Revised for 2016: Preparing your Garmin for a Santana Tour

Session I: Initial setup of your Garmin

This first session takes less than half an hour.

Required:

- (1) A printed copy of these instructions (or a second computer for viewing them).
- (2) Your Santana-supported* Garmin GPS with its USB "leash."
- (3) Internet-connected computer (Mac or PC, no tablets).
- (4) A blank 8GB "Micro SD" memory card (available anyplace that sells office supplies, cameras or electronics).
- * Santana currently supports the following Garmin models: Edge {Tour, 800, 810 & 1000/Explore 1000}, Dakota 20, eTrex 20 & 30 (or newer "x" versions), or any version Montana or Oregon. If you have an older or less-capable Garmin—and are willing to pay \$50 for custom lower-resolution route files—send an email with model info to garmingene@mezereny.com. Gene will be able to tell you if a workaround is possible.
 - Get comfortable in front of your web connected computer, turn off your Garmin before
 attaching it to your computer via the Garmin's USB leash and go to Garmin's support website
 www.mygarmin.com. If you've already set up an account, log in. Otherwise, setting up your free
 myGarmin account is easy and highly recommended.
 - Register your Garmin by clicking the "Register" link and following the instructions. This won't take more than a few minutes. Registering allows you to update your Garmin with the latest software and firmware.
 - Next, click the "myProducts" tab and check the software updates pane for new software and/or firmware. If it's available, updating is quick and easy process. Because an updated Garmin is faster and more reliable, check for updates before each tour.

Session II: Installing, naming & prepping your MicroSD Memory Card

This session takes about 15 minutes

• Before you install your Micro SD memory card you'll need to disconnect your Garmin from the computer. Before you unplug the USB leash you should "eject" the Garmin's drive icon the same way you eject other USB drives (e.g., digital cameras, smartphones and memory sticks).

WARNING: When you use the instructions on the following page to install a new Micro SD card into your GPS's memory slot, you might find an existing Micro SD card in that slot. If you do, the card might be a Garmin-supplied map card covering either the US or Europe. Since this card will likely be outdated (compared to the FREE open source map we provide) you will want to install our map on your new blank Micro SD card. Because Garmin's "pre-loaded" cards with copyrighted maps have valuable non-map extras (hotels, restaurants, gas stations and such), and cost nearly \$100 to replace, make sure you put this teensy item in a safe place where you can find it later.

- Installing a blank memory card in all units except Edge models: To install your new Micro SD memory card it's necessary to open the back of your Garmin and remove its batteries to find a silver metal flap that we'll call "the gate." Look for "open" and "close" arrows (you may need a magnifying glass) sliding the gate in the appropriate direction and flip it open. Match the brass contacts on the new Micro SD card with the contacts that were under the closed gate. Insert the card and swing the gate closed before you "latch" the gate by sliding it opposite of how you opened the gate until it stops. WARNING: If the gate isn't "latched" your memory card is apt to lose contact after hitting a bump. Worse, with an unlatched gate your Micro SD card with its expensive map data could fall out (and become lost) when you change batteries. Check gate before reinstalling batteries.
- Installing a blank memory card in an Edge: Find the slot on the bottom of the unit and insert the Micro SD memory card (flange side down) until it clicks into place.
- All models: Re-connect your Garmin to the computer. To prevent future confusion you need to give your newly-installed Micro SD card the perfect name. On a Mac: search the desktop for the new and unnamed drive icon. On a PC: open the "My Computer" or "Computer" or "Library" window to find the unnamed drive. All: select the unnamed icon and name it "MAPCARD."
- On some computer operating systems (usually Macs) your Garmin GPS may appear on your desktop as an icon simply named "Garmin" as opposed to the Model name (Oregon 600, Edge 1000, etc). If this is your circumstance in order to prevent problems that occur after maps and routes are installed in the wrong places, use the preceding instructions to select and rename the drive currently named "Garmin." While a FOLDER named "Garmin" must be present within both drives (the SD Card and your unit's resident memory). You're more likely to get maps and routes in the right places if your drives and folders don't have the same names. Our straightforward

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solution: rename the resident memory drive to match your Garmin's model name instead of its brand name.

