GPSMAP® 620
GPSMAP 640

owner's manual

GARMIN.

Introduction

The GPSMAP® 620 and GPSMAP 640 are both marine and automotive GPS-enabled navigation devices. When you place the device in a mount installed on your boat, it powers on in marine mode. When you place the device in an automotive mount, it powers on in automotive mode.

NOTE: The GPSMAP 620 can be used in the automotive mode only if optional City Navigator NT maps are purchased and loaded onto the device.

This manual is divided in two sections. The first section describes how to use the GPSMAP 620 and GPS 640 in marine mode, and the second section describes how to use the device in automotive mode. The sections are labeled with tabs along the edge of the page to help identify the usage mode.

> ⚠ **WARNING**

See the *Important Safety and Product Information* guide in the product box for product warnings and other important information.

Product Registration

Help us better support you by completing our online registration today. Go to http://my.garmin.com. Keep the original sales receipt, or a photocopy, in a safe place.

Contact Garmin®

Contact Garmin Product Support if you have any questions while using your GPSMAP 620 or GPSMAP 640. In the USA, go to www.garmin.com/support, or contact Garmin USA by phone at (913) 397.8200 or (800) 800.1020.

In the UK, contact Garmin (Europe) Ltd. by phone at 0808 2380000.

In Europe, go to www.garmin.com/support and click **Contact Support** for in-country support information, or contact Garmin (Europe) Ltd. by phone at +44 (0) 870.8501241.

Manual Conventions

In this manual, when you are instructed to touch something, use your finger to touch that item on the screen. Small arrows (>) used in the text indicate that you should touch a series of items in order. For example, if you see, "Touch **Charts** > **Navigation Chart**", you should touch the **Charts** button on the screen, and then touch **Navigation Chart**.

Table of Contents

Getting Started

Identifying the GPSMAP 620 and GPSMAP 640 Features

① Power button—manually turn the device on or off.

② DC in—power the device and recharge the battery with an external power cable.

③ MCX connector—connect an external GPS antenna.

④ USB connector—connect the device to a computer.

⑤ Battery locking ring—lift and rotate counter-clockwise to release the battery.

⑥ Battery—removable lithium-ion rechargeable battery.

Identifying the Mounting Bracket Features

Marine Mounting Bracket

Automotive Mounting Bracket

① Bail-mount adapter—connect the marine mounting bracket to the marine bail mount.

② Ball-socket adapter—connect the mounting bracket adapter to a compatible automotive dashboard mount. (The automotive kit is an optional accessory for the GPSMAP 620 and GPSMAP 640).

③ Audio line out—connect the unit to an audio output source with a standard $1/8$ in. (3.5 mm) stereo audio plug.

④ Locking tab—use to lock the device into the mount.

⚠ **CAUTION**

The ball-socket adapter on the GPSMAP 620 and GPSMAP 640 is not compatible with Garmin automotive mounts other than the included mount. Do not mount the device on a windshield.

NOTICE

When you remove the GPSMAP 620 or GPSMAP 640 from the marine mounting bracket, dry the metal contacts and use the attached weather cap to prevent corrosion.

Using the Mounting Bracket

NOTICE

Do not use the automotive mounting bracket in your boat. The power connector and speaker assembly are not water resistant, and therefore unsuitable for marine use. Additionally, do not use the automotive-mount base in your boat. The automotive-mount base does not connect to the dashboard using mounting hardware, and therefore is not stable in marine conditions.

To install the marine mounting bracket in your boat, see the *GPSMAP 620/640 Marine Mount Installation Instructions*.

NOTE: To mount the GPSMAP 620 or GPSMAP 640 into your boat console, purchase the GPSMAP 600 Series Flush Mount Kit at www.garmin.com.

To install the automotive mounting bracket in your car:
1. Place the automotive-mount base on your dashboard, and press down on each of the four sides. The base bends and conforms to your dashboard.
2. Snap the mounting bracket onto the automotive-mount arm.
3. Plug the vehicle power cable into a power outlet in your vehicle.

TIP: If the bottom surface of the automotive mount slides on the dashboard due to dust and dirt buildup, wipe it clean using a wet cloth.

To place the GPSMAP 620 or GPSMAP 640 in the mounting bracket:
1. Flip up the locking tab on top of the mounting bracket.
2. Fit the bottom of the device into the cradle.
3. Tilt the device back until it stops.
4. Flip down the locking tab to hold the device in the mounting bracket.
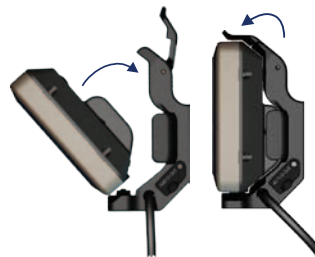
Placing the GPSMAP 620 or GPSMAP 640 in the Mounting Bracket

To remove the device from the mounting bracket:
1. Flip up the locking tab on top of the mounting bracket.
2. Tilt the device forward, and lift it out of the mounting bracket.

Powering the Device On and Off

Power on the GPSMAP 620 or the GPSMAP 640:

- If the mounting bracket on your boat or in your car is connected to power, the device powers on when you place it in the mount.
- The device powers on when external power is supplied through the DC IN connector.
- To power on the device manually, press and hold ⏻ until the Garmin logo appears on the screen.

Power off the GPSMAP 620 or the GPSMAP 640:

- When you remove the device from the mounting bracket or you remove power from the DC IN connector, you will be prompted to continue on battery power. Touch **Turn Off** to power off the device.
- To power off the device manually, press and hold ⏻ until the unit powers off.

NOTE: If you manually turn off the device while it is connected to a power source, it will continue to charge the battery.

NOTICE

If the marine mounting bracket is not wired through the ignition or a switch, the GPSMAP 620 or GPSMAP 640 will drain the boat battery, even when powered off. Remove the device from the mounting bracket to avoid draining the boat battery.

Removing and Inserting the Battery Pack

NOTICE

This product contains a lithium-ion battery. To prevent damage, remove the unit from the vehicle or boat when exiting or store it out of direct sunlight.

To remove the battery pack:

1. Remove the GPSMAP 620 or the GPSMAP 640 from the mounting bracket.
2. On the back of the device, lift up the battery locking ring and turn it counter-clockwise.
3. Tilt the battery pack away from the device and lift it out.

To Insert the battery pack:

1. On the back of the GPSMAP 620 or the GPSMAP 640, fit the bottom of the battery pack into the device.
2. Tilt the battery pack toward the device until it is tight.
3. Turn the locking ring clockwise to lock the battery pack in place.

Important battery notes:

• Before using the GPSMAP 620 or the GPSMAP 640 for the first time, charge the battery for at least six hours.

• The lithium-ion battery pack used in the device is primarily a backup battery source. Use the device in a mount with external power whenever possible.

• If the device will not be used for an extended time (longer than one week), remove the battery pack.

NOTICE

The GPSMAP 620 and the GPSMAP 640 are waterproof to the IPX7 standard only when the battery is connected and locked in place. Use extreme caution around water when removing the battery from the device.

Inserting and Removing a Secure Digital (SD) Card

To preserve the IPX7 water resistance of the GPSMAP 620 or the GPSMAP 640, the SD card slot is located under the battery.

To insert an SD card:

1. Remove the battery pack. The SD card slot is in the bottom of the battery compartment, on the opposite side from the battery contacts.

2. Place an SD card into the opening with the label showing, with the SD card contacts facing away from the battery contacts.

3. Slide the SD card into the SD card slot, and press until it clicks softly and locks in place.

4. Insert the battery pack.

Inserting an SD Card

To remove an SD card:

1. Remove the battery.

2. Press in on the SD card until it clicks softly and releases from the SD card slot.

3. Remove the SD card.

Marine Mode: Getting Started

Step 1: Mount Your GPSMAP 620 or GPSMAP 640

1. Install the marine mount in your boat according to the *GPSMAP 620/640 Marine Mount Installation Instructions*.
2. Place the device in the marine mounting bracket (page 2).

Step 2: Configure Your Device

To power on your device if it does not power on automatically, press and hold ⏻ until the Garmin logo appears on the screen. Follow the on-screen prompts to set up the marine mode on the device for the first time. To power off your GPSMAP 620 or GPSMAP 640, press and hold ⏻.

Step 3: Acquire Satellites

1. Go outdoors to an open area, away from tall buildings and trees.
2. Turn on your GPSMAP 620 or GPSMAP 640.

Acquiring satellite signals can take a few minutes. The 📶 bars indicate satellite strength. When at least one of the bars is green, your device has acquired satellite signals. Now you can select a destination and navigate to it.

Step 4: Use Your GPSMAP 620 or GPSMAP 640

Marine Mode: Home Screen

① Usage mode. A boat icon represents marine mode, and a car icon represents automotive mode. Touch this icon to change modes.

② GPS satellite strength.

③ Battery status.

④ Current time.

⑤ Home screen categories and actions. Touch an icon to view the associated menu or perform the associated action.

Navigating Directly to a Destination

1. From the Home screen, touch **Charts** > **Navigation Chart**.

2. On the Navigation chart, touch the place you would like to navigate to.

   • Touch ➕ and ➖ to zoom in and out. Touch anywhere on the chart and drag to pan the map.

   • For more information on using charts, see page 8.

3. When the pointer icon ⊙ is on the location you want to navigate to, touch **Navigate To** > **Go To**.

4. Follow the magenta line drawn between your current location and your destination. Navigate with caution. Avoid land masses and obstacles while following the line to your destination.

Tips:

• In addition to navigating directly to your destination, you can create a route or allow the device to create a route. For advanced navigation options, see page 13.

• You can also use the Compass screen to actively navigate to your destination by following a pointer on a compass. See page 24 for more information.

Direction to destination

Position and heading

Navigation information

Navigating Directly to a Destination

Saving Your Current Location

To save a location, such as your marina or a good fishing spot, mark it as a waypoint.

1. From the Home screen, touch **Mark**.

2. If you want to name the waypoint, touch **Edit Waypoint** > **Name**. Use the on-screen keyboard to enter a name other than the number assigned to the waypoint by default.

Navigating Directly to a Saved Location

1. From the Home screen, touch **Where To?** > **Waypoints**.

2. Touch the waypoint you want to navigate to.

3. Touch **Navigate To** > **Go To**.

4. Follow the magenta line drawn between your current location and your destination. Navigate with caution. Avoid land masses and obstacles while following the line to your destination.

Tips:

• In addition to navigating directly to your destination, you can create a route or allow the device to create a route. For advanced navigation options, see page 13.

• You can also use the Compass screen to actively navigate to your destination by following a pointer on a compass. See page 24 for more information.

Stopping Navigation

1. While navigating, from the Navigation chart, touch **Menu**.

2. Touch **Stop Navigation**.

NOTE: You can also stop navigation from the Where To? screen.

Adjusting the Volume

1. From any screen, press and quickly release ⏻.

2. Touch **Volume**.

3. Touch and drag the volume slider bar left to decrease the volume and right to increase the volume. The box to the right of the volume slider bar shows the volume level as a percentage.

To mute the volume, touch the box to the right of the volume slider bar. The word **Mute** replaces the volume percentage.

NOTE: The device must be connected to an external audio source for you to hear audio alerts in Marine Mode.

Adjusting the Backlight

1. From any screen, press and quickly release ⏻.

2. Touch and drag the backlight slider bar left to decrease the brightness and right to increase the brightness. The box to the right of the backlight slider bar shows the backlight level as a percentage.

Touch **Color Mode** to change between **Day Colors** and **Night Colors**. The **Auto** setting automatically changes the colors depending on the time of day.

Marine Mode: Using Charts

The GPSMAP 620 is loaded with a basic worldwide imagery map. The GPSMAP 640 is loaded with a basic worldwide imagery map and detailed BlueChart® g2 offshore cartography for US waters.

You can use optional BlueChart g2 Vision® preprogrammed SD cards to get the most out of your device. For more information on BlueChart g2 Vision, see page 10.

There are four ways to view charts:

- **Navigation Chart**—displays an overhead view of the basic worldwide imagery map and the optional BlueChart g2 Vision charts and photos.
- **Perspective 3D**—displays a view from above and behind your boat for a visual navigation aid (page 10).
- **Mariner's Eye 3D**—displays a detailed, three-dimensional view from above and behind your boat for a visual navigation aid (page 11).
- **Fishing Chart**—removes navigational data from the chart and enhances bottom contours for depth recognition (page 11).
- **Fish Eye 3D**—provides an underwater view that visually represents the sea floor according to information on the chart (page 11).

NOTE: Mariner's Eye 3D and Fish Eye 3D chart views are available only if you use a BlueChart g2 Vision SD card (page 10). The Fishing chart is available if you use a BlueChart g2 Vision SD card or a BlueChart g2 SD card, or if your built-in map supports Fishing charts.

Using the Navigation Chart

From the Home screen, touch **Charts** > **Navigation Chart**.

Use the Navigation chart to plan a course (page 13), to view map information, and as a visual aid while navigating.

Panning the Navigation Chart

1. From the Home screen, touch **Charts** > **Navigation Chart**.
2. Touch and drag the chart to view other areas on the chart.
3. Touch **Stop Panning** to return the Navigation chart to your current location.

Zooming In and Out on the Navigation Chart

The scale at the bottom of the chart (**500km**) indicates the zoom level. The bar under the number represents the numeric scale distance on the map.

Touch and to zoom in and out on the Navigation chart.

Interacting with Objects on the Navigation Chart

1. Touch a point on the Navigation chart.

2. Touch an option:

NOTE: The options that appear are dynamic and depend on the point you touched.

- **Review**—view details of the chart objects near the pointer. (**Review** only appears if the pointer is near multiple objects on the chart—if the pointer is near only one object, the name of the object appears instead of **Review**.)

- **Navigate To**—view the navigation options (page 13).

