



## Avoiding the Potholes

# Routing with BaseCamp for the Garmin Zūmos With the Trip Planner App

(Tried and tested with the Zūmo 590 and 595, but much may apply to the 39x models.)

## Part 1

*Please be aware that this document is put together as I learn more about the way in which the Zūmo operates. It is a learning document and a reminder for me when I forget what I have found out !*

*Others may find it useful - but I have no insider knowledge from Garmin. What is in this document is what I have found out about the way in which my Zūmo 590 and 595 appear to behave. I have carried out research and performed numerous tests to confirm this behaviour, but I do not know about the stuff that I do not know about, or how any missing information may impact on what I have found out so far.*

*I'm on a learning curve. If you have any other information, please contact me via [st-owners.com](mailto:st-owners.com)*

## Introduction

### About this Guide.

The satnav does an excellent job in getting you from A to B. Type in a destination and the satnav will route you there with the minimum of fuss, using whatever preferences you have set to guide it in its choice of roads.

You hardly need a manual or a set of guidance notes to use a satnav for this purpose.

This booklet is intended for anyone who is planning long trips to places where the names of towns mean nothing; where the geography and landscape offer no clues to the present location; where the riding is on the wrong side of the road and the distances are in km and not miles; where the scale of the map is unfamiliar and the distance to the next fold will take all day to reach rather than just the anticipated half hour.

It is aimed at those of us that like to plan our routes so that we can concentrate on the riding, the scenery and on having the trip of a lifetime - and to get back safely so that we can do another one next year !

But the danger of this is that it places a great deal of reliance on the satnav that we use. Sometimes it doesn't do what we expect, and when that happens, most of the time we blame the satnav. Of course, it's not our fault - even though we didn't bother to learn about its little quirks and idiosyncrasies before setting off.

But I'm a stickler for stuff like that. If I am going to use something, I want to know how to use it properly and then in a moment of uncertainty on a route, I want to be able to know what to do. It's no fun for me or for the pillion to be sitting in the pouring rain trying to work out why we have ended up back where we were two hours ago - and believe me, a satnav is quite capable of performing that little trick. Near home, you would spot it in an instant. In a foreign country, you would like to think the same would be true - but think about it.... **How would you know ?**

### What this guide is

So this guide is aimed at providing a better understanding of how the Zūmo 590 & 595 behave and how to stop it from ruining your trip of a lifetime when something doesn't quite go to plan. I have done a lot of research and experimentation in producing these notes. I am fairly sure that I have got it right. But I have been sure about that before..... They are just my notes after all, but probably based on much more experimental data than most people would care to collect.

I had two long trips planned in the year that I created these notes, and this unexpected behaviour of the Zūmo 590 left me worried about relying on it in a different country. I needed to know the answers, and after much experimentation and re-learning, I have all of the answers - at least to all of the questions that I asked myself. Doubtless many new questions will crop up, and when they do, I will find the answers and modify this little essay.

**I make a lot of suggestions** in this guide - but they are just that - suggestions. They are based on what I do to avoid the problems that I have encountered. You will see me saying things like 'Don't put the **Start Point** where you intend to start a route'. That may seem like a stupid suggestion, but try to follow my logic and I think that you will agree that my suggestions make sense.

### What this guide is not

This guide is **not** a Zūmo 590 / 595 manual. Neither is it a guide on how to plan a route in Basecamp. I assume that you know at least the basics of both of these, and if you don't there are plenty of good guides around to help you.

I am not recommending that BaseCamp is the best thing for preparing a route. Sometimes getting the Garmin in hand, finding a postcode destination and maybe adding an intermediate point is all that is required.

Many motorcycle riders share their routes between different makes of satnavs. This guide isn't going to help much as it is aimed specifically at how **Basecamp** interacts with the Zūmo. Nevertheless, the route from your friend (perhaps a GPX file) will contain a series of *routing points*, and this guide may help you to understand how to recognise what type of points these become when they are transferred to the Zūmo and what you can expect to happen as a result. I know of some software that produces routing points that the Zūmo ignores completely.

### Zūmo 590 and Zūmo 595

I have edited these notes to include more specific information about the **595**. In many ways the two Zūmos operate in the same way but there are a few features on the **590** that do not exist on the **595**, and vice versa. So when I refer to 'the Zūmo', I mean *either* the **590** or the **595**. When the information is specific to one or the other, I will add a note: (**590**) or (**595**).

**So let's get on with it.....**

## Anatomy of a Garmin SatNav Route

In this section - In case you can't be bothered reading all of the detail and explanations !

### Start Point

Why it is best not to put it at the start of a ride

### Via Point

Just have a few of these and do not place them where you intend to stop.

### Shaping Point

Why you need plenty of these and why they are so useful.

### Waypoints

Why you have to be clear about what you understand by this term.

### Starting a Route

How to your satnav can really screw up your carefully planned route, and why it is actually you that messed up.

### Recalculating

When and why the satnav will recalculate your route.

# Anatomy of a Garmin SatNav Route

## As Viewed on a Zūmo

A typical satnav route consists of a number of different types of routing points which help to determine the roads along which the satnav will direct you as you ride or drive along. The image on the right shows a route on the [Zūmo 595](#) from Skipton to Inverness with a number of intermediate routing points.

## Start Points and End Points



The route opposite consists the **Start Point** (Skipton), the **End Point** (Inverness) and two **Via Points** (Longtown and Pitlochry).



The Zūmo displays the route as a scrollable list, showing only 3 or 4 entries on one screen. I have shown the entire list.

## Via Points

... are route points which mark the end of one section of the route and the beginning of the next section. They are shown as orange coloured flags on the route list opposite, and there are just two of them (Longtown & Pitlochry). After each **Via Point** is the expected time for arrival - if the trip has a scheduled start time.



The Zūmo treats these as the key points that define your route and may for example, be stopping off points. The [590](#) also shows the scheduled date.

The Zūmo will alert you as you approach the **Via Points** with an audible and visual message. It will also tell you when you have arrived. **Via Points** are sometimes called **Alerting Points**.

As soon as you pass through a **Via Point**, the satnav will then navigate to the next routing point in the list.

The Zūmo will *insist* that you 'visit' a **Via Point** as you ride along. If you miss a **Via Point**, the satnav will navigate you back to it, even if you join the plotted magenta route after the **Via Point**. It is therefore essential that **Via Points** are positioned accurately and not up a side road or on the wrong carriageway.

## Shaping Points

.... are shown in the route on the right as blue circles ([595](#)), or orange ([590](#)). Just like Via Points, the satnav will navigate you back to a Shaping Point if you go past it. However, unlike Via Points, if you then pick up the magenta route after a missed Shaping Point, the Zūmo will navigate to the next point on the route. It will not try to take you back.



But the [Zūmo 595](#) has a trick. If you ignore 2 instructions after failing to rejoin the magenta route, it will ask if you wish to miss it out.

You will **not** be alerted as you approach a **Shaping Point**.

## Editing Destinations in a Route on the Zūmo

On the satnav screen, on the route list opposite, any Via Point can be made into a Shaping Point and vice versa, simply by tapping the orange flag or the orange/blue circle.

*(Do this on the 595 and XT and the new Shaping Point may be relocated - reported to Garmin 5 May 2020)*

## How to edit a route by adding/deleting/inserting points

*Display the route list (like image on the right).*

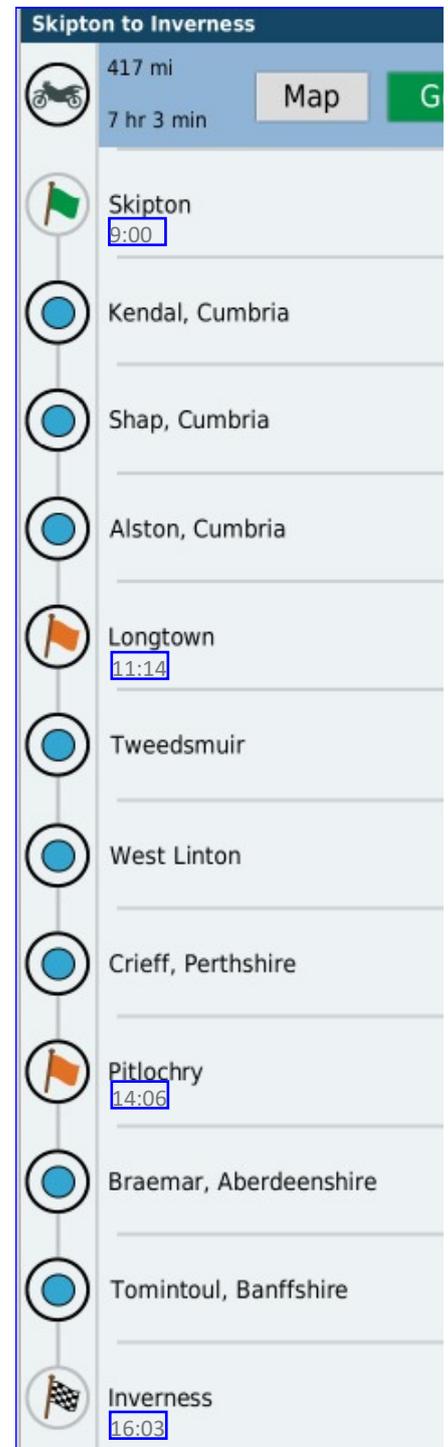
*To reorder, tap the name of the **start point** and choose the double arrow*

*To Add after any point, tap the name of the point and then tap the plus sign (+)*

*To delete any point, tap the name of the point and tap the bin symbol*

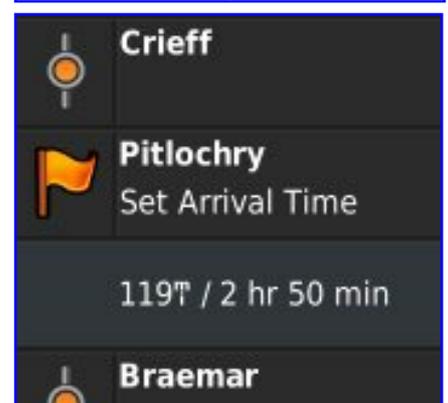
## How to Edit a route using the map ([595](#))

*Apps / Trip Planner / (select route) / Spanner / Shape Route*



*A Full Route List in Edit Mode showing Start, End, Via and Shaping Points. The type of point can be changed on this screen.*

*Below: A section of the same route shown on the 590 in night time colours*



## A Zūmo Map View of a Route

### ..containing both Via Points and Shaping Points

The map on the right shows the same route that is displayed on the previous page.

-  The **Start Point** of the route (Skipton) is shown at the bottom of the map, near Leeds. It is an orange flag on the map but appears as a green flag on the 'Edit Destinations' screen on the previous page.
-  The **Finish Point** of the route (Inverness) is marked with the chequered flag as before.
-  **Via Points** are marked with an orange flag. The location is where the base of the flag is planted.
-  **Shaping Points** show on this map as small light blue circles on the magenta coloured route. The blue circles also appear on the navigation map, but these can be difficult to see when riding.

### Routing

Given enough **Via Points** and **Shaping Points**, the satnav will have enough information in order to be able to plot a route to your destination. It uses your preferences - Faster Time, Shorter Distance, Off Road, Curvy Roads in order to select a route and combines this with your choice of avoidances.

I suggest that 'Faster Time' gives the most predictable route, and that **Via Points** and **Shaping Points** should be inserted to force the route along particular roads. The only avoidance that I have set is for unpaved roads.

If the Zūmo re-calculates a **Route** (it doesn't always need to, as we shall see) it does so in stages - working out a route between adjacent route points whether they are **Via Points** or **Shaping Points**. In doing so, it uses the **Routing Preferences** for that **Route** (590). The 595 uses the Zūmos Calculation Mode for the routes Transportation Mode (eg Motorcycle) Whichever route it takes, it will always pass through the **Via Points** and usually through the **Shaping Points**. I say 'usually' because under one set of circumstances, the **Shaping Points** are completely ignored. This can happen when when starting out - as I will explain later.

### Route Point or Routing Point

I have used these terms a number of times to refer to any of the points that make up a route - when I don't care what type of point they are - **Start Point**, **End Point**, **Shaping Point** or **Via Point**.

### WayPoint

Waypoint is a term used to describe a location which is saved for future use - BC has thousands of them, or a point that you have saved in your own list of favourite locations. In Basecamp you can do this with the Waypoint Flag tool. A **Waypoint** can store additional information such as address and phone number.

Any **Waypoint** may be used in your route, but the term **Waypoint** does not imply that is part of a route. In conversation and in forums, people commonly and incorrectly use the term '**Waypoint**' when they actually mean a point on a route. When a Waypoint is inserted into a route, it then becomes a **Via Point** or a **Shaping Point**. And it doesn't always become the same thing. Since the SatNav behaviour is determined by what type of point is plotted, this can be crucial. A **Waypoint** can be created in Basecamp only with the Waypoint (Flag) tool.

I have checked the definitions that I have given here with Garmin's current definitions and usage, and the way that I have used the terms is correct (as of Dec 2019).



## Placing Via Points & Shaping Points on a Route

### Where is the best place to put them ?



#### End Point

Placing the end point is easy, isn't it ? Surely it goes precisely at the point that you wish to reach ?

Well, yes, but the actual hotel front door isn't always the best place to stop. The car park at the rear may provide better access. The database of **Waypoints** might include your destination, but in my experience they are not very accurate. Use the instructions on the hotel's website, or use Street View or Satellite imagery to identify the precise location - and plot that - use the Waypoint Flag tool, and your point will be added to the database and transferred to the list of Favourites in the Zūmo. Start Point.