- Your Garmin is "happy" (faster and more reliable) when it can find its mapping data on a Micro SD card, and everything else in its resident memory. Because confused users create "unhappy" Garmins by loading routes and maps in the wrong places, Santana came up with the simple solution of renaming your Micro SD card to MAPCARD. The best strategy is to load maps to MAPCARD and everything else (including Santana's routes) to your Garmin's resident memory.
- After naming and/or renaming the MicroSD card or GPS device disconnect your device from the computer and cycle the unit on and then turn off once it has booted up. This allows the GPS to create any necessary "default" folders on both the GPS unit and MAPCARD.

End of Session II

Session III Loading Santana's FREE "Open Source" Map

This session takes about 15 minutes

WARNING: Session II will NOT work for many unsupported Garmins, especially Edge 605 / 705.

About a month before the event you'll receive an email with links that will allow you to download a fresh custom-prepared "open source" (or non copyright) map file onto your computer. Once Santana's custom map is downloaded onto your computer (which may take a few minutes), it will show up as a .img file that cannot be opened or viewed by your computer or any of its applications. Resist the urge to open the file on your computer; you will get an error message! To see the map you'll need to "leash" your GPS to your computer and then drag and drop Santana's ".img" file into the "Garmin" folder of your MAPCARD.

If your Garmin has expensive NT-series road maps for the area of our tour, it displays its NT map unless you go into the map settings and "deselect" the Garmin NT map and "select" our provided map.

End of Session III

Session IV

Loading Santana's Route Files

Requires less than 10 minutes

Santana's custom route files won't become available until a few days prior to an event. Registered participants should receive them via an e-mail attachment. Because route files will also be available at the event (where Santana can load them into your Garmin in less than two minutes) there's no need to fret if you don't receive route files in advance.

If you've received Santana's route files, here's the best way to load them into your Garmin.

- Either "copy" or drag the appropriate e-mail attachment(s) to your computer desktop. For all models other than an Edge (Tour/800/810/1000/Explore 1000), this will be a single "bundled" file with a .gpx suffix. The firmware of an Edge Tour/800/810/1000/Explore 1000 requires multiple files that must all have a .fit suffix.
- Make sure your Garmin is turned off and use its leash to connect it to the computer. Your
 Garmin will automatically restart as a pair of remote computer drives. To find these two drives
 look on your desktop Mac or PC. In the previous session you downloaded your FREE open source
 map to MAPCARD. Routes, however, should be downloaded to your Garmin's "resident"
 memory, which should now be named to reflect the model of your Garmin.
- Warning: Although loading route files onto "MAPCARD" won't cause a problem, loading any data onto a Micro SD card that was factory pre-loaded by Garmin can over-write and erase non-retrievable information. If you've followed all previous instructions, there's no need to worry.
- Units other than Edge Touring/800/810/1000/Explore 1000: Open the resident drive to find the "Garmin" folder. Inside the Garmin folder locate the folder named "GPX." We recommend that you drag this folder's current contents (old ride files) into your computer's trash or recycle bin. If you can't bear to throw away your old routes, create a new folder within the Garmin folder, name it "old routes," and transfer your old routes into that folder. After the GPX folder is empty, drag and drop the Santana-supplied .gpx route file into the GPX folder.
- Warning for Edge 800/810: If you skipped updating your 800/810 (which was part of Session I), go back and do it now. Pre-2014 versions of software won't work with these instructions.

