

# GPSMAP 176C/176

*chartplotting receiver*



quick  
start  
guide

# Quick Start

## Unit Overview

12-level Grayscale LCD Display with Backlight (176)  
16-color Transflective Display with Backlight (176C)

GPS Antenna



Backlit Keypad for easy night operation

Rotate Antenna to Down Position for Storage

External Power and Computer Data Port



Port for optional Data Storage Card

Battery Compartment

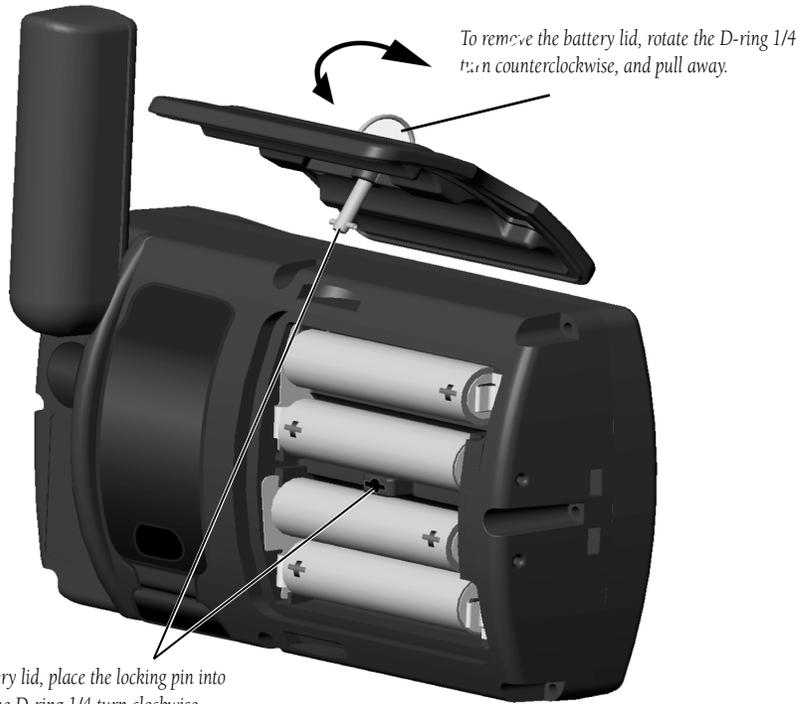
## Quick Start

### Battery Installation



**WARNING:** It is very important to install ALL batteries with the proper polarity, positive (+) or negative (-) orientation, as indicated in the unit's battery compartment. Batteries can leak and cause personal injury and property damage if not installed correctly.

**TIP:** The GPSMAP 176 saves user data in nonvolatile memory and will not lose data when the batteries are changed or if stored without batteries.



To reinstall the battery lid, place the locking pin into the slot and rotate the D-ring 1/4 turn clockwise.

The GPSMAP 176 uses 4 AA batteries, which can be Alkaline, rechargeable, Lithium or Ni-Cad. Immediately after installing new batteries, turn the unit on to ensure that the unit's power indicator shows a fully charged battery condition (see page 49 of the Owner's Manual). Replace all batteries at the same time. Do NOT mix new and used batteries. Do NOT mix Alkaline batteries with Lithium or Ni-Cad rechargeable batteries.

## Quick Start

### Learning the Keypad



-  The **IN** key — adjusts the map scale to show a smaller area with more detail. (Zooms in)
-  The **OUT** key — adjusts the map scale to show a larger area with less detail. (Zooms out)
-  The **PAGE** key — cycles the unit through the main display pages in sequence and returns the display from a submenu page.
-  The **QUIT** key — cycles the unit through the main display pages in a reverse sequence, re-saves the previous value in a data entry field, or cancels an unintended function such as a GOTO.
-  The **ENTER** key — selects a highlighted menu option. When entering data, it allows you to initiate entry, and then to accept the selected value(s). It also marks the current location of a waypoint when pressed and held for more than one second.
-  The **MENU** key — displays a menu of available options for the current page, Pressing the **MENU** key twice will display the Main Menu.
-  The **NAV/MOB** key — displays the Navigation Menu. It also activates the MOB (Man OverBoard) function when pressed and held for more than one second.
-  The **FIND** key — allows you to quickly access User Waypoints, Cities, Points of Interest, Services and other items used for navigation.
-  The **POWER** key — is used to turn the unit on and off and to activate the backlight. It is also used to adjust the contrast.
-  The **ARROW KEYPAD** — is used to select (highlight) menu options and enter data. It also controls cursor movement on the Map Page.