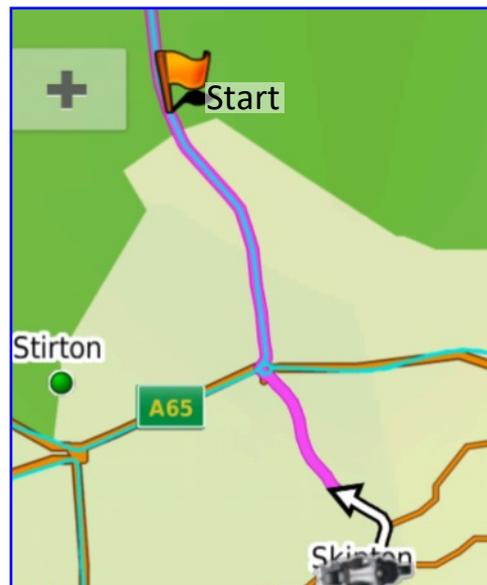
#### Start Point

So that goes at the start, surely ? Well I prefer not.

The **Start Point** is just a special **Via Point**, and **Via Points** insist that you visit them. The chance of parking your motorcycle precisely where you plotted your **Start Point** is pretty slim, especially if you need fuel first or you intend to start with a group of other bikers. You can't all fit on the exact start location. You may well be nagged by the satnav to visit the **Start Point** as soon as you set off.

**Suggestion:** The **Start Point** is better placed on a road which you know you will be taking **after** setting off. Once the route is selected, the Zūmo will take you to the **Start Point** from wherever you are now, and then continue navigating.

*In the screenshot, the start point is the orange flag. The bike is somewhere in the middle of Skipton. It has plotted a route to the Start Point and then continues the planned magenta route beyond.*



*The light blue lines are tracks from previous rides.*



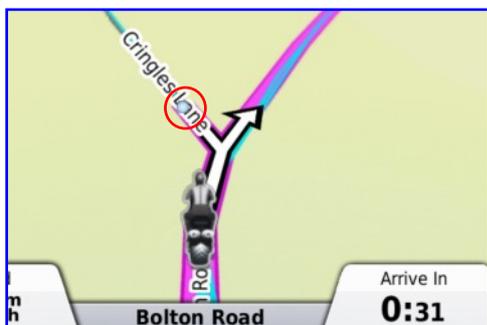
#### Shaping Points

Place them accurately in order to force the route along particular roads.

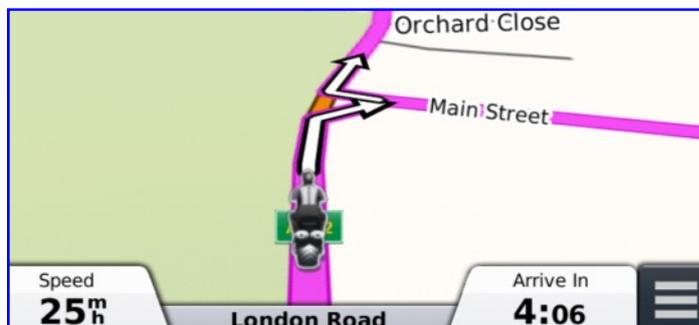
**Shaping Points** are simply devices to force your trip along particular routes, rather than places to visit. Decide which are the key points of your route and make them **Via Points**. Put **Shaping Points** in place to shape the route. They are usually best placed on the intended road **after** a junction.

A nice feature is that when riding with the Zūmo 590 and 595 is that **Shaping Points** can be ignored. The 'Coffee Stop' diagram on the next page is a good example of using a **Shaping Point** and **Via Point** combination to provide a choice of whether to stop or not when riding.

Here are two more examples showing the behaviour of **Shaping Points** when riding along. You can tell that they are **Shaping Points** - they are plotted on screen as small blue circles. (Via Points are plotted as flags).



*The **Shaping Point** (circled) is slightly misplaced. The satnav will tell me to turn left, but I can see that it is wrong. I can ride past it and remain on the magenta route. Because I am still on the intended route, the satnav will not try to take me back to the missed **Shaping Point**.*



*The **Shaping Point** is located some way to the right on Main Street. I can ignore this instruction to turn right and ride straight ahead on the short unplotted course. The satnav will attempt to navigate me back to the **Shaping Point**, but as soon as I rejoin the magenta line after the missed point (near Orchard Close) it will continue to navigate me forward, not minding that I haven't visited the **Shaping Point**.*



### Via Points - shown on BaseCamp

One good thing about **Via Points** is that they announce your approach and arrival and display a message on the navigation screen. If you have the **data display** showing (like the display on the right), then this can show the timing and distance for arrival at the next **Via Point**.

One negative thing about **Via Points** is that the satnav will insist that you visit the point before it will navigate to the next point - even if you continue along the plotted magenta route and even if the **Via Point** is slightly inaccurately placed up a side road (although if it has already announced your approach, it seems to regard that as having visited it). However, the **Skip** button silences the nagging - if you are on the route after the skipped Via point, that is the end of it. If not, the Zūmo calculates a route from where you are now to the next **Shaping or Via Point**. It uses the user's preferences for the mode of transport of this route that are currently set in the Zūmo.

×	Arrival
	<b>6:33</b>
	Direction
	<b>NE</b>
	Via Distance
	<b>0.3<sup>m</sup></b>

**Via Points** must be placed accurately and be given recognisable names.

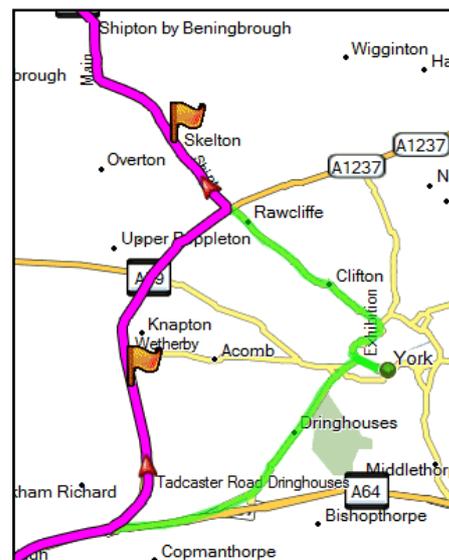
**Some suggestions:** Place **Via Points** on route that you intend to take after leaving a town. This leaves open the option to detour within a town.

See the map on the right. The intention is to take the magenta route heading north west. On the map I have placed two **Via Points** (flags) - one due west of York, the other on the intended road near Skelton.

The **Via Point** due west of York is not very useful. If we decide to take the green route into York, the satnav will then try to take us back to the Via Point near Knapton. We want to be taken out of York on the road near Skelton.

Skelton, north west of York, is a much better location for the **Via Point**. Wherever we detour to, the satnav will get us back onto the correct route.

**Via Points** can be ignored by using the **Skip** button - But working out whether you have skipped enough route points or whether you have skipped too many is a problem. Try it on a test route, you will see what I mean.

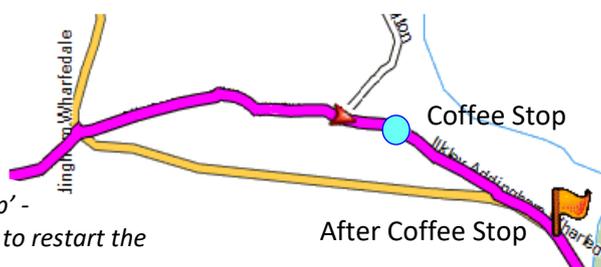


Place a **Via Point** a little way after a coffee stop and use a **Shaping Point** for the location of the café. (See route, right, heading east)

The best route is the yellow main road, but I have added a potential coffee stop as a **Shaping Point**. Later, I have added a **Via Point** to mark the intended route after the coffee stop.

If I ignore the detour, the satnav will nag me to go back to 'Coffee Stop' - until I rejoin the magenta route - when it will forget about it. If I need to restart the route, 'After Coffee Stop' will appear in the list of **Via Points** available.

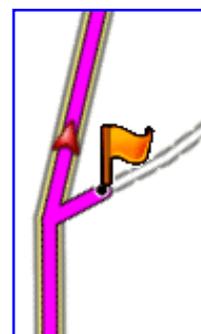
Consider an additional Via Point before the coffee stop detour - simply so that the satnav alerts you that you have a choice coming up.



Make sure that your **Via Points** are accurately placed. Zoom in and make **absolutely sure** that they are not placed up side roads or on the wrong side of a dual carriageway.

In the map on the right, the flag has been placed a few metres up a side road. You ignore it, but it is a **Via Point** and the Zūmo will insist that you go back. There is no escape from this (apart from the 'Skip' button). The magenta line is ahead and there is no audible 'recalculating' message, so you may not know that you have missed the Via Point.

It might be a good idea **not** to disable 'U' turns. They alert you to this type of problem. But the real clue is that the magenta route continues ahead, yet you seem to be being asked to turn back.



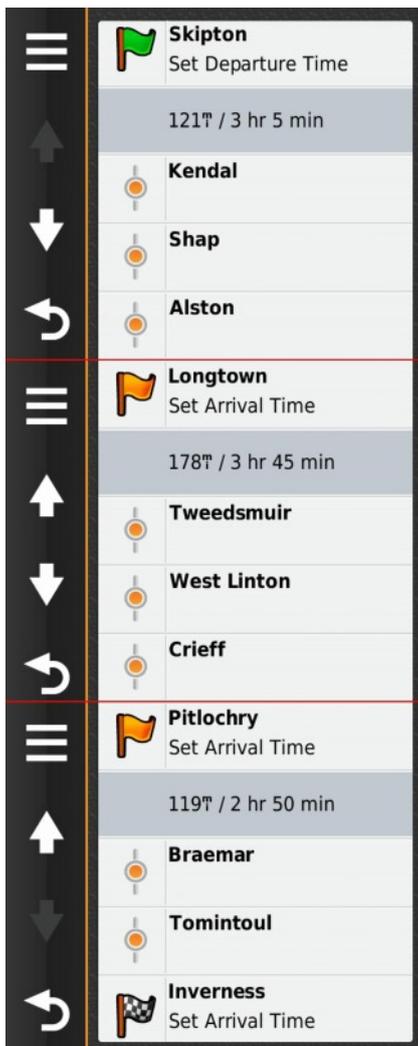
**The Skip Button on the Map Tools screen.** On the Zūmo 595, this is under 'Change Route'

'Skip' allows you to skip the Via or Shaping Point towards which the satnav is currently trying to navigate.

The Zūmo 595 has extra features. In 'Change Route' you can select to skip the next shaping point **or** the next Via Point (next destination) - and it displays the name of the points to help you choose. 'Skipping' will remove the selected point from the list of points in the route, but will leave all of the others intact.

Also, on the 595 if you ignore instructions (twice) to go back to a missed Via or Shaping Point, it will automatically ask if you want to skip it - and give you the name of the point that you have missed.

## Starting to Navigate a Route on the Zūmo 590 and Zūmo 595



The image is taken from a Zūmo 590. The display for a Zūmo 595 is shown on P4

### How Via Points and Shaping Points are Treated by the Trip Planner App

So far we have just looked at routes that are in the Zūmo, without any consideration as to how they got there. They could have been *transferred* as a GPX file, they could have been *transferred* from BaseCamp, or they could have been created from scratch within the Zūmo. It seems a good place to put this page, but you may want to come back and re-read it if your route is being created elsewhere and then *transferred* into the Zūmo.

The picture on the left shows the same Skipton to Inverness route as before - shown here as one long strip - the red lines show where I have joined together the 3 separate screens that the Zūmo normally displays.

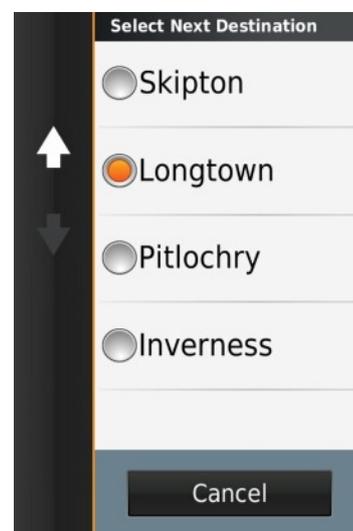
It is worthwhile checking this route out - for the location of the **Via Points** and the **Shaping Points**. You cannot edit the route in this display, but the 3-bar Menu button in the top left gives access to a similar display which allows editing. See the earlier page entitled 'Anatomy of a Garmin SatNav Route'.

Tap **Go!** And the Zūmo presents you with a choice of which destination you wish to go to next.

[See the display on the right →](#)

Note that only the **4 Via Points** from the route are shown. The **8 Shaping Points** are not listed. Note also that the list of options may only show 3 items and that the first **Via Point** (Skipton) may be off the top of the screen.

I find the heading '**Select Next Destination**' to be rather confusing. It makes sense if you are riding to meet some mates in Skipton, but if you are already at Skipton waiting for your mates to show up when you start the navigation, then selecting Longtown may seem the obvious choice, **but this would be the wrong thing to do.**



Here are four alternative scenarios (*sorry about this detail, but it will save a lot of headaches later*)

- **If you select Skipton** as the next destination, and you have taken my previous suggestion to place your **Start Point** for Skipton up the road, then the SatNav will calculate from where you are now to this **Start Point**, and then it will continue navigation seamlessly towards Kendal, Shap & Alston. **This is exactly what we want.**
- **If you select Longtown** as the next destination - then the satnav will use the **Route Preferences** to re-calculate a route from where you are now to **Longtown** - ie to the 2nd **Via Point** on the list. But look at the route - the **Shaping Points** of Kendal, Shap and Alston were put there to ensure that you included the delightful mountain roads of the North Pennines through Kendal, Shap and Alston. By selecting **Longtown** the satnav will calculate its own route to Longtown. Remember I said that on one occasion, **Shaping Points** are ignored? This is it! It will not go through Kendal, Shap & Alston.
- **If you are already in Skipton and your Start Point is set to Skipton.** 'Skipton' may be exactly where you are with your bike - or it may be behind you or in front of you. The point is, you do not know. Pressing 'Skip' is a bit of a lottery on the 590. Which point are you skipping? Skipton? Or the next point - Kendal? You will find out half an hour up the road, when the satnav doesn't take you to Kendal.  
**The Zūmo 595** is a bit more helpful. Under 'Change Route' it gives the option to skip the next via or next shaping point. And it displays the name of the point being skipped.
- **You are in Skipton, you select Skipton, but have already gone past the start point.** Pressing 'Skip' will prevent you having to return to the start point. The satnav will re-calculate a new route to get to Kendal - the next Route Point, ignoring the originally planned route. If your route was planned in Basecamp, the satnav remembers where BaseCamp plotted the route. If the Zūmo recalculates, then it forgets what Basecamp told it, and does its own thing.