- **Create Waypoint**—marks a waypoint at the location of the pointer (page 22).

- **Information**—view additional information about an object or an area of the chart.

- **Measure Distance**—view the distance and bearing of the object from your current location. The information appears in a window on the upper-left corner of the screen. Touch **Set Reference** to measure from a location other than your current location.

NOTE: You can touch and drag the pointer to a new location.

Accessing Additional Object or Chart Information

1. Touch an object on the chart or an area of the chart.

2. Touch **Information**, and choose from the following options:

- **Tides**—view tide information provided by the tide station closest to the object or area of the chart (page 26).

- **Currents**—view current information provided by the current station closest to the object or area of the chart (page 26).

- **Celestial**—view sunrise and sunset almanac data for the object or area of the chart (page 27).

- **Local Services**—view a list of the marinas and marine services closest to the object or area of the chart.

- **Chart Notes**—view National Oceanic and Atmospheric Administration (NOAA) information associated with the chart containing the object.

Viewing Aerial Photos

You can view aerial photos of marinas and other navigationally significant landmarks in the region covered by an inserted BlueChart g2 Vision SD card.

1. On the navigation chart, touch a camera icon.
   - A standard camera icon (📷) indicates an overhead photo.
   - A camera icon with a cone (▷📷) indicates a perspective photo. The photo was taken from the location of the camera, pointed in the direction of the cone.
2. Touch **Aerial Photo**.

Using Perspective 3D

Perspective 3D provides a view from above and behind the boat (according to your heading), and provides a visual navigation aid.

When navigating, you can use the Perspective 3D screen to better follow your course, indicated by a highlighted line. See page 13 for more information on navigation.

To access the Perspective 3D screen from the Home screen, touch **Charts** > **Perspective 3D**.

Touch 🔸 to move the view closer to your boat and lower to the water. Touch 🔹 to move the view away from the boat. This is indicated by the scale (**39%**) at the bottom of the screen.

Using BlueChart g2 Vision

Optional BlueChart g2 Vision preprogrammed SD cards allow you to get the most out of your device. In addition to detailed marine charting, BlueChart g2 Vision has the following features:

- **Mariner's Eye 3D**—provides a view from above and behind the boat for a three-dimensional navigation aid. The BlueChart g2 Vision Mariner's Eye 3D is more detailed than the standard Perspective 3D screen.
- **Fish Eye 3D**—provides an underwater, three-dimensional view that visually represents the sea floor according to the information on the chart.
- **Fishing Charts**—displays the chart with enhanced bottom contours and without navigational data. This chart works well for offshore deep-sea fishing.
- **High Resolution Satellite Imagery**—provides high-resolution satellite images for a realistic view of the land and water on the Navigation chart.
- **Detailed Roads and POI data**—displays roads, restaurants, and other points of interest (POIs) along the shore.
- **Auto Guidance**—uses specified safe depth, safe height, and chart data to suggest the best passage to your destination.

Using Mariner's Eye 3D

When using a BlueChart g2 Vision SD card, you can view the Mariner's Eye 3D screen. The Mariner's Eye 3D screen is similar to the Perspective 3D screen (page 10), but renders a true 3D screen. This view is helpful when navigating tricky shoals, reefs, bridges, or channels, and is beneficial when trying to identify entry and exit routes in unfamiliar harbors or anchorages. Mariner's Eye 3D provides a three-dimensional view of both the shore and the sea floor.

To access the Mariner's Eye 3D screen from the Home screen, touch **Charts** > **Mariner's Eye 3D**.

As with the Perspective 3D screen, touch ⊞ to move the view closer to your boat and lower to the water. Touch ⊟ to move the view away from the boat. This is momentarily indicated by the scale (**39%**) at the bottom of the screen.

Touch and drag the map to the left or the right to pan the 3D perspective.

Using Fish Eye 3D

Using the depth contour lines of the BlueChart g2 Vision cartography, Fish Eye 3D provides an underwater view of the sea floor or lake bottom. The ⊞ and ⊟ buttons adjust the view in the same way as the Mariner's Eye 3D.

To access the Fish Eye 3D screen from the Home screen, touch **Charts** > **Fish Eye 3D**.

NOTE: When navigating, the magenta line will not appear on the Fish Eye 3D screen, although any enabled navigation data bars will appear.

Using Fishing Charts

Use the fishing chart to view detailed bottom contours and depth soundings on the chart. There are no navigation aids such as buoys and lights on the fishing chart.

The fishing chart uses highly detailed bathymetric data, and is best for offshore deep-sea fishing.

NOTE: The Fishing chart is available if you use a BlueChart g2 Vision SD card or a BlueChart g2 SD card, or if your built-in map supports Fishing charts.

Fishing Chart   **Navigation Chart**

To access the Fishing chart screen from the Home screen, touch **Charts** > **Fishing Chart**.

Touch ⊞ and ⊟ to zoom in and out on the Fishing chart.

You can navigate using the Fishing chart just as you would when using the Navigation chart.

Enabling High-Resolution Satellite Imagery

You can overlay high-resolution satellite images on the land, the sea, or both portions of the Navigation chart when using a preprogrammed BlueChart g2 Vision SD card.

To enable satellite imagery:

1. While viewing the Navigation chart, touch **Menu** > **Navigation Chart Setup** > **Photos**.

2. Touch one of the following:

   • **Off**—standard chart information is shown on the map.

   • **Land Only**—standard chart information is shown on water with photos overlaying the land.

   • **Photo Map Blend**—photos overlay both the water and the land at a specified opacity. The higher you set the percentage, the more the satellite photos cover both water and land.

When enabled, the high resolution satellite images are only present at lower zoom levels. If you cannot see the high resolution images in your BlueChart g2 Vision region, zoom in by touching ⊞, or set the detail level higher by touching **Menu** > **Navigation Chart Setup** > **Chart Appearance** > **Detail**.

Marine Mode: Navigating

To navigate using the GPSMAP 620 or GPSMAP 640, first choose a destination, then set a course or create a route. Follow the course or the route on the Navigation chart or on the Perspective 3D or Mariner's Eye 3D screen.

TIP: You can also use the Compass screen to follow a course or a route on the Navigation chart, the Perspective 3D screen, or the Mariner's Eye 3D screen. See page 24 for more information.

Step 1: Choose a Destination

You can choose a destination using either the Navigation chart or the **Where To?** menu.

Choosing a Destination Using the Navigation Chart

1. From the Home screen, touch **Charts** > **Navigation Chart**.
2. On the Navigation chart, touch the place you would like to navigate to. The ⊙ pointer icon indicates the destination on the chart.

TIP: Touch ➕ and ➖ to zoom in and out. Touch anywhere on the chart and drag to pan the map. For more information on using charts, see page 8.

Choosing a Destination Using Where To?

1. From the Home screen, touch **Where To?**.
2. Touch a category:
   • **Waypoints**—view a list of locations you marked previously (page 19).
   • **Routes**—view a list of routes you saved previously (page 19).
   • **Tracks**—view a list of recorded tracks (page 20).
   • **Offshore Services**—view a list of nearby marinas and other offshore points of interest, listed by proximity (page 19).
   • **Search by Name**—search nearby marinas and other offshore points of interest by name (page 20).
3. Touch the location you want to navigate to.

Step 2: Set and Follow the Course

You can set a course three ways:

• **Go To**—(direct course) create a direct line from your current location to the destination (page 14).

• **Route To**—create a route from the destination to your current location, adding turns along the way (page 15).

• **Guide To**—use the chart data on a BlueChart g2 Vision SD card to automatically suggest a passage from your current location to the destination ().

After you set the course, follow the course using the Navigation chart, the Perspective 3D screen, or the Mariner's Eye 3D screen.

Setting a Direct Course (Go To)

When the ⊙ pointer icon is on the location you want to navigate to, or you have selected a destination using **Where To?**, touch **Navigate To** > **Go To**.

Following a Direct Course (Go To) on the Navigation Chart, Perspective 3D Screen, or Mariner's Eye 3D Screen

After you set the course using **Go To**, a magenta line represents the direct course from the start point to the end point, and does not move, even when you are off course.

> ⚠ **CAUTION**
>
> When using Go To, a direct course and a corrected course may pass over land or shallow water. Use visual sightings and steer to avoid land, shallow water, and other dangerous objects.

In the center of the magenta line is a thinner purple line that represents the corrected course from your current location to the end point. The corrected course line is dynamic, and it moves with your boat when you are off course.

1. After you set a course, from the Home screen, touch **Charts** and then touch **Navigation Chart**, **Perspective 3D**, or **Mariner's Eye 3D**.

2. Follow the magenta line (direct course).

3. Steer off course to avoid land, shallow water, and other obstacles on the water.

4. When you are off course, follow the purple line (corrected course) to travel to your destination, or steer back to the magenta line (direct course).

Following a Direct Course on the Navigation Chart

Direct course

Corrected course
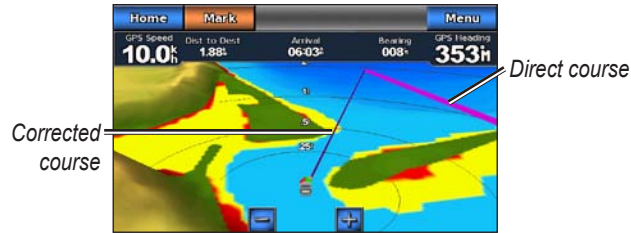
Following a Direct Course on the Mariner's Eye 3D Screen

NOTE: When following a course, important navigation information appears in a data bar along the top of the chart. To adjust the settings of the data bar, see page 46.

Creating a Route (Route To)

1. When the ⊙ pointer icon is on the location you want to navigate to, or you have selected a destination using **Where To?**, touch **Navigate To** > **Route To**.

2. Touch the location where you want to make the last turn toward your destination.

Adding the Last Turn

3. Touch **Add Turn**.

4. To add an additional turn, touch another location where you want to make a turn (working backward from the destination) and then touch **Add Turn**. You can add up to 250 turns to a route.

Adding an Additional Turn

5. Touch **Done** to finish creating the route and to set the course, or touch **Cancel Route** to delete the route.

Complete Route

Saving a Created Route (Route To)

You can save up to 50 routes, with up to 250 turns in each route.

1. After you create a route, touch **Menu** > **Stop Navigation**.

2. Touch **Yes** to save your current active route.

Following a Route (Route To) on the Navigation Chart, Perspective 3D Screen, or Mariner's Eye 3D Screen

After you create a route using **Route To** or choose a saved route from the **Where To?** menu, a magenta and purple line appears between the start point and the first turning point, then continues on to each subsequent turning point. This magenta and purple line represents the route leg (from turning point to turning point), and does not move, even when you are off course.

⚠ CAUTION

Even when you carefully create a route, legs may pass over land or shallow water. Use visual sightings and steer to avoid land, shallow water, and other dangerous objects.

When you are off course, an orange arrow appears to help steer you back onto the route leg to the next turning point. This orange arrow represents the Course to Steer.

1. After you create a route using **Route To** or choose a saved route from the **Where To?** menu, from the Home screen, touch **Charts** and then touch **Navigation Chart**, **Perspective 3D**, or **Mariner's Eye 3D**.

2. Follow the magenta and purple line (route leg) from the start point to the first turning point.

3. After you reach the first turning point, follow the magenta and purple line (route leg) to each subsequent turning point, until you reach the end point.

4. Steer off course to avoid land, shallow water, and other obstacles on the water.

5. When you are off course, follow the orange arrow (Course to Steer) to steer back to the magenta and purple line (route leg).
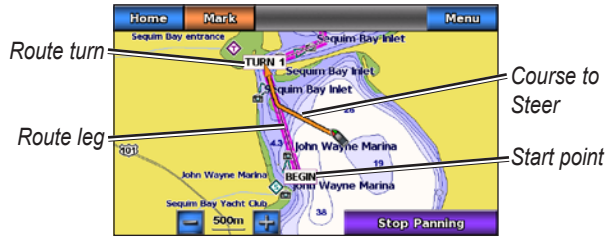
Following a Route on the Navigation Chart

Following a Route on the Mariner's Eye 3D Screen

NOTE: When following a route, important navigation information appears in a data bar along the top of the chart. To adjust the settings of the data bar, see page 46.

Setting an Automatic Course (Guide To)

When using a preprogrammed BlueChart g2 Vision SD card, you can use Auto Guidance to automatically create a suggested passage based on available BlueChart g2 Vision chart information. See page 42 for instructions on setting up Auto Guidance for your boat.

When the ⊙ pointer icon is on the location you want to navigate to, or you have selected a destination using **Where To?**, touch **Navigate To** > **Guide To**.

> ⚠ **CAUTION**
>
> The Auto Guidance feature of the BlueChart g2 Vision SD card is based on electronic chart information. Carefully compare the course to all visual sightings, and avoid any land, shallow water, or other obstacles that may be in your path.

Following an Automatic Course (Guide To) on the Navigation Chart, the Perspective 3D Screen, or the Mariner's Eye 3D Screen

After you create an automatic course using **Guide To**, a magenta line appears. The magenta line represents the suggested passage between the start point and the end point, and does not move, even when you are off course.

1. After you set an automatic course using **Guide To**, from the Home screen, touch **Charts** and then touch **Navigation Chart**, **Perspective 3D**, or **Mariner's Eye 3D**.

2. Follow the magenta line from the start point to the end point.

3. Steer off course to avoid land, shallow water, and other obstacles on the water.

4. When you are off course, steer back to the magenta line when the path is clear.

NOTE: When following a course, important navigation information appears in a data bar along the top of the chart. To adjust the settings of the data bar, see page 46.

Marine Mode: Where To?

Use the **Where To?** menu on the Home screen to search for, and navigate to, nearby fuel, repairs, and other services, as well as waypoints and routes.

Searching for Marine Services

NOTE: This feature may not be available in all areas.

