# FREQUENTLY ASKED QUESTIONS - GPS USE

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#### Introduction

The purpose of this document is to help GPS users use their GPS more effectively during a hike. Some of the information in this document assumes the use of a Garmin GPSmap or Legend/Vista series GPS. As a reader of this document you can be an important contributor to the enhancement of this document by sending your questions and comments to abqseniorhikers@Live.com

# When will I become so proficient in the use of a GPS that I will be able to lead a hike without error?

Never. Always be prepared to retrace your steps when you see you that you are going wrong.

### **QUESTIONS ABOUT BEFORE THE HIKE**

### What GPS Settings should I use?

There are a large number of pages on a master page called the main menu. Any of the pages on the master page can be moved into a set of pages that can be rotated through. The pages in the rotation should be kept to a minimum, consistent with the way you want to use your GPS. A recommended set is Satellite, Map, Trip Computer, Compass, and Main Menu. The order of rotation through the set can also be controlled. This setting is found in Setup, Page Seq.

On the Tracks page select Setup on the page, and set Record Method to Auto, Interval to Normal, and Color to Red or some other discernable non-black color.

On the Map page select the menu, select Setup Map, and select General. Set the Orientation to North Up. This will make it easier to relate what you see on the screen to your map (You will bring a map, won't you?)

### What do I do before I go?

Print a map and/or find a map to take along. A topographic map (one that shows contour information) would be best.

Bring a compass. The sun may not shine and the GPS can run out of power.

If you were in some far off place the last time you used the GPS, turn it on and let it stabilize (accuracy down to 15 to 20 feet). It can take up to an hour to stabilize if you were in China last.

If you have information in your GPS you want to save, unload it. Clear the GPS, using the select all option. If you have relevant track/waypoint information in a .gpx file, load it into the GPS. EasyGPS (free) is a simple way to transfer .gpx files between your computer and the GPS. You can also do it using your mapping software. .gpx files are text files with tags that tell the computer the data type of each entry. It's a national standard. Your mapping software may use a proprietary format for files, but usually offers the option to import and/or export in .gpx format.

Make sure the batteries are not low. And bring spares just in case.

## What do I do when I get to the trailhead?

Turn the GPS on and let it stabilize. If you've turned the GPS on before reaching the trailhead and want the track log and odometer to reflect the hike only, then clear the GPS, using the default settings if you have cleared and loaded the GPS previously. Do not use the all option or the information you have loaded will be lost. If you have not cleared and loaded the unit previously, clear it all. On the Tracks page set Track Log On.

Record (MARK) a waypoint.

## **QUESTIONS ABOUT DURING THE HIKE?**

#### What are Orientation Features?

These are things that you see during the hike which may help you understand where you are and where you might go next. A good Orientation Feature at the beginning of a hike can help to get you back if you get lost, or at least temporarily misplaced. For example a communication tower, a mesa edge, some distinctive natural formation (like Cabazon for example). During the hike such features can also be useful, especially if you can relate them to your map.

## **Are your Zoom In and Zoom Out buttons worn?**

There is a time to zoom in and a time to zoom out. Zooming in to the max is liable to lead to disastrous results. You will notice the accuracy display on the Map page. It will be something like 10 feet. This means that there is a circle of error (definitely not a circle of trust) of 20 feet in diameter (at the worst case if the location error was also 10 feet in the other direction). When zoomed in to the max, the display is at 50 feet per centimeter. We are not looking for precise guidance here. Never zoom in to less than 120 feet, but if you insist .... It is a good idea to generally be zoomed out so that a good portion of the overall track can be seen. 500 feet is a good. This, in conjunction with your map, especially one with the track on it (You did bring a map?), will tell you where you are. Occasionally zoom out so you can see a good portion of the overall hike track for the hike. This will give you a better idea of where you are on the map.

The active track (you set it to a different color on a color unit, on non-color units the track you loaded will be dotted.) will tell you that you are going off track. Where you are relative to your map will tell you if you are about to walk off of a cliff. This is good Orienteering practice, not going off the cliff that is. Waypoints can be helpful for determining where you are on the track and therefore where you are on the map.

### Is your nose buried in your GPS?

If this is so, not only will you not be enjoying the hike, you may again be about to go off a cliff. There is a very important point they make in defensive driver education -- Be aware of your surroundings. This is also one of the basics of Orienteering. It is important to observe features that can be seen at some distance, which will help you understand where you are on the map.