**Suggestion: Position a Start Point or Via Point on your desired route after the stopping place.**

*That way, from the 'Select Next Destination' screen, you know that you are heading towards the first **Via Point** after the stop, and that you haven't already gone past it while you were parking your bike. It also gives the option to miss out the stop as the **Via Point** is on your desired route. Use a **Shaping Point** for the stop itself. They can be ignored easily.*

## WayPoints

### - Have I Missed out an Important Term ?

Well - yes I have, but it is quite a deliberate omission.

The term **Waypoint** is often used incorrectly to refer to any point on a route. This is understandable as other routing software often uses the term for any point. Some seem to confuse 'Waypoint' with 'Via Point' - which is also incorrect for Zūmos. For the Garmin Zūmos, Mapsource and Basecamp the term **Waypoint** has a very precise meaning and should not be used simply to refer to a point on a route. Often a route will have no Waypoints in it at all.

A **Waypoint** is a point that is already named, defined and stored in a database. Basecamp uses a database of **Waypoints**, and most are stored with additional information - such as which symbol to display on the BaseCamp route along with address, postcode, phone number and which category it belongs to - in order to make searching easier.

A similar database of **Waypoints** is stored in the Zūmo - the personalised list of **Favourites** that can be accessed for the quick creation of routes. When **Waypoints** are transferred / imported into the Zūmo, they are added to the Zūmo's list of **Favourites**. (*Generally speaking, depending upon how it is done. More on this at the bottom of the page*)

There is no significance attached to a point in a route being a **Waypoint**. Apart from the **Start and End Points**, the Zūmo only cares about whether a routing point is a **Shaping Point** or a **Via Point**.

As you will see later, when using the BaseCamp tools to create a route, the software will 'snap' to any nearby **Waypoint** that is stored in the database, given half a chance. By landing on a known Waypoint, the route point copies the name of the Waypoint but it does not put a Waypoint into your route. (ie it does not copy all of the other information that is associated with Waypoints). Instead it becomes a **Via Point** so when navigating, the satnav will insist that you visit it. This may not be what you intended - in which case it needs to be changed to a **Shaping Point**.

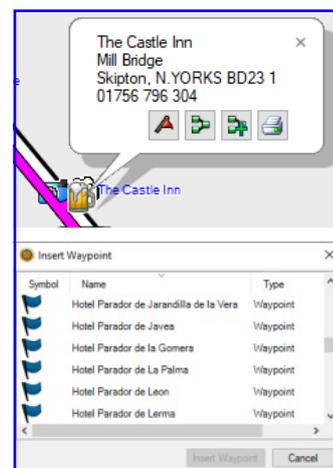
### Putting a WayPoint into a Route in Basecamp.

The only ways to get a new Waypoint into your route is by using the Waypoint Flag Tool. Or you can right click on a feature on the map (eg a hotel symbol) and select 'New Waypoint'. Sometimes you may get a 'balloon' pop up like the one in the image. Select the flag icon to add the Waypoint to your list.

Neither of these methods will add the Waypoint to your route. They only add the point to your current list. To add a Waypoint to your route, double click the route to open up its properties box. The green + icon allows any Waypoints in your list to be added to the route. Drag it to the correct position in the list of routing points.

When a Waypoint or a route containing Waypoints is transferred to the **590's** and **595's Internal Storage** those Waypoints are automatically added to the Zūmo's list of **Favourites**.

When a Waypoint or a route containing Waypoints is transferred to the **590's** and **595's SD card**, the route has to be imported before the Waypoints can be imported into the list of Favourites



### How to View the List of Favourites on the Zūmo.

**Where To → Favourites**. You may need to import some favourites to make them visible - select **Tool Menu → Import** from the Favourites screen.

### Odd Behaviour with Favourites - Waypoints that are transferred to the Zūmo.

**Waypoints** are automatically imported to the list of **Favourites** if they, or the route that contains them, are transferred from Basecamp to the Zūmo **590's** and **595's Internal Storage**. If they are transferred to SD card, the Waypoints have to be imported before they can be seen in the Zūmo's list of **Favourites**.

But there is a serious glitch. For **both devices**, if there is nothing stored in the list of Favourites, the option to import disappears. For the **590** this applies to Waypoints sent the SD card. For the **595** it applies to Waypoints sent to internal memory as well (although reports suggest that there may be a variation between countries).

This can happen if, for example all of the Favourites have been deleted from the Zūmo - the option to import disappears.

*If this happens when away from a PC, the solution is simple. Use the Zūmo map to drop a flag and save the point as a Favourite. Once the Zūmo has a favourite in its memory, it makes the import function available again and it is then possible to re-import the ones stored in files in Internal Storage and the SD Card.*

*Waypoints are locations or landmarks that are recorded and stored in your GPS unit. These are locations you may later want to return to. They may be check points on a route or significant ground features, such as a camp, a fork in a trail, or a favourite fishing spot.*

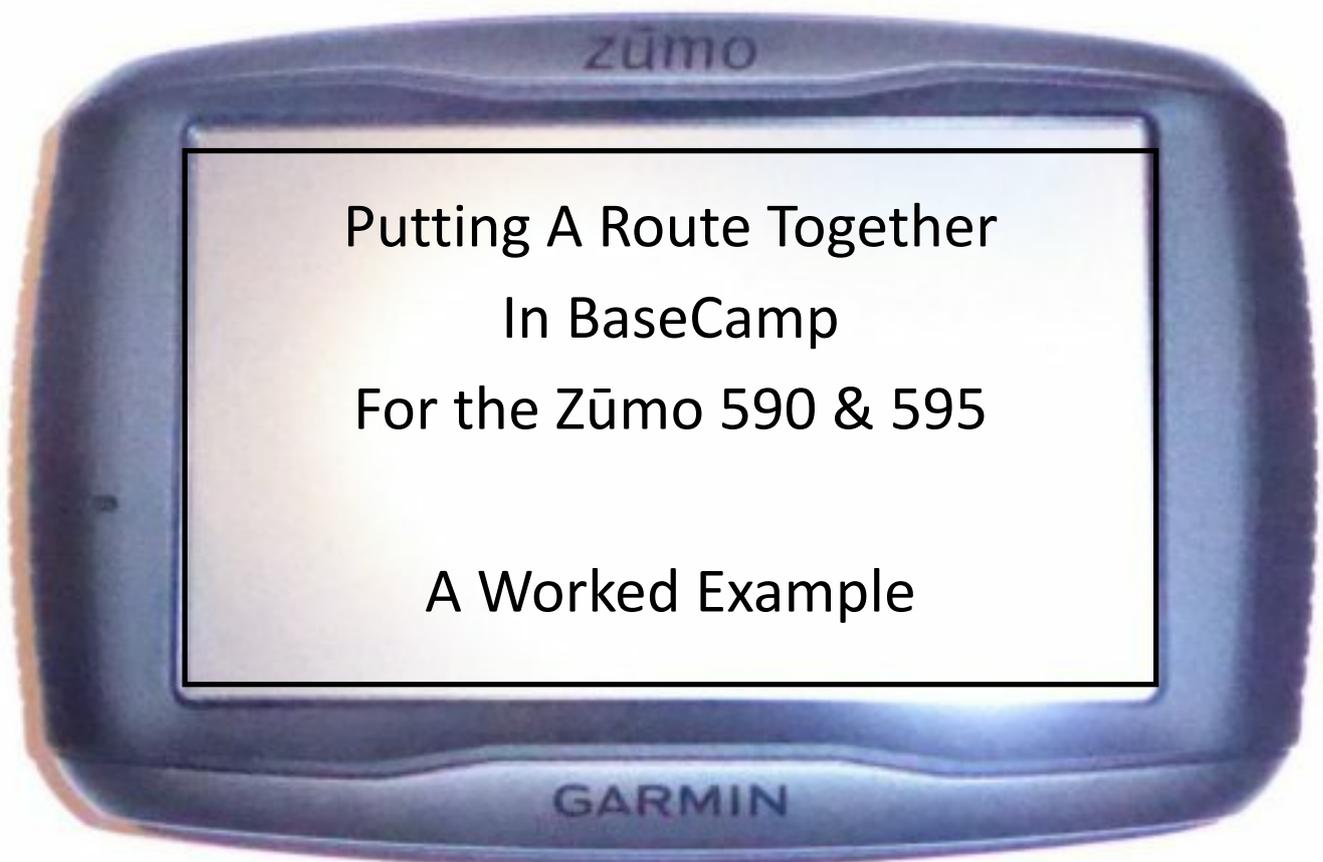
[Source - Garmin Help Website](#)

# Avoiding the Potholes

## Routing with BaseCamp for the Garmin Zūmos With the Trip Planner App

(Tried and tested with the Zūmo 590 and the 595 models.)

### Part 2



## Routing with the Trip Planner App

In this section - Where has my route and data gone ?

### Memory

3 Areas for Storing Routes. You know of only 2 ? Read on.....

### Getting the Route into the Zūmo

It's a 3 stage process. What happens and why at each stage.

### Waypoints (yes again, but different this time)

Genuine Waypoints get saved in Favourites. Or not. Why you cannot find them.

### Create a Route in Basecamp for the Zūmo.

You think you know the best way ? Well if it works for you, but I bet you never considered this information ..

### Your routes should transfer, import and load in a couple of seconds

Mine do. Here's why it sometimes takes a long time.

### Recalculating your route

What gets recalculated ? All of the route ? Some of it ?

### An Example Route

In the Basecamp route list, on the Zūmo Map, In the Zūmo route list.

### 'Ghost Points'

What the hell are 'ghost points' ?

## Part 2

# Creating a Route with Basecamp for the Trip Planner App

### A Worked Example

I make no apologies for repeating some information here. If like me you rarely read from cover to cover, but pick up documents in order to find out information, then this little section contains what you need to know, without having to refer back to another section.

In any case, I cannot stress the importance of knowing the difference between the various routing points. Owners of the Zūmo 660 will wonder what I am on about, but for the Trip Planner App on the Zūmo 590 and 595 it matters.

### Storage on the Zūmo - Three areas - SD Card, Internal Storage, and 'Active Memory'.

*The SD card and Internal Storage provide storage for routes, waypoints, music, language, keyboard, etc - arranged into folders and files. These are accessible to a PC that is connected by a USB cable. In order for the Zūmo to be able to use the information, it has to be imported to a separate area which I will call 'Active Memory'. I haven't got a clue what Garmin call it. 'Active Memory' is more limited as to what it can hold. Eg Routes and Waypoints have to be imported before they can be used, and the number of routes in there is limited to 100. You can delete them from Active Memory whenever you want - but the original data cannot be deleted by the Zūmo and the routes and waypoints are retained so that they can be imported again.*

### Two more definitions to understand:

Getting a route from Basecamp to the Zūmo is a two stage process.

#### 1 Transfer the Route

This is the process of sending the route to the satnav from BaseCamp via the USB cable. In BaseCamp the command is under **Device / Send To Device**. Details are in the reference section if you need to know them.

The term *Transfer* also applies to the Drag and Drop method of sending routes and Waypoints to the Zūmo. In this case the selected route, items, entire selection can be dropped into either of Internal Storage or Memory Card. I have found that dropping the files into 'User Data' has been much less reliable. That is just an observation - I don't know why, and I haven't investigated.

Files that have been sent by a friend also need to be transferred - but without necessarily using Basecamp.

#### 2 Import the Route

The route that has been *transferred* isn't available in the current list of trips until it has been *Imported* through Trip Planner. This takes a copy of the *transferred* route and makes it available for navigation. If necessary, the Zūmo will calculate the route using its own internal routing preferences. However, routes that are *transferred* from BaseCamp should not normally require the route to be recalculated. You can expect a few seconds of calculation, when importing - but that is organising data, not recalculating the route. If the route does get recalculated, the route will change - you may need to check out the settings described in the Reference Section.

Routes that are listed in Trip Planner are in 'Active Memory' and they can be deleted if necessary. This doesn't delete them from the list of routes that have been *transferred* to the Zūmo. They can always be *imported* again from the *transferred* files at any time. In fact, *transferred* files cannot be deleted by the Zūmo. See the reference section on how to get rid of them using a computer link.

Warning: Do not delete all of the Waypoints from the Zūmo's memory. (See the note at the end of the last section.)

#### 3 Waypoints

Any routing points that form part of the route are transferred automatically - they do not need to be transferred separately. **Waypoints** that were created with the Flag Tool in Basecamp, whether or not they form part of a route, are a special case :

Waypoints will appear in the list of Zūmo Favourites. (**Where To**→**Favourites**)

If a route with Waypoints is *transferred* to **Internal Storage**, the list of Favourites is updated immediately.

If the route with Waypoints is *transferred* to **SD card**, then the route has to be *imported*, and the Waypoints in the route have to be *imported*. Only then will the list of favourites in the Zūmo be updated.

It is essential for **Internal Storage** to contain at least one Waypoint, otherwise the Zūmo will be unable to find any Waypoints that were transferred to the memory card. (Yes, really).



## Putting A Route Together

### Step 1 - Planning - a recap on terms

Basecamp continues to evolve and at the time of revising (Feb 2024) it is at version 4.7.5. I hope that some things change for future versions, but right now there seem to be a few inconsistencies between how Basecamp treats routes and terms and how the Zūmos treat them. I am assuming that the new Trip Planner App is the way that things are moving, so it really does help to be clear about the terminology used so far. And this is because the current version of BaseCamp doesn't seem to make the same distinctions made by the Zūmo 590 & 595.

So I make no apologies for making sure that at least this document is clear about its own use of the terminology.

