

Mountain Dynamics Garmin GPS Maps User Guide: Memory Card

Thank you for purchasing this Mountain Dynamics map set for your Garmin GPS. This User Guide is designed to get you up and running with your maps and cover the basics of operating your GPS. You don't need to be a GPS expert to use or get the most out of your maps, although we recommend you read your GPS's owner's manual and take some time to learn how it works.

Mountain Dynamics publishes three series of maps:

- SnowRanger ski resort maps for North America ("SnowRanger NA")
- SnowRanger ski resort maps for Europe ("SnowRanger EU")
- SledGPS snowmobile maps for North America ("SledGPS")

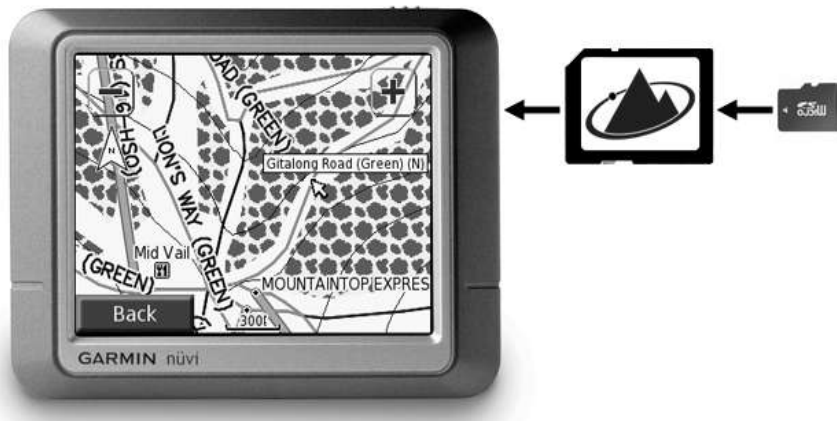
Our maps are available on memory card and on CD-ROM. The memory card version is shipped on a thumbnail sized "microSD card" which goes directly into a variety of Garmin GPS models. We also can ship it with a postage-stamp sized "SD card" adapter so that it can also work with Garmin models with this larger memory card slot. The memory card has minimal installation steps (see below)--it's basically just "plug and play" and does not need a computer or an Internet connection--and can be swapped between different GPSes if you have more than one.

Our maps cannot be used on GPSes that do not support map display. Examples of these are the budget Geko series and the running-oriented Forerunner 305 (though see "Snow Days" below for how you can still track your skiing/snowboarding activities using such a GPS).

Installation - Memory Card Version

Insert the Card

The card comes as a microSD card, sometimes packaged with an SD sized adapter sleeve. Find the location and type of the memory card slot on your GPS, referring to your GPS manual if required. The slot is usually on the side of the unit or inside the battery compartment (possibly under the batteries). If your GPS uses the larger SD size, insert the microSD card into the adapter sleeve before inserting the sleeve into the GPS.



Configure your GPS

The new map will be shown by default on the GPS's map display, and for most models there is no further configuration necessary. If your GPS comes with built-in street maps, for example a nüvi or zümo, you may choose to disable them while using our maps, because having both sets of information on the screen may be confusing. Also if you are using the "turn by turn" routing capability of our SnowRanger maps we recommend you turn off the street maps, otherwise the GPS will try to route you using those roads rather than our trails!

Using the Maps on your Garmin GPS below describes how to check the maps are correctly loaded and how to turn other maps off and on.

Using the Maps on your Garmin GPS

Most Garmin GPS operate in similar ways, but the appearance of the screens, and the exact names of buttons and icons, vary. We will include examples here from three different types of GPS--an eTrex, an Oregon and a nüvi--and you will likely find that your GPS operates much like one of the three. If your GPS is new we strongly recommend you read the manual and "quick start" guides that came with it.