1. From the Home screen, touch **Where To?** > **Offshore Services**.
2. Touch the marine service category to which you want to navigate. A list of the 50 nearest locations appears, including the distance and bearing to each.
3. Touch the marine service item you want to navigate to.
4. Touch **Go To**, **Route To**, or **Guide To** to set the selected marine service as a navigation destination. See page 13 for details about navigating to a destination.

Searching for Waypoints

NOTE: You must create waypoints before you can search for and navigate to them.

1. From the Home screen, touch **Where To?** > **Waypoints**. A list of saved waypoints appears, sorted by distance, including the distance and bearing to each.

2. Touch the waypoint you want to navigate to.
3. Touch **Navigate To** to set the selected waypoint as a navigation destination. See page 13 for information about navigating to a destination.

Searching for Saved Routes

1. From the Home screen, touch **Where To?** > **Routes**.
2. Touch the saved route you want to navigate.
3. Touch **Navigate To** to navigate the selected route, and choose how you want to navigate to it. See page 16 for information about navigating routes.
   - **Forward**—Navigate the route from the start point to the end point.
   - **Backward**—Navigate the route in reverse, from the end point to the start point.
   - **Offset**—Navigate a course that is parallel to the route and a specified distance from the route. First choose the direction and side of the offset, then specify the offset distance from the route.

Searching for Saved Tracks

1. From the Home screen, touch **Where To?** > **Tracks**.
2. Touch the saved track you want to navigate.
3. Touch **Follow Track** to navigate the selected saved track. See page 22 for more information about tracks.

Searching by Name

Use the Search by Name menu to search all marine services, waypoints, saved routes, and saved tracks.

1. From the Home screen, touch **Where To?** > **Search by Name**.
2. Use the on-screen keyboard to type the name or part of the name of the marine service, the waypoint, the saved route, or the saved track you want to find, and touch **Done**.

3. A list of results appears. Touch the item you want to navigate to. Each entry is marked by an icon to help identify which category it belongs to:
   - ◈—marine service icon
   - ▦—default waypoint icon. This icon can be changed using the waypoint properties (page 22).
   - ⦉—saved route icon
   - ⬚—saved track icon
4. Touch **Navigate To** or **Follow Track** to begin navigation. See page 13 for information about navigating to a destination. See page 22 for more information about tracks.

Marine Mode: Using Waypoints and Tracks

Create waypoints in locations that you want to return to, such as your marina or a good fishing spot. You can store up to 1,500 marine waypoints with a user-defined name, symbol, depth, and water temperature for each waypoint.

A track is a recording of your path. The track currently being recorded is the active track. You can save your active track.

Using Man Overboard (MOB) Waypoints

Use a Man Overboard (MOB) waypoint to both create a waypoint with an international MOB symbol (⬙) and immediately begin navigating to the MOB waypoint with a direct course (Go To).

To mark an MOB waypoint from the Home screen:
1. Touch **Man Overboard**. This immediately marks your current position as an MOB waypoint.
2. Touch **Yes** to begin navigating to the MOB waypoint.

To mark an MOB waypoint from any other screen:
1. Touch **Mark** in the top-left corner of any screen except the Home screen. This immediately marks your current position as a waypoint.
2. Touch **Man Overboard**. This designates the waypoint as an MOB waypoint and begins navigation automatically.

Marking a Waypoint at Your Current Location
1. Touch **Mark** on any screen. This marks your current location as a waypoint with an automatically generated name.
2. Choose from the following options:
   - **Edit Waypoint**—designates a specific name, a symbol, a water depth, a water temperature, or a position.
   - **Delete**—deletes the waypoint.
   - **Man Overboard**—designates the current location as a Man Overboard (MOB) waypoint.
   - **Back**—returns to the previous screen.

Creating a Waypoint from the Navigation Chart

1. From the Home screen, touch **Charts** > **Navigation Chart**.

2. Touch the location you want to designate as a waypoint. A ⊙ pointer indicates the location.

3. Touch **Create Waypoint**.

Editing Waypoint Details

1. From the Home screen, touch **Information** > **User Data** > **Waypoints List** to display the list of all waypoints, or touch a waypoint on the Navigation chart.

2. Touch the name of the waypoint you want to edit.

3. Touch **Edit Waypoint**.

4. Touch the waypoint attribute you want to change.

5. Enter the new name, the symbol, the value, or the comment.

Changing the Position of a Waypoint

1. From the Home screen, touch **Information** > **User Data** > **Waypoints** to display the list of all waypoints, or touch a waypoint on the Navigation chart.

2. Touch the name of the waypoint you want to move.

3. Touch **Edit Waypoint** > **Position**.

4. Touch **Use Chart** or **Enter Coordinates**.

5. If entering coordinates, use the on-screen keyboard to enter the new coordinates for the waypoint. If using the chart, touch the new location and then touch **Move Waypoint**.

Deleting a Waypoint or MOB

1. From the Home screen, touch **Information** > **User Data** > **Waypoints List**.

2. Touch the name of the waypoint or the MOB you want to delete.

3. Touch **Delete** and then touch **OK** to confirm that you want to delete the waypoint.

Using Tracks

A trailing line on the chart indicates your active track. The active track holds 10,000 track points. You can specify whether the active track stops at 10,000 track points or overwrites the earliest points (page 52).

To toggle the display of tracks on or off, from the Navigation chart, touch **Menu** > **Waypoints and Tracks** > **Tracks**.

To disable the recording of tracks, from the Home screen, touch **Information** > **User Data** > **Tracks** > **Active Track Options** > **Record Mode** > **Off**.

Saving the Active Track

You can save up to 20 tracks, with up to 700 points per saved track.

1. From the Home screen, touch **Information** > **User Data** > **Tracks** > **Save Active Track**.

2. Either touch the time the current track began recording, or touch **Entire Log**.

Clearing the Active Track

From the Home screen, touch **Information** > **User Data** > **Tracks** > **Clear Active Track** > **OK**. The track memory is cleared and the current track continues to be recorded.

Following the Active Track

1. From the Home screen, touch **Information** > **User Data** > **Tracks** > **Follow Active Track**.

2. Either touch the time the current track began recording, or touch **Entire Log**.

Navigating a Saved Track

1. From the Home screen, touch **Where To?** > **Tracks**.

2. Touch the name of the saved track you want to navigate.

3. Touch **Follow Track**.

4. Touch **Forward** or **Backward** to follow the track in the direction you prefer.

NOTE: You can also navigate a saved track from the saved tracks list (**Information** > **User Data** > **Tracks** > **Saved Tracks**).

Editing or Deleting a Saved Track

1. From the Home screen, touch **Information** > **User Data** > **Tracks** > **Saved Tracks**.

2. Touch the track you want to edit or delete.

3. Touch **Edit Track**
   - **Name**—change the name of the saved track.
   - **Track Color**—change the color of the saved track
   - **Save Route**—save the saved track as a saved route.
   - **Delete**—delete the saved track.

Marine Mode: Using the Dashboard

Use the Dashboard to view important data such as navigation and trip information on one screen, without using the chart screens.

Using the Compass Screen

From the Home screen, touch **Dashboard** > **Compass** to view the Compass screen.

Following a Direct Course or a Route Using the Compass Screen

After you set a course using **Go To**, or create a route using **Route To**, you can use the Compass screen to follow the course or route.

You can view your current heading and the corrected course on the Compass screen. When you are off course, the distance between your current heading and the corrected course is called the Course to Steer, and is shaded orange on the compass.

> ⚠ **CAUTION**
>
> Just as on the Navigation chart, a direct course and a corrected course may pass over land or shallow water. Use visual sightings and steer to avoid land, shallow water, and other dangerous objects.
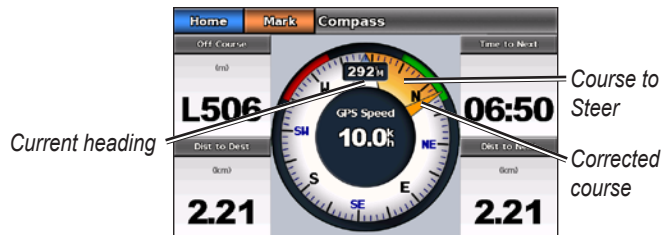
Following a Direct Course on the Compass Screen

To follow a direct course on the Compass screen:

1. After you set a course, from the Home screen, touch **Dashboard** > **Compass**.

2. Follow the orange corrected-course pointer and steer off course to avoid land, shallow water, and other obstacles on the water.

3. When you are off course, turn toward the orange corrected-course pointer to reduce the shaded orange Course to Steer and continue to the next turn in the route or to your destination.

Using the Numbers Screen

To view important navigation numbers, such as heading and GPS speed, from the Home screen, touch **Dashboard** > **Numbers**. For more information on configuring the Numbers screen, see page 52.

Using the Trip Screen

The Trip screen provides helpful statistics about your trip.

To view the Trip screen, from the Home screen, touch **Dashboard** > **Trip**.

Resetting Trip Screen Information

1. From the Trip screen, touch **Menu**.
2. Touch an item to reset that category of information on the Trip screen, or touch **Reset All**.

Marine Mode: Viewing Almanac Data

Use the Information screen to access almanac data about tides and currents, as well as sun and moon (celestial) data.

You can also select tide, current, and celestial information for a specific station directly from the Navigation chart. Touch near the specific station. When the ⊙ pointer icon is near the station, touch **Information** and then touch **Tides**, **Currents**, or **Celestial**.

Viewing Tide Station Information

To view tide information from the Home screen, touch **Information** > **Tides**. Information for the most-recently viewed tide station is shown.

Tide station

Local time

Tide level at local time

The Tide Station Graph

- Touch any point on the tide graph to view the tide level at a different time. You can also drag your finger along the graph to scroll.

- Touch **Nearby Stations** to view other tide stations close to your position.

- Touch **Change Date** > **Manual** to view tide information for a different date.

- Touch **Show Report** to view the Tide Report for the selected station.

Viewing Current Information

To view current information from the Home screen, touch **Information** > **Currents**. Information for the most-recently viewed current station is shown.

- Touch any point on the tide graph to view the current activity at a different time. You can also drag your finger along the graph to scroll.

- Touch **Nearby Stations** to view other current stations close to your present location.

- Touch **Change Date** > **Manual** to view current information for a different date.

- Touch **Show Report** to view the Current Report for the selected station.

Viewing Celestial Information

You can view celestial almanac data for your present location. You can view information about sunrise, sunset, moonrise, moonset, the moon phase, and the approximate sky view location of the sun and moon.

To view celestial information from the Home screen, touch **Information** > **Celestial**.

• Touch **Change Date** > **Manual** to view information for a different date.

• Touch and to view celestial information for a different time on that date.

• Touch **Show Moon Phase** to view the moon phase at the specified date and time. After touching **Show Moon Phase**, touch **Show Skyview** to return to the celestial sky view.

• Touch **Next Day** or **Previous Day** to view celestial information for a different day.

Marine Mode: Managing User Data

To view and manage marine user data from the Home screen, touch **Information** > **User Data**.

- **Waypoints List**—display a list of all saved waypoints.
- **Routes**—display a list of saved routes.
- **Tracks**—display a list of saved tracks.
- **Data Transfer**—transfer waypoints, routes, and tracks to and from an SD card.
- **Clear User Data**—erase all user waypoints, routes, and tracks.

NOTE: User data (waypoints, routes, and tracks) is not shared between marine mode and automotive mode.

Transferring Marine Data (Waypoints, Routes, Tracks) to or from an SD Card

1. Insert an SD card into your device (see page 4).
2. From the Home screen, touch **Information** > **User Data** > **Data Transfer**.

3. Select an option:
   - **Save To Card**—save waypoints, routes, and tracks to the SD card.
   - **Merge From Card**—transfer data from the SD card to the unit and combine it with existing user data.
   - **Replace From Card**—overwrite items on your device.
   - **Copy Built-In Map**—copy the pre-loaded basemap on the device to an SD card for use with compatible Garmin PC software products.

Backing Up Marine Data to a Computer

1. Insert an SD card into your device (page 4).
2. From the Home screen, touch **Information** > **User Data** > **Data Transfer** > **Save to Card**. A list of user-created data files appears.
3. Create a new data file on the card if you have not created one previously. Touch **Add New File** and enter a file name.
4. Remove the SD card from the device and insert it into an SD card reader that is attached to a computer.
5. From Windows® Explorer, open the Garmin\UserData folder on the SD card.
6. Copy the <filename>.ADM file on the card and paste it to any location on the computer.

Restoring Backup Marine Data to your Device

1. Copy the <filename>.ADM file from your computer to an SD card in a folder named Garmin\UserData.

2. Insert the SD card into your device.

3. From the Home screen on your device, touch **Information** > **User Data** > **Data Transfer** > **Replace From Card**.

4. Touch the name of the data file you want to restore.

Copying or Merging MapSource® Marine Data to the GPSMAP 620 or GPSMAP 640

Using an SD card:

1. Insert the SD card into your GPSMAP 620 or GPSMAP 640 device. The unit places a file on the card that provides information to MapSource to format data. This only needs to be done the first time you copy or merge MapSource data to your device from a specific SD card.

2. Check your MapSource version on your PC by clicking **Help** > **About MapSource**. If the version is older than 6.12.2, update to the most-current version by clicking **Help** > **Check for Software Updates** or check the Garmin Web site at www.garmin.com.

3. Insert the SD card into an SD card reader that is attached to the PC.

4. From MapSource, click on **Transfer** > **Send to Device**.

5. From the Send to Device window, select the drive for the SD card reader, and select the types of data you want to copy to your device.