This exercise provides you with the knowledge and skill to confidently navigate the pages and menus of your GPSMAP 176.

As you progress through this Quick Start and the Owner's Manual, you will often be directed to press a specific 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 to do so. The position of the highlight is controlled by the **ARROW KEYPAD**. When a field is highlighted, a dark strip will encompass the field.

### **Turning the GPSMAP 176 On**

To turn the unit on, press the **POWER/BACKLIGHT** key. The **POWER/BACKLIGHT** key is labeled with a red light bulb. As the unit powers on a "Warning/Info Page" will be displayed. To acknowledge that you have read and understand the warning, press the **ENTER** key.

### **Backlight and Contrast Adjustment**

You may need to adjust the Backlight or Contrast to see the display better. To display the Backlight/Contrast adjustment window, with the unit on, press the **POWER/BACKLIGHT** key.

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

1. With the Backlight/Contrast adjustment window displayed, press the **ARROW KEYPAD UP** to increase the brightness of the backlight, or **DOWN** to decrease the brightness of the backlight.

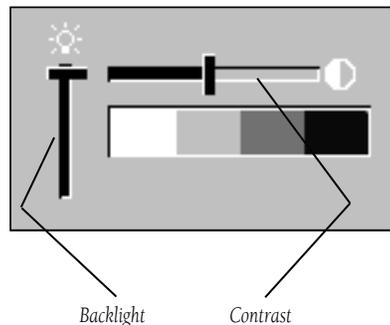
**Or...**

2. Press the **POWER/BACKLIGHT** key. When the **POWER/BACKLIGHT** key is pressed repeatedly, the backlight will cycle between 'Off', 'the last setting' and 'full On'.

#### **To adjust the contrast setting:**

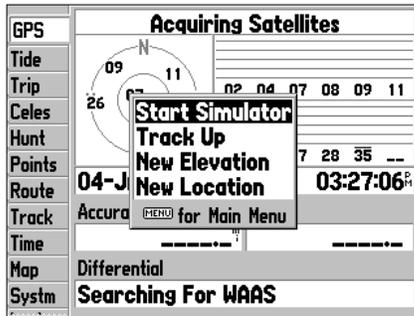
1. With the Backlight/Contrast adjustment window displayed, press the **ARROW KEYPAD RIGHT** to increase the contrast (darker) or **LEFT** to decrease the contrast (lighter) setting.

## **Power On/ Backlight and Contrast**



## Quick Start

### Activating the Simulator



With the GPS Info tab displayed, pressing the **MENU** key will display the options for the page. To start the simulator, verify the selection "Start Simulator" is highlighted then press the **ENTER** key.

### Using the GPSMAP 176

The keys are your link with the GPSMAP 176. Let's take a few minutes and use each key so that you can get a feel for their use before doing any live navigation.

Each time the GPSMAP 176 is turned on the GPS Info tab will be displayed showing the current satellite status. If you press the **PAGE** or **QUIT** key, the GPS Info tab will be hidden and no longer show in the Main Page cycle.

While learning the basic operation of the GPSMAP 176, let's put the unit into Simulator Mode. The Simulator Mode is great for practicing with the unit while indoors and when satellite signals are not available. When the GPSMAP 176 is in Simulator Mode, the GPS receiver is turned off. This will help conserve battery power, but the unit cannot be used for actual navigation in simulator mode.



**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

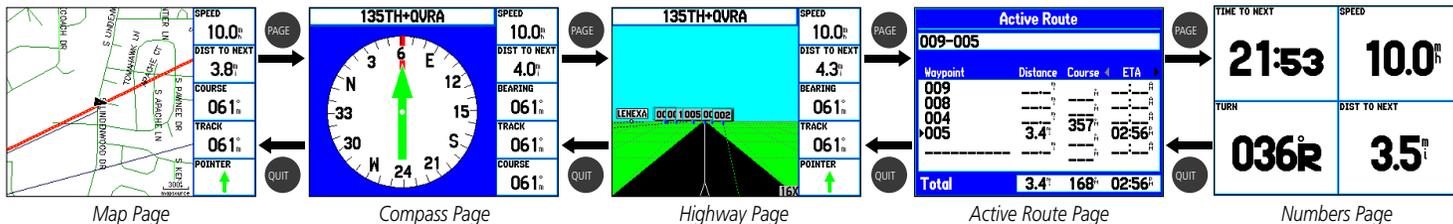
#### Putting the GPSMAP 176 in simulator mode:

1. With the GPS Info tab displayed press the **MENU** key.
2. 'Start Simulator' should be highlighted, if not, using the **ARROW KEYPAD**, highlight it and press the **ENTER** key.