### Why take waypoints?

Waypoints can be useful during the hike as well as for future reference. In some cases they can pinpoint Orientation features. They can identify branches and intersections in trails. These points will look different on the way back on a non-loop hike. You will want

to take enough waypoints so that you can write a description of the hike that someone else could follow. Waypoints can be deleted later if they are not useful.

## How do I make a waypoint?

On a GPSmap series unit use the Mark button. On A Legend/Vista Series select Mark on the Main Menu. The waypoints are numbered by default. The waypoint name can be modified, or write down the number and its meaning for future use.

# But what if I want to make a waypoint at some point on the map on the GPS screen which is not where I am currently at?

Using the navigation buttons on a GPSmap or the toggle button on a Legend/Vista unit, move the white pointer to the desired position on the screen, but not positioned on a feature (no selection list appears). Press enter. You will be asked if you want to create a user waypoint. Select yes.

#### When would I want to use a GO TO?

"Going To" a waypoint is a convenient way of shortening a hike (for example, if the weather gets bad or your hikers aren't covering the country fast enough to complete a loop). Take care, though, that there aren't physical obstacles in your way and taking a shortcut doesn't actually make the hike longer, especially if you leave a trail and go cross-country. It can also provide a rough answer to the question". How far do we have to go?"

# What if the black position arrow stops moving or doesn't change direction when you do?

You have to be walking a certain speed (not that fast) for the arrow to show movement or direction change. However, if the black arrow stays stuck in its previous position & orientation, especially if you're off-trail, it's reboot time. Turn the GPS off, then turn it back on. If you still have a lazy arrow, try a battery change with those spare batteries you brought along. If nothing works, it's time to take out the compass and do your best.

## How do I get rid of the "white arrow"?

The white pointer generally appears when navigating on the GPS screen using the navigation buttons on a GPSmap or the toggle button on a Legend/Vista. Pressing Enter will remove the white pointer and position the display on your current position.

## QUESTIONS ABOUT AFTER THE HIKE

### What do I do at the end of the hike?

Go to the Tracks page and select Save. Save the track. Enter OK. Verify that the track appears in the tracks list with today's date. You could even select it and make sure what you see is what you just did. You can also see a more accurate hike distance than what your odometer was reading. Then it is good practice to clear the Track Log (active track). This is important if you want to collect and save another track before you have an opportunity to unload the information in the GPS. This can also be done on the Trip Computer page, where the statistical data can also be cleared. If it is your preference, on the Tracks page set Track Log Off.

# Why is the distance for a saved track different from the distance on the Trip Computer page?

Generally the saved track distance is shorter because a saved track can have no more than 500 points. When the Track Log (active track) is saved, by some mysterious algorithm the unit throws away some points and the distance will generally become shorter.

# What do I do when I get home?

Unload the information from the GPS. EasyGPS is an easy to use tool which gives you an opportunity to remove the track you loaded at the beginning of the adventure if you wish, and also remove useless Active Track information. If you've written down the waypoint labels on paper, edit the waypoints in EasyGPS and change the default waypoint numbers to something meaningful. Save the file as a .gpx file. Send the file and any descriptive information you may have to <a href="mailto:abqseniorhikers@live.com">abqseniorhikers@live.com</a>

### I saved the track so what is all the stuff that I unloaded about?

If you used EasyGPS there will be two tabs, one to view waypoints, one to view tracks.

On the tracks tab you may see (1) If you loaded a track before the hike you will see that. (2) If you did not clear the track log you will see that. (3) When you turn on the GPS if you do not turn the GPS (receiver) off quickly, you may see an Active Log fragment. (4) You will hopefully see the track for the hike, which will be a date unless you renamed the track when you stored it. Everything you do not really want can be removed using EasyGPS.

On the Waypoints tab you will see the waypoints which were loaded before the hike and those you took during the hike all smashed together. Waypoints can be removed or edited using EasyGPS.

### **CHECKLIST**

# Before you leave for the hike

- ✓ Are your GPS settings correct
- ✓ Save your GPS contents if desired
- ✓ Clear your GPS
- ✓ Load your GPS with relevant data
- ✓ Take a map
- **✓** Take hike descriptive material

# Before the hike begins

- ✓ Assure that your GPS location has stabilized
- ✓ Clear your GPS, Trip Computer Information only
- ✓ Mark a waypoint

# **During the hike**

**✓** Mark relevant waypoints

## At the end of the hike

- ✓ Mark the end point if different from the start point
- **✓** Save the Active Track
- **✓** Clear the Active Track

# When you get back

- ✓ Unload the GPS
- ✓ Send the file and any descriptive information you may have to abgseniorhikers@live.com
- ✓ Clear the unit