Verifying and Configuring Maps on GPS

We strongly recommend you first check the maps are on the GPS, especially before departing for your next activity. We will do this using the map setup feature.

eTrex

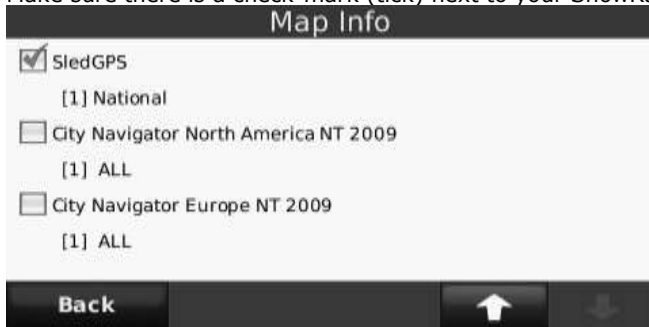
- Use the **PAGE** button (top of right hand side) to cycle through the display pages until **Main Menu** is shown
- Use the rocker (joystick) to select and click-on **Setup**
- Select and click-on **Map**
- Use the rocker to move left and right through the icons across the top of the page to select the "(i)" information icon.
- This will show you the maps that are installed on your GPS, and you can use the rocker to move up and down through the list. Your GPS probably has a "basemap" pre-installed, and your SnowRanger/SledGPS maps should be listed.
- You can turn a map on and off by selecting and clicking on it to toggle the check-mark (tick) next to it on and off.

Oregon

- On the main menu page, press the **Setup** button
- Press **Map**
- Press Map Information Select Map
- This will show you the maps that are installed on your GPS. Your GPS probably has a "basemap" pre-installed, and your SnowRanger/SledGPS maps should be listed.
- You can turn a map on and off by pressing it, then pressing Enable or Disable.

nüvi

- Go to the main screen
- Press the Tools button (a wrench (spanner))
- On some models you may now need to press the Settings button
- Press the **Map** button
- Press Map Info
- This will show you the maps that are installed on your GPS. Your GPS probably has "City Navigator" street maps preinstalled, and your SnowRanger/SledGPS maps should be listed.
- Make sure there is a check-mark (tick) next to your SnowRanger/SledGPS trail map.



- While using your new trail maps, you may wish to temporarily disable the street maps to reduce clutter. To disable them, simply remove the check-marks from next them. Likewise, to re-enable them, put the check-marks back.
- Press Back until you are back at the main screen
- When you wish to use your GPS as a street navigator again, follow these same steps, but remove the check mark from our maps and check the other map(s).

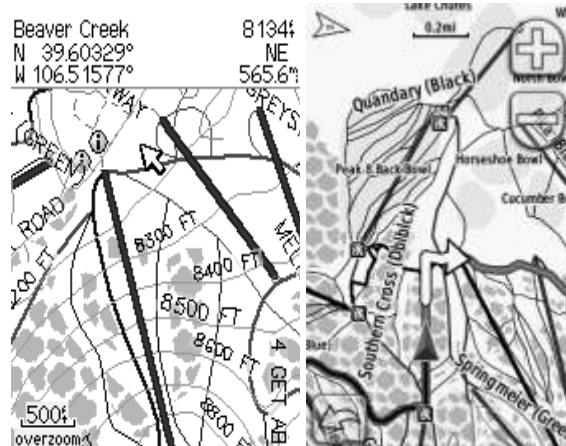
Troubleshooting

- If the maps are not shown in the list then your GPS does not believe they are loaded.
- Make sure the memory card is properly inserted. If your GPS has the larger (SD) memory slot size, you **must** put the small (microSD) card into the larger (SD) sleeve. The sleeve itself does not contain a copy of the map data, it's just an adapter.



Viewing the Maps

The maps are shown on the main map page of your GPS, just like any other map you might have loaded. You can pan (scroll) the map (using the touchscreen or the rocker button depending on the model), zoom in and out, click-on features to get their names if they are not shown on the screen, and so on.



As you zoom in and out different levels of detail are shown, so that the screen does not become too cluttered. You can also adjust the amount of detail shown in the **Detail** setting in the Map Setup feature of your GPS. This is normally set to "normal" or "medium" but can be increased or decreased.