When the Simulator Mode is active, the message "Simulating GPS" will be displayed in the Status Field along the top of the GPS Info tab. Press the **PAGE** key to display the Map Page.

## Main Display Pages

There are five Main Display Pages: the Map Page, Compass Page, Highway Page, Active Route Page, and Numbers Page. Pressing the **PAGE** key will display the next Main Page. Press the **PAGE** key several times to look at the Main Pages. The **QUIT** key will allow you to cycle through the Main Pages in a reverse sequence.



## Features and Entering Data

**Cursor**— A highlighted area on the screen which can be moved UP/DOWN/LEFT/RIGHT with the **ROCKER KEYPAD** to select individual fields on the display. Moving the cursor to a given location allows you to begin data entry or scroll through a list.

**Default**— A system-selected format, built into the operating software of the unit's memory, that will be followed unless the user chooses a different setting. For example, the default setting for distance and speed units is Statute (miles/miles per hour/feet) but can be changed to Metric or Nautical. Once a setting is changed, the new setting is retained until another change is made or the 'Restore Original Settings' menu option is selected.

## Quick Start

### Main Pages/ Features

# Quick Start

## Data Entry/ Waypoints

<b>Waypoint Edit</b>		
005		
Comment		
-----		
N 38° 51.351'	Elevation	Depth
W 094° 47.933'	1066'	-----'
From Current Location		
0.0'	335%	
Delete	Show Map	Next

On-Screen Buttons

GPS	User   Proximity
Tide	011
Trip	003
Celes	004
Hunt	005
Points	006
Route	007
Track	009
Time	010
Map	011
System	2966 Available 35 Used

Scroll Bar

**Field**— The location on a page where a group of characters or an option is entered and displayed. The cursor is placed on a field (using the **ROCKER KEYPAD**) to begin data entry or select options.

### To enter data in a data field:

1. Use the **ROCKER KEYPAD** to highlight the desired data field. Press **ENTER** to begin data entry.
2. Use the **ROCKER KEYPAD** to enter the desired data. Move UP/DOWN to select the desired character and RIGHT to move to the next character field. LEFT allows you to back up to the previous character field or, when at the left-most character field, to clear the entire data field.

**On-Screen Button**— Similar to 'Field'. Place the cursor on a button and press **ENTER** to select the action corresponding to the button. An example of an on-screen button is the 'Show Map' button at the bottom of the Waypoint Edit page (see example at left).

**Scroll Bar**— When viewing a list of items too long to display on a single page, a scroll bar will appear along the right side of the list (see example at left). The position of the scroll bar indicates which portion of the list is currently being displayed. The height of the scroll bar indicates the number of items in the list. To scroll through a list of items, press UP/DOWN on the **ROCKER KEYPAD**.

## Creating and Naming Waypoints

There will be many times that you may need to select a menu item and/or enter data. An example is naming a waypoint. The **ARROW KEYPAD** is used to navigate through menu items and to enter data.

We will create a new waypoint, enter a waypoint name, and assign a symbol to the waypoint using the **ARROW KEYPAD**.

The term "waypoint" may be new to you. A waypoint is a location saved in the unit's memory so it can be used for navigation. Waypoints can be used for direct navigation, or to build a Route.

Creating or "marking" a waypoint with the GPSMAP 176 is easy. The unit has to be turned on and receiving at least three satellites or be in Simulator Mode to mark a waypoint.

**“Marking” a waypoint:**

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

When the **ENTER** key is held, the ‘Mark’ function of the key is activated and the GPSMAP 176 captures its current location, and displays the New Waypoint Page. Notice that the unit assigned a square as the default symbol and a number as the default name. The ‘OK’ Button along the lower right is highlighted, pressing the **ENTER** key will save the new waypoint using the default settings for the symbol and name, but for practice we will change them.