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- Edge Touring/800/810/1000/Explore 1000: Open the resident drive to find the "Garmin" folder. Inside the Garmin folder locate the folder named "Courses." We recommend that you drag this folder's current contents (old ride files) into your computer's trash or recycle bin. If you can't bear to throw away your old routes, create a new folder within the Garmin folder, name it "old routes," and transfer your old routes into that folder. After the "Courses" folder is empty, drag and drop the Santana-supplied .fit files into the courses folder.
- All Models: To confirm Santana's routes are properly loaded, you'll need to disconnect and restart your Garmin. On the main menu of an Edge Touring/800/810/1000/Explore 1000 select "Courses." On the main menu of all other models select "Where To?" and then either "Saved Rides" (Edge models) or "Tracks" (all others). You should now see a list of daily routes. On Santana's routes the two letters that precede the day of the week identify the event or region. The digits at the end of a file name indicate miles.
- WARNING for Oregon/Dakota/Montana/eTrex: On these units an improperly installed memory card is apt to lose contact after hitting a bump. In this case Santana's pink route line will appear on a screen that no longer shows an underlying map. Worse, an unsecured Micro SD card with its valuable map data could fall out (and become lost) when you change batteries. On these units the card installs below a silver metal flap that we'll call "the gate." After reinstalling your card, swing the gate closed before you "latch" the gate by sliding it away from the USB connector until it stops. With these units it's a good idea to re-latch the gate each time you change batteries.
- At Santana's daily route talks you'll learn which routes to select and follow.

End of Session IV

"Tuning" your Garmin for a Santana Event

There are innumerable ways to use a Garmin GPS. At Santana's events, however, your GPS will only follow our carefully designed routes if you "tune" your Garmin by engaging the necessary presets. Failure to "tune" your Garmin will cause it select its own routes. Because your Garmin (and its software mapping) has an extremely limited "knowledge" of roads (and knows nothing about traffic flow, road shoulders, scenery, gradients, or pavement condition), allowing your Garmin select routes is unwise.

On every tour, somebody decides to ignore these essential "tuning" instructions. If you want your Garmin to select a route that's longer, steeper, bumpier, uglier and/or more dangerous, that's up to you. The problem for us is that we don't want others to follow you! The #1 cause of lost groups of riders at our events is from a stubborn pace-line leader who wrongly imagined the "off-road" preset would cause their Garmin to choose dirt roads. Other problems occur when someone believes that "auto-rerouting" is simply too cool to disengage. Trust us! Santana's carefully-scouted routes won't appear unless you take a few minutes to "tune" your Garmin's presets as follows:

Edge Touring:

- 1. Turn unit on. From the home screen tap the "wrench/screwdriver" icon.
 - a. Tap "Routing Options"
 - i. Select "Routing Mode"
 - ii. Choose either "Cycling" or "Tour Cycling"
 - b. Ignore "Calculation Method"
 - c. Select Lock on Road and choose Off.
 - d. Select Avoidance Setup
 - i. Turn off "Unpaved Roads" (slider is darkened)
 - ii. Turn off "Narrow Trails" (slider is darkened)
 - iii. Tap the back arrow key
 - e. Select "Recalculation" and choose off
 - f. Tap the back arrow key
- 2. Next Choose "Trip Pages"
- 3. Select "Map"
 - a. Ignore "Map Data Fields"
 - b. "Orientation" select "Track Up"
 - c. "Auto Zoom" select "Off"
 - d. Ignore "Map Detail"
 - e. Ignore "Map Information"
 - f. Select Back arrow key
- 4. Select back arrow key again and you are done with tuning

Edge 1000:

Turn unit on; from the Home Screen:

- Tap the wrench
- Select the desired profile (Train, Race, Etc)
- Select "Navigation"
- Select, "Routing"
- Select, "Routing Mode"
- Select "Direct" (this will turn all other automation off)
- Once you select that all other choices other than "Lock on Road" disappear. This can be set either on or off

Next back out one level to the "Navigation" screen and then look for "Map Settings"

- Select "Orientation," Select "Track Up" (should be the default)
- Select "Auto Zoom" Select "Off"
- Select "Map Visibility" Select "High Contrast"
- Ready to ride!

Edge Explore 1000:

Turn unit on; from the Home Screen:

- Tap the wrench
- Select "Activity Settings"
- Select "Routing Mode"
- Select "Direct" (this will turn all other automation off)
- Once you select that all other choices other than "Lock on Road" disappear. This can be set either "on or off."

