

How to have a good Route 2

Test of Garmin Routing and Trails to keep POI (waypoints) announced and keep on track.

This is not new but not published greatly or documented it seems. Links to my findings and work done by others.

Testing dates 31st May 2023

Equipment Garmin GPS Zumo 959 and XT

Windows 10 PC and Google Basecamp. Ver. 4.7.5 (2023) and quick test of MRA.

Reason for testing.

Garmin seem to have a known issue of going off a planned route and many have resolved to put in additional shaping points which aren't announced but try and maintain the route/trip planned. Saves putting loads of way markers or points along the route.

Route/Trip (the same just called differently by Garmin and I will use Route) – This is a plotted route that is designed that we would wish the GPS to follow and not divert from. For something like 25 to 200 miles it could be a lot of time adding them. Make the route change it for the places you want to see or stop or add shaping points and let the track create it for you.

Track – this is a trail on the map (breadcrumbs trail) which give position, distance and course, takes up little room and there are many of these points on a route/trip. The track can be made before a Route/Trip and combined with the Route. Note a trail of the route taken is recorded in the Zumo and can be recovered for later reviewed in BC or other software (this records speed and direction in files and the XT states it's stored for 6 months

When a Track is used there is only 2 Points of Interest (POI) being the Start and End.

Most people like to see navigation or announcement that they are approaching their POI they have chosen. But any made Tracks drop all of the POI, so we are looking to combine these tracks into a working route with announcements and keeping to the planned route without having to spend a lot of time adding loads of shaping points that will not or may not work.

Aim of this is to get a true route and trip without diverting from the planned route.

There is no software changes to the GPS or BC only an addition of a map Theme in the GPS so that the route and track can be seen one above each other.

The theme files are very small and about 7KB each and with the software they can be changed to your preference.

Themes for maps are at the end of this document.

Testing - I tested the idea done by others of combing a track and making a route out of it, and this worked well but there was no detail of POI that I had planned. Although it gave directions which a track does not do when used on its own. I wanted to push this further and get instruction of the POI I had inserted into my route.

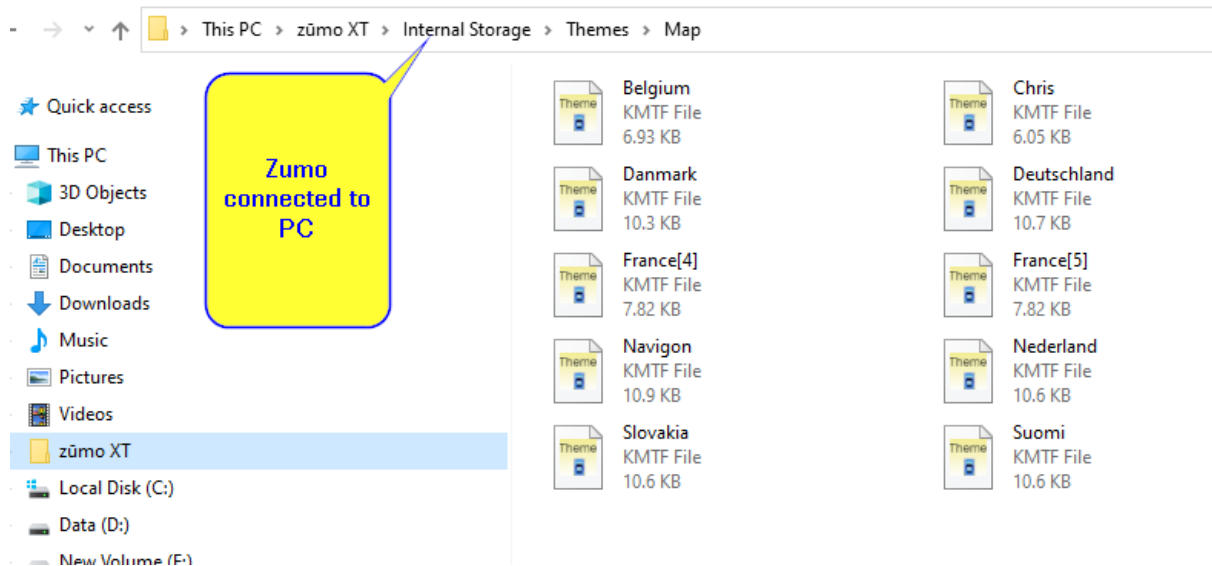
After some testing and checking out other forums I managed to get a working system for both GPS with twisty routes, cross over routes and go to nearest joining and a start point away from the home/leaving location.

