

GARMIN GPSMAP 64SX User Guide

Edited: 12/7/2021

Installing a NiMH Battery Pack

The device operates using a NiMH battery pack (optional) or two AA batteries.

- 1 Turn the D-ring counter-clockwise and pull up to remove the cover.
- 2 Locate the battery pack ①.



- 3 Insert the battery pack, observing polarity.
- 4 Gently press the battery pack into place.
- 5 Replace the battery cover and turn the D-ring clockwise.

To Turn on the Device:

Power on by holding the  on the side of the handheld (see #3 on the illustration below)



①	GPS/GNSS antenna
②	Keys
③	Power key

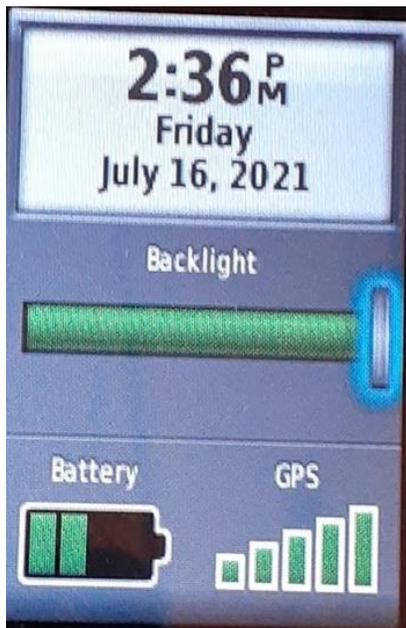
④	Mini-USB port (under weather cap)
⑤	Camera lens
⑥	microSD card slot (under batteries)
⑦	Battery compartment
⑧	Mounting spine
⑨	Battery cover D-ring

Acquiring Satellite Signals

It may take 30 to 60 seconds to acquire satellite signals.

1. Turn on the device.
2. Wait while the device searches for satellites.
 - ? flashes while the device determines your location.
 - ■ ■ ■ shows the satellite signal strength.

To check signal strength and battery life: Click the power button

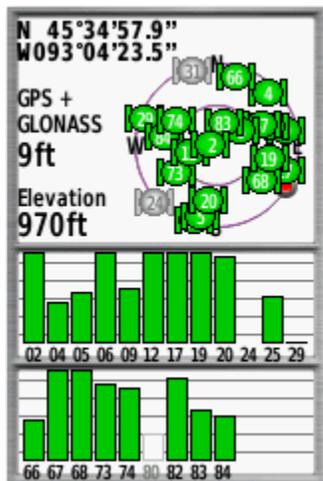


To Charge the Battery

Connect the Garmin to a usb wall charger or vehicle charger with the supplied usb chord that came with your Garmin.

Satellite Page

The satellite page shows your current location, GPS accuracy, satellite locations, and signal strength.



Waypoints

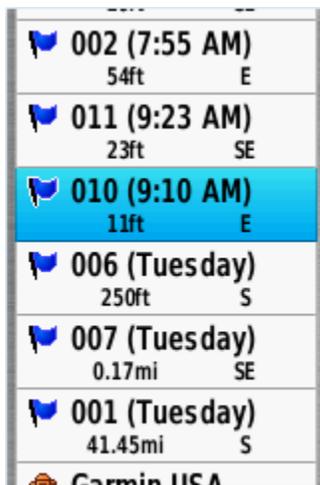
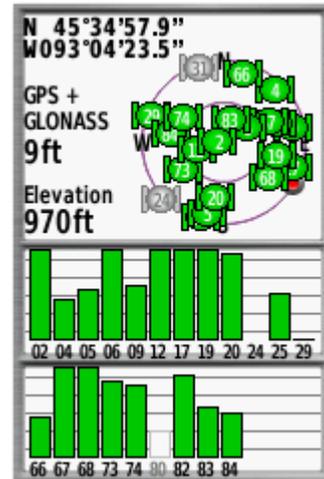
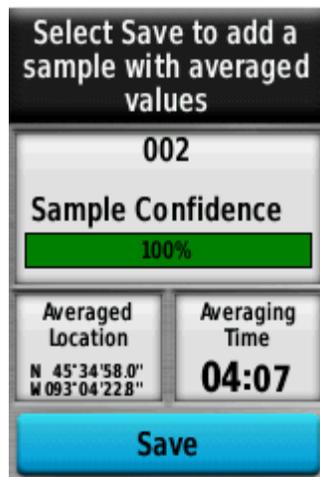
Waypoints are locations you record and store in the device. Waypoints can mark where you are, where you are going, or where you have been. You can add details about the location, such as name, elevation, and depth.