Since your GPS will normally center the map display on your current or last-known position, you might find it difficult to pan to the areas covered by your SnowRanger/SledGPS trail map if you are not currently "on" them. In the next section, **Using Find/Where To**, we show you how to find a feature that is on the map so that you can view the maps around it. We strongly encourage you to view the maps before you depart for your next activity to familiarize yourself with them.

Using Find/Where To

The search function on a Garmin GPS is called **Find** or **Where To?** and allows you to find "points of interest" (POIs) such as restaurants, chairlifts, and gas stations. As well as being essential when out doing your activity, this feature lets you more easily browse the maps even when you are not "on" them.

eTrex

- Use the **PAGE** button (top of right hand side) to cycle through the display pages until **Main Menu** is shown
- Use the rocker (joystick) to select and click-on **Find**
- As a shortcut, you can also get to the Find page by pressing and holding the **Menu** button on the left hand side of the eTrex.

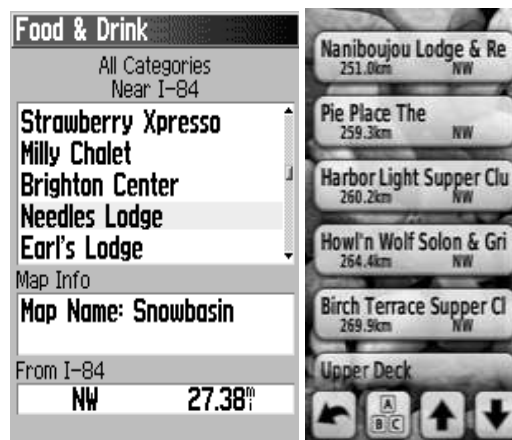
Oregon

- On the main menu page, press the **Where To?** button

nüvi

- Go to the main screen
- Press the **Where To?** button

POIs are divided into categories, although you can choose **All POI** and search all categories together. In this example we'll use **Food and Drink**. Your GPS will only show results that are within a few hundred miles/km of your current position.



Instead of searching near this current position, you can change the search to be relative to another location. This might be a place you are planning on traveling too, and this also is a good way to view the maps when they are new to get familiar with them before you start your next activity.

eTrex

- On the search results page, press the **Menu** button on the left hand side of the eTrex (just a normal press, not a press-and-hold) and then choose **Change Reference** from the menu.
- A map page will be shown where you can pan (using the rocker) and zoom (using the normal zoom in/out buttons on the left hand side of the eTrex) to find a city or area that you know is on or near the coverage area of your maps. Then click with the rocker to indicate the point you would like to search from.
- The results page should now show those search results.

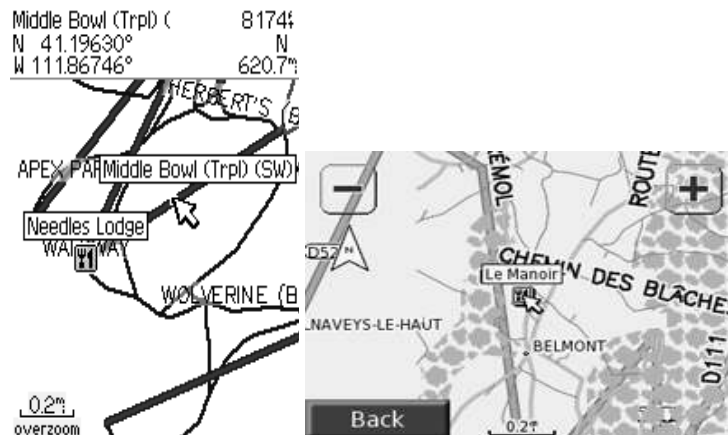
Oregon

- Use the **Back** button (arrow in bottom-left corner) to go to Search page. At the bottom of this, press the **Proximity** button that looks like a target of concentric circles.
- Press **A Map Point**
- A map page will be shown where you can pan and zoom to find a city or area that you know is on or near the coverage area of your maps. Then press **Use**.
- This will again show the main Search page again, but all searches will now be relative to the chosen spot, not your current position.

nüvi

- Use the **Back** button to go back to the categories screen. At the bottom of this, press the **Near...** button
- Press **A Different City**.
- Enter the name of a city that you know is on or near the coverage area of your maps.
- This will again show the main Search page again, but all searches will now be relative to the chosen spot, not your current position.
- Choose **Food** again. The results page should now show search results.