6. Click **Send**. MapSource transfers a file named USERDATA.adm to the SD card.

7. Insert the SD card into your device.

8. From the Home screen on your device, touch **Information** > **User Data** > **Data Transfer**.

9. Touch **Replace From Card** or **Merge From Card** to copy or merge the data into your device.

Connecting the device directly to the PC:

1. Power on the unit in marine mode, or switch to marine mode.

2. Connect the device to your computer using a mini-USB cable.

3. From MapSource, click on **Transfer** > **Send to Device**.

4. From the Send to Device window, select the GPSMAP 620 or GPSMAP 640.

5. Click **Send**.

Marine Mode: Managing Information from Other Vessels

Use the Information screen to view and manage information about other boats.

NOTE: To view information about other boats, your unit must be connected to an external Automatic Identification System (AIS) or Digital Selective Calling (DSC) device.

Viewing AIS Information

The Automatic Identification System (AIS) enables you to identify and track other vessels.

About AIS

AIS alerts you to area traffic. When connected to an external AIS device, the chartplotter can show some AIS information about other vessels that are within range, that are equipped with a transponder, and that are actively transmitting AIS information. The information reported for each vessel includes the Maritime Mobile Service Identity (MMSI), the location, the GPS speed, the GPS heading, the time that has elapsed since the last position of the vessel was reported, the nearest approach, and the time to the nearest approach.

AIS Targeting on the Navigation Chart

AIS Targeting Symbols

Symbol	Description
	AIS vessel. The vessel is reporting AIS information. The direction in which the triangle is pointing indicates the direction in which the AIS vessel is moving.
	Target is selected.
	AIS Target is activated. The target appears larger on the chart. A green line attached to the target indicates the heading of the target. The MMSI, speed, and direction of the vessel appear beneath the target, if the details setting is set to **Show** (page 32). If the AIS transmission from the vessel is lost, a message banner appears.
	Target is lost. A green **X** indicates that the AIS transmission from the vessel is lost, and the chartplotter displays a message banner asking whether the vessel should continue to be tracked. If you discontinue vessel tracking, the lost target symbol disappears from the chart or the 3D chart view.

◤	Dangerous target in range. The target flashes while an alarm sounds and a message banner appears. After the alarm is acknowledged, a solid red triangle with a red line attached to it indicates the location and the heading of the target. If the AIS alarm is set to Off, the target flashes, but the audible alarm does not sound and the alarm banner does not appear. If the AIS transmission from the vessel is lost, a message banner appears.
◤ (with red X)	Dangerous target is lost. A red **X** indicates that the AIS transmission from the vessel is lost, and the chartplotter displays a message banner asking whether the vessel should continue to be tracked. If you discontinue vessel tracking, the lost dangerous target symbol disappears from the chart or the 3D chart view.
◤ (symbol)	The location of this symbol indicates the closest point of approach to a dangerous target, and the numbers near the symbol indicate the time to the closest point of approach to that target.

Heading and Projected Course of Activated AIS Targets

When heading and course-over-ground information are provided by an activated AIS target, the heading of the target appears on a chart as a solid line attached to the AIS target symbol. A heading line does not appear on a 3D chart view.

The projected course of an activated AIS target appears as a dashed line on a chart or a 3D chart view. The length of the projected course line is based on the value of the projected heading setting (). If an activated AIS target is not transmitting speed information, or if the vessel is not moving, a projected course line does not appear. Changes in the speed, the course over ground, or the rate-of-turn information transmitted by the vessel can impact the calculation of the projected course line.

When course-over-ground, heading, and rate-of-turn information are provided by an activated AIS target, the projected course of the target is calculated based on the course-over-ground and the rate-of-turn information. The direction in which the target is turning, which is also based on the rate-of-turn information, is indicated by the direction of the barb at the end of the heading line. The length of the barb does not change.
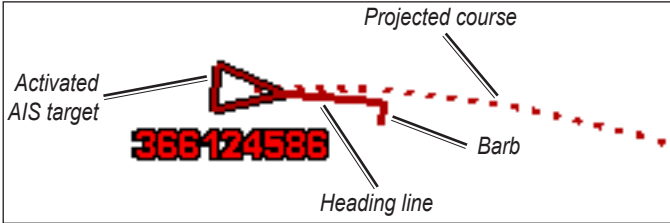
Target with Projected Course, Heading and Direction of Turn

When course over ground and heading information are provided by an activated AIS target but rate of turn information is not provided, the projected course of the target is calculated based on the course over ground information.
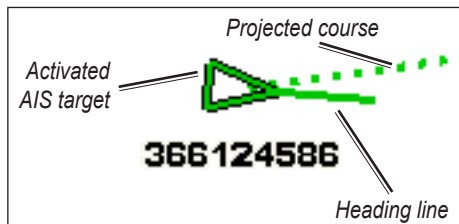
Target with Projected Course and Heading

Turning Off AIS Reception

AIS signal reception is turned on by default.

> From the Home screen, select **Configure** > **Other Vessels** > **AIS** > **Off**.

> All AIS functionality on all charts and on all 3D chart views is disabled. This includes AIS vessel targeting and tracking, collision alarms that result from AIS vessel targeting and tracking, and information about AIS vessels.

Showing AIS Vessels on a Chart or on a 3D Chart View

AIS requires the use of an external AIS device and active transponder signals from other vessels.

You can configure how other vessels appear on a chart or on a 3D chart view. The display range configured for one chart or one 3D chart view is applied only to that chart or to that 3D chart view. The details, projected heading, and trails settings configured for one chart or one 3D chart view are applied to all charts and to all 3D chart views.

NOTE: The Mariner's Eye 3D chart is available if you use a BlueChart g2 Vision SD card. The Fishing chart is available if you use a BlueChart g2 Vision SD card or a BlueChart g2 SD card, or if your built-in map supports Fishing charts.

1. From the Home screen, select **Charts**.

2. Select **Navigation Chart**, **Fishing Chart**, **Perspective 3D**, or **Mariner's Eye 3D**.

3. Select **Menu** > **Other Vessels** > **AIS Display Setup**.

4. Complete an action:
   - Select **AIS Display Range** to indicate the distance from your location within which AIS vessels appear. Select a distance or select **Show All**.
   - Select **Details** > **Show** to show details about AIS-activated vessels.

- Select **Projected Heading**, enter the projected heading time for AIS-activated vessels, and select **Done**.

- Select **Trails** to show the tracks of AIS vessels, and select the length of the track that appears using a trail.

Activating a Target for an AIS Vessel

1. From the Home screen, select **Charts**.

2. Select **Navigation Chart**, **Fishing Chart**, **Perspective 3D**, or **Mariner's Eye 3D**.

3. Touch an AIS vessel.

4. Select **AIS Vessel** > **Activate Target**.

Viewing Information about a Targeted AIS Vessel

You can view the AIS signal status, MMSI, GPS speed, GPS heading, and other information that is reported about a targeted AIS vessel.

1. From the Home screen, select **Charts**.

2. Select **Navigation Chart**, **Fishing Chart**, **Perspective 3D**, or **Mariner's Eye 3D**.

3. Touch an AIS vessel.

4. Select **AIS Vessel**.

Deactivating a Target for an AIS Vessel

1. From the Home screen, select Charts.

2. Select **Navigation Chart**, **Fishing Chart**, **Perspective 3D**, or **Mariner's Eye 3D**.

3. Touch the AIS vessel.

4. Select **AIS Vessel** > **Deactivate Target**.

Setting the AIS Alarm

The AIS alarm is used for collision avoidance, and can be customized. All AIS alarm settings are applied to all charts and to all 3D chart views.

1. From the Home screen, select **Configure** > **Other Vessels** > **AIS Alarm** > **On**.

   A message banner appears and an alarm sounds when an AIS-activated vessel enters the safe-zone ring around your boat. The object is also labeled as dangerous on the screen. The Off setting disables the message banner and the audible alarm, but the object is still labeled as dangerous on the screen.

2. Select **Range** to set the measured radius of the safe-zone ring to a specified distance from 500 ft. to 2.0 nm (or from 150 m to 3.0 km, or from 500 ft. to 2.0 mi.).

3. Select a distance.

4. Select **Time To** to sound an alarm if AIS determines that a target will intersect the safe zone within the defined time interval (ranging from 1 to 24 minutes).

5. Select a time.

Viewing a List of AIS Targets

NOTE: The Mariner's Eye 3D chart is available if you use a BlueChart g2 Vision SD card. The Fishing chart is available if you use a BlueChart g2 Vision SD card or a BlueChart g2 SD card, or if your built-in map supports Fishing charts.

1. From the Home screen, select **Charts**.
2. Select **Navigation Chart**, **Fishing Chart**, **Perspective 3D**, or **Mariner's Eye 3D**.
3. Select **Menu** > **Other Vessels** > **AIS List**.

Viewing DSC Information

The DSC list is a log of the most-recent DSC calls and other DSC contacts you have entered. The DSC list shows the most-recent call from a boat. If a second call is received from the same boat, it replaces the first call in the call list.

Viewing the DSC List

Your chartplotter must be connected to a VHF radio that supports DSC in order to view the DSC list.

From the Home screen, touch **Information** > **Other Vessels** > **DSC List** to view a list of all received DSC distress calls and position reports.

Sorting the DSC List

By default, the DSC list is sorted by name. To change the sorting of the DSC list, touch **Menu**, then choose a category to sort by:

- **Sort by Name**—(default) show an alphanumerical list of DSC calls and reports, sorted by name.
- **Sort by Type**—separate distress calls from position reports, and show the most-recent calls or reports, sorted chronologically.
- **Sort by MMSI**—show an alphanumerical list of calls and reports, sorted by MMSI number.
- **Sort by Time**—show the most-recent DSC calls and reports received, sorted and listed chronologically by time and date. Calls and reports with identical time and date information show the same information in the list.
- **Sort by Distance**—show an alphanumerical list of calls and reports, sorted by distance from your present location.

Using DSC Information

To edit or interact with DSC distress calls and position reports, select a distress call or a position report from the **DSC List**.

- **Edit**—add a name to the DSC call or report to help better identify the vessel by MMSI number.
- **Navigate To**—set the selected DSC call or report as a navigation destination. See page 13 for information about navigating to a destination.
- **Create Waypoint**—mark a waypoint at the position of the selected DSC call or report. See page 21 for more information about waypoints.
- **Clear Report**—delete the selected DSC call or report.

Adding a DSC Contact

You can add a vessel to your DSC list as a DSC contact.

1. From the Home screen, select **Information** > **Other Vessels** > **DSC List** > **Add Contact**.
2. Enter the Maritime Mobile Service Identity (MMSI) of the vessel.
3. Select **Done**.
4. Enter the name of the vessel.
5. Select **Done**.

Deleting All Received DSC Information

From the Home screen, touch **Information** > **Other Vessels** > **DSC List** > **Menu** > **Delete All** to delete the list of all received DSC distress calls and position reports.

Incoming Distress Calls

If your Garmin chartplotter and VHF radio are connected using NMEA 0183, your chartplotter alerts you when your VHF radio receives a DSC distress call. If position information was sent with the distress call, that information is also available and recorded with the call.

Navigating to a Vessel in Distress

The ⊞ symbol designates a distress call in the DSC list and marks the position of a vessel on the Navigation chart at the time the distress call is sent.

Position Tracking

When you connect your Garmin chartplotter to a VHF radio using NMEA 0183, you can track vessels that send position reports.

Every position-report call received is logged in the DSC list.

Viewing a Position Report

1. From the Home screen, select **Information** > **Other Vessels** > **DSC List**.

2. Select a position-report call.

3. Select ＜ or ＞ to switch between details of the position report and a Navigation chart marking the location.

Navigating to a Tracked Vessel

1. From the Home screen, select **Information** > **Other Vessels** > **DSC List**.

2. Select a position-report call.

3. Select **Navigate To**.

4. Select **Go To** or **Route To**.

Creating a Waypoint at the Position of a Tracked Vessel

1. From the Home screen, select **Information** > **Other Vessels** > **DSC List**.

2. Select a position-report call.

3. Select **Create Waypoint**.

Editing Information in a Position Report

1. From the Home screen, select **Information** > **Other Vessels** > **DSC List**.

2. Select a position-report call.

3. Select **Edit**.

4. Complete an action:

   - Select **Name**. Enter the name of the vessel. Select **Done**.
   - Select **Symbol**. Select a new symbol. Select **Done**.
     NOTE: The symbol can not be changed if the position-report call is a distress call.
   - Select **Comment**. Enter the comment. Select **Done**.
   - Select **Trail** > **Show** to show a trail line for the vessel, if your radio is tracking the position of the vessel.
   - Select **Trail Line**. Select a color for the trail line.

Deleting a Position-Report Call

1. From the Home screen, select **Information** > **Other Vessels** > **DSC List**.

2. Select a position-report call.

3. Select **Clear Report**.

Vessel Trails on the Navigation Chart

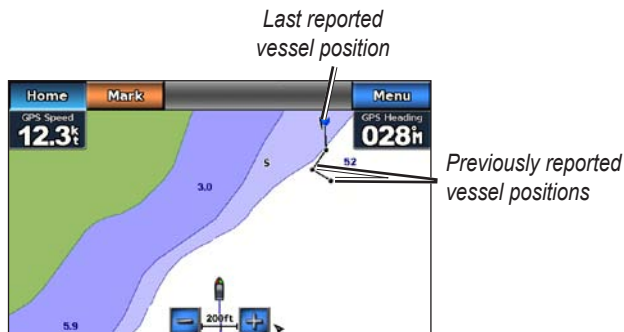You can view trails for all tracked vessels on the Navigation chart, the Fishing chart, and the Mariner's Eye 3D chart view. By default, a black dot appears for each previously reported position of a tracked vessel, and a Blue Flag symbol indicates the last reported position of the vessel. A black line indicating the path of the vessel also appears.

Vessel Trail on the Navigation Chart

You must enable the DSC Trails setting in order to view trails for tracked vessels.