### Shaping Points:

- are points placed on a route which are designed to ensure that the route passes through particular locations;
- do not alert on approach or arrival - either audibly or visually;
- do not feature in the Zūmo's Trip Data displays like 'Time to Via';
- do not feature in the list from which the next destination can be selected when starting a route;
- are ignored if they lie before the 'Next Destination' selected when starting a route.
- will ensure that navigation takes you to the point - but .....
- .... are automatically skipped once you have picked up the magenta route after missing a **Shaping Point**.
- appear as blue dots on the Zūmo map and orange dots (590) on route list displays (but not in BaseCamp)
- can be switched to **Via Points** on the Zūmo and in BaseCamp

### Via Points (including Start and End Points):

- are route points designed to be key locations along your route.
- alert audibly and visually as you approach and when you arrive
- are the only route points to feature in the data display such as 'Time to Via'
- are the only route points that feature in the list: 'Select Next Destination' when starting a route
- will forever nag you to visit a missed or inaccurate **Via Point** location, unless 'Skip' is pressed
- appear as flags in the Zūmo map and on route list displays (but not necessarily in Basecamp)
- can be changed to **Shaping Points** on the Zūmo and in BaseCamp (except start and end points)
- can be selected as the Next Destination when starting a route. If the selected **Via Point** is not the one designated as the **Start Point**, then any intervening **Via Points** and **Shaping Points** are ignored - The Zūmo will calculate a new route to navigate you to the chosen **Via Point**, after which it will follow the stored route.

### Waypoints

A term that is often used incorrectly by many. Garmin's definition has been consistent, however:

*"Waypoints are locations or landmarks worth recording and storing in your GPS. These are locations you may later want to return to."*

**Waypoints** are locations that are stored in the database and are given a name, and may have other details such as phone number, address..... You can add your own Waypoints to the database, as well as Points of Interest (POI). Some companies often provide POI files of the locations of their premises.

**Waypoints** may be put into routes, but the terms 'Via' and 'Shaping' are used for route points. Not Waypoint.

When talking about any point on a route, it is more useful to refer to points specifically as either **Shaping Points** or **Via Points** - because those terms describe how they behave when navigating. A **Waypoint** placed in a route can be either of these. The only other types of point on a route are **Start Point** and **Finish Point**

**Waypoints** can be stored in Zūmo's list of Favourites. This happens automatically when the route is transferred to Internal Storage. If transferred to SD Card, the Waypoints have to be imported to Favourites.

### In BaseCamp

When dropping a routing point onto the map it will probably jump to a slightly different location. If it lands on a known location (a **Waypoint**), it becomes an alerting point by default (a **Via Point**). If it lands on an unknown spot, it become non alerting by default (a **Shaping Point**).

*Although the name given by Basecamp to a routing point can be changed, the Zūmo seems to want to use the old name in routes, even though the changed name shows up correctly in Favourites. Sometimes an edited name transfers to the Zūmo Ok, sometimes not. But if you create a Waypoint to use as a Shape or Via Point, the Zūmos always keep the given name.*

*Use your own Waypoints - it is easier, less hassle and more consistent - and the Zūmo retains the name given in Basecamp.*

## Putting A Route Together

### Step 2 - Create Route in BaseCamp

#### Method 1 - Create The List of Waypoints First.

Create a *List Folder* and a *List* and create all of the **Waypoints** that you are likely to want in your route with the Waypoint (flag) tool. To create the route from your list of **Waypoints**, select each in turn from the list in the order that you want them (using CTRL & Click on a PC). Right click on your selected points and from the drop down menu, select 'Create Route From Selected Waypoints'.

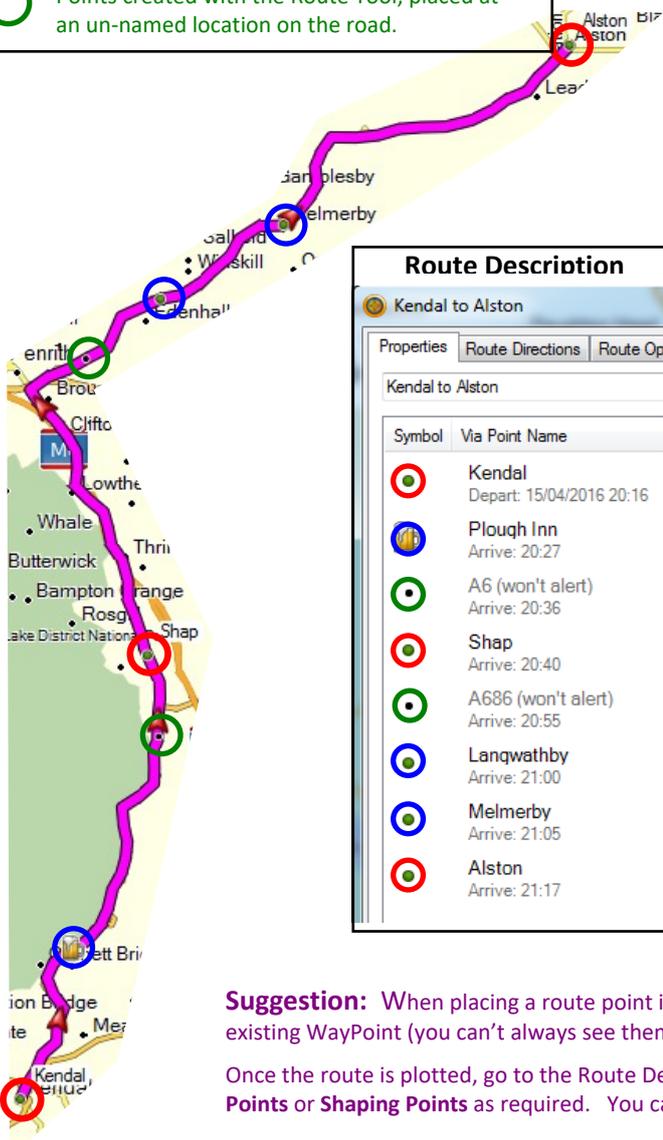
In this example, the route consists of just 3 **Waypoints**, set by default as **Via Points**. They can be changed to **Shaping Points** later, if you wish. The other points were created after the route had been created from the Waypoints. The Insert Tool was used to force the route onto particular roads.

#### Method 2 - Use the Route Tool or the Insert Tool

These tools allow you to build or modify a route by pointing and clicking points along the route. If where you click happens to be in your database of stored **WayPoints** or **Points of Interest**, it will appear as a **Via Point** in your route (alerting). The name can be changed in Basecamp, but the old name will appear in the Zūmo route.

Other points (eg Road names) default to Shaping Points (non alerting). Sometimes these names can be changed, and will appear OK in the Zūmo route. *(But usually, changed names other than Waypoint names are not shown in the Zūmo.)*

- Waypoints created with the Flag Tool.
- Points created with the Route Tool, placed on an existing named POI
- Points created with the Route Tool, placed at an un-named location on the road.



#### Route Description

Kendal to Alston

Properties | Route Directions | Route Op

Kendal to Alston

Symbol	Via Point Name
<span style="color: red;">○</span>	Kendal Depart: 15/04/2016 20:16
<span style="color: blue;">○</span>	Plough Inn Arrive: 20:27
<span style="color: green;">○</span>	A6 (won't alert) Arrive: 20:36
<span style="color: red;">○</span>	Shap Arrive: 20:40
<span style="color: green;">○</span>	A686 (won't alert) Arrive: 20:55
<span style="color: blue;">○</span>	Lanqwithby Arrive: 21:00
<span style="color: blue;">○</span>	Melmerby Arrive: 21:05
<span style="color: red;">○</span>	Alston Arrive: 21:17

The Route Description image shown here is displayed whenever the route is double clicked.

I have added the coloured circles for emphasis.

Note that a column in the table is headed 'Via Point Name'. This is a remnant of earlier versions of the software. The columns shows both Via Points and Shaping Points.

The symbols used in this table are not used by the Zūmo.

Only 3 of the points were created with the Waypoint 'Flag' tool - Kendal, Shap and Alston - shown with red circles. The route was created initially by Basecamp using just these 3 Waypoints.

Note that the blue and green circled points were all created with the Insert Tool, after the initial 3 point route had been created:

**The blue ones** were clicked where there was an existing Point of Interest (a village name). These have become **Via Points**.

**The green ones** have just been placed on a road. These show as black dots on the map and have become **Shaping Points**.

It is possible to change the type of point in the Route Description by right clicking the name and selecting 'Alert on Arrival' to make it a **Via Point**, or selecting 'Don't Alert on Arrival (shaping point)' to make it into a **Shaping Point**.

It makes this part of the process rather hit and miss - so get the points placed and then see the suggestion to change their properties afterwards.

Note that even if you change the type of point in Basecamp, the displayed symbol stays as it was !

**Suggestion:** When placing a route point in Basecamp, it is rather hit and miss as to whether or not it falls on an existing WayPoint (you can't always see them).

Once the route is plotted, go to the Route Description (above) and use that to change the route points to be **Via Points** or **Shaping Points** as required. You can set multiple points at the same time.

## Putting A Route Together

### Step 3 - Before Transferring Your Route - Understand 'Ghost Points'

'Ghost Point' is **my** word for the type of point that plays a very important part in *transferring* routes from BaseCamp to your Zūmo - no matter which model of Zūmo you have. The correct term for these is **Garmin Route Point Extensions**. BaseCamp and Mapsource use them in order to ensure that the route seen on BaseCamp is **exactly** what you get in your Zūmo. This is regardless of any different routing preferences in the Zūmo.

You cannot see *Ghost Points*, but we can prove that they exist by converting an existing route to a track. Every point in the route, be it a **Shaping Point**, a **Via Point** or a '*Ghost Point*' is converted to a track point, and these points can be seen on a track in Basecamp as small white circles..

On the left is a BaseCamp image of a small section of the route from Kendal to Alston from the previous pages - converted to a track. The **Via Point** at Shap is shown, but so are a large number of **Track Points** which have been converted directly from the '*Ghost Points*' in the original route. I have verified this by looking at the details of the exported GPX files. In total, for this single 8 point route, there are 855 '*Ghost Points*' which define the entire route precisely.

When any route is *transferred* to the Zūmo and then *imported* for navigation, the Zūmo will navigate from one *ghost point* to the next. They are so close together, that there is no way that the Zūmo is able to create a different route between adjacent points. It is forced to follow the route **exactly** as it appeared in Basecamp.

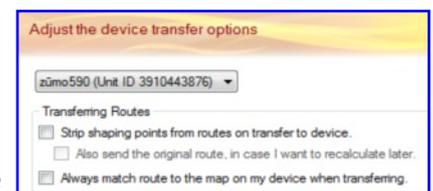
However, under some circumstances the route may be re-calculated after being *transferred* or *imported* into the Zūmo. If this happens then **the Ghost Points will be lost**. There is a page in the reference section to help to find out whether or not this is happening, and tips on how to prevent it.

#### 'Must Haves' to ensure the route gets transferred correctly.

**Ensure the Map in the Zūmo is the same as the one in Basecamp** - and make sure any others you may have or unticked on the Zūmo. If is not, then the route will always re-calculate on loading. It takes ages.

#### Ensure Basecamp Options are not the culprit.

Hidden away in **Edit / Options / Device Transfer** is this little dialog box (on the right). Untick 'Strip shaping points', and untick 'Always match the route to the map'.



#### Re-calculating when Riding

If you deviate from the plotted magenta route when riding, then the Zūmo will discard the Ghost Points for the current section and re-calculate your route to get you to the next route point (Via or Shaping). It will discard them and use the *stored routing preferences* \*\* to do this.

If you have Auto Recalculation turned off, (or if you tell it not to recalculate when prompted), the magenta route will stay where it is and you are on your own until you rejoin the magenta line. If you have by-passed a **Via Point** while 'going solo' the Zūmo will attempt to take you back to it when you rejoin the route. Otherwise it will carry on in the right direction.

*How do you know if you have passed a Via Point while being away from the route ? Well one give-away is that it will take you in the wrong direction when you rejoin. Use the Skip button. Otherwise it can be very difficult. Prudent use of limited number of Via Points and careful naming is encouraged. I use them for obvious stopping points on the main route.*

#### Suggestion. Check that your Zūmo doesn't change your Basecamp route

Try the experiment described in the reference section with the short A to B route but with a massive detour consisting of shaping points. If this doesn't work, then every route that you ever *transfer* in the future will be recalculated on transfer / import.

**\*\* Stored Routing Preferences.** *By this I mean what settings the Zūmo uses to re-calculate its route.*

*Both the 590 and the 595 use the Transportation Mode that comes from the Basecamp Profile (eg Car, Motorcycle, Off Road).*

*The Zūmo 590 uses the Routing Preferences set in the Basecamp Profile (eg Faster Time, Shorter Distance, Off Road).*

*The Zūmo 595 ignores the Routes Routing Preferences from the Basecamp Profile and instead uses the Calculation Mode that is set in the Zūmo for the current vehicle.*

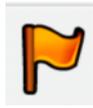
# Putting A Route Together

## Step 4 - After Transferring - Import and Check the Route

The route on the previous page has now been *transferred* to the Zūmo, and *Imported* into the Trip Planner.

Look at how the original Basecamp Route (right) compares to the Zūmo route and map (below left and right). Note the route is from south to north.

 Note how the BaseCamp “won’t alert” route points in the Route Description (opposite right) are displayed as the **Shaping Point** symbol on the Zūmo Screens. (A6 and A686, below left and right)  
*The 595 uses a blue circle for Shaping Points*

 Note how the points that are not labelled as “won’t alert” in the Route Description are displayed as the **Via Point** flag symbol on the Zūmo screens (below left and right)

The map below shows the route displayed on the Zūmo screen. The flags and circles define the **Via Points** and the **Shaping Points** respectively.