For any of the search results you can select and click-on it. Then click on the on-screen **Map** button (or just tap the results button itself on a Oregon) to view the map centered on this POI.



You can pan and scroll the map to explore it. To return to the search results, press the **Page** button on the right hand side of the eTrex. You also can click on a point on the map to get more information about it.

The **Go To** button for a POI will give you directions from your current location to it. See **Turn-by-Turn Directions** below.

Turn-by-Turn Directions (SnowRanger only)

SnowRanger NA and EU maps offer turn-by-turn directions for on-mountain navigation. This is just like the directions feature that vehicle "sat navs" offer, indeed we use this capability built into most GPSes by making our trail maps act like street networks. Since we are using the feature as-is, there are a number of caveats and commonsense issue that you should bear in mind.

Most Garmin GPSes support this feature, even the "outdoors" models like the eTrex series. On vehicle type units such as the nüvi, the directions will be spoken, and you can be skiing along listening to directions in an earpiece if you connect one to the GPS! For outdoors units the directions are shown on-screen, and the unit will usually "beep" to announce that the directions displayed have changed.

To start using the directions, do a **Find/Where To** as above, and choose "Go To" for the POI you want to get to. Your GPS might ask you if you want to **Follow Road** or go **Off Road**. Somewhat counter-intuitively, you should select **Follow Road**: remember that we are "tricking" the GPS into treating the trail maps as a street map. If you choose **Off Road** it would just show a simple "as the crow flies" direction line to the destination. You also can set this behavior on the Navigation page in Setup.

Your GPS will now show you directions as you move towards the destination.



It will recalculate the route automatically if you miss a turn.

As we've said already, it's essential to bear in mind that we are using the standard street navigation feature of the GPS, and do not have precise control over how it works. We ask that you use common sense when reviewing directions given and bear in mind the following points:

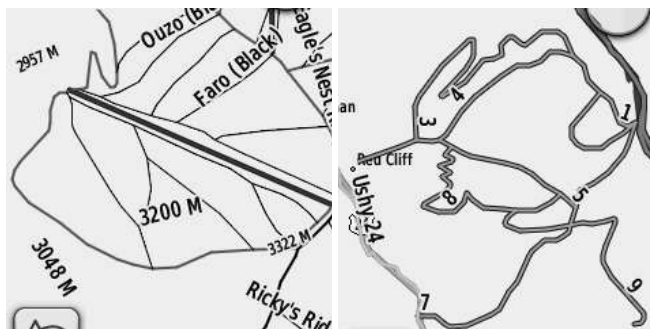
- The GPS does not know what level of skier/snowboarder you are. We've arranged our map data so it will **tend** to direct you on green and blue trails (pistes), but it **might** try to send you on a red or black trail if it cannot find a better route. Conversely, it might send you on quite a long, safe, green route, while you would prefer to take some shortcuts along the way down runs (pistes) that you know are within your abilities.
- The GPS treats most of the lifts and trails as "one-way streets". This makes sense, as you nearly always go "down" trails and "up" lifts (with some lifts, such as gondolas, being two-way). If you are at a trail junction, or at the top of a lift where multiple trails go off in different directions, the GPS may think that you already "on" the nearest trail and committed to going down it, even though the best route is actually for you to walk a few seconds towards another trail.
- Lifts and trails might be currently closed, especially near the beginning and end of the season.
- Sometimes you might be told to turn left when actually you need to turn right (or vice versa)! This may happen when you are approaching the bottom of a lift that you are to get on, for example. If the trail on our map approaches on the right side of the lift station you will be told to turn left onto the lift. However you might be skiing along the left hand side of the trail, coming more to the left of the station, and so for you it's to your right! It also may occur based on where the ski resort arranges the entrance for the lanes for waiting to load the lift.
The key message here is to pay more attention to the **name** of the lift or trail that you are being directed to, rather than it being left or right when you are getting close to it.
- If you start a new route while you are standing on the slopes under or near the path of a lift, the route might start by putting you on to the lift. The GPS does not know that you cannot just jump onto the lift in the middle.
- If the GPS cannot create a proper route from here to there, it will show a simple "as the crow flies" straight line to guide you towards your destination.