Showing and Setting the Duration of Trails for All Tracked Vessels

1. From the Home screen, select **Charts**.
2. Select **Navigation Chart**, **Fishing Chart**, **Perspective 3D**, or **Mariner's Eye 3D**.
3. Select **Menu** > **Other Vessels** > **DSC Trails**.
4. Select the number of hours to show tracked vessels on the chart or 3D chart view.

   For example, if you select **4 Hours**, all trail points that are less than four hours old appear for all tracked vessels.

Showing the Trail Line for a Tracked Vessel

You can show the trail line for a specific tracked vessel.

1. From the Home screen, select **Charts**.
2. Select **Navigation Chart**, **Fishing Chart**, **Perspective 3D**, or **Mariner's Eye 3D**.
3. Select **Menu** > **Other Vessels** > **DSC List**.
4. Select a vessel.
5. Select **Edit** > **Trail** > **Show**.

Marine Mode: Advanced Configuration

Use the Configure menu to configure general unit settings.

Use the Menu screen on various chart screens to configure chart-specific information.

Configuring System Settings

From the Home screen, touch **Configure** > **System**.

Simulator—turn Simulator Mode **On** or **Off**.

Touch **Setup** to set Simulator options.

- **Speed**—enter the speed of your boat in simulator mode, and touch **Done**.
- **Track Control**—touch **Auto Track** to allow the chartplotter to set the heading automatically, or touch **User Track** to set the heading manually.
- **Set Position**—select the simulated position of your boat, and touch **Select**.
- **Set Time**—enter the simulated time, and touch **Done**.
- **Set Date**—enter the simulated date, touch **Done**.

Language—touch the on-screen language.

Keyboard Layout—select **QWERTY** for a layout similar to a computer keyboard, or select **ABCDE** for an alphabetical layout.

Beeper/Display—set beeper and display options.

- **Beeper**—touch **Beeper** to set when the unit makes audible sounds. The settings are **Off**, **Alarms Only**, and **On (Key and Alarms)** (default).
- **Display**—touch **Display** to open the display menu.
  - **Backlight Slider**—adjust the intensity of the backlight.
  - **Color Mode**—touch **Color Mode** to select **Day Colors** or **Night Colors**, or touch **Auto** to allow the device to automatically adjust the colors.
  - **Volume**—adjust the volume levels.
- **Screenshot Capture**—toggle the screenshot capture feature on and off. With the screenshot capture on, touch and hold **Home** on any screen to take a screenshot. The screenshot is saved to an inserted SD card.
- **Audio Out**—set to High-Z for best sound quality if your stereo has a high-impedance input. If you are experiencing audio distortion, try toggling this setting between Low-Z and High-Z to improve audio performance.
- **Calibrate Touch Screen**—touch the dots as they appear to calibrate the touchscreen.

GPS—view GPS information and change GPS settings.

- **Skyview**—view the GPS satellite constellation.
- **WAAS/EGNOS**—toggle WAAS (in North America) or EGNOS (in Europe) on or off. WAAS/EGNOS can provide more-accurate GPS position information; however, when using WAAS/EGNOS, the device takes longer to acquire satellites.
- **Speed Filter**—the speed filter averages the speed of your boat over a short period of time for smoother speed values. **On** keeps the speed filter on continuously. **Auto** allows the unit to provide the optimal performance as required by your situation, such as traveling at a constant speed or frequently changing speeds.

System Information—view system information, restore factory settings, view the event log, and save system information.

- **Factory Settings**—erase all user settings and return the device to factory default settings.
- **Event Log**—view a list of system events. Select an event to view additional information.
- **Save to Card**—save system information to a memory card as a troubleshooting tool. A Garmin Product Support representative may ask you to use this information to retrieve data about the network.

Speed Sources—specify if the calculated wind speed data comes from a **Water Speed** sensor, if it is based on the **GPS Speed**, or whether the chartplotter selects a speed data source automatically. Water speed is the speed reading from a water-speed sensor, and GPS speed is calculated from your GPS position.

Usage Mode—change to automotive mode.

Changing Units of Measure

From the Home screen, touch **Configure** > **Units**.

System Units—specify system-wide units of measure: **Statute** (mh, ft, ºF), **Metric** (kh, m, ºC), **Nautical** (kt, ft, ºF), or **Custom**. Touch **Custom** to individually define units of measure for:

- **Depth**—set the units of measure for depth to **Feet**, **Fathoms**, or **Meters**.
- **Temperature**—set units of measure for temperature to **Fahrenheit (ºF)** or **Celsius (ºC)**.
- **Distance**—set the units of measure for distance readings (**Miles**, **Kilometers**, or **Nautical Miles**).
- **Speed**—set the units of measure for **Vessel Speed** and for **Wind Speed** readings (**Miles Per Hour**, **Kilometers Per Hour**, or **Knots**).

- **Elevation**—set the units of measure for elevation readings (**Feet** or **Meters**).
- **Atmospheric Pressure**—set the units of measure for atmospheric (**Millibars** or **Inches of Mercury**) pressure readings.

Heading—set the reference used in calculating heading information.

- **Auto Mag Var (**Automatic Magnetic Variation)—automatically set the magnetic declination for your location.
- **True**—set true north as the heading reference.
- **Grid**—set grid north as the heading reference (000º).
- **User Mag Var**—set a custom magnetic variation value.

Position Format—select the coordinate system in which a given location reading appears. Do not change the position format unless you are using a map or chart that specifies a different position format.

Map Datum—select the coordinate system in which the map is structured. The default setting is WGS 84. Do not change the map datum unless you are using a map or chart that specifies a different position format.

Time—change time settings.

- **Time Format**—set the time format (12 hour, 24 hour, or UTC) for time readings.
- **Time Zone**—set the time zone displayed for time readings.

Configuring Communications Settings

From the Home screen, touch **Configure** > **Communications**.

NMEA Port 1 or **NMEA Port 2**—select the input/output format (**Garmin Data Transfer**, **NMEA Std.** or **NMEA High Speed**) for each port to use when connecting your unit to external NMEA devices, to a computer, or to other Garmin devices.

- **Garmin Data Transfer**—a proprietary data transfer protocol that is used to interface with Garmin computer programs.
- **NMEA Std.**—supports the input or output of standard NMEA 0183 data and DSC data for the DPT, MTW, and VHW sentences.
- **NMEA High Speed**—supports the input or output of high speed NMEA 0183 data for most AIS receivers.

NMEA Setup—enable or disable NMEA 0183 output for route sentences and system sentences, and adjust Garmin NMEA settings.

•	**Posn. Precision**—adjust the number of digits (**Two Digits**, **Three Digits**, or **Four Digits**) to the right of the decimal point for transmission of NMEA output.

•	**Waypoint IDs**—select how the unit outputs waypoint identifiers (**Names** or **Numbers**).

•	**Diagnostics**—a tool used by installers to verify that NMEA 0183 data is being sent across the system.

Enabling or Disabling NMEA 0183 Output Sentences

1.	From the Home screen, touch **Configure** > **Communications** > **NMEA Setup**.
2.	Touch a setting (**Route**, **System**, or **Garmin**).
3.	Touch the NMEA output sentence.
4.	Touch **Off** to disable, or touch **On** to enable, the NMEA 0183 output sentence.

Configuring Alarm Settings

You can configure your device to alert you when certain events occur.

Setting Navigation Alarms

From the Home screen, touch **Configure** > **Alarms** > **Navigation**.

Arrival—set an alarm to sound when you arrive at a predetermined point.

•	**Type**—set the alarm to sound either at the **Destination Only** or at the **Destination and Turns** (when navigating a route with turns).

•	**Activation**—set the criteria for the alarm. The **Distance** setting sounds the alarm when you are a specified distance from the point. The **Time** setting sounds the alarm when you are a specified time from the point.

•	**Change Distance/Change Time**—specify the distance or time from the point at which the alarm will sound.

Anchor Drag—set an alarm to sound when you drift a specified distance from your current location.

Off Course—set an alarm to sound when you steer a specified distance from your current course.

Setting System Alarms

From the Home screen, touch **Configure** > **Alarms** > **System**.

Clock—set an alarm using the system (GPS) clock. The unit must be on for the clock alarm to work.

GPS Accuracy—set an alarm to sound when the GPS location accuracy falls outside the specified value.

Setting Sonar Alarms

From the Home screen, touch **Configure** > **Alarms** > **Sonar**.

Shallow Water/Deep Water—set an alarm to sound when the depth according to a NMEA 0183 water-depth sensor is less than or greater than the specified value.

Water Temp—set an alarm to sound when temperature received via a NMEA 0183 sensor reports a temperature that is 2°F (1.1°C) above or below the specified temperature.

Configuring My Boat

From the Home screen, touch **Configure** > **My Boat**.

Keel Offset—offset the surface reading for the depth of a keel, making it possible to measure depth from the bottom of the keel instead of from the transducer location. Enter a positive number to offset for a keel. Enter a negative number to compensate for a large vessel that may draw several feet of water.

To adjust the Keel Offset:

1. From the Home screen, touch **Configure** > **My Boat** > **Keel Offset**.
2. Use the on-screen keyboard to specify the offset.
   - If you are measuring down to the keel (transducer installed at the water line), enter a (+) positive number.
   - If you are measuring up to the water line (transducer installed on the keel), enter a (-) negative number.
3. Touch **Done** to accept the number.

Configuring Other Vessels

From the Home screen, touch **Configure** > **Other Vessels**.

NOTE: To configure AIS or DSC information for other boats, your unit must be connected to an external AIS or DSC device.

AIS—turn AIS on or off. AIS alerts you to area traffic by providing the boat IDs, the position, the course, and the speed for boats that are within range and equipped with a transponder.

DSC—turn DSC on or off.

AIS Alarm (AIS only)—a message banner appears and an alarm sounds when an AIS-activated vessel enters the safe-zone ring around your boat. The object is also labeled as dangerous on the screen. The Off setting disables the message banner and the audible alarm, but the object is still labeled as dangerous on the screen.

- **Range**—change the measured radius of the Safe Zone ring to a specified distance from 500 ft. to 2.0 nm (or 150 m to 3 km, or 500 ft. to 2.0 mi.).
- **Time To**—sounds an alarm if AIS determines that a target will intersect the safe zone within the defined time interval (ranging from 1 to 24 minutes).

NOTE: Additional AIS and DSC configuration options are available from the Navigation chart options. See .

Configuring Navigation Settings

From the Home screen, touch **Configure** > **Navigation**.

Route Labels—for saved routes, this determines whether route turns are indicated by number (Turn 1, Turn 2, and so on), by waypoint name, or whether the description of turns is hidden.

Auto Guidance—Set the parameters the chartplotter uses when calculating an Auto Guidance line.

⚠ CAUTION

The **Safe Depth** and **Safe Height** settings influence how the chartplotter calculates an Auto Guidance line. If an area has an unknown water depth or an unknown obstacle height, the Auto Guidance line is not calculated in that area. If an area at the beginning or the end of an Auto Guidance line is shallower than the safe water depth or lower than the safe obstacle height, the Auto Guidance line is not calculated in that area. On the chart, the course through those areas appears as a gray line. When your boat enters one of those areas, a warning message appears.

- **Safe Depth**—set the minimum depth (using chart depth data) allowed when calculating an auto-guidance path. A safe depth of less than one meter is not allowed when using Auto Guidance.
- **Safe Height**—set the minimum height (using chart height data) of a bridge that your boat can safely travel under.

• **Shoreline Distance**—set how close you want to travel near the shore: **Nearest**, **Near**, **Normal**, **Far**, or **Farthest**. The Shoreline Distance setting indicates how close to the shore you want the Auto Guidance line to be placed. The Auto Guidance line may move if you change this setting while navigating.

Setting the Distance from Shore

The available values for the Shoreline Distance setting (Nearest, Near, Normal, Far, or Farthest) are relative, not absolute. To place the Auto Guidance line the appropriate distance from shore, you can assess the placement of the Auto Guidance line using one or more familiar destinations that require navigation through a narrow waterway.

1. Dock your boat or drop anchor.

2. From the Home screen, select **Configure** > **Navigation** > **Auto Guidance** > **Shoreline Distance** > **Normal**.

3. From the Home screen, select **Charts** > **Navigation Chart**.

4. Select a destination that you have navigated to previously.

5. Select **Navigate To** > **Guide To**.

6. Review the placement of the Auto Guidance line. Determine whether the line safely avoids known obstacles, and whether the turns enable efficient travel.

7. Complete an action:

• If the placement of the Auto Guidance line is satisfactory, select **Menu** > **Stop Navigation**. Proceed to step 11.

• If the Auto Guidance line is too close to known obstacles, from the Home screen, select **Configure** > **Navigation** > **Auto Guidance** > **Shoreline Distance** > **Far**.

• If the turns in the Auto Guidance line are too wide, from the Home screen, select **Configure** > **Navigation** > **Auto Guidance** > **Shoreline Distance** > **Near**.

8. If you selected **Near** or **Far** in step 7, review the placement of the Auto Guidance line. Determine whether the line safely avoids known obstacles, and whether the turns enable efficient travel.

Auto Guidance maintains a wide clearance from obstacles in open water, even if you set the Shoreline Distance setting to **Near** or **Nearest**. As a result, the chartplotter may not reposition the Auto Guidance line, unless the destination selected in step 3 requires navigation through a narrow waterway.

9. Complete an action:

• If the placement of the Auto Guidance line is satisfactory, select **Menu** > **Stop Navigation**. Proceed to step 11.

• If the Auto Guidance line is too close to known obstacles, from the Home screen, select **Configure** > **Navigation** > **Auto Guidance** > **Shoreline Distance** > **Farthest**.

- If the turns in the Auto Guidance line are too wide, from the Home screen, select **Configure** > **Navigation** > **Auto Guidance** > **Shoreline Distance** > **Nearest**.