Remember that BC to ZUMO file transfer (or Zumo will ignore) will strip out some BC information of driving speeds, and setting done in BC. (if you have set it up for a driving speed of 50 in a 70 on BC the Zumo will expect 70 and 30 in 30 mph areas)

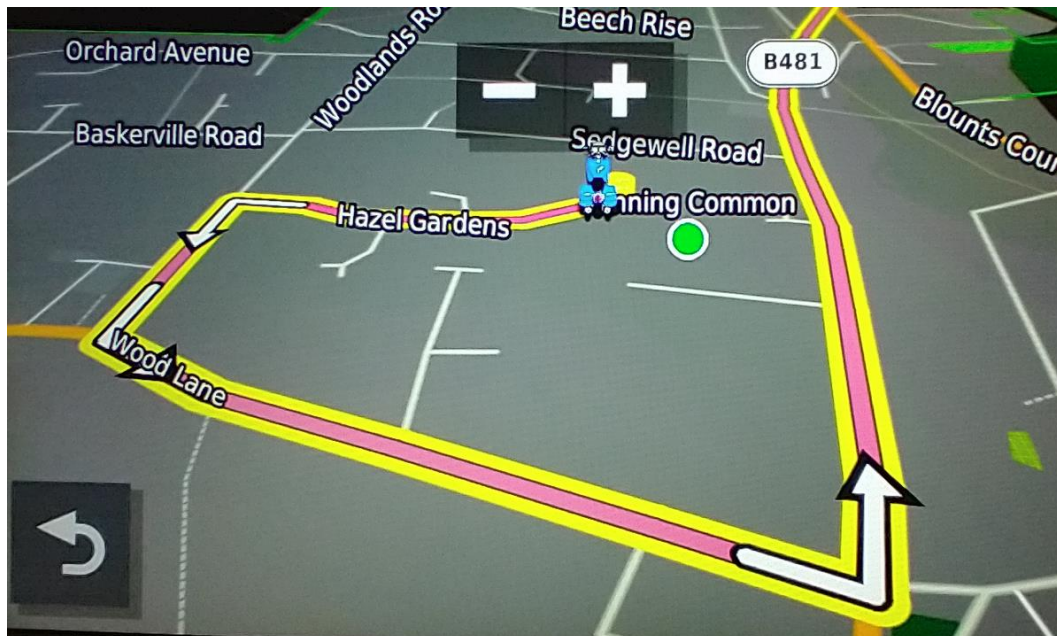
Theme changes - A Video by Chris Wiltshire <https://youtu.be/6z1Jj86ZY4g>

Theme Files - example themes embedded at end of document with others.

This is where you find the map themes – add new ones (don't remove old ones)



Doing the changes gives a route with the track underneath like this.



This is the process that works for me.

Having the Map Theme selected in Maps & Vehicle, Map Theme.

I have created a route in BC (Basecamp) with a couple places that I want to visit or stop for a break.

Made a track from that route within BC and there will be a grey line with white dots in close up.

There could be thousands of pointers in this track. You can make a route from a track.

Save both to the SD card in the Zumo (the reason it's saved as the GPS may delete if in main memory?)

Stage 1 - Track changes for the best setup (has to be done to each track.

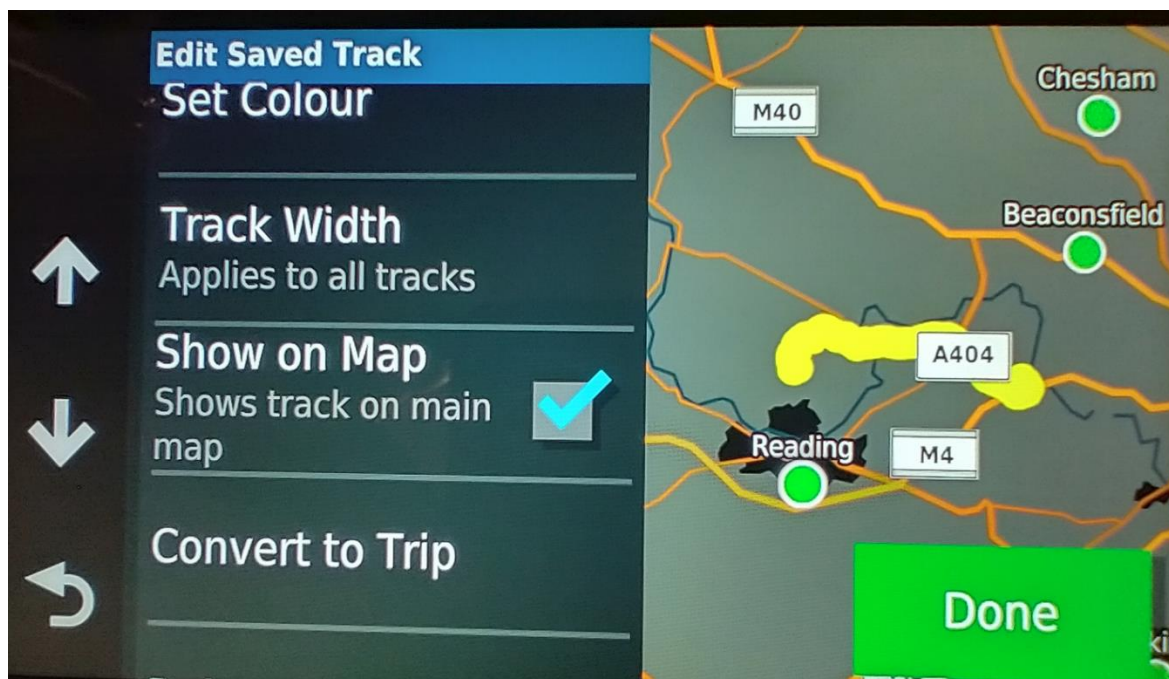
Start GPS and then **Apps, Track, Import the tracks**. These will show Tracks in the directory. Now select the track you plan to use and import. It will show in the Track list.