Waypoint Averaging

You can create or refine a waypoint location for more accuracy. When averaging, the device takes several readings at the same location and uses the average value to provide more accuracy.

To Create a New Waypoint

1. Occupy PC, hold the GPS unit in hand and try to face south
2. Select **Waypoint Averaging** from **Page/Main Menu**
3. Select **Create Waypoint** at top of menu
4. The device will begin averaging values
5. When **Sample Confidence** reaches 100% select **Save**
6. On **Data Recorder**: Open **Midas Mobile** and select **Ctrl G**. Record **Saved Location Latitude** and **Longitude**, and **Distance Adjusted (GPS error)**.
7. **GPS PDOP = 0**
8. **Number of Readings** (number of seconds it takes for the 'Sample Confidence' to get to 100%)
9. Select **Done**
10. To record **Elevation**: Open the **Satellite Page** or navigate to the **Saved Waypoint**



Creating a Waypoint Using the Mark Button

1. Press **Mark** from any page

2. Coordinates and information for the current location will display
 - From this page, the following fields can be edited: Symbol, Name, Note, Location, Elevation, Depth
 1. Use the directional pad to highlight the desired field, and press **Enter** to select
 2. Select **Done** within the keypad to save changes
3. Select **Done** or **Save** at the bottom to save the waypoint
4. You can find the saved waypoint in the Waypoint Manager.

To Manually Create an SP or PC Waypoint:

1. Press **Mark**
2. Highlight the **Location** field
3. Press **Enter**
4. Adjust the coordinates as desired with the rocker pad:
 1. Left and Right will cycle between the different coordinate spaces
 2. Up and Down will cycle through characters for the selected space
5. Press **Enter** when finished
6. Alter any other fields as desired
7. Select **Done** when everything is set correctly
8. The waypoint will be saved with the updated information and location. For additional information you can review the owner's manual.



To Refine a Waypoint:

1. Occupy PC, hold the GPS unit in hand and try to face south
2. Select **Waypoint Manager** from **PageMain Menu**
3. Select a waypoint.
4. Select **MENU > Average Location**
5. Select **Start**
6. The device will begin averaging values
7. When the confidence status bar reaches 100%, select **Save**