10. If you selected **Farthest** or **Nearest** in step 9, review the placement of the Auto Guidance line. Determine whether the line safely avoids known obstacles, and whether the turns enable efficient travel.

   Auto Guidance maintains a wide clearance from obstacles in open water, even if you set the Shoreline Distance setting to **Near** or **Nearest**. As a result, the chartplotter may not reposition the Auto Guidance line, unless the destination selected in step 4 requires navigation through a narrow waterway.

11. Repeat steps 1–10 at least once more, using a different destination each time, until you are familiar with the functionality of the Shoreline Distance setting.

Configuring Route Turn Transitions

You can set how much time, or how far, before a turn in a route that you transition to the next leg. Raising this value can help improve the accuracy of the autopilot when navigating a route or an Auto Guidance line with many frequent turns, or at higher speeds. For straighter routes or slower speeds, lowering this value can improve autopilot accuracy.

1. From the Home screen, select **Configure** > **Navigation** > **Turn Transition Activation**.

2. Complete an action:

   - Select **Time** > **Turn Transition Time**, and enter the time.
   - Select **Distance** > **Turn Transition Distance**, and enter the distance.

3. Select **Done**.

Configuring Navigation Chart Options

From the Navigation chart, touch **Menu**.

Waypoints and Tracks—access shortcuts to waypoint and track information. For more information on waypoints and tracks, see .

- **Tracks**—toggle tracks on or off.
- **Waypoints List**—view a list of all saved waypoints.
- **New Waypoint**—mark a new waypoint.
- **Active Tracks**—change active track options, clear the active track, follow the active track, or save the active track.
- **Saved Tracks**—view the saved tracks list.
- **Tracks Display**—show or hide tracks on the chart according to color.

• **Waypoint Display**—select whether to show labels for waypoints of a particular symbol with the waypoint name, a comment, or a symbol only. You can also select to hide a waypoint on charts by symbol. This allows the waypoints on the map to be quickly limited to those most relevant to your current activity.

Other Vessels—access AIS and DSC shortcuts, as well as chart-specific AIS display settings.

• **AIS List**—view the AIS list. See .

• **DSC List**—view the DSC list. See .

• **AIS Display Setup**—configure chart-specific AIS display settings.

  ◦ **AIS Display Range**—on the navigation chart, specify the distance from your boat within which AIS icons are visible.

  ◦ **Projected Heading**—specify the amount of time ahead of an AIS target to project the heading of the AIS target.

  ◦ **Details**—toggle AIS details on the Navigation chart on or off.

  ◦ **Trails**—show trails behind AIS icons on the Navigation chart for a position history of other vessels. Specify the amount of time behind each AIS icon you want to maintain a trail.

  ◦ **DSC Trails**—select the number of hours to show tracked vessels on the Navigation chart. For example, if you select **4 Hours**, all trail points less than four hours old for tracked vessels are displayed. The Navigation chart displays a black line indicating the path of the vessel, a black dot for each reported position, and a Blue Flag symbol indicating the last reported position. Touch **Off** to turn trails off for all vessels.

• **AIS Alarm**—set the AIS alarm. See .

Stop Navigation—stop active navigation.

Configuring Navigation Chart Setup and Appearance

From the Navigation chart, touch **Menu** > **Navigation Chart Setup**.

Photos—enable and configure BlueChart g2 Vision high-resolution satellite imagery. See .

Tides/Currents—toggle the tide station icons and current station icons on or off.

Service Points—toggle the marine services icons on or off.

Roses—indicate compass direction, true wind direction, or apparent wind direction oriented to the heading of the boat.

 True wind direction or apparent wind direction appears if the chartplotter is connected to a compatible marine wind sensor. True wind shows wind direction data based on the flow of air experienced while on a stationary boat. Apparent wind shows wind direction data based on the flow of air experienced while on a boat in motion.

Touch **None** if you do not want a rose to appear on the chart.

NOTE: You must connect an optional NMEA 0183 wind sensor to view the True Wind and Apparent Wind roses.

Data Bars—control how charting numbers appear on the screen. Choose to show or hide the numbers by category. When set to **Auto**, the overlay numbers appear only when that category is active.

- **Cruising**: GPS speed and GPS heading.
  - ◦ **Data Bar Setup**—specify the position of the data bar on the Navigation chart, and specify the contents of the fields.

- **Navigation**: GPS speed, distance to destination, arrival (time), off course, bearing (to destination), and GPS heading. When set to **Auto**, these numbers appear only when navigating to a destination.
  - ◦ **Data Bar Setup**—toggle the **Route Leg** data field (shows additional route information) and specify how each data field provides navigation information (by time or by distance).

- **Fishing**: Depth, water temperature, and water speed are available if an appropriate NMEA 0183 sensor is attached.

- **Sailing**: Water speed, wind speed, wind angle, and Wind Velocity Made Good (VMG). Wind speed, angle and VMG are only available when connected to an optional NMEA 0183 wind sensor. See page 49 for more information on how the chartplotter displays Wind VMG and Waypoint VMG.
  - ◦ **Wind**—choose the type of wind data used in the sailing data fields (apparent or true).

- **Compass Tape**: Displays the current heading. An indicator that shows the bearing to the desired course is displayed while navigating.

  When you are off course, the distance between your current heading and the corrected course is called the Course to Steer, and is shaded orange on the compass tape.

Bearing indicator

Heading indicator

Compass Tape – Off Course

Compass Tape – On Course

Chart Appearance—customize the appearance of the Navigation chart.

- **Orientation**—change the perspective of the map display:
  - **North Up**—set the top of the map display to a north heading.
  - **Head Up**—set the top of the map display according to your GPS heading. The heading line appears vertically on the screen if it is shown. If the device is connected to a NMEA 0183 heading sensor, the map remains oriented according to GPS heading (course over ground), but the vessel icon rotates according to magnetic heading from the sensor.
  - **Course Up**—set the map so the direction of navigation is always up.
- **Detail**—adjust the amount of detail shown on the map.
- **Heading Line**—draw an extension from the bow of the boat in the direction of travel.
  - **Off**—turn off the heading line.
  - **Distance**—set the distance to the end of the heading line.
  - **Time**—set the amount of time until you reach the end of the heading line.

- **World Map**—toggle the world map (basemap) between a basic world map and a full world map.

    ◦ The basic world map shows coastal outlines of the world, with land indicated in yellow.

    ◦ The full world map shows the coastal outlines of the world with the land covered in a low-resolution photo image.

- **Spot Depths**—turn on spot soundings and set a dangerous depth.

- **Safety Shading** (with compatible BlueChart g2 Vision cards)—areas with depths shallower than the specified value are shaded in blue, while areas with depths greater than the specified value are shaded in white. The contour is always drawn at, or deeper than, the selected depth. Select **Manual** to enter the depth. Select **Auto** to use the depth from the g2 Vision chart.

- **Symbols**—customize the symbols that appear on the Navigation chart.

    ◦ **Navaid Size**—adjust the size of the symbols shown on the map.

    ◦ **Navaid Type**—set the navaid symbol set: National Oceanic and Atmospheric Administration (NOAA) or International Association of Lighthouse Authorities (IALA).

    ◦ **Land POIs**—toggle Points of Interest (POI) icons shown on land (this option is only available when using a BlueChart g2 Vision SD card).

    ◦ **Light Sectors**—show the sector in which a navigational light is visible. Select **On** to show light sectors at all times, or select **Auto** to allow the chartplotter to automatically filter out light sectors depending on the zoom level.

    ◦ **Chart Borders**—show what area the maps cover when using a BlueChart g2 Vision data card.

Understanding How Wind VMG and Waypoint VMG Are Displayed in the Data Bars

The chartplotter automatically switches between displaying Wind Velocity Made Good (VMG) and Waypoint VMG in the data bars.

Waypoint VMG is displayed under the following conditions:

- The Route Leg data bar displays Waypoint VMG when you are navigating a route or an Auto Guidance line.

- The Sailing data bar displays Waypoint VMG when you are navigating a route or an Auto Guidance line, and you turn the Route Leg data bar off.

Wind VMG is displayed under the following conditions:

- The Sailing data bar displays Wind VMG when you are not navigating a route or an Auto Guidance line.
- The Sailing data bar displays Wind VMG when the Route Leg data bar is on and you are navigating a route.

Configuring Perspective 3D Options and Mariner's Eye 3D Options

From the Perspective 3D screen or the Mariner's Eye 3D screen, touch **Menu**.

Waypoints and Tracks—provides access to waypoint and track information shortcuts, as on the Navigation chart. See page 45.

NOTE: The Tracks Display configuration option is not available on the Perspective 3D screen. You need a BlueChart g2 Vision SD card to use this feature.

Other Vessels—provide access to AIS and DSC shortcuts, as well as chart-specific AIS display settings, as on the Navigation chart. See page 45.

Data Bars—control how charting numbers appear on the screen, as on the Navigation chart. See page 46.

Chart Appearance—customize the appearance of the Perspective 3D or Mariner's Eye 3D screen.

- **Style**—(Mariner's Eye 3D only) select how chart data is displayed over 3D terrain.
- **Hazard Colors**—(Mariner's Eye 3D only) turn hazard colors on or off.
  - **On** setting indicates shallow water and land with a color scale. Blue indicates deep water, yellow is shallow water, and red is very shallow water.
  - **Off** setting shows the land as seen from the water.
- **Range Rings**—toggle the range rings on or off.
- **Safe Depth**—(Mariner's Eye 3D only) adjust the depth at which red indicates shallow water.
- **Lane Width**—adjust the width of the course line drawn when navigating. This setting affects direct navigation (Go To) and routes (Route To), but does not affect Auto Guidance (Guide To).

Fish Eye 3D Settings

From the Fish Eye 3D screen, touch **Menu**.

View—change the viewpoint. Choose the direction you want the camera to point. For example, if you touch **Port**, the view places the camera to starboard, looking across the boat to port.

Tracks—toggle tracks on or off.

Data Bars—control how charting numbers appear on the screen, as on the Navigation chart. See page 47.

Fishing Chart Settings

From the Fishing chart, touch **Menu**.

Waypoint and Tracks—access shortcuts to waypoint and track information, as on the Navigation chart. See page 45.

Other Vessels—access AIS and DSC shortcuts, as well as chart-specific AIS display settings, as on the Navigation chart. See page 46.

Navaids—toggle all navaids, such as lights and buoys, on or off.

Configuring Fishing Chart Setup and Appearance

From the Fishing chart, touch **Menu** > **Fishing Chart Setup**.

Roses—enable information roses around the boat icon, as on the Navigation chart. See page 46.

Data Bars—control how charting numbers appear on the screen, as on the Navigation chart. See page 47. You can also turn the compass tape on or off (page 48).

Chart Appearance—customize the appearance of the Fishing chart.

- **Orientation**—changes the perspective of the map display, as on the Navigation chart. See page 48.
- **Detail**—adjusts the amount of detail shown on the map.
- **Heading Line**—draws an extension from the bow of the boat in the direction of travel, as on the Navigation chart. See page 48.
- **Navaid Size**—adjusts the size of the symbols shown on the map.
- **Navaid Type**—sets the navaid symbol set (NOAA or IALA).

Configuring the Active Track Options

From the Home screen, touch **Information** > **User Data** > **Tracks** > **Active Track Options**.

Record Mode—select **Off**, **Fill**, or **Wrap**.

- **Off**—does not record a track log.
- **Fill**—records a track log until the track memory is full.
- **Wrap**—continuously records the track log, replacing the oldest track data with new data.

Interval—define the frequency at which the track is recorded. Recording more-frequent plots is more accurate, but fills the track log faster.

- **Interval**—set whether the interval is determined by distance, time, or resolution. (Touch **Change** to set the quantity.)
  - **Distance**—record the track based on a distance between points.
  - **Time**—record the track based on a time interval.
  - **Resolution**—record the track based on a variance from your course. This setting is recommended for the most efficient use of memory. The distance value (Change) is the maximum error allowed from the true course before recording a track point.

- **Change**—set the value of the interval.

Track Color—set the color of the track.

Configuring the Numbers Screen

From the Home screen, touch **Dashboard** > **Numbers** > **Menu** > **Configure**.

1. Select the number of data fields you want to show on the Numbers screen. The Numbers screen appears with changeable data fields.
2. Touch the data field you want to change.
3. Touch the data type you want to appear in the selected data field.
4. Repeat steps 3 and 4 until all the data fields contain the information you want.
5. Touch **Done**.

Automotive Mode: Getting Started

Step 1: Mount Your GPSMAP 620 or GPSMAP 640

1. Place the automotive dashboard mount on the dashboard of your vehicle.
2. Snap the mounting bracket onto the automotive dashboard mount arm, and place the GPSMAP 620 or GPSMAP 640 in the mounting bracket (page 2).
3. Plug the speaker/vehicle power cable into a power outlet in your vehicle. Your unit should turn on automatically, in automotive mode, if it is plugged in and the vehicle is running.

NOTE: The GPSMAP 620 can be used in the automotive mode only if optional City Navigator NT maps are purchased and loaded onto the device.

Step 2: Configure Your Device

If your device does not power on automatically, press and hold ⏻ until the device turns on. Follow the on-screen instructions. Press and hold ⏻ to turn off your device.

Step 3: Acquire Satellites

Go outdoors to an open area, away from tall buildings and trees and turn on your GPSMAP 620 or GPSMAP 640.

Acquiring satellite signals can take a few minutes. The ▂▄▆█ bars indicate satellite strength. When at least one of the bars is green, your device has acquired satellite signals. Now you can select a destination and navigate to it.

Step 4: Use Your Device

Automotive Mode: Menu Page

① GPS satellite strength.

② Usage mode. Touch this icon to change modes.

③ Battery status.

④ Local time. Touch to change time settings.

⑤ Touch to find a destination.

⑥ Touch to view the map.

⑦ Touch to adjust the volume.