Open the Track you want (map will show a grey line of track.) Spanner and **Set Colour, Width** (widest), **Show on Map** (Tick)... (I believe that Explorer can effect seeing this box Show on Map for some reason?)

You can if you want to save this as a Route (Trip) for use later but it will not have your stopping points only the start and end. Click **Done**.

Your map will show the track now in the colour you have chosen.

Now **EXIT** back to the **Apps** menu and select **Trip Planner**.



Map shows the colour, size and that the track will show on the main map when finished.

Stage 2 - Route/Trip planner- Import the routes you have made.

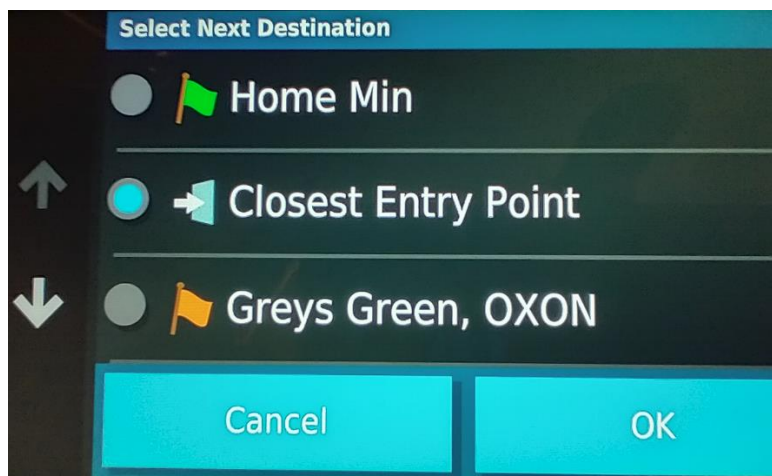
Select the **Route** (same as your track and NOT the saved Track one as that will have dropped any POI) and this will show your route over the track if you click on **Map**. (As long as you have not selected the same colours for the track). **Press Go** and you will be offered a **Start Point** or **Closest Entry Point** with flags of the POI you have input to the route.

Click **OK** and GPS will calculate the route. Click **Start** and your away.

Chose to start from the **Beginning** or **Nearest Entry Point** or any point along the list.

If the beginning is a distance away the GPS will work out a route to the start without the background track not showing until you reach the **Start**.

If you join the route at the **Nearest Entry Point** it joins in easily and continues the route. This is great if you have had to stop or had a break the GPS routing may need to be reset and it will continue on ok.



If you turn off the GPS or change the screen to the start screen or power off fully the route will be dropped from memory and you will simply have to open the route again and it will appear over the track, click Join at **Closest Entry Point** and your GPS will take you to that point or you select a named point. Example below of missing route.



Track with missing Route – This can be recovered by just opening the route again.

Stage 3

You will need to have the route shown on the map with the track shown either side of the route could be red on yellow background which works well.



Click **Start** and it will show as below.



Then you're working getting announcements along the route.

Settings on GPS XT for testing

Fastest Route and shortest.