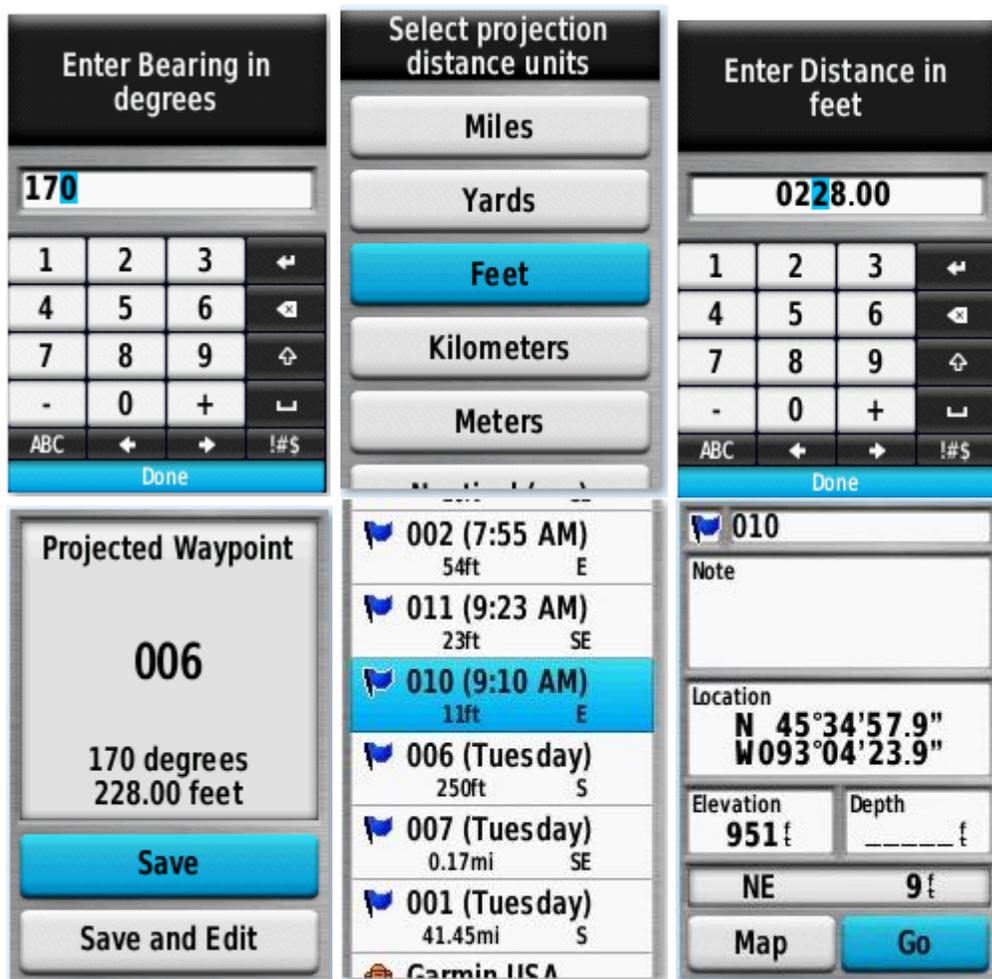


Projecting a Waypoint

You can calculate PC coordinates from an offset location by projecting the distance and bearing from a marked location to a new location.

1. Occupy start location, hold the GPS unit in hand and try to face south
2. Select **Waypoint Averaging** from **Page\Main Menu**
3. Select **Create Waypoint** at top of menu
4. The device will begin averaging values
5. When **Sample Confidence** reaches 100% select **Save**
6. Select **Waypoint Manager** from **Page\Main Menu**
7. Select the saved waypoint.
8. Select **MENU > Project Waypoint**.
9. Enter the bearing, and select **Done**.
10. Select a unit of measure (usually in feet)
11. Enter the distance in feet, and select **Done**.
12. Select **Save**.
13. Select the saved waypoint.
14. Select **Go** (if navigating to PC)

15. Record **Location Coordinates, Elevation** and **GPS Error** in **Midas Mobile** by selecting **Ctrl G**, if unable to occupy PC



How to Calculate Distance and Azimuth Between a Saved SP Waypoint and a Saved PC Waypoint

Select **Page > Main Menu > Route Planner > Create Route > Select First Point > Waypoints > Select SP Waypoint > Use > Select PC Waypoint > Use > Select the QUIT button to save the route > Select the Route you just created and click the Enter button > View Map > record the Distance (located below route number) > Go > record Course (azimuth)**

Note: The Course data field will need to be added to the Map page. To add more data fields, Go to **Page > Main Menu > Setup (enter) > Map (enter) > Data Fields (enter) > change to 4 small.**

To change the data fields on the Map page. Go to the **Map page > Menu button > Change Data Fields (enter)**. First data field will be highlighted. Click the Enter button to bring up the data field menu. Use the arrow keys to scroll up and down and click enter button to make the selection.

Navigating to a Waypoint

1. Select **FIND > Waypoints**.
2. Select a waypoint.
3. Select **Go**.

Editing a Waypoint

- 1 Select **Waypoint Manager**.
- 2 Select a waypoint.
- 3 Select an item to edit, such as the name.
- 4 Enter the new information and select **Go**.

Deleting an Individual Waypoint

1. Press **Menu** twice to reach the Main Menu
2. Select **Waypoint Manager**
3. Select a waypoint
 - o Use the directional pad to move the cursor and press **Enter** to select
4. Press **Menu**
5. Select **Delete**
6. Select **Yes** or **Delete** to confirm

The selected waypoint should now be removed from the Waypoint Manager.

Deleting All Waypoints

1. Press **Menu** twice to reach the Main Menu
2. Select **Waypoint Manager**
3. Press **Menu**
4. Select **Delete All**
5. Select **Yes** or **Delete** to confirm

All of the waypoints should now be removed from the Waypoint Manager, indicated by "No Results Found" being displayed on the screen.