⑧ Touch to use the tools such as **Settings** and **Custom Routes**.

Finding Your Destination

The Where To? menu provides several different categories for you to use when searching for addresses, cities, and other locations. The detailed maps loaded in your device contain millions of points of interest, such as restaurants, hotels, and auto services.

1. Touch **Where To?**.
2. Select a category.
3. Select a subcategory.

4. Select a destination.   5. Touch **Go!**.

TIP: Touch ⬆ and ⬇ to see more choices.

Adding a Stop

You can add a stop (called a Via Point) to your route. The GPSMAP 620 or GPSMAP 640 gives you directions to the Via Point and then to your final destination.

1. With a route active, touch **Menu** > **Where To?**.
2. Search for the extra stop.
3. Touch **Go!**.
4. Touch **Add as Via Point** to add this stop before your destination. Touch **Set as New Destination** to make this your final destination.

Taking a Detour

1. With a route active, touch **Menu**.
2. Touch **Detour**.

The GPSMAP 620 or GPSMAP 640 attempts to get you back on your original route as quickly as possible. If the route you are currently taking is the only reasonable option, the device might not calculate a detour.

Stopping the Route

1. With a route active, touch **Menu**.
2. Touch **Stop**.

Automotive Mode: Where To?

The Where To? menu provides several different categories you can use to search for locations. To learn how to perform a simple search, see page 54.

Finding an Address

NOTE: Depending on the version of the maps loaded on your device, the button names can change and some steps could be ordered differently.

1. Touch **Where To?** > **Address**.
2. Change the state, the country, or the province, if necessary.
3. Touch **Spell City**, enter the city/postal code, and touch **Done**. Select the city/postal code in the list. (Not all map data provides postal code searching.) If you are unsure of the city, touch **Search All**.
4. Enter the number of the address, and touch **Done**.
5. Enter the street name, and touch **Done**.
6. Select the correct street in the list, if necessary.
7. Touch the address, if necessary.

Setting a Home Location

Set your home location for the place you return to most often.

1. Touch **Where To?** > **Go Home**.
2. Select an option:
   • Enter your address.
   • Use your current location.
   • Choose from a list of recently found locations.

Going Home

To navigate home after you have set your home location, touch **Where To?** > **Go Home**.

Changing Your Home Location

To set a different home location:
1. Touch **Tools** > **My Data** > **Set Home Location**.
2. Select an option:
   • Enter your address.
   • Use your current location.
   • Choose from a list of recently found locations.

To edit your home location:
1. Touch **Where To?** > **Favorites** > **All Favorites** > **Home**.
2. Touch **Edit**, enter your changes, and touch **Done**.

Go! Page Options

Holiday Inn-Olathe

101 W 151st St
Olathe, KS 66061
913-829-4000

Route Info
Distance: 2.2 km
Time: 2 mins

Go!

Back   Map   Save

Go! Page

① Touch to view a turn-by-turn map to this location.

② Touch to create a turn-by-turn route to this location.

③ Touch to view this location on the map.

④ Touch to save this location to your Favorites.

Finding a Place by Spelling the Name

If you know the name of the destination you are looking for, you can spell it using the on-screen keyboard. You can also enter letters contained in the name to narrow the search.

1. Touch **Where To?** > **Points of Interest** > **Spell Name**.
2. Using the on-screen keyboard, enter letters of the name of your destination. Touch **Done**.

Using the On-Screen Keyboard

When an on-screen keyboard appears, touch a letter or number to enter it.

Touch 🔲 to add a space. Touch ◀ and ▶ to move the cursor. Touch ✏ to delete a character. Touch and hold ✏ to erase the entire entry.

Touch **&?%** to enter special characters, such as punctuation marks.

Searching near Another Location

1. Touch **Where To?** > **Near…**.
2. Select an option:
   - **Where I Am Now**—search near your current location.
   - **A Different City**—search near the city you enter.
   - **My Current Route**—search along your active route.
   - **My Destination**—search near your current destination.

Finding Recently Found Places

Your device stores the last 50 of your recent finds in the Recently Found list. The most-recently viewed places appear at the top of the list. Touch **Where To?** > **Recently Found** to view your recently found items.

Deleting Recently Found Places

To remove all places from the Recently Found list, touch **Clear** > **Yes**.

NOTE: When you touch **Clear**, all items in the list are removed. This process does not delete the actual place from your device.

Favorites

You can save places in your **Favorites** so you can quickly find them and create routes to them. Your home location is also stored in **Favorites**.

Saving Your Current Location

From the Map page, touch the vehicle icon ( ). Touch **Save Location** to save your current location.

Saving Places You Find

1. From the Go! page, touch **Save**.

2. Touch **OK**. The place is saved in **Favorites**.

Finding Saved Places

1. Touch **Where To?**.

2. Touch **Favorites**. Your saved locations are listed.

Editing Saved Places

1. Touch **Where To?** > **Favorites**.

2. Select the category and the location you want to edit.

3. Touch **Edit**.

4. Touch an item to edit:

   - **Change Name**—enter a new name, and touch **Done**.

   - **Attach Photo**—select a picture that you have loaded on your device or on an SD card to assign to the location.

   - **Change Map Symbol**—touch a new symbol used to mark this location on the map.

   - **Change Phone Number**—enter a phone number, and touch **Done**.

   - **Change Categories**—select another category for the location.

   - **Delete**—touch **Yes** to remove this item from the Favorites list.

Finding a Place Using the Map

Use the Browse Map page to view different parts of the map. Touch **Where To?** > **Browse Map**.

Tips for Browsing the Map

- Touch the map, and drag to view different parts of the map.
- Touch ⊕ and ⊖ to zoom in and out.
- Touch any object on the map. An arrow appears pointing at the object. Touch **Save** to save this location.
- Touch **Go!** to navigate to the location.
- If the GPS mode is off, touch **Set Loc** to set your simulated location to the selected location (see).

Using Custom Routes

Touch **Where To?** > **Custom Routes**. Select the route you want to take, and touch **Go!**.

Creating a Custom Route

Use your device to create and save routes before your next trip. You can save up to 10 routes.

1. Touch **Where To?** (or **Tools**) > **Custom Routes** > **New**.
2. Touch **Add New Start Point**.
3. Find a location for your start point, and touch **Select**.
4. Touch **Add New End Point**.
5. Find a location for your end point, and touch **Select**.
6. Touch to add another location to your route. Touch to remove a location.
7. Touch **Next** to calculate your route and view it on the map.
8. Touch **Save** to save the route and exit.

Editing Custom Routes

1. Touch **Where To?** (or **Tools**) > **Custom Routes**.

2. Select the route you want to edit.

3. Touch **Edit**.

4. Touch an option to edit the route:

   • **Change Name**—enter a new name, and touch **Done**.

   • **Add/Remove Points**—add or remove points from the route.

   • **Manually Reorder Points**—change the order of points along your route.

   • **Optimally Reorder Points**—automatically order the points.

   • **Recalculate**—change the route preference to calculate by faster time, shorter distance, or off road.

   • **Delete**—remove this route.

   • Your changes are automatically saved when you exit any of the route edit pages.

Entering Coordinates

If you know the geographic coordinates of your destination, you can use your device to navigate to your destination using the latitude and longitude coordinates (or other coordinate formats). This can be especially helpful when geocaching.

1. Touch **Where To?** > **Coordinates**.

2. Touch **Format** to select the correct coordinate format for the type of map you are using.

3. Touch a direction field to select a new direction.

4. Touch a numeric field to enter the coordinates, and touch **Done**.

5. After you have entered the proper coordinates, touch **Next**.

Navigating Off Road

If you are not following roadways as you navigate, use Off Road mode. Touch **Tools** > **Settings** > **Navigation** > **Route Preference** > **Off Road** > **OK**.

Automotive Mode: Using the Map

Your route is marked with a magenta line. As you travel, your GPSMAP 620 or GPSMAP 640 guides you to your destination with voice prompts, arrows on the map, and directions at the top of the map. A checkered flag marks your destination. If you depart from the original route, your device recalculates the route and provides new directions.

Automotive Mode: Map Page

TIP: A speed limit icon could appear as you travel on major roadways. This icon displays the current speed limit of the roadway.

①   Touch to view the next turn.

②   Touch to view the turn list.

③   Touch to zoom in and zoom out.

④   Touch the vehicle icon to view the Where Am I? page.

⑤   Touch to view the Trip Computer.

Next Turn

When you are navigating a route, the next turn shows the turn on the map and the distance and time left before you reach the turn.

To view an upcoming turn on the map, touch the turn indicator on the map, or touch any turn from the turn list.

Turn List

When you are navigating a route, the turn list displays turn-by-turn instructions for your entire route and the distance between turns.

Touch the text bar on the top of the map to open the turn list. Touch a turn on the list to view the instructions for that turn. Touch **Show Map** to view the entire route on the Browse Map page.

Trip Computer

The trip computer displays your current speed and provides helpful statistics about your trip. To view the trip computer, touch the **Speed** field on the map.

If you make frequent stops, leave the device turned on so it can accurately measure elapsed time during the trip.

Resetting the Trip Computer

Reset the trip computer before beginning a trip. From the map, touch the **Speed** field. Touch **Reset Trip** to reset the information on the trip computer. Touch **Reset Max** to reset the maximum speed.

Automotive Mode: Managing Files

You can store files, such as JPEG image files, in the internal memory on the GPSMAP 620 or GPSMAP 640 or on an SD card.

NOTE: The GPSMAP 620 and GPSMAP 640 are not compatible with Windows® 95, 98, Me, or Windows NT®. It is also not compatible with Mac® OS 10.3 and earlier. This is a common limitation of most USB mass storage devices.

The GPSMAP 620 and GPSMAP 640 support the following file types:

• JPEG and JPG image files.
• Maps and GPX waypoint files from MapSource: see .

NOTE: User data (waypoints, routes, and tracks) is not shared between marine mode and automotive mode.

Copying Files to the Unit

1. Insert an SD card in the GPSMAP 620 or GPSMAP 640 (optional).
2. Connect a mini-USB connector to the back of the device.
3. Connect the larger end of the cable to an available USB port on your computer. Your device and memory card appear as removable drives in My Computer on Windows computers and as mounted volumes on Mac computers.

   NOTE: Some operating systems or computers with multiple network drives cannot display the GPSMAP 620 or GPSMAP 640 drives. See your operating system Help file to learn how to map the drives.

4. Browse your computer for the file you want to copy. You can copy JPEG and JPG image files or maps and GPX waypoint files from MapSource.
5. Highlight the file, and click **Edit** > **Copy**.
6. Open the "Garmin" or memory card drive/volume.
7. Click **Edit** > **Paste**. The file appears in the list of files in the device memory or on the memory card.
8. When you are finished transferring files, click the Safely Remove Hardware icon in your toolbar (system tray), or drag the volume icon to the Trash on Mac computers.
9. Unplug your GPSMAP 620 or GPSMAP 640 from your computer.

Copying Automotive Data to the Unit Using MapSource

1. Check your MapSource version on your computer by clicking **Help** > **About MapSource**. If the version is older than 6.12.2, update to the most-current version by clicking **Help** > **Check for Software Updates** or check the Garmin Web site at www .garmin.com.

2. Connect a mini-USB connector to the back of the GPSMAP 620 or GPSMAP 640.

3. Connect the larger end of the cable to an available USB port on your computer. Your device and memory card appear as removable drives in My Computer on Windows computers and as mounted volumes on Mac computers.

   NOTE: Some operating systems or computers with multiple network drives cannot display the GPSMAP 620 or GPSMAP 640 drives. See your operating system Help file to learn how to map the drives.

4. From MapSource, click on **Transfer** > **Send to Device**.

5. From the Send to Device window, select the drive for the GPSMAP 620 or GPSMAP 640, and the types of data you want to copy to your device.

6. Click **Send**. MapSource transfers a file named Temp.gpx file to the Garmin\GPX directory.

7. Click the Safely Remove Hardware icon in your toolbar (system tray), or drag the volume icon to the Trash on Mac computers.

8. Unplug your GPSMAP 620 or GPSMAP 640 from your computer.

Deleting Automotive Files

Connect the GPSMAP 620 or GPSMAP 640 to your computer, and open the device or SD card drive/volume. Highlight the file you want to delete, and press the **Delete** key on the computer keyboard.

NOTICE

If you do not know the purpose of a file, do not delete it. Your device memory contains important system files that should not be deleted.

Automotive Mode: Using the Tools

The Tools menu provides many features that are helpful when you are traveling. From the Menu page, touch **Tools** to access the Tools menu.

Settings

For information about the settings, see page 65.

Where Am I?

Touch **Where Am I?** to view current location information, including hospitals, police stations, and fuel. This feature is helpful if you need to tell emergency personnel your location. Touch **Save Location** to save your current location.

Picture Viewer

Use the picture viewer to view pictures that you have stored in your device or on an SD card.

See page 62 for more information about loading pictures to your device.

1. Touch **Tools** > **Picture Viewer**.
2. Touch a picture to view a larger image of it.
3. Touch the arrows to view all the images.

Viewing a Slide Show

Touch **Slide Show** to start a slide show, which displays each image for a few moments and then displays the next image.

Touch anywhere on the screen to stop the slide show. Touch **Stop** to return to the list of pictures. Touch **Resume** to resume the slide show. Touch ➕ and ➖ to zoom in and to zoom out.

Navigating to a Picture

If a picture contains location information, touch **Info**, and then touch **Go!** to create a route to it.

My Data

Touch **Tools** > **My Data** to manage and delete your saved data, such as your Favorites.

Automotive Mode: Advanced Configuration

1. Touch **Tools** > **Settings**.
2. Touch the setting you want to change.
3. Touch the button under the setting name to change it.

Changing the System Settings

Touch **Tools** > **Settings** > **System**.