We feel we've done our best to implement this feature in the framework of the built-in Garmin routing system, and hope that you will allow us some tolerance of these issues. Consider the turn-by-turn directions more of a "suggestion" that the definitive routing you might get in your car.

Feature Types

SnowRanger shows trails according to their color code (green, blue, black, and, in Europe, red). Major trails are drawn with a thicker line, and appear sooner as you zoom in. Lifts are red with a black border.

SledGPS snowmobile trails are gray with a blue border.



Tips for using your GPS while skiing/snowboarding

- Keep your GPS in your pocket rather than clipped to the outside of your jacket or hanging around your neck on a lanyard. It'll stay warmer, leading to better battery life and screen update speed, and so long as stow it with the face away from your body you find you'll get a pretty good GPS signal.
- It's still a good idea to attach a lanyard though, as an added precaution against dropping it when wearing gloves.

- Garmin GPS screens do not need to be touched with bare skin the way that an iPhone screen does. They use a different technology, and a raised seam on your ski glove's finger might be an excellent "stylus" to touch with.
- You may need to "lock" the screen on a touch-screen unit before you put it into your pocket.
- If your GPS uses AA/AAA batteries, NiMh rechargeables get excellent battery life for hundreds of charge cycles. For very cold conditions, lithium batteries work best, but are expensive and not rechargeable.
- If you are using a nüvi, bear in mind that it is not as rugged as other GPSes. Nevertheless it is fairly robust--just treat it like you would a phone or MP3 player, keeping it dry and fairly warm.
- Some nüvi models, particularly more recent wide-screen models, can only get 2 or 3 hours of continuous use between charges. Get in the habit of turning them off when you don't need them for active navigation.
- Record your GPS track during the day and upload it to our free Snow Days service (see below) to easily keep track of your days skied, number of runs, vertical feet/m, etc., throughout the season.

Tips for using your GPS while snowmobiling

- See the skiing tips above for comments that apply to snowmobiling also.
- If your sled has a 12V DC outlet, consider hooking your GPS up to it so that it is not running on batteries. Not only will this give you indefinite battery life, but by operating the GPS with the screen and backlight turned on all the time, the GPS will stay a lot warmer.
- Rugged mounts for mounting your GPS on the handlebars or dashboard of your snowmobile are available from:
 - www.ram-mounts.com
 - www.touratech-usa.com

Snow Days - Track, View and Share your Skiing

Snow Days is our free GPS tracking and statistics site where you can view and share your GPS ski tracks overlaid on top of our SnowRanger trail maps. While you are out skiing or snowboarding with your GPS it records a "breadcrumb" track of where you go, including your elevation. When you get back to your computer you can upload this track to our website and view where you went, and see your GPS performance statistics such as vertical feet skied, average and maximum speeds, and miles covered. You can also share them (if you want) with the rest of our website community and through Facebook.

You don't need to have SnowRanger maps loaded onto your GPS to use this service. It works very well with Garmin's Forerunner GPS sports watches, and even with any non-Garmin GPS that can save its tracks to the standard GPX file format.

See www.mountaindynamics.com/en/SnowDays.html

Other Information and Resources

If you cannot find the manual or "quick start" guide for your GPS they are available in PDF format from Garmin's website at www.garmin.com by clicking on Manuals in the Quick Links panel on the product page for your GPS.

SnowRanger North America and Europe

www.mountaindynamics.com
support@mountaindynamics.com

SledGPS

www.sledgps.com
support@sledgps.com

Corrections

If you believe there are errors or omissions in the maps, please contact us at the above email addresses. If you have a GPS track recorded for the area of concern, saved as GPX format file, it will allow us to review the area much more effectively.