Area Calculation

Calculating the Size of an Area

1. Select **Area Calculation > Start**.
2. Walk around the perimeter of the area you want to calculate.
3. Select **Calculate** when finished.

Satellite System: Sets the satellite system

GPS and Other Satellite Systems

Using GPS and another satellite system together offers increased performance in challenging environments and faster position acquisition than using GPS only. However, using multiple systems can reduce battery life more quickly than using GPS only.

Your device can use these Global Navigation Satellite Systems (GNSS).

GPS: A satellite constellation built by the United States.

GLONASS: A satellite constellation built by Russia.

GALILEO: A satellite constellation built by the European Space Agency.

To change the Satellite System

1. Select **Page > Main Menu > Setup > System.**
2. **Satellite System:** Select **GPS + GLONASS (NRS)**
3. **WAAS/EGNOS:** Select **Off**
4. **Language:** User choice
5. **Interface:** Default setting is **Garmin Serial**



Position Format Settings

Select **Page > Main Menu > Setup > Position Format.**

Position Format: Select **hddd mm'ss.s"**. This sets the position format in which a location reading appears (NRS collects coordinates in Degrees, Minutes and Seconds of Latitude and Longitude).

Map Datum: Select **NAD83**. This sets the coordinate system on which the map is structured (NRS uses NAD 83).

Map Spheroid: Default setting is **GRS 80**. This shows the coordinate system the device is using.



Attaching the Carabiner Clip

1. Position the carabiner clip ① in the slots on the mountingspine ② of the device.



2. Slide the carabiner clip up until it locks in place.

Removing the Carabiner Clip

Lift up on the bottom of the carabiner clip and slide the carabiner clip off the mounting spine.

Charging the Battery Pack

To prevent corrosion, thoroughly dry the USB port, the weathercap, and the surrounding area before charging or connecting to a computer.

Do not attempt to use the device to charge a battery that was not provided by Garmin[®]. Attempting to charge a battery that was not provided by Garmin can damage the device and void the warranty.

Before you can connect the straight connector of the USB cable to your device, you may need to remove optional mount accessories.

NOTE: The device does not charge when outside the approved temperature range (*Specifications*, page 13).

You can charge the battery using a standard wall outlet or a USB port on your computer.

- 1 Pull up the weather cap ① from the mini-USB port ②.



- 2 Plug the small end of the USB cable into the mini-USB port.
- 3 Plug the USB end of the cable into an AC adapter or a computer USB port.
- 4 If necessary, plug the AC adapter into a standard wall outlet.
When you connect the device to a power source, the device turns on.
- 5 Charge the battery completely.

Installing AA Batteries

Instead of the optional NiMH battery pack (*Installing a NiMH Battery Pack*, page 1), you can use two alkaline, NiMH, or lithium batteries. This is useful when you are on the trail and cannot charge the NiMH battery pack. Use NiMH or lithium batteries for best results.

NOTE: Standard alkaline batteries are not recommended for the 64sc/csx models when using the camera feature.

- 1 Turn the D-ring counter-clockwise and pull up to remove the cover.
- 2 Insert two AA batteries, observing polarity.



- 3 Replace the battery cover and turn the D-ring clockwise.
- 4 Hold .
- 5 Select **Setup > System > AA Battery Type**.
- 6 Select **Alkaline, Lithium, Traditional NiMH, or Precharged NiMH**.

Use Garmin Basecamp to update the device

- Connect the Garmin to your Trimble
- Open Basecamp App on your Trimble desktop
- Click Device on the top menu bar (next to edit)
- Click Check for Device Software Update
- Click the Next button when the WebUpdater popup window opens
- The WebUpdater will take a couple of moments to look for the device. The GPSMAP 64SX should be listed in the device dropdown menu when it's finished. If it isn't, Click Find Device. Then click Next.
- Click Next to review the software release notes.
- Click Next to review the software change history.

- Click Next to review the license agreement.
- Check the *I agree to the above terms* box and click next to download and install the update. It might take several minutes to install. Do not unplug the Garmin device during the update and you will not be able to cancel once the update starts.
- Click Cancel *to check for more updates*.