GPS Simulator—turn on the simulator to turn off the GPS mode and simulate navigation, and to save battery power.

Usage Mode—change to marine mode.

Units—change units of measure to **Kilometers** or **Miles**.

Keyboard—touch **QWERTY** for a layout similar to a computer keyboard, or touch **ABC** for an alphabetical layout.

About—display the device software version number, the unit ID number, and the audio version number. You need this information when you update the system software or purchase additional map data (see page 70).

Restore—restore the original system settings.

Changing the Navigation Settings

Touch **Tools** > **Settings** > **Navigation**.

Route Preference—select a preference for calculating your route:

* **Faster Time**—to calculate routes that are faster to drive but can be longer in distance.
* **Shorter Distance**—to calculate routes that are shorter in distance but can take more time to drive.
* **Off Road**—to calculate point-to-point routes (without roads).

Avoidances—select the road types you want to avoid on your routes.

Restore—restore the original navigation settings.

Adjusting the Display Settings

Touch **Tools** > **Settings** > **Display**.

Color Mode—select **Daytime** for a light background, **Nighttime** for a dark background, or **Auto** to automatically switch between the two.

Screen Shot—turn on Screen Shot mode. Touch 📷 to take a screen shot. The picture bitmap file is saved in the Garmin\ Screenshot folder on the GPSMAP 620 or GPSMAP 640 drive.

Brightness—adjust the backlight brightness level. Reducing the backlight brightness increases your battery life.

TIP: You can also adjust the brightness level from any screen by pressing and quickly releasing ⏻.

Restore—restore the original display settings.

Adjusting the Volume

From the Menu page, touch **Volume**. Touch ➖ and ➕ to adjust the volume. Touch the box next to **Mute** to mute all audio.

Adjusting the Backlight

1. From any screen, press and quickly release ⏻.
2. Touch 💡 and 💡 to adjust the backlight.

Updating the Time Settings

Touch **Tools** > **Settings** > **Time**.

Time Format—select a 12-hour, 24-hour, or UTC time format.

Current Time—manually set the time on your device. Select **Automatic** to have the GPSMAP 620 or GPSMAP 640 set the time based on your location.

Restore—restore the original time settings.

Setting the Languages

Touch **Tools** > **Settings** > **Language**.

Voice—change the language for voice prompts.

Text—change all on-screen text to the selected language. Changing the text language does not change the language of user-entered data or map data, such as street names.

Keyboard—select the keyboard for your language. You can also change the keyboard language mode from any keyboard by touching the **Mode** button.

Restore—restore the original language settings.

Changing the Map Settings

Touch **Tools** > **Settings** > **Map**.

Map Detail—adjust the amount of detail shown on the map. Showing more detail can cause the map to redraw slower.

Map View—select a map perspective.

- **Track Up**—display the map in two dimensions (2D) with your direction of travel at the top.
- **North Up**—display the map in 2D with North at the top.
- **3D**—display the map in three dimensions (3D) with your direction of travel at the top.

Vehicle—touch **Change** to change the icon used to display your position on the map. Touch the icon you want to use, and then touch **OK**. Download additional vehicle icons at www.garmingarage.com.

Trip Log—show or hide the log of your travels. To clear your trip log, touch **Tools** > **My Data** > **Clear Trip Log**.

Map Info—view the maps and the version of each map loaded on your device. Touch a map to enable (check mark) or disable (no check mark) that map.

Restore—restore the original map settings.

Changing Security Settings

Touch **Tools** > **Settings** > **Security**.

Safe Mode—turn the safe mode on or off. When your vehicle is moving, Safe mode disables all functions that require significant operator attention and could become a distraction while driving.

Restore—restore the original security settings.

Restoring All Settings

1. Touch **Tools** > **Settings**.
2. Touch **Restore**.
3. Touch **Yes**.

Appendix

Calibrating the Screen

Power the unit on in marine mode, or switch to marine mode. See page 38 for calibration instructions.

Resetting Your GPSMAP 620 or GPSMAP 640

If your GPSMAP 620 GPSMAP 640 stops responding, turn off the device, and then turn it back on. If this does not help, reset your device by removing and reconnecting the battery.

Updating the Software

1. Go to www.garmin.com/products/webupdater, and download WebUpdater to your computer.
2. Connect the GPSMAP 620 or GPSMAP 640 to your computer using the mini-USB cable.
3. Run WebUpdater, and follow the on-screen instructions.

After confirming that you want to perform an update, WebUpdater automatically downloads the update and installs it on your device.

Clearing User Data

IMPORTANT: This deletes all user-entered information.

1. Hold your finger on the lower-right corner of the screen while turning on the GPSMAP 620 or GPSMAP 640.
2. Keep your finger pressed on the screen until the pop-up window appears.
3. Touch **Yes** to clear all user data.

All original settings are restored. Any items that you have saved are erased.

Battery Information

To maximize the life of the battery, do not leave your GPSMAP 620 or GPSMAP 640 in direct sunlight, and avoid prolonged exposure to excessive heat.

The battery icon in the corner of the Menu page and the Home screen indicates the status of the GPSMAP 620 or GPSMAP 640 battery. To increase the accuracy of the battery gauge, fully discharge the battery and then fully charge it. Do not unplug the GPSMAP 620 or GPSMAP 640 until it is totally charged.

NOTE: If the device will not used for an extended period of time (longer than one week), remove the battery pack.

Charging Your GPSMAP 620 or GPSMAP 640

• Before using the device for the first time, charge the battery for at least six hours.

• Place the device in the mounting bracket with the bracket connected to power. The vehicle or vessel key may need to be turned to ON/ACC for the GPSMAP 620 or GPSMAP 640 to charge.

• Alternatively, connect the included AC adapter to the GPSMAP 620 or GPSMAP 640 and a wall outlet.

Changing the Fuse on the Automotive Mount

NOTICE

When replacing the fuse, do not lose any of the small pieces, and put them back in the proper place.

If your unit will not charge in your vehicle, you might need to replace the fuse located at the tip of the vehicle adapter.

1. Unscrew the black, round end piece, and remove it.

2. Remove the fuse (glass and silver cylinder), and replace it with a 1.5 A fast-blow fuse.

3. Place the silver tip in the black end piece. Screw on the black end piece.

Caring for the Unit

The case is constructed of high-quality materials and does not require user maintenance, except cleaning.

Cleaning the Case

Clean the unit's outer casing (except for the screen) using a cloth dampened with a mild detergent solution and then wipe dry. Avoid chemical cleaners and solvents that may damage plastic components.

Cleaning the Screen

The unit's lens is coated with a special anti-reflective coating that is sensitive to skin oils, waxes and abrasive cleaners. Cleaners containing ammonia, alcohol, abrasives, or anti-grease detergents will harm the anti-reflective coating. It is important to clean the lens using an eyeglass lens cleaner (that is specified as safe for anti-reflective coatings) and a clean, lint-free cloth.

Water Immersion

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

Avoiding Theft

- To avoid theft, remove the unit and mount from sight when not in use.
- Do not keep your unit in the glove compartment.
- Register your product at http://my.garmin.com.

Additional Maps

You can purchase additional MapSource map data from Garmin and load the maps in your GPSMAP 620 or GPSMAP 640 internal memory or on an optional memory card.

To determine the versions of the maps that are loaded on your device, open the Menu page. Touch **Tools** > **Settings** > **Map** > **Map Info**. Check www.garmin.com/unlock/update.jsp to see if an update for your map software is available. To enable additional maps, you need your unit ID (page 65) and serial number (located near the power connector).

To load maps or waypoints in your device memory or on your memory card, select the name for your GPSMAP 620 or GPSMAP 640 drive or memory card drive. Refer to the MapSource Help file for more information.

About GPS Satellite Signals

Your GPSMAP 620 or GPSMAP 640 must acquire GPS satellite signals in order to navigate. If you are indoors, near tall buildings or trees, or in a parking garage, your device may not acquire satellites. Go outside to an area free from tall obstructions to use your device.

When your GPSMAP 620 or GPSMAP 640 has acquired satellite signals, the signal strength bars on the Home screen (or Menu page) are green. When it loses satellite signals, the bars turn red or clear.

For more information about GPS, go to www.garmin.com /aboutGPS.

Extras and Optional Accessories

For more information about optional accessories, go to http://buy .garmin.com or www.garmin.com/extras, or contact your Garmin dealer.

Specifications

Physical size: W × H × D: 6 × 4 × 1 ⁷/₈ in.
   (151 × 102.49 × 47.25 mm)

Weight: 17.3 oz. (490.4 g)

Display: 5 ³/₁₆ in. (132 mm) diagonal, 800 × 480 pixels; bright WVGA landscape display; white backlight; touchscreen

Case: Waterproof to IEC 529-IPX-7

Operating temperature range: From 5°F to 131°F (from -15°C to 55°C)

Charging temperature range: From 32°F to 113°F (from 0°C to 45°C)

Data storage: Internal memory and optional removable SD card. Data stored indefinitely.

Computer interface: USB 2.0 high-speed and full-speed mass storage

Operating system: Garmin

Charge time: Approximately 6 hours

Power input: 11–32 Vdc, vehicle power using vehicle power cable, or AC power using the included AC adapter.

Usage: 12 W max.

Battery life: Up to 9 hours with minimum backlight, and up to 5 hours with maximum backlight.

Battery type: User-replaceable rechargeable lithium-ion battery

GPS receiver: High-sensitivity

Acquisition times*:
   Warm: <1 sec.
   Cold: <33 sec.
   Factory Reset: <36 sec.

*Average acquisition times for a stationary receiver with a clear view of the sky.

Compass-safe distance: 17 in. (43.18 cm)

Declaration of Conformity

Hereby, Garmin, declares that this product is in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC. To view the full Declaration of Conformity, go to www.garmin.com/compliance.

Software License Agreement

BY USING THE GPSMAP 620 OR GPSMAP 640, YOU AGREE TO BE BOUND BY THE TERMS AND CONDITIONS OF THE FOLLOWING SOFTWARE LICENSE AGREEMENT. PLEASE READ THIS AGREEMENT CAREFULLY.

Garmin Ltd. and its subsidiaries ("Garmin") grant 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 and/or its third-party providers.

You acknowledge that the Software is the property of Garmin and/or its third-party providers and is protected under the United States of America copyright laws and international copyright treaties. You further acknowledge that the structure, organization, and code of the Software, for which source code is not provided, are valuable trade secrets of Garmin and/or its third-party providers and that the Software in source code form remains a valuable trade secret of Garmin and/or its third-party providers. You agree not to decompile, disassemble, modify, reverse assemble, reverse engineer, or reduce to human readable form the Software or any part thereof or create any derivative works based on the Software. You agree not to export or re-export the Software to any country in violation of the export control laws of the United States of America or the export control laws of any other applicable country.

Troubleshooting

Problem/Question	Solution/Answer
My device never gets satellite signals.	Take your GPSMAP 620 or GPSMAP 640 out of parking garages and away from tall buildings and trees. Remain stationary for several minutes.
My GPSMAP 620 or GPSMAP 640 does not charge in my vehicle.	Check the fuse in the vehicle power cable (page 69). Ensure the vehicle is turned on and is supplying power to the power outlet. Your device can only charge between 32°F and 113°F (between 0°C and 45°C). If the device is placed in direct sunlight or in a hot environment, it cannot charge.
How do I clear all my user data?	Hold your finger on the lower-right corner of the GPSMAP 620 or GPSMAP 640 screen while it is turning on. Keep your finger pressed until the message appears. Touch Yes to clear all user data.
My battery gauge does not seem accurate.	Allow the device to fully discharge, and fully charge it (without interrupting the charge cycle).
The touchscreen is not responding to my touches.	Calibrate the touchscreen as described on page 38.

Problem/Question	Solution/Answer
How do I know my GPSMAP 620 or GPSMAP 640 is in USB mass storage mode?	When your device is in USB mass storage mode, a picture of a GPSMAP 620 or GPSMAP 640 connected to a computer is shown. Also, you should see two new removable disk drives listed in **My Computer**.
My computer never detects the GPSMAP 620 or GPSMAP 640 when I connect it.	1. Unplug the USB cable from your computer. 2. Turn off the GPSMAP 620 or GPSMAP 640. 3. Plug the USB cable into a USB port on your computer and into your device. The GPSMAP 620 or GPSMAP 640 automatically turns on and goes into USB mass storage mode. Ensure your GPSMAP 640 is connected to a USB port and not a USB hub.
I cannot see any new removable drives in my list of drives.	If you have several network drives mapped on your computer, Windows can have trouble assigning drive letters to your GPSMAP 620 or GPSMAP 640 drives. See your operating system Help file to learn how to map or assign drive letters.
How can I find restaurants near the hotel I will be staying at in the future?	1. Touch **Where To?** > **Near** > **A Different City**. 2. Find the hotel, and touch **Go!**. 3. Touch **Menu** > **Where To?** > **Near** > **My Destination**. 4. Search for a restaurant. Restaurants nearest your hotel are listed first.

Messages and Alarms (Marine Mode)

Boat is not Moving Fast Enough to Calibrate—(speed sensor) appears during water speed calibration. Check the speed wheel for blockage and calibrate again. If the wheel is clear, calibrate again and increase speed.

Can't Read User Card—cannot read card when attempting a user data transfer.

Can't Unlock Maps—maps are locked and cannot be used on this unit.

Can't Write User Card—cannot write card when attempting a user data transfer.

Database Error—general database error. Contact product support.

Lost Satellite Reception—the unit has lost satellite reception. Make sure you have a clear view of the sky.

Maps Fit, Some Maps Will Not Be Drawn—there are more maps present on the SD card than what the unit can support. Some of the maps on the card will not be drawn or used to find map features.

Index

For the latest free software updates (excluding map data) throughout the life of your Garmin products, visit the Garmin Web site at www.garmin.com.