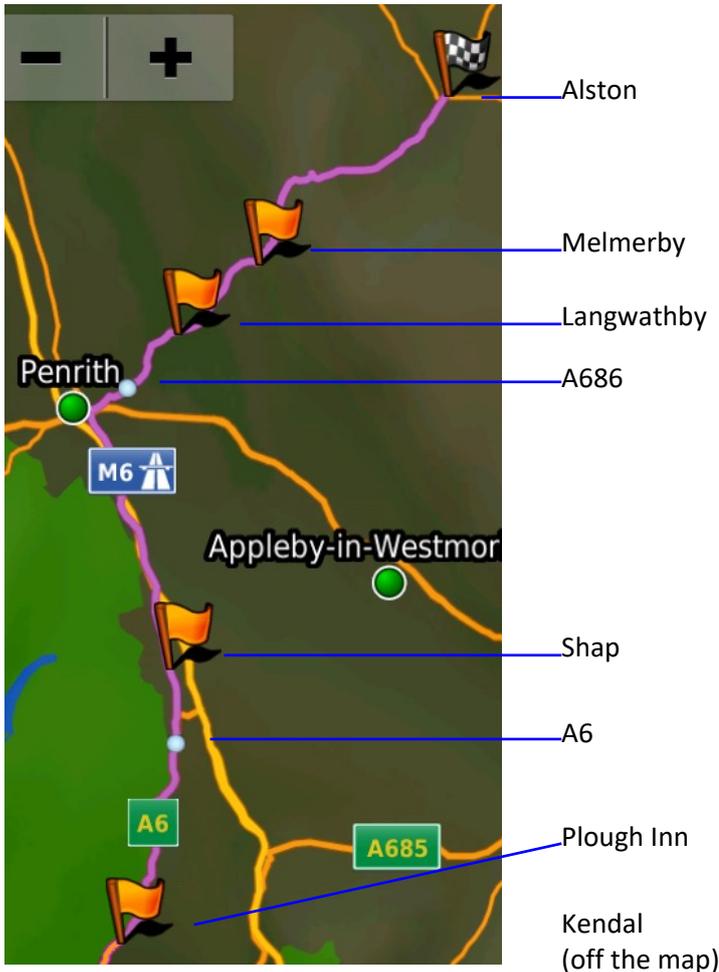
Interesting that the start time and date get transferred in the route description tables, but the timings for the route are calculated differently for the Zūmo. The Zūmo is wrong and I don’t know why - the trip takes about an hour. I have deleted my history so it has no speed information to work with. Perhaps that is the problem !

### Route Description - BaseCamp

Symbol	Via Point Name
●	Kendal <u>Depart: 01/05/2016 10:00</u>
🍺	Plough Inn Arrive: 10:05
●	A6 (won't alert) Arrive: 10:14
●	Shap Arrive: 10:18
●	A686 (won't alert) Arrive: 10:35
●	Langwathby Arrive: 10:40
●	Melmerby Arrive: 10:46
●	Alston Arrive: 10:58

### Map - Zūmo

*Note that the route runs south to north*



### Route Description - Zūmo

🚩	Kendal 1/5/2016 10:00	
	4.5 <sup>mi</sup> / 10 min	
🚩	Plough Inn 1/5/2016 10:10	
	11 <sup>mi</sup> / 20 min	
⦿	A6	
	3.1 <sup>mi</sup> / 10 min	
🚩	Shap 1/5/2016 10:30	
	14 <sup>mi</sup> / 25 min	
⦿	A686	
🚩	Langwathby 1/5/2016 10:55	
	4.1 <sup>mi</sup> / 10 min	
🚩	Melmerby 1/5/2016 11:05	
	11 <sup>mi</sup> / 15 min	
🚩	Alston 1/5/2016 11:20	

**Kendal to Alston**

🏍️ Total Distance: 44 mi

Travel Time: 1 hr 20 min

[Map](#)

[Go!](#)

*The screen images are taken from a Zūmo 590. The 595 display is very similar, apart from the shading and the colours.*

*The Zūmo Route description on the right shows the scheduled date and time for this route.*

*The Zūmo 595 has dispensed with the option to set a scheduled date for the trip, so shows only the ETA for each Via Point flag.*

## Update to Routing Behaviour

### Regarding Recalculations

For a long time, Garmin has ensured that the route transferred from Basecamp to the Zūmo is an exact match, and it does this by inserting hundreds of route point extensions (what I call 'ghost points').

However, it seems that when riding, if the route has to perform a recalculation, it will recalculate the entire route - not just the current section of route. Obviously, the current section will be completely different if you have wandered off the intended route, and the satnav will always try to navigate you to the route point to which it was aiming before the deviation, or to the point after that if you pressed 'Skip'.

But it also recalculates all of the other sections. It will probably come up with a similar route to the one from Basecamp - but during recalculation it may also have the opportunity to bring other factors into the equation - factors such as:

- TrafficTrends (on the 590)
- Live Traffic from Smartphone Link
- Roadworks from Smartphone Link
- Your riding trends on the 590.
- Seasonal Road Closures if it happens to recalculate on the day of the change.

At the time of writing (14 May 2020), I am unsure which of these affect the route to be calculated or precisely when it does it. It is educated guesswork and work in progress.

# Avoiding the Potholes

## Routing with BaseCamp for the Garmin Zūmos With the Trip Planner App

Tried and tested with the Zūmo 590 and 595



### Part 3

This section has less to do with routing and more to do with how the Zūmo interacts with Basecamp:

## Reference Section

**A Summary of stuff so far. No explanations. Just facts.**

### **How to use different trip databases with BaseCamp**

Keeping your eggs in separate baskets

### **How to configure Basecamp to transfer routes correctly**

Why routes get altered before they ever reach your Zūmo. How to test and fix the problem.

### **Transferring routes to Internal Storage and to Memory Card - the differences**

Internal Memory is best. Many disagree. They are wrong ! (but only in my opinion).

### **Using Trip Logs and clearing out unwanted Zūmo trips, routes and favourites**

Wiping your Zūmo. Warning - this will permanently delete routes and data.

### **Zūmo's Ghost Points and how to use them**

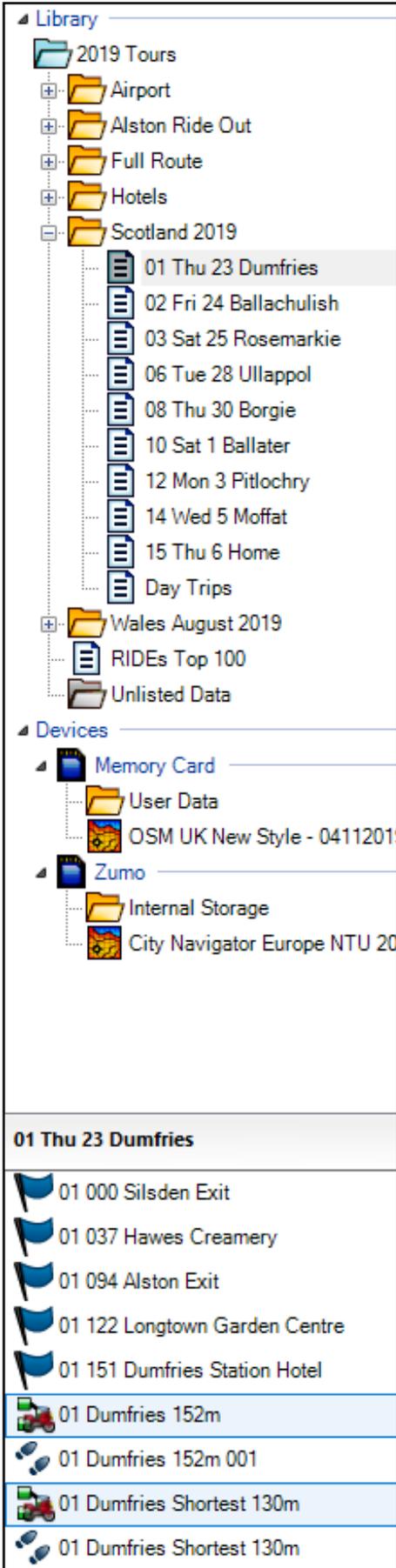
You can't create Ghost Points, you cant do anything with them. So what am I on about ....

### **Links to Videos**

A series of You Tube video clips using Basecamp in order to prepare routes.

# Transferring Routes to the Zūmo 590 or 595

## Sending files from Basecamp to the Zūmo.



The image on the left represents one of my BaseCamp databases. I have a number of yellow folders, one of which - Scotland 2019 - I have expanded so that I can see the lists that I have created inside. I have one list for each day of the trip and they are named with a 2 digit sequence number, followed by the day, date and destination.

01 Thu 23 Dumfries is highlighted.

Down at the bottom, the contents of the 01 Dumfries list is displayed, and I have selected two different routes to Dumfries that I wish to transfer to the Zūmo. They are highlighted individually by holding down the CTRL key as I click on each item to select.

I want to transfer them to Internal Storage which can be done in a couple of ways:

- Drag them up to the Zūmo Device
- Select the menu item **Device**→**Send to Device**→**Send Selection to Device** and then select Zūmo or Memory Card

Which ever method is used is down to personal preference. It doesn't matter.

What does matter is that the progress bar is monitored and the arrow in a yellow circle on the folder Internal Storage folder is replaced with a tick in a green circle. If that doesn't happen, then the files have not been transferred.



Sometimes a failure of this sort is as a result of the satnav taking time to communicate with BaseCamp - especially if it is loading maps from the satnav, it can take a few minutes between loading Basecamp, and it being ready to communicate. No warning is given - it is up to you to check that the transfer has been successful as described above.

Files can be transferred to the SD card in a similar way.

### What gets transferred?

Using the image of my database on the left as an example:

**Select** **2019 Tours** to transfer everything to the Zūmo - Routes, tracks, Waypoints etc. Everything in every list in every folder.

Select **Scotland 2019** to transfer everything that is within that folder. ie the contents of all 10 lists .

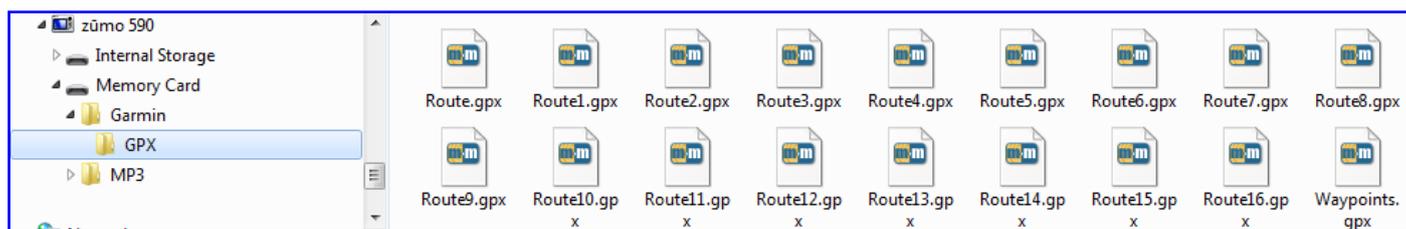
Select a list - eg **01 Thu 23 Dumfries** - to transfer all of the entries for that particular section of the route that are stored in the list.

Select individual items - (eg **01 Dumfries 152m** - in this case a route. This will transfer any Waypoints, Via Points and Shaping Points that form part of the route. There is no need to transfer the route points separately. This can be a convenient way of ignoring extra points in the a list that you may have created but not used.

Select extra Waypoints (eg **01 094 Alston Exit** which you want saving as Favourites. There is no need to do this if they form part of a route, but if you want them in the satnav just in case, then transfer any Waypoints that you need. Waypoints must have been created with the flag tool, otherwise they are not Waypoints.

## Transferring a Route to the Memory Card

If the same operation is carried out but data is sent to the Memory Card instead of to Internal Storage, then each route is saved as a separate gpx file in the **Garmin/GPX** folder. As in the image below:



The Shaping Points and Via Points are all save in a file called **Waypoints.gpx**. Waypoints for subsequent route transfers are saved in Waypoints0.gpx, Waypoints1.gpx, etc

## Importing Routes

A route needs to be *imported* before it can be used by the Zūmo for navigation. You can have as many routes as will fit in Internal Storage, but there is a limit to the number of routes that can be *imported* for immediate selection. That's OK - deleting an imported route from the Zūmo does not delete the gpx file that was *transferred*, so you can delete routes from the Zūmo and *import* new ones if you hit the limit. As long as you have not deleted the files that contain the transferred routes. *Actually, it is not possible to delete routes that have been transferred using the Zūmo screen, it can only be done using a file explorer on your PC with the Zūmo connected by USB cable.*

On *transferring* routes to the Zūmo 590 or 595, its subsequent behaviour depends upon whether the route was placed in Internal Storage or on the SD Card.

- If the route was put into **Internal Storage**, then when the unit is turned on, it will alert you to the fact that new routes have been found. If you select the option to *import* them now, it will give a list of all of the newly found routes so that you can choose which ones to import.
- If the route was put onto the **SD card**, no alert is given that there are new routes.
- If there are new routes in both locations - ie Internal Storage AND Memory card, then the alert is displayed when the unit is turned on, but it shows only the ones that are in Internal Storage as being available for import, when you say 'Yes' to the prompt to 'Import them now?'

I usually dismiss this prompt because of this anomaly, and prefer to open up the Trip Planner App and select **Import** from the Tool menu in the top left corner. This gives a complete list of routes - including the ones that have already been *imported*, and including all of the ones that are on the Memory Card. There is no distinction, but it shows the routes in **Internal Storage** at the top of the list and routes on the **Memory Card** are shown at the bottom.

Its also possible to *transfer* the same route twice, in which case the route will appear twice in the list with a sequence number added to the name. Its not a bad idea to keep the name of the route to just a few characters, otherwise this sequence number cannot be seen.

Note that routes on the Memory Card must be in the folder **Garmin/GPX** - and this name is case sensitive. Basecamp will create this folder automatically, but if you are given a GPX file or you have prepared routes using different software, this is where it needs to be saved. If you create the folder name and use the wrong case of letters, the Zūmo will not find the route. The folder has to be named '**GPX**' using 3 capital letters.