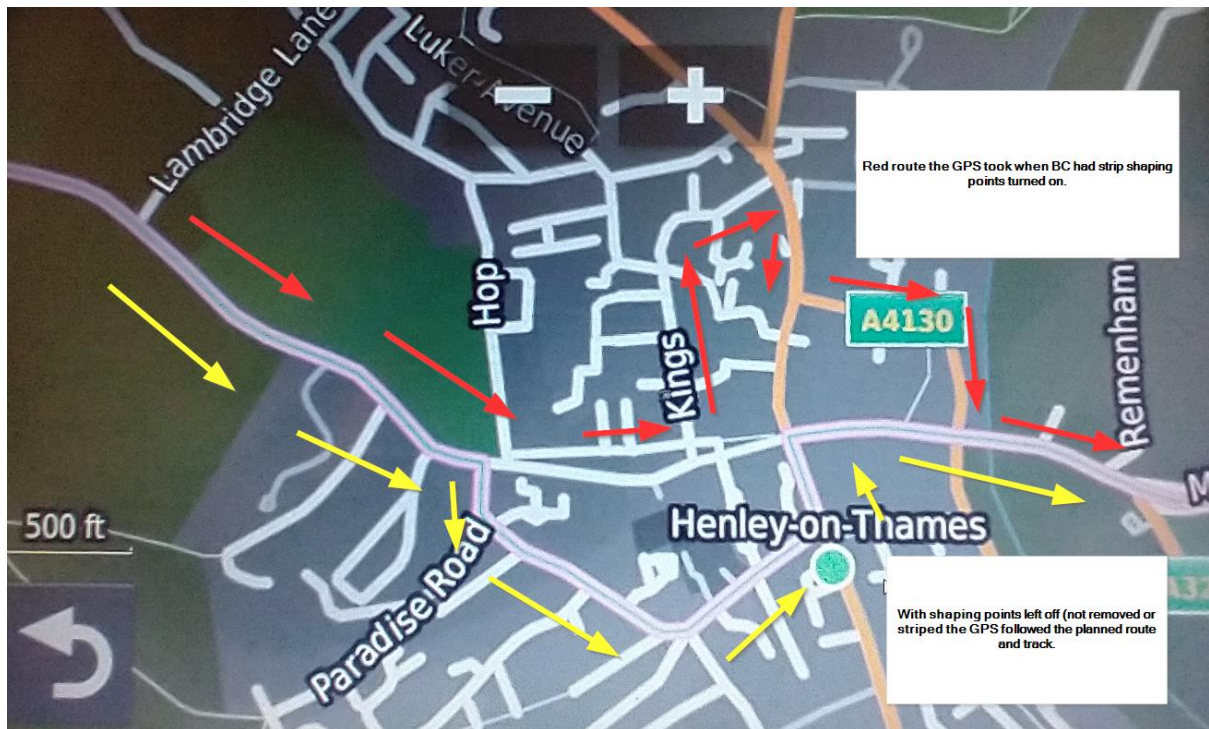
Off Route Recalculation - Automatic

(Prompted works but nag screen if off route and if you say NO it stops directions)

Part of testing and findings

Test of Route with BC stripping shaping points on and off during transfer.

Strip Points ON. - Red was stripped and Yellow (OFF) followed the track and route planned on BC.
Took us to the same place in the end.



Garmin 595 route screen shot of GPS taking a route with BC stripping the shaping points out.

Garmin 595XL - This worked well but size of Track could not be altered like the XT. This gives a narrow map and line to follow. The XT was a lot better brighter screen and route to follow.

It worked for me and it gave details of the POI or place marking inserted.

My Route App

MRA I have a paid version but due to transfer issues on each of the 1.0 to 1.2

I prefer BC and I noted that it didn't give the POI but just said waypoint when tested.

I tried each version of MRA and yes it did give me the track and route but announcements were not good. This may be me in my building of a MRA route, but I have spent enough time on this at the moment.

My Thanks page to others for their work and links below show their work....

This is a working live document and errors may have been made.

I'm happy to take suggestions and improvements.

Terminology for Route and Trip (blame that on Garmin) I'll use Route..... for this anyway.

GPS Map Themes that I have altered – Link or inserted in the page.



Chris3.kmtf



Chris4.kmtf



Chris2.kmtf



Chris.kmtf



France[5].kmtf



France[2].kmtf



France[3].kmtf



France[4].kmtf

<https://www.pinns.co.uk/osm/index.html>

Theme Editor https://www.pinns.co.uk/osm/theme_editor.html

YouTube Video by <https://youtu.be/PIIp5d0o4mI>

Zumo Info

Advice :- **Battery on Zumo** Keep it maintained and charged by plugging it in to power source and on, when on the main screen you can short press the power button and get a charging screen to show then it will go dark. Turn it back on by pressing power button again.

There are two types of power down and sleep mode, remove power and a shutdown screen will show, this has it going to sleep mode and will drain the battery.

The 590 batteries are not long lasting.

Total shutdown of GPS – Press and hold power button until screen says Shutdown this will keep as much power in the battery that it can and drainage will be none, yes it takes a few seconds to restart, but you battery will be better. Low or flat batteries are not good and expensive.

On the 590 series there can be a batter connection issue this may be your answer.

<https://www.zumouserforums.co.uk/viewtopic.php?t=2>

<https://www.totally4bikers.com/blog/biking-blather/does-your-garmin-zumo-590-run-on-its-battery-for-only-a-few-minutes/>

I trust that this method works for you.

Min Standen

G0JMS

June 2023