**Changing the waypoint symbol:**

1. Using the **ARROW KEYPAD**, highlight the Symbol field, then press the **ENTER** key.
2. Using the **ARROW KEYPAD**, highlight the ‘Scenic Area’ symbol, then press the **ENTER** key.

**Changing the waypoint name:**

1. Using the **ARROW KEYPAD**, highlight the Name field, then press the **ENTER** key.

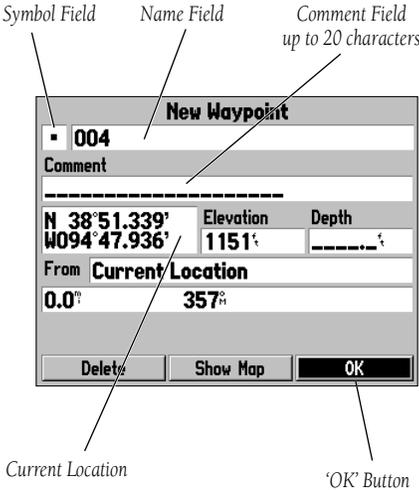
The Name field will become active and the first zero will be highlighted. Notice that there are now ten placeholders for alpha-numeric characters displayed.

2. Press the **ARROW KEYPAD** to the LEFT to clear the field.
3. Press the **ARROW KEYPAD** UP, scroll through the alpha-numeric list until the letter ‘C’ is selected.
4. Press the **ARROW KEYPAD** RIGHT to move to the next placeholder.
5. Press the **ARROW KEYPAD** 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 to spell the word CREEK.

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

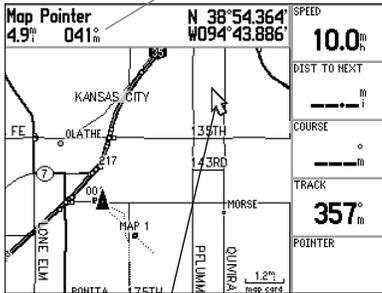
**Creating a Waypoint**



# Quick Start

## Creating a Waypoint/ Navigation

Bearing and distance from Map Pointer to current GPS location.



Map Pointer

When you have finished renaming the waypoint you will need to save it in the unit's memory.

### To save the waypoint:

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

These are the same steps that you will use to enter names, change numbers and select options in all of the data fields in the GPSMAP 176.

### Here are a few tips:

1. If you press and hold the **ARROW KEYPAD** while scrolling through the alpha-numeric list it will move through the list 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 **ARROW KEYPAD** to move to the next placeholder.

You should now have enough knowledge to look through the main pages, and enter data into your GPSMAP 176. Now let's learn how to navigate!

### Navigating with your GPSMAP 176

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

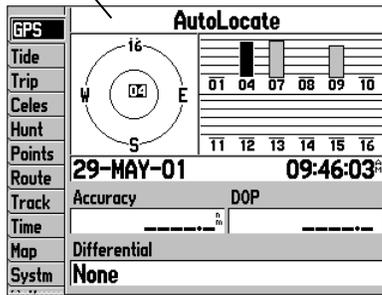
Press the **PAGE** key until the Map Page is displayed. Press the **IN** key several times until the Zoom Scale in the lower left corner of the Map Page reads "300 ft". The current GPS location is indicated by the triangle in the center of the map.



# Quick Start

## Simulated Navigation

Receiver Status



Light colored bars indicate the receiver is collecting data from that satellite. When the bar turns solid, the receiver has collected the satellite data and is able to use that satellite for navigation. When the GPSMAP 176 is able to use at least 3 satellites, the Receiver Status will display "2D or 3D GPS Location".

The Compass Page features a Pointer and a Compass Ring. When you are moving, the Pointer will point toward your destination (Bearing) while the Compass Ring reflects the direction that you are traveling (Track). In short, when you are headed directly toward your destination, the Pointer will be pointed toward the top of the display, aligned with the vertical line displayed in the Compass Ring. If you are not heading toward your destination, the Pointer will turn, continuing to point toward your destination. To head toward your destination again, turn toward the Pointer until it is realigned with the vertical line in the Compass Ring and pointed toward the top of the display.