## Zūmo 590 and 595 Storage differences.

I mention this a little later on, but no harm in putting it here. I know people will dip into sections of this document rather than read through the whole lot.

The Zūmo **590** and Zūmo **595** stores routes and route points imported into Internal Storage altogether in a file called **temp.gpx** which is in the GPX folder of Internal Storage.

*Previously, I had experimented with using 595 software on my 590. This dispensed with the use of temp.gpx, and instead adopted the same structure as is used for files stored on the SD card - as described above, and shown in the diagram - one file for each route and another file for the route points that are associated with each route.*

*These files are in the Garmin/GPX folder in Internal Storage - just like on the SD Card.*

*I now have a genuine 590 and a genuine 595.*

## Clearing Out Old Routes and Data.

A look at the files and folders on the Zūmo 590 and 595.

When my Zūmo first arrived, I plugged the (very short) cable into the mini USB socket and connected it to the USB on my computer. I was expecting to see a couple of drive letters in Windows Explorer. But got the above display instead.



This is MTP (Media Transfer Protocol) and the Zūmo has control of the connection. This means that like your other media devices, you can unplug the USB cable when transfer is complete without losing data.

If you prefer to see drive letters, you can change the settings for the Zūmo to MSS mode, which makes the Zūmo's memory appear and behave as attached memory devices. To do this, navigate to **Maps→Speed** (bottom left) and hold your finger on the large digit speedometer at the top centre of the screen for 5-10 seconds. Select **Configuration & Settings→MTP Settings** and select **Mass Storage** or **Mass Storage Single Session**. However, in this mode, you must 'eject' the USB connection before disconnecting the cable. Otherwise you will lose data.

### Locating the Route Files

There are two locations where the relevant information may be found. One is in **Internal Storage** in a folder called **GPX**. In here are a number of files as shown below. Of note are the track logs. These are held in the **CurrentTrackLog.gpx** file until such a time as the file becomes too large when it is transferred to the Archive Folder and given a sequential number. The Archive folder keeps files for a period of time after which they are deleted. My Archive currently contains 20 files from 7.gpx to 26.gpx. Files 1.gpx to 6.gpx have disappeared, leaving just the latest 20 files.

If like me you wish to keep these files, you need to do it before the files get over-written. I make a point of copying every couple of months - but it depends how much you use your satnav. The GPX log files can be loaded into Basecamp and viewed. You can obtain elevation and speed profiles and find out where you were at a particular time and how fast you were going.

Name	Type	Size
Archive	File folder	
Current.gpx	GPS Exchange	1,470 KB
CurrentTrackLog.gpx	GPS Exchange	1,967 KB
Position.gpx	GPS Exchange	1 KB
temp.gpx	GPS Exchange	2,756 KB

**On the Zūmo 590:** **temp.gpx** contains the routes and routing points that have been *transferred* to the Zūmo.

Although it is possible to delete routes, Favourites and History from the Zūmo itself, whenever you go to *import* a route, all of the files that you have *transferred* previously are still there. Once transferred, the Zūmo has no way of deleting the routes that it has received. Unlike imported routes, favourites, history, which can be deleted using the Tools menu on the relevant display. The only way of getting rid of the transferred routes and routing points is to connect the Zūmo to the USB cable and using a File Explorer from your computer.

On the **590 and 595**, deleting **/GPX/temp.gpx** will get rid of them.

On the **590 with 595 software**, deleting the contents of **/Garmin/GPX/** will remove them from the Zūmo.

On the **595**, deleting **/GPX/Current.gpx** will get rid of all of the imported items (but these can be deleted on the Zūmo itself)

If you delete **Current.gpx**, the Zūmo puts a copy back on restart - presumably from a slightly out of date hidden copy, so it is usually more useful to delete imported data first, using the Tools menu.

## Removing all routes on Zūmo

### A Brief Summary

#### Removing Imported Routes / Trips

**590:** On the Zūmo Screen → Apps / Trip Planner / 3 Bar Menu / Delete / Select All / Delete

**595:** On the Zūmo Screen → Apps / Trip Planner / Spanner / Delete / Select All / Delete

#### Removing Favourite and Historic Route Points

**590:** On the Zūmo Screen: **Where To?** → Favourites → 3 Bar Menu → Delete

OR **Where To?** → History → 3 Bar Menu → Delete

**595:** On the Zūmo Screen: **Where To?** → Favourites → Spanner → Delete

OR **Where To?** → History → Spanner → Delete

#### Check the Existence of Previously Imported Routes / Trips

**590:** On the Zūmo Screen : **Apps** → Trip Planner → 3 Bar Menu → Import

**595:** On the Zūmo Screen : **Apps** → Trip Planner → Spanner → Import

If there are routes listed and you wish to delete them then follow these instruction:

#### Removing Previously Transferred Routes / Trips

You need to connect the Zūmo to the PC using the USB port and wait for it to be recognised

**590 and 595:** Navigate to **Internal Storage** → GPX then Delete **temp.gpx** and **Current.gpx**

**590 with 595 software:** Navigate to **Internal Storage** → **Garmin/GPX** then Delete **the entire folder contents**.  
Delete **GPX/Current.gpx**

You may have transferred routes to the memory card. Delete GPX files from the **Memory Card/GPX** folder

Turn the Zūmo off and let it restart. Best to turn it off fully (ie hold the button until the 'Turn Off Device?'

Message appears. Say Yes. Normally, the Zūmo assumes that Current will exist, and you have just deleted it. Restarting the Zūmo will create a new, empty Current.gpx.

## Track Log

### Keeping a record of your long trip

As described on the previous page, the \GPX\Archive folder keeps only the last 20 files, after which earlier files are deleted. The \GPX\CurrentTrackLog.gpx stores the currently active track log, with the most recent trips, before it becomes full and it becomes an archive file. It is easy to use a File Explorer to transfer these gpx file to a computer.

On the Zūmos, the track log is available to view from the **Apps** → **Where I've Been** icon. It is also possible to save the contents of the Current TrackLog to the SD Card.

#### To save the Current Track Log to Internal Storage

**On the Zūmo Screen :** **Apps** → Tracks → 'Active' Side Menu

The log files are shown with their date. You can save all, or save them one at a time. I will save all of them.

Select For the **590:** **All Segments** → 3 Bar Menu → Save Track → Give it a name → Save

Select For the **595:** **All Segments** → Spanner → Save Track → Give it a name → Save

The track logs are all stored on one track - but it is better than nothing.

#### Now to get it onto the memory card

**590:** On the Zūmo Screen: **Apps** → Tracks → 'Saved' Side Menu → 3 Bar Menu → Share

**595:** On the Zūmo Screen: **Apps** → Tracks → 'Saved' Side Menu → Spanner → Share

Choose **Memory Card** → Select the track(s) you wish to copy across to the card → Done

#### And then delete the track log that was first saved to Internal Storage

**590:** On the Zūmo Screen: **Apps** → Tracks → 'Saved' Side Menu → 3-bar menu → Delete → Select (All) → Delete

**595:** On the Zūmo Screen: **Apps** → Tracks → 'Saved' Side Menu → Spanner → Delete → Select (All) → Delete

The files will still be on the memory card in **Memory Card/Garmin/GPX/Shared\_tracks.gpx**

Of course, most trip logs will be available in the archive, but much longer trips may require more than 20 archive files, in which case the lower numbered files will be deleted. If you want to keep them, save them frequently.

## Ignoring a Route Point When Riding

### What Happens When You Miss Out A Shape Point or a Via Point.

By 'Ignoring a Route Point', I mean that when driving or riding along, the Zūmo is telling you to take a particular turning and you decide not to go that way, for whatever reason.

No matter what type of point the satnav is trying to take you to (**Shaping** or **Via**), the Zūmo will do the same thing - depending upon the settings that you have selected for recalculation.

In any situation, the **Skip** button will stop the Zūmo navigating to the next routing point, and go to the following one.

#### If Automatic Recalculation is set:

The Zūmo will automatically recalculate a new route up to the next **Shaping Point** or **Via Point** in the route list. To do this, it uses the Zūmo's **Stored Routing Preferences \*\*** for the route's Transportation Mode. There is no announcement and route that the Zūmo had been following for that section will be replaced by this new route. But only the current section of the route is recalculated - ie up to the next **Shaping** or **Via Point**.

#### If Recalculation is Turned Off:

The Zūmo will do nothing if you go off route. The plotted magenta route will still be visible if you zoom out far enough, but no attempt is made to re-direct you to any point that is on the route that you were following.

If you navigate your own way towards the magenta route, then as soon as you intersect it, the Zūmo will begin navigation again, but where it takes you when you rejoin the route will depend on whether or not you missed a Via Point and are now on the route after that Point.

- If you have missed a Via Point, the Zūmo will give you instructions to get you back to that point.
- The **Zūmo 595** will try twice to get you to go back to the missed Via Point (or Shaping Point). After that it displays a message asking if you wish to Skip the point (and gives you the name of the point).
- If you have not missed a **Via Point**, then the Zūmo will navigate you in the correct direction to the next route point - it doesn't care about missed Shaping Points if you are back on the magenta route.

#### If Prompted Recalculation is Selected:

This is probably the best option to select until you get to know what the Zūmo is doing. A message will appear on the screen and ask you if you want it to recalculate - (ie the route from your present off route to the next route point (**Shaping** or **Via**)). If you say 'Yes', it uses the Zūmo's **Stored Routing Preferences \*\*** to recalculate a route - but see section 4.

#### If recalculation is turned off, or you select 'No' when prompted to recalculate

Basically, you're on your own. Once you rejoin the route the satnav will try to take you from there, or it might take you back to a Via Point that you have missed. Problem is, you do not know. There are sensible ways out of this. Reload the route is one, and start from a known Via Point as the Next Destination.

If you have a **Zūmo 595** and you continue, then the Skip button becomes quite useful. It gives the name of the route point that it is trying to take you to. Also if you ignore the instruction to go back twice, it throws up a prompt on the screen - Do you want to skip <named route point>.

But the best solution is not to end up in this situation in the first place. Shaping points are quite forgiving in such situations, not so Via Points. But Via Point are useful for major stops.

***Suggestion.** Use **Via Points** to separate stages of a trip, and place them on the route away from a stop. They are useful for displaying data about a journey on the screen, and for the situations where you have to restart a route and select the next Via point as a destination. But have too many that are close together an it easy easy to lose track of where you are in relation to the **Via Points**.*

*It helps if **Via Points** are sensibly named so that you can work out where they are in relation to where you are. For unknown areas, once a route is finished, I add a 3 digit figure to the front of the name to represent the mileage from the start of the trip. I can then compare this with the bike's trip meter. (nb Only true **Waypoints** retain their altered name in the Zūmo).*

*You wouldn't do it for local trips - but in a place where the names are meaningless to you, it can help. (Did you know that Spanish motorway junctions are numbered in km from the start ? Very useful. Its the same logic)*

**\*\* Stored Routing Preferences.** By this I mean what settings the Zūmo uses to re-calculate its route.

*Both the 590 and the 595 use the Transportation Mode that comes from the Basecamp Profile (eg Car, Motorcycle, Off Road).*

*The Zūmo 590 uses the Routing Preferences set in the Basecamp Profile (eg Faster Time, Shorter Distance, Off Road).*

*The Zūmo 595 ignores the Routes Routing Preferences from the Basecamp Profile and instead uses the Calculation Mode that is set in the Zūmo for the current vehicle.*

# BaseCamp Database

## Organising your stuff

BaseCamp has a long list of modifications and bug fixes that it has introduced since the first release. The latest (as of 09/02/20) is version 4.7.1, obtainable from [here](#), along with the list of all of the changes. Riveting reading. Something else to do if you happen to be waiting for paint to dry.

But one feature that crept in a few years ago is worth knowing about. You can specify where on your hard disk you wish to have BaseCamp store its database of your routes.

So Basecamp now gives you the opportunity to set up a number of different databases, each one entirely separate from the others - so you needn't have your planned tour of Europe mixed in with your trip through the Dales. They can be completely isolated from each other in separate folders or on different hard disk drives.

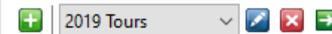
## Where is this feature?

In the **Edit Menu**, click **Options** and then click the '**General**' gear icon.



### Database Options

Select a database. A restart will be required after switching to a different database.



In this 'Database Options' section the icons allow the user to perform the actions shown in the table on the right. The drop down list displays a list of all of the database that it knows about - ie the ones that you have used.

-  Allows the creation of a new database.
-  Allows the database name and location to be edited
-  Delete the database
-  Switch to a newly selected database (Basecamp restarts)

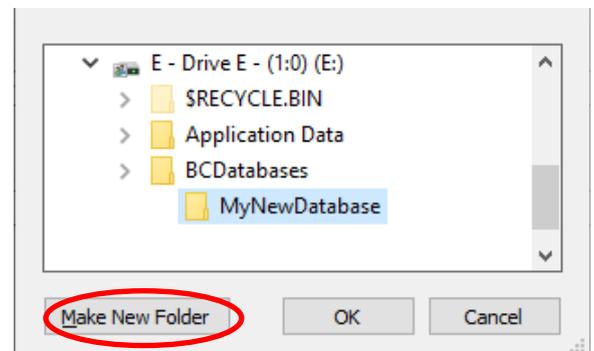
## Deleting a Database

Removes the database from the list. It does not appear to delete the actual database - as database files may contain more than one database.

## Adding a New Database

First you need to create folder in which to store your databases. Within that, I prefer to have a sub folder for a group of routes - say for a year, or for a single long trip, although you don't have to do this.

