the **ENTER** key until you have finished entering the data. Remember, use the **ROCKER** key to move to the next placeholder.

Entering Data

Entering a name

Rocker key Directions

Basic Navigation

Bearing and Distance from Pointer to current GPS location.

Map Pointer

You should now have enough knowledge to move through the main pages, option menus and enter data into your GPSMAP 76S. Now let's learn how to navigate!

The main use of a GPS is to be able to navigate to a known position. Let's create a waypoint directly on the Map Page using the Map Pointer.

Press the **PAGE** key until the Map Page is displayed. Press the **IN** key several times until the Zoom Scale in the lower left corner of the screen reads 800ft. The current GPS location is indicated by the triangle in the center of the map.

To display the Map Pointer:

1. Press the **ROCKER** key any direction.

Using the **ROCKER** key you can pan the Map Pointer around the map. As you move the Map Pointer around the map, the direction and distance from the Map Pointer to the current GPS location is displayed along the top of the map.

To mark a waypoint using the Map Pointer:

1. With the Map Pointer at a location on the map about one mile from your current location, and not on a road or map feature, press the **ENTER** key. If the Map Pointer is on a road or map feature, a label will be displayed describing the item.

The location of the Map Pointer will be captured and the New Waypoint Page will be displayed. Change the waypoint name to MAP 1, and store the waypoint in memory by highlighting the 'OK' Button then pressing the **ENTER** key. Press the **QUIT** key to hide the Map Pointer and center the map on the current GPS location.

Now that we have a destination, navigating to it is just a step away.

Going to a waypoint:

1. Press the **NAV** key.
2. Highlight 'Go To Point' then press the **ENTER** key.
3. Highlight 'Waypoints' then press the **ENTER** key.
4. Highlight 'MAP 1' then press the **ENTER** key.
5. Highlight the 'Goto' Button then press the **ENTER** key.

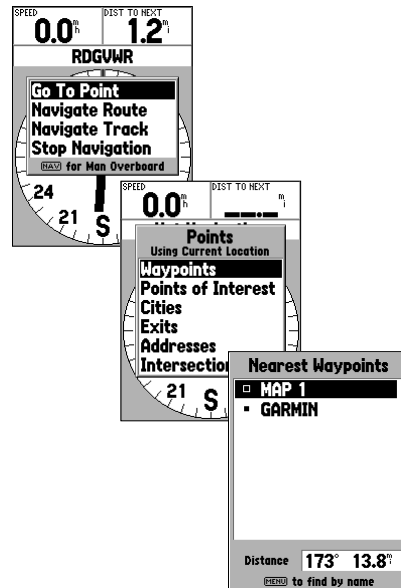The GPSMAP 76S is now navigating to the waypoint MAP 1.

For a GPS to navigate, it has to be moving. Fortunately you can simulate movement in the GPSMAP 76S. Press the **PAGE** key until the Compass Page is displayed. At the top of the Compass Page there are two data fields, 'Speed' and 'Bearing'. To simulate movement, press the **ROCKER** key up one time. This will set a speed of 10 miles per hour. If you continue to press or hold the **ROCKER** key, the speed will increase in 10 mph increments. For our purpose, 10 mph is fine.

The Compass Page displays a Pointer and Compass Ring. The Pointer will always point toward your destination (Bearing) while the Compass Ring reflects the direction that you are facing or traveling (Track). In short, when you are headed directly toward your destination, the Pointer will be pointed toward the top of the display, and aligned with the vertical line on the Compass Ring. If you are not heading toward your destination, turn until the Pointer is aligned with the vertical line in the Compass Ring and pointed toward the top of the display.

The simulator will let you change the Track so that you can see what will happen. Press the **ROCKER** key to the right until your Track has changed about 40°. This will simulate a direction change to the right. The Pointer should now be pointed toward the left of the display indicating that you need to turn to the left to head toward the waypoint. This is exactly what will happen during actual navigation as you move off course.

Basic Navigation

Selecting a waypoint for navigation

Initializing the GPSMAP 76S

Turning off the Simulator

Press the **ROCKER** key to the left simulating a left turn, until the Pointer is realigned with the vertical line in the Compass Ring. You are now headed toward the waypoint.

Now that we have now gone through the basic operation of the unit using the simulator, it is time to do some actual navigation!

To turn off the simulator:

1. With the GPS Information Page displayed, press the **MENU** key.

2. Select 'Stop Simulator' then press the **ENTER** key.

Initializing the GPS Receiver

Before the GPSMAP 76S can be used for navigation, the receiver has to be initialized and the compass calibrated.

Take the unit outside where it will have an unobstructed view of the sky and turn it on. The unit will search for satellite signals and begin to gather and store the information that it needs to become operational. This process should take no more than five minutes. When the unit is operational, the message '3D GPS Location' will be displayed on the GPS Information Page.

If for some reason the unit is not able to gather the necessary satellite information, an options page will be displayed. Select 'New Location' then 'Automatic' and allow the unit to continue initializing. This selection will force the unit to search for satellites. It may take a little longer for the unit to become operational using this method.

Calibrating the Electronic Compass

After the GPS receiver is initialized the Electronic Compass needs to be calibrated. Press the **PAGE** key until the Compass Page is displayed.