Next back out one level to "Activity Settings" and look for "Map"

- Select, "Orientation," Select "Track up" (should be the default)
- Select "Auto Zoom," Select "Off"
- Select "Map Visibility," Select "High Contrast"

Ready to ride!

Dakota:

- Turn unit on.
- From Home Screen tap the "Setup" button (with the wrench icon).
- Find and select the "Display" button.
- Ignore other Display settings—use return arrow key to return to Setup Menu
- Find and select the "Map" button.

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- On the map menu (with the "Orientation" button at the top).
 - "Orientation" toggle to "track up."
 - o "Auto Zoom"—toggle to "Off."
 - "Data Fields"—ignore.
 - Select "Advanced Map Setup" to call up a sub-menu (with "Zoom Levels" button at top).
 - Select "Zoom Levels" button to call up a sub-sub-menu
 - Top three buttons ("Map", "User" and "Street") should remain on "Auto"
 - "Land Cover" button—select and toggle to "Off"
 - Use return arrow button once (sub menu with "Zoom Levels" button at top).
 - Skip past the next two buttons ("Text", "Detail")
 - Select bottom button ("Shaded Relief") and toggle it to "Do Not Show"
 - Use return arrow TWICE to return to the Setup Menu (with red X in lower left corner)
- Scroll down and select the "Routing" button (with road icon) to get to a sub-menu
 - o "Guidance Method"—toggle to "Off Road."
 - o "Calculate Routes"—toggle to "Bicycle."
 - o "Lock on Road"—toggle to "No."
 - o Bottom two buttons ("Transitions", "Avoidance") can be ignored
 - Use return arrow to return to Setup Menu (with a red X in lower left corner)
- You're all set. Use the red X button to return to the main menu.

eTrex 20/30

- Does not have a touchscreen. Use joystick to scroll and select.
- Same tuning steps as Oregon 450 / 550

Oregon 450 & 550

- Turn unit on.
- From Home Screen tap the "Setup" button (with the wrench icon).
- Find and select the "Display" button.
- Ignore other Display settings—use return arrow key to return to Setup Menu
- Find and select the "Map" button.
- On the map menu (with the "Orientation" button at the top).
 - o "Orientation"— toggle to "track up."
 - "Auto Zoom"—toggle to "Off." (on the Montana this is located under the "Advanced" settings)
 - o "Data Fields"—ignore.
 - o Select "Advanced Map Setup" to call up a sub-menu (with "Zoom Levels" button at top).
 - Select "Zoom Levels" button to call up a sub-sub-menu
 - Top three buttons ("Map", "User" and "Street") should remain on "Auto"
 - "Land Cover" button—select and toggle to "Off"
 - Use return arrow button once (sub menu with "Zoom Levels" button at top).
 - Skip past the next two buttons ("Text", "Detail")
 - Select bottom button ("Shaded Relief") and toggle it to "Do Not Show"
 - o Use return arrow TWICE to return to the Setup Menu (with red X in lower left corner)
- Scroll down and select the "Routing" button (with road icon) to get to a sub-menu
 - "Activity"—toggle to "Direct Routing."
 - "Lock on Road"—toggle to "No."
 - Use return arrow to return to Setup Menu (with a red X in lower left corner)
- You're all set. Use the red X button to return to the main menu.

Montana / Oregon 600

- Turn unit on.
- Tap the bar at the bottom of the Home Screen to open the main menu.
- From main menu tap the "Setup" button (with the wrench icon).
- Find and select the "Display" button.
- Next select "Orientation Lock" and choose "Lock Portrait."
- Ignore other Display settings—use return arrow key to return to Setup Menu
- Find and select the "Map" button.
- On the map menu (with the "Configure Maps" button at the top).
 - o "Orientation"— toggle to "track up."
 - o "Dashboard" toggle to "None"
 - "Guidance Text" ignore
 - o "Map Speed" ignore
 - Tap "Advanced Setup"
 - "Detail" "Normal"
 - "Shaded Relief" "Do Not Show"
 - "Vehicle" ignore
 - "Zoom Controls"
 - "Auto Zoom" "Off."
 - Ignore the rest
 - Back up one Level and select "Zoom Levels"
 - "Land Cover" "Off"
 - Ignore the rest
 - Use return arrow TWICE to return to the Setup Menu (with X in lower left corner)
- Scroll down and select the "Routing" button (with road icon) to get to a sub-menu
 - "Activity"—"Direct Routing"
 - o "Route Transitions" Ignore
 - o "Lock on Road"—toggle to "No."
 - Use return arrow to return to Setup Menu (with a X in lower left corner)
- You're all set. Use the X button to return to the main menu.