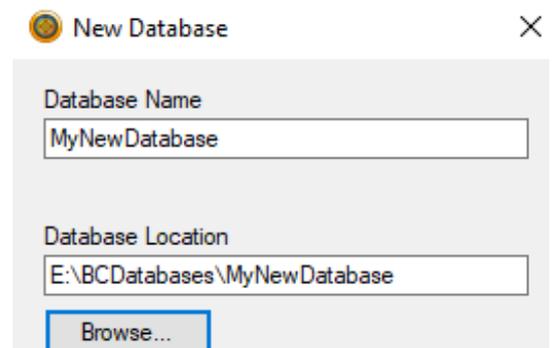
My folder is on a separate hard drive in **E:\BCDatabases**, So I navigate to that and select 'Make a New Folder', and I name it exactly the same as the name I shall use for my Database. That way I know which Windows Folder relates to which database. (Image, bottom right).



## Moving a Database

It is possible to copy a database from one location to another:

- *Make sure that you have a folder in which all of your databases will be stored (eg BCDatabases, as before).*
- *In Basecamp, create a new database. Give the database **almost** the same name as the one you want to move, and select 'Make New Folder' with exactly the same name. Exit out of the 'Edit Options' Dialogue and BC will want to restart. Let it.*
- *Exit and Close Basecamp.*
- *In your file explorer, locate your new MyNewDatabase folder. If there is a folder in there called 'Database', delete it and all of its contents (its Ok, Basecamp just created it). You are going to paste in the folder for your old Database instead.*
- *Locate the folder containing your old database and navigate to the 'Database' folder. Copy this folder. **Back to the MyNewDatabase folder** and paste the Database folder in the location where you deleted your previous one.*
- *Restart Basecamp. It will start with your newly created database name which contains your moved database contents.*
- *The new name will be in the drop down list. So will the old name - which is why you named it slightly differently.*



# Some Simple Checks

...to verify what is happening

## Checking that a route gets transferred correctly

With a large route it isn't easy to spot if the Zūmo has recalculated the route which you have transferred and Imported into Trip Planner. This simple check with a small route will help you to make sure that BaseCamp and Zūmo are not about to mess up all of your hard planning.

- 1 Create a simple route on BaseCamp between two points that are just a mile or two apart. Make their positions relative to each other very obvious - say East and West of each other. See Fig 1.



- 2 Add a couple of extra points using the insert tool to make the route takes an obvious detour to the north. If you have used the insert tool, then these points should be **Shaping Points**, but that isn't guaranteed - if a point lands on a known **Waypoint** such as a village, then it will become a **Via Point**. I've circled 3 added points - see Fig 2.

Symbol	Via Point Name	3
•	A65 Depart: 29/04/2016 06:09	
●	Coniston Cold Arrive: 06:16	
•	A651 (won't alert) Arrive: 06:22	
●	Newsholme Arrive: 06:28	
●	Gisburn Arrive: 06:32	

Symbol	Via Point Name	4
•	A65 Depart: 29/04/2016 06:09	
•	Coniston Cold (won't alert) Arrive: 06:16	
•	A651 (won't alert) Arrive: 06:22	
•	Newsholme (won't alert) Arrive: 06:28	
●	Gisburn Arrive: 06:32	

Symbol	Via Point Name	5
•	A65 Depart: 29/04/2016 06:12	
●	Gisburn Arrive: 06:35	

- 3 Double click the route line to display the Route Description box (Fig 3). Note that two of the points have ended up as Via Points. Right click these and select 'Don't Alert on Arrival (shaping point)'. This gives Fig 4.
- 5 Right click on the route (magenta line or the route name) and select 'Remove Shaping Points'. The route description will now look like Fig 5 - no Via Points, No Shaping Points. But the route itself will remain as it was in Fig 2 - it is held in place by what I call the *Ghost Points*.

The next step is to transfer the route to the Zūmo, Import it into Trip Planner and display the map. The map should show the route with the long detour to the north, just like in Fig 2. If it shows a direct route like Fig 1, then the route has been recalculated by Zūmo. If it happened with this simple experiment, it will happen for every route that you transfer and import until you sort out why it is happening. Check that your maps are identical. Check that the option boxes in Edit / Options / Device Transfer are unticked in BaseCamp.

*There was an issue once with one Garmin map. The maps were identical in BaseCamp and in the Zūmo 660, yet every time I transferred and imported a route, the Zūmo would recalculate it. It turned out that the name on one device had the version number 2013.4 and the other had version number 2013.40 - or something like that. Simple Garmin error, but it meant that routes were always recalculated until the next map was brought out.*

Normally, of course, you would not strip out the Shaping Points. The more of these you have in your route, the less chance there is of incompatible maps, or incorrect settings messing it up. The Garmin will always plot a route that goes through every Via Point and every Shaping Point. Should it recalculate, it will only work out a new route from where you are now, up to the next Shaping or Via Point.

## You can check what Zūmo will do to your route by forcing the entire route to recalculate

On the Zūmo, import a route, and select it so that the route description is displayed, you can use the Tool menu to edit it. Select 'Change Transportation Mode' and choose 'Car' instead of Bike. The route will recalculate and you can see what changes might take place should you go off route during your trip.

*Note that you can always delete a route from Trip Planner and then import it again from the original that was transferred - no need to be connected to your computer. Zūmo will never change or delete the transferred routes. You need a computer to do that.*

## Check Your Route has Transferred Correctly

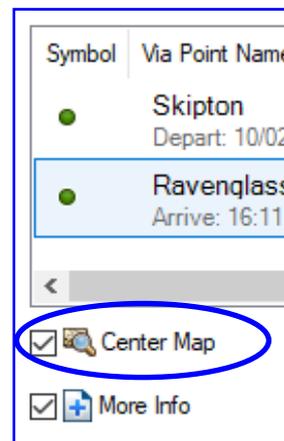
A couple of handy tricks to ensure you get it right.

### The Zoom Trick

The point that you placed on the map could very easily be out of position. The Zūmo jumps to the nearest Waypoint if there is one near the mouse when you click. You won't see it - they appear at high zoom levels. In any case, at the time you were focusing on the entire route, not the detail.

In the route properties dialogue box (double click the route to see this), there is a 'Center Map' option (see image, right). Tick this and click each route point in turn (I have Ravenglass selected). The map will be displayed, zoomed in with Ravenglass at its centre. This makes it easy to check each point in turn simply by clicking in the dialog box. If there are changes to make - you can edit them on the map without closing the dialog box. All very convenient.

In particular watch out for points placed on the wrong side of a dual carriageway.



### The Track Trick

Both the 590 and 595 can overlay a track onto the map. Tracks are lines drawn along a particular route. The satnav isn't going to try to follow a track, nor is it going to try to change it. It is like marking a route on paper map with a hi-lighter.

In Basecamp, right click your route and select '**Create Track from Selected Route**'. The track has the same name as the route, but has a footprint icon. The track itself is grey with a whole lot of track points. Transfer the track in the same way that you transfer a route, via The USB cable.

To Import the Track: **Apps**→**Tracks**→**Saved (tab on right)**→**Select the track from the list**. The track appears as a grey line on the map - you might need to zoom in to see it.

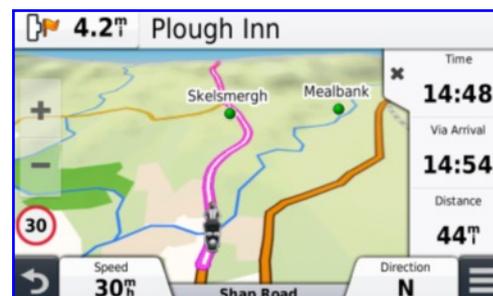
Select the tools menu in the top left corner (3 bar menu or spanner). Click it to get a list of options. Select **Show on Map**, and optionally, change the colour of the track.

The track appears narrower and sits on top of the magenta route - so you can see both. It becomes very obvious if the magenta line deviates from the track. The track is what you had in Basecamp. The magenta line shows the route calculated by the Zūmo.

The screen shot on the right shows a saved white track superimposed on a map with the magenta route. Both follow the same road in this case.

### Editing Map Themes (*The story so far*)

You might notice that the track isn't the normal colour and is much wider than the '*where I have just ridden*' track. That is because I have altered the map theme. In fact I am still in the process of working out the best result, so these notes are *work in progress*.



In the Zūmo folder Internal Storage/Themes/Map, there are a number of .kmtf files which can be edited with a normal text editor. This file controls the colours of various parts of the map and also the scale and border of shapes.

*Before attempting to edit any of these files, make sure that you work on a copy with a new name, not the original file.*

There is an on-line editor that will take some of the hard work off your hands. <http://www.javawa.nl/Zūmocolors.html>

But the editor doesn't give control over everything. I like the United Kingdom theme, but the clarity of the Garmin High Vis theme. Unfortunately, the GarminHV theme uses default settings and modifies just a few, so I combined the two - Copied the UK theme to a file I named JohnHV.kmtf, and then edited that. I replaced all of the sections in JohnHV.kmtf with the equivalent sections from the GarminHV.kmtf, and carried out some text edits:

- 1) Changed the name at the top of my ktmf file:
- 2) Changed the lines relating to TRK at the bottom of my ktmf file:
- 3) Played around with the editing program using the above link to change the track colours.

*I have to say, at this stage I have only a vague idea of how the parameters affect the track display, and so far I have a result. But if you do this, you would need to experiment, because I haven't got the answers.*

*My changes have had the desired effect on the track, but there may be unexpected changes. When I find out, I will re-post.*

```
<TITLE>JohnHV</TITLE>
<DESCRIPTION>Theme Based on UK and Garmin HV</DESCRIPTION>
```

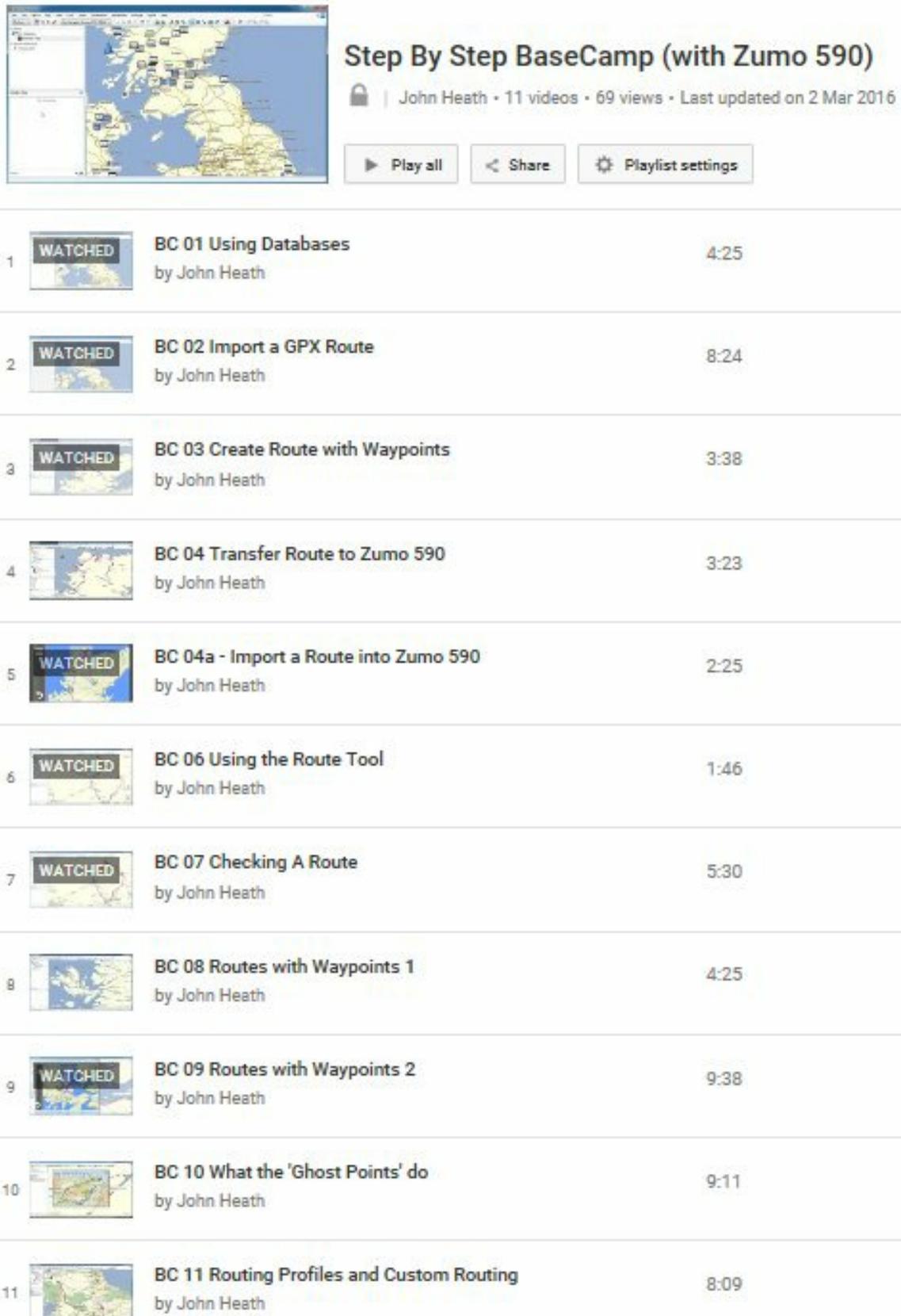
```
<STYLE field="MAP_TRK_CLR" scale="5" border="1">
  <COLOR>
    <PRIMARY day="#06EEEE" night="#06EEEE"/>
    <SECONDARY day="#0A92E2" night="#0A92E2"/>
  </COLOR>
</STYLE>
<STYLE field="MAP_TRK_SAVED_CLR" scale="8" border="2">
</STYLE>
```

## Step By Step Basecamp Videos

**Not the usual - there will be stuff in these that you didn't know**

This series of short videos show you how to create a route that will always do what you expect on your satnav. It is aimed primarily at what I found to be a very confusing mode of operation introduced with the 590 and 595 style satnavs. At the time of writing, even the tech support didn't seem to know about this stuff. They certainly couldn't answer my questions about it.

Videos are posted as a YouTube Playlist [here](#).