When calibrating the compass the GPSMAP 76S needs to be held level. During the calibration process you will need to slowly turn the unit through two full circles. There will be a prompt on the display indicating if you are turning to fast, just right, or to slowly. If the calibration process fails, you will be prompted to start again.
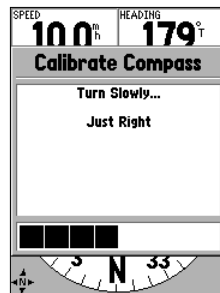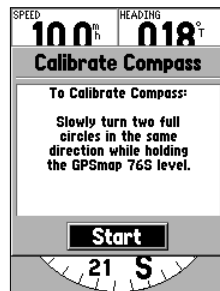
Calibrating the Compass:

1. Press the **MENU** key to display the options.

2. Highlight 'Calibrate Compass' and press **ENTER**.

3. With 'Start' highlighted, press **ENTER** to begin the calibration.

4. Slowly rotate the unit through two full circles in the same direction while holding the unit level.

When the calibration process is finished the unit will indicate if the calibration was successful or failed. If the calibration failed, press **ENTER** to begin the calibration process again. If the calibration process was successful, press **ENTER** to return to the Compass Page.
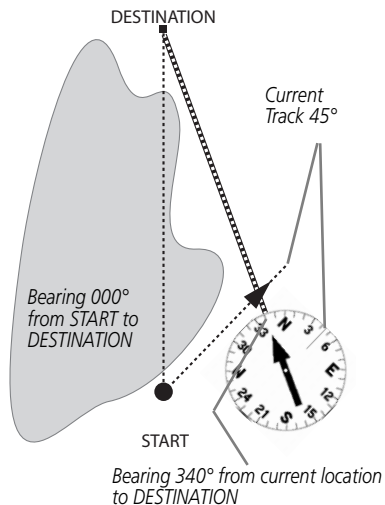
Calibrating the Compass

Basic Navigation

DESTINATION

Current Track 45°

Bearing 000° from START to DESTINATION

START

Bearing 340° from current location to DESTINATION

The GPSMAP 76 provides a straight line, direct navigation course to your destination. Since it is not always possible to follow a straight line from start to finish, as you move, the Pointer will always point toward your destination and the Compass Ring will always show your current track.

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Starting to Navigate

With the unit turned on and displaying '3D GPS Location' on the GPS Information Page, mark a waypoint at your current location. Name this waypoint 'HOME', assign the 'Residence' Symbol and store the waypoint.

Begin walking holding the GPSMAP 76S in front of you with the top of the unit pointed toward the sky. As you move, you will see that the unit leaves a bread crumb trail on the map indicating where you have been. Walk at least a two minutes in one direction and then make either a right or left turn. Continue walking in this new direction for approximately another two minutes.

Let's start the trip back. Remember that unit provides you with direct, straight line navigation. It is not always possible to navigate using the most direct route, don't worry, the GPSMAP 76S will continuously update your Track and Bearing, always pointing out the shortest route to your destination.

To begin navigation:

1. Press the **NAV** key.
2. Select 'Go To Point' then press the **ENTER** key.
3. Select 'Waypoints' then press the **ENTER** key.
4. Select 'HOME' then press the **ENTER** key.
5. With the 'Goto' Button highlighted, press **ENTER**.

If the Compass Page is not displayed, press the **PAGE** or **QUIT** key to display the Compass Page.

With the unit held level, the Pointer will point toward your destination. The outer ring of the compass will show the direction that you are headed. Begin walking, as you move the Pointer and Compass ring will update, always showing you direction of travel and the shortest path to your destination. As soon as you are able, turn toward the Pointer until it is aligned with the vertical line in the Compass Ring and stop walking.

At a walking pace, the GPSMAP 76S by default uses the compass feature for navigation. If you would prefer, the GPSMAP 76S can use the GPS receiver instead. To turn the compass feature off, press and hold the **PAGE** key. A message "Compass Turned Off" will be displayed, press **ENTER** to acknowledge the message. The unit is now using the GPS receiver for navigation. There are some key differences when using the GPS receiver.

When using the GPS receiver for navigation the unit has to be moving to provide accurate data. While you are standing still the pointer and compass ring may not be accurate. Hold the unit upright and begin walking. After a few steps, the Pointer will once again point toward your destination and the Compass Ring will show your direction of travel. As you continue walking, and approach your "HOME" waypoint, a message will be displayed alerting you that you have arrived. To reactivate the compass, press and hold the **PAGE** key.

Congratulations, you should have enough basic knowledge of your GPSMAP 76S to begin navigating on your own. Be safe; remember that while the GPS is very reliable, you should always have a backup means of navigation.

Basic Navigation

DESTINATION

START
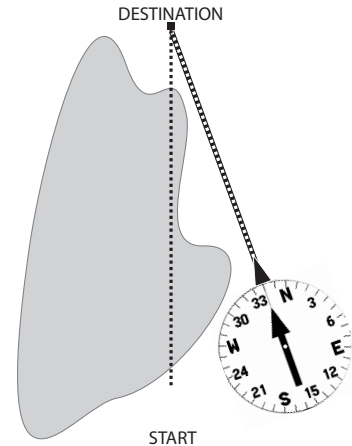
When you are able to turn toward the destination, follow the Pointer until it points toward the top of the display and aligns with the line in the Compass Ring. When the Pointer and Line are aligned, your Track and Bearing will be equal and you will be headed toward your destination. When you are near your destination, a message 'Arriving at Destination' will be displayed.