The Simulator allows you to change the Track so you can see how this works. Press the **ARROW KEYPAD** to the right until the Track has changed about 50°. This will simulate a direction change to the right. The Pointer should now be pointing toward the left side of the display. This is exactly what will happen during actual navigation when you move off course. Press the **ARROW KEYPAD** to the left, simulating a left turn, until the Pointer is realigned with the vertical line in the Compass Ring. You are now once again headed directly toward the destination waypoint.

Now that we have 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. Press **MENU** twice to display the Main Menu.
2. Highlight the GPS tab and press **MENU**.
3. Highlight 'Stop Simulator' and press **ENTER**.

OR:

1. Turn the unit off and back on. The unit will not turn on in Simulator mode.

## Initializing the GPS Receiver

Before the GPSMAP 176 can be used for navigation the receiver has to be initialized. This process is automatic and will only take a few minutes.

Take the unit outside where it will have an unobstructed view of the sky and turn it on. Make sure that the antenna is pointed up. The unit will search for satellite signals and begin to gather and save 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 top of 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 all satellites. It may take a little longer for the unit to become operational using this method.

## Starting to Navigate

With the unit on and displaying '3D GPS Location', mark a waypoint at your current location. Name this waypoint 'HOME', assign the 'Residence' symbol and save the waypoint (see pages 9-10).

Before beginning any trip you should clear the Track Log. The Track Log is the bread crumb trail left on the Map and Highway Pages.

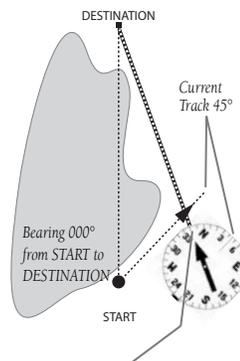
### **To clear the track log:**

1. Press the **MENU** key twice to display the Main Menu. Highlight the Track Tab.
2. Using the **ARROW KEYPAD**, highlight the 'Active' Tab then move the highlight to the 'Clear' Button and press the **ENTER** key.
3. Highlight the 'OK' Button then press the **ENTER** key. Press **QUIT** to return to the Map Page.

## Quick Start

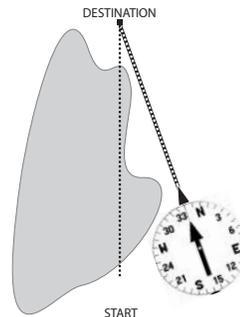
### Initializing the GPSMAP 176

*The GPS provides a straight line, direct navigation course to your destination. Since it is not always possible to navigate 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.*



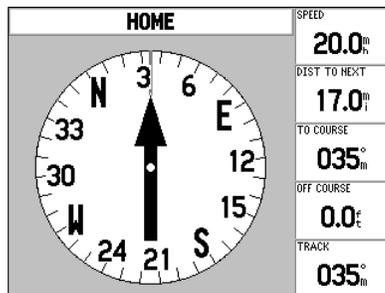
Bearing 340° from current location to DESTINATION.

*When you are able to turn toward the destination, navigate the Pointer until it points toward the top of the display and aligns with the Vertical 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.*



## Quick Start

### Basic Navigation



Navigating to "HOME"

Begin walking while holding the GPSMAP 176 in front of you with the antenna pointed toward the sky. As you move, you will see that the unit leaves a new bread crumb trail on the map indicating where you have been. Walk at least two minutes in one direction and then make either a right or left turn. Continue walking in this new direction for at least another two minutes.

Now it's time to navigate back. Remember that GPS provides you with direct, straight line navigation. It is not always possible to navigate using the most direct route, but don't worry, the GPSMAP 176 will always point 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 the **ENTER** key.

Start walking. As you move you will see that the Pointer is pointed at your destination. As soon as you are able, turn toward the Pointer until it is aligned with the vertical line in the Compass Ring. Continue walking. As you approach your 'HOME' waypoint a message will be displayed alerting you that you have arrived.

Congratulations! You should have enough basic knowledge of the GPSMAP 176 to begin navigating on your own. Be safe; and remember that while the GPS is very reliable, you should always have a backup means of navigation.

We've covered just some of the most important features of your GPSMAP 176 in this Quick Start Guide. To learn more, be sure to read the information in the Owner's Manual. If you need more help with any of the features of the GPSMAP 176, visit the GARMIN web site ([www.garmin.com](http://www.garmin.com); where you'll find answers to many frequently-asked questions), or talk to a GARMIN dealer or customer support representative.



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