**Step By Step BaseCamp (with Zumo 590)**  
 John Heath · 11 videos · 69 views · Last updated on 2 Mar 2016

▶ Play all   < Share   ⚙ Playlist settings

Video Number	Video Title	Duration
1	BC 01 Using Databases by John Heath	4:25
2	BC 02 Import a GPX Route by John Heath	8:24
3	BC 03 Create Route with Waypoints by John Heath	3:38
4	BC 04 Transfer Route to Zumo 590 by John Heath	3:23
5	BC 04a - Import a Route into Zumo 590 by John Heath	2:25
6	BC 06 Using the Route Tool by John Heath	1:46
7	BC 07 Checking A Route by John Heath	5:30
8	BC 08 Routes with Waypoints 1 by John Heath	4:25
9	BC 09 Routes with Waypoints 2 by John Heath	9:38
10	BC 10 What the 'Ghost Points' do by John Heath	9:11
11	BC 11 Routing Profiles and Custom Routing by John Heath	8:09

## Avoiding the Potholes

Profiles & Transportation Mode  
Routing Preferences and Calculation Mode  
Route Settings  
Cradle Settings



Tried and tested with the Zūmo 590 and 595

Part 4

:

## Profiles

### And other related stuff. What this section covers....

Take a look at the list of subheadings under this paragraph. Do you know the difference between each of these? Did you know that it matters? If the answer is no, then you could be in for a surprise at some point when your nicely prepared bike trip over the twisty mountain passes turns into a motorway dash.

### Profiles

In Basecamp defines the type of vehicle that you are using (Car, Motorcycle, Offroad) and the type of journey you wish to make - Fastest, Shortest, Curvy Roads.

Of course you know that nothing else that you set in profiles makes the slightest bit of difference to how the Zūmo behaves? Of course you did.

### Transportation Mode

In Basecamp, the term Transportation Mode is used to cover all types of satnav device - eg for cycling, driving trucks, walkers. In the Zūmo, it simply means Car, Motorcycle or Offroad and activates the settings that are saved for that particular mode of transport.

### Calculation Mode

The term used by the Zūmo for setting how it will calculate the way to a destination when no route is loaded. Both Zūmos offer Faster Time, Shorter Distance and Off Road. The 590 offers also offers Curvy roads. The 595 has Garmin Adventurous Routing.

### Routing Preferences (BC)

Basecamp has a 'Routing' Tab for the vehicle profiles. All sorts of preferences can be selected, but only the Faster Time and Shorter Distance settings are transferred with the route. The 590 will accept Curvy, but not the 595. I set Fastest Time and leave everything else blank in Basecamp and do the same in the Zūmo.

### Route Preferences (Zūmo 590 and 595)

The term 'Route Preference' is used when a route has been loaded into the Zūmo to refer to how that route is should be calculated - eg Faster Time/ Shorter Distance. The 595 and 590 use the settings that were sent with the route - defaulting to Faster Time if the Routing Preference is unrecognised.

*The term 'Route Preferences' is also used under the heading 'Navigation' on the main settings menu. This has options for changing the a group of navigation options such as Calculation Mode (shorter, faster, curvy/adventurous, off road). This has nothing to do with the Route Preference that are declared in the route file itself.*

### Car Cradle

Put the Zūmo in the car cradle, it switches to the Car Transportation Mode and activates the preferences that are set for the car, Yes?

*No. The Zūmo switches itself to the to the Zūmo vehicle that was last used in the cradle.*

### Motorcycle Cradle

Put the Zūmo in the bike cradle, it switches to the Bike Transportation Mode ..... etc

*Maybe sometimes, but definitely not always. Just as above.*

### The Custom Profile.

Custom Profiles don't have have a transportation mode that can be sent to the Zūmo. So what does the Zūmo do with the route you send it?

*Read on to find out!*

### Hand Held

So I am setting up my Zūmo in my chair in front of the fire, and I have all of the preferences set up ready. I clip it into the bike cradle and ask me to get me to town X. I'm expecting it to find some nice curvy roads. But it tries to take me on the motorway.

*Yes. That's what it will do sometimes if you don't understand what is going on or what you can do to stop it from happening. You need to read this section to get an idea. If you can't be bothered to read the explanations, then skip to the summary on the last page. Then when you decide that is a load of rubbish, come back and read the explanations and try it for yourself. It will stop you from being caught out when planning your route.*

## Transport Modes, Options & Cradles

**590 & 595:** Understanding the various routing options

### Transportation Mode

The Zūmo has 3 modes: Car, Motorcycle, OffRoad.

The icon which represents the current **Transportation Mode** is always shown at the top of the main screen. Tapping that icon opens up a screen, where any of the 3 modes can be selected.

Each **Transportation Mode** can be configured with its own set of navigation and display options. If the transportation mode is changed then the method of calculation will change to suit.

### The Cradle

The Zūmo can be operated in the motorcycle cradle, in the car cradle and in your hand. The Zūmo will recognise which cradle it is in as soon as it is clipped into place and will immediately switch the **Transportation Mode** to be whatever mode was set when that cradle was used last.

The main Zūmo screen will always show a little icon which represents the current Transportation Mode.   . Clicking the icon allows the mode to be changed for whatever cradle the unit is currently in - Car, Bike or in your hand.

The car cradle does not activate the car **Transportation Mode**. Likewise the bike cradle does not activate the bike mode. Oh no it doesn't. Instead, the Zūmo uses the **Transportation Mode** that was in use when the Zūmo was last clipped into that cradle. This sounds wrong, but it makes perfect sense when following a pre-planned route.

### Which options can be set differently for each Transportation Mode ?

In the Navigation section and in the Map and Vehicle section (under Settings) there are a number of options which I have reproduced on the right. Those that are marked with  can be set differently for each of the 3 Transportation Modes. The ones with  are set for all modes. These are for the **590. 595** options are similar.

**Traffic** - Traffic option is set globally - ie it isn't different for each **Transportation Mode**.

### Suggestions.

**Set Transportation Options.** Set the Zūmo **Transportation Mode** for Motorcycle. Set up the options for the Display orientation, and for the items with a green symbol in the two menus on the right. Then set the Transportation Mode to Car and repeat the process.

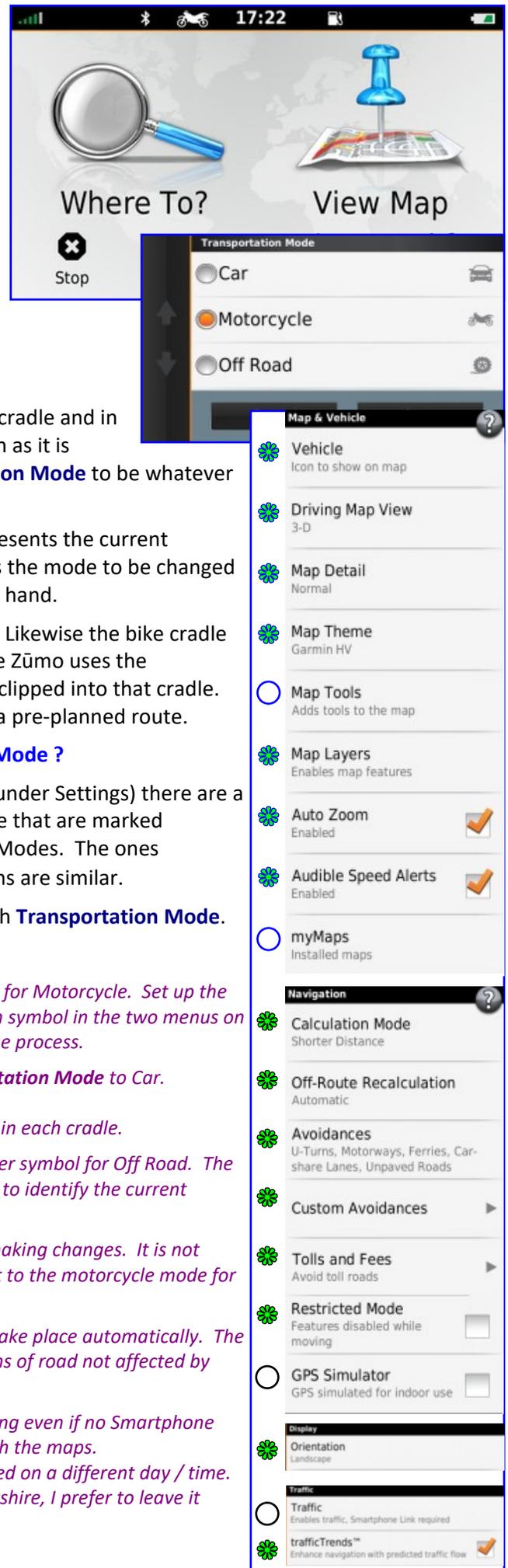
**Set Cradle Modes.** Put the Zūmo in the car cradle. Set **Transportation Mode** to Car. Put the Zūmo in the bike cradle. Set the mode to Motorcycle. Check that the Zūmo switches to the correct mode when inserted in each cradle.

**Set the Vehicle Icon.** Car for Car, Motorcycle for Motorcycle, Other symbol for Off Road. The icon on the map is then as reliable as the icon on the main screen to identify the current transportation mode - providing that you don't change it !

**Always Check** the Zūmo's current **Transportation Mode** before making changes. It is not enough to simply click it into a cradle - The car cradle could be set to the motorcycle mode for example, without you realising.

**Traffic Link (Smartphone Link App)** may cause recalculations to take place automatically. The data I have used is not very reliable, closing and detouring sections of road not affected by traffic or road works. I keep mine turned off.

**Check trafficTrends (590)** - this can be on/off and will affect routing even if no Smartphone link is added. I guess that historic traffic flow data is updated with the maps. A route calculated on one occasion may well differ when calculated on a different day / time. Because it can choose very narrow alternative routes here in Yorkshire, I prefer to leave it unticked.



## BaseCamp Profiles and Zūmo Routing

### Everything is not quite as it may seem.

In the screen shot on the right, all of the Basecamp settings are shown. These help Basecamp to plot the route on its map.

The Zūmo itself receives the route exactly, without having to calculate it, so none of the settings from Basecamp are sent to the Zūmo.

Except for two items: the profile name (eg Motorcycle) and the Routing preferences from the route file (eg Faster Time).

This is so that if the Zūmo needs to recalculate, it has got some basic information to produce something acceptable. Something to plot a reasonable route to the next route point. Careful choice of shape and via points can ensure that any recalculations follow the same roads.

### What the Zūmo Receives

#### The Route

The route that is plotted in Basecamp gets transferred to the Zūmo exactly. Basecamp sends all of the routing points (**Start, Finish, Shaping, Via**) and it also sends those **Ghost Points**. The Zūmo should plot the route *exactly* as it appeared in Basecamp. If not, something is wrong - see earlier sections.

#### The Main Route Points

All of these are transferred exactly - but not the icons that are associated with Via Points and Shaping Points. Renamed route points (except Waypoints) show up with their original name on the Zūmo.

#### The Name of the Route

Exactly as saved.

#### The Transportation Mode

This is essentially the name of the profile that has been used.

Motorcycling, OffRoad and Driving profiles are recognised, but any other profile name, including 'Custom' is ignored by the Zūmo and it will instead default to Motorcycle.

#### Route Preferences

The Zūmo's Calculation Mode is not used for an active route. The routing preference for Shorter Route, Faster Time or Curvy Roads is sent used whenever the route is recalculated (by deviating from the route for example). The Route Preferences in the route over-rides whatever was set in the Zūmo's Calculation Mode.

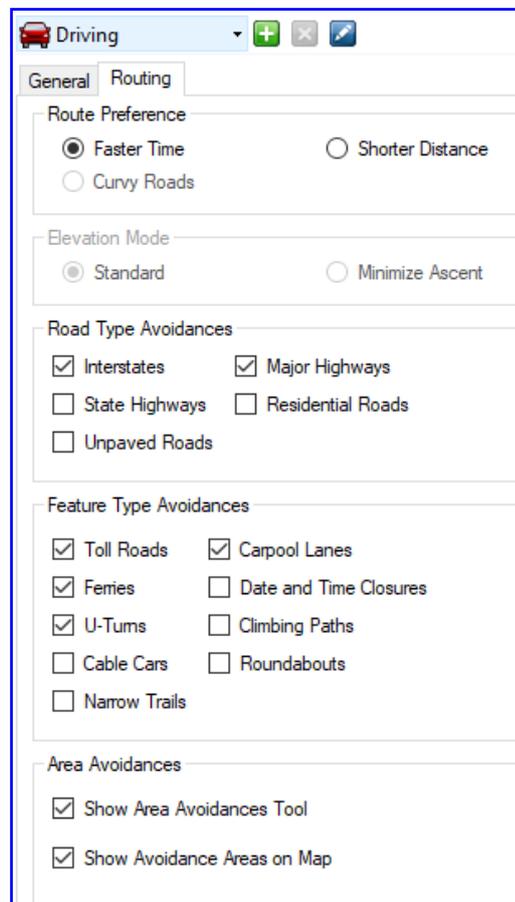
For the 595, the same applies - except that Curvy Roads is ignored and the Zūmo defaults to Faster Time. Adventurous Routing can be selected from the Spanner menu when the route is loaded. The route still keeps to the same shaping and via points.

### What About Avoidances ?

These are not transferred to the Zūmo. But the Zūmo stores preferences for the bike which are different from preferences for the car. The route profile switches the Zūmo to bike mode, so in the event of a recalculation, the Zūmos avoidance settings for the bike are used.

The box on the right shows a section of the gpx file transmitted to the Zūmo. All apart from the route, it sends only the stuff in blue - ie the route name, the profile name, and the mode of calculation.

The green text is the start of the hundreds of ghost points that it sends to duplicate the Basecamp route precisely.



```

<rtc>
  <name>Skipton to Ravenglass</name>
  <extensions>
    <gpxx:RouteExtension>
      <gpxx:IsAutoNamed>false</gpxx:IsAutoNamed>
      <gpxx:DisplayColor>Blue</gpxx:DisplayColor>
    </gpxx:RouteExtension>
  </rtc>
  <trp:Trip>
    <trp:TransportationMode>Motorcