



## Collecting Waypoints with Garmin GPSMap 78 Units

### Abstract

This guide outlines the steps for collecting waypoints with a Garmin GPSMap 78 GPS unit.

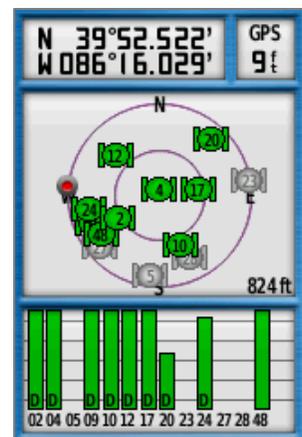
*Steps: Acquire Satellites – Walk to desired location – Hold the Mark Button – Save and/or Edit the Waypoint*

### Details

#### Startup

Before starting data collection, the user should activate the unit, confirm settings, and acquire satellites.

1. While outdoors, turn on the GPS unit and acquire satellites. This may take a few minutes. While acquiring satellites, the user can confirm the following settings under the *Setup* menus:
  - System > GPS: WAAS/EGNOS*
  - Position Format > Position Format: UTM UPS (or hddd.ddddd°)*
  - Position Format > Map Datum: WGS84*
  - Map > Map Orientation: North Up*
  - Display > Backlight Timeout: 1 minute*
  - Display > Battery Save: On*
  - Tracks > Track Log: Do Not Record*
  - Routing > Guidance Method: Off Road*
  - Routing > Lock On Road: No*
2. Waypoints can be collected while navigating, but it is not recommended because it can complicate interaction with the unit, particularly on the *Map* screen. Make sure the unit is currently not navigating to any points by **pressing the Find** button. If the unit is navigating to anything, select **Stop Navigation** on the screen that appears. If the unit is not navigating to anything, then a list of feature types for navigation appears instead and the can use the **Page** button to proceed to the Main Menu again.
3. Once all settings on the unit are adjusted or confirmed, the user should view the *Satellites* screen by using **Page** to go to the Main Menu and then select the **Satellite** menu.
4. While on the *Satellites* screen, a skyplot of satellites should be drawn and any satellites that are providing signal to the unit should be green with a corresponding green bar on the bar chart beneath. Several satellites (more than five) should be locked in by now and the screen should display coordinates and a GPS Accuracy value at the top. If the unit is still searching for satellites, wait until it successfully locks onto enough satellites to provide a location and accuracy readout before starting data collection.
5. Once the GPS accuracy is under 15 feet, it is ready for use and the user can press the **Page** button to go to the desired screen for work. If you are having trouble getting accuracy down to 15 feet or less, try the following:
  - Move away from vehicles or trees, if possible.
  - Make sure the unit's GPS mode is set to *WAAS/EGNOS*.



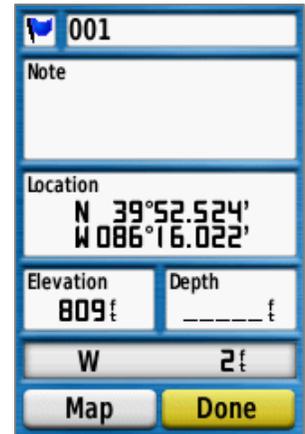


### Marking Waypoints

This method involves taking a single waypoint each time the user presses and holds the **Enter** button (**EnterMark**). The point is not part of a track and is not averaged over time. This should be sufficient for most resource grade uses so long as the GPS unit indicates its current accuracy is 15 feet or less.

1. **Press** and hold the **Enter** button.
2. If you need to make no changes to the waypoint information, **select Done**, otherwise use the rocker and enter button to modify information for the point, as needed.

**Note:** As soon as you press **Done**, the waypoint's name and location will be saved. To back out of recording the point, press the **Quit** button on the unit before selecting Done on this screen.



3. If you chose to edit the Waypoint, use the rocker to highlight the field to be edited and press the **Enter** button. A new screen appropriate to the highlighted field will be displayed. For instance, to change the name, highlight the waypoint number next to the flag icon at the top and press the **Enter** button. You'll be taken to a screen with a keyboard for you to modify the name. Use the keyboard by highlighting letters with the rocker button and then press **Enter** to select the highlighted entry. As always, you can back out of any screen by pressing the **Quit** button.

**Note:** Typically only the point name and the Note field should be edited, if desired. Other fields should not be changed.



4. When finished making changes, **highlight** and select **Done** to return to the *Main Menu* screens.

### Waypoint Averaging

Waypoint averaging with this unit requires extensive additional time per point on the order of several minutes and longer. It is not recommend for resource grade tasks.