Edge 800

- Turn Unit on and touch the Menu button at bottom of the Home Screen
- Touch the button with the to reach a sub-menu (bike settings buttons at top)
 - Find and select the "System" button to get a sub-menu (GPS button at top)
 - New users: Select "Display" and toggle to Backlight Timeout button to "Stays On"
 - Veterans will change this setting to obtain 6+ hours of battery life.
 - Tap return arrow to get back to previous menu ("GPS" button at top)
 - Select "Units" then "Position Format" and select "hddd mm.mmm"
 - Touch Arrow button TWICE to reach system submenu (GPS button on top)
 - Select "Map" button to get to another sub-menu ("Orientation" button at top)
 - Select "Orientation" and toggle to TRACK UP
 - Select Auto Zoom and toggle to OFF
 - Ignore Guide Text (Always Display)
 - Select Map Visibility button
 - On the next screen select the top button (no matter what it says)
 - On the next screen touch the middle HIGH CONTRAST button
 - Touch Arrow button TWICE to reach system submenu (GPS button on top)
 - Select Routing to reach a sub menu (Calculate Routes button on top)
 - Toggle Calculate Routes to BICYCLE
 - Toggle Guidance Method to OFF ROAD (this won't cause you to ride on dirt!)
 - Toggle Lock on Road to NO
 - Avoidance Setup: Ignore (was over-ridden by choosing "Off Road")
 - Toggle Recalculate to OFF

Edge 810:

- Turn on Unit
- From the Home Screen tap on the wrench
- New users: Tap System, then Display, Then backlight timeout, select "stays on." Veterans know they'll need to change this setting to obtain 6+ hours of battery life.

To set up the rest:

- Tap "Wrench" then "Activity Profiles"
- Select train "Train" (or if you are a power user setup your page)
- Select "Navigation" then "Training Pages"
- Scroll to bottom of page and tap "Virtual Partner" and then "off"
- back arrow
- Select "Map," then "Orientation"
- Select "track up."
- Select "Auto Zoom" "off"
- Select "Map Visibility" and select "High Contrast"
- Back arrow
- Next select "Routing," "Activity" "Direct Routing"
- Next "Lock on Road" "No"
- Back arrow 4 times and then X... You are done

Summoning Assistance

Every participant needs to know how to get their Garmin to display its Earth Coordinates.

In an emergency, you'll need to be able to able to provide these numbers to obtain help with less delay.

You need to practice and MEMORIZE the following steps!

Edge Tour

- 1. On the Home Screen tap the "Satellite" icon (top left corner)
- 2. Next tap the signal strength bar
- 3. Tap on "View Satellites" to see coordinates

Edge 800

- 1. On the Home Screen tap Menu
- 2. Then tap wrench icon
- 3. Then tap System
- 4. Then tap GPS
- 5. Finally, tap View Satellites

Edge 810 / 1000/Explore 1000

- 1. On the Home Screen "Satellite" icon
- 2. Then tap system
- 3. Then tap GPS
- 4. Finally, tap View Satellites

Dakota, Oregon 450/550

- 1. Tap the signal strength icon at the bottom of the Home Screen
- 2. Your Latitude/Longitude coordinates are displayed at the top of the screen

Montana, Oregon 600

- 1. Tap the bar at the bottom of the Home Screen to open the main menu.
- 2. Scroll down to the Satellite icon and tap it

eTrex

- 1. On the Home Screen, use the joystick to scroll down to find the satellite icon
- 2. Press joystick to select satellite icon

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