

Using a GPS Unit

Setting up your GPS

When you initially turn on your GPS unit, the satellite screen will appear. The unit may take up to 5 minutes to establish a position the first time you use it outside with a clear view of the sky. When the unit has acquired enough satellite signals to determine your location (i.e. at least three), a "Ready to Navigate" message will appear.

You can now **move to the 'Map' screen** by pressing the **'Page' button**, if set up correctly you should now be able to see information on signal accuracy, speed etc (see figure 4).



Figure 4. Example Map Screen – with accuracy highlighted in a red box.

Finding your Sample Site Coordinate

You could simply write down the location information that your receiver calculates and/or you can store the waypoint in the receiver. You will need to save your sample site location as a waypoint; this is useful as you can later use this point as a navigation guide (see 'finding a waypoint') and it also acts as a digital copy of your coordinate, which can be, used alternative non-paper back up.

1. In order to save your location you need to first make sure you are standing at your sample site. Next **navigate to the 'map' screen** using the **'page' button**.
2. In the top right hand side of this screen there should be a **box titled 'accuracy'** (highlighted in a red box in figure 4) you need to write the **'accuracy' value down on your data sheet** (value in meters). **THIS VALUE MUST BE BELOW 5 METRES.**

To increase your accuracy, you can try several things to help. Moving around helps locate you faster. If you are under a dense canopy, it helps to track satellites in a nearby open area first and then bring the unit back to the area you were mapping. Finally, because you are in North America, there will be more satellites in the south, so you can try holding the GPS receiver facing that direction.³⁾

3. Once you have an accuracy value at or below 5 meters you can make an accurate waypoint. **Press and hold the 'Enter' button** on the map screen **until a 'waypoint' screen appears**. Once in this screen you can save and edit your waypoint coordinate information.

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4. First, before you edit your waypoint, you must **write the location value onto your data sheet**. This value must be given in decimal degrees (will appear on you screen as a number followed by a "°" symbol).
5. In the first large box you can edit the name of your waypoint (box containing 'LAND' in figure 5), the name of the waypoint is often set as a number by default, you should **change this to a name that is easily distinguishable as your sample site** (for example use GLWW). Using the 'rocker' key **highlight** this box and **click 'Enter'**, you can now use the 'rocker' to **select letters using a pop up keypad**, click 'ok' once you have selected all your desired letters. You can then repeat this same method in the comment box.
6. After you have edited your waypoint data **select 'ok'** using the 'rocker' key and **press 'enter'**. This will save the waypoint coordinates into the internal memory of the GPS unit.



Figure 5. Waypoint Screen - Location is given in decimal degrees yours should look identical to this.

Finding a Waypoint

If you are visiting your site multiple times you may find it beneficial to learn how to find your sample site using your digital waypoint. The 'find' tool on your GPS acts in a very similar way to a normal compass; apart from, it can automatically work out your location and will literally point you in the direction your digital waypoint coordinate.

1. **Click 'find'**, using the 'rocker' key **highlight 'waypoints' and press 'Enter'**.
2. This will move you to a screen with the list containing all the waypoints on your GPS unit. You can **search for you waypoint** by typing in its name into the digital keypad and then selecting 'ok'.
3. **Highlight the locations name and click 'Enter'**.
4. This will then take you to the waypoint screen. **Navigate to 'Goto'** using the 'Rocker' key and **click 'Enter'**.
5. **You should then move the 'Navigation' screen**, you can **now follow the arrow on your digital compass** until your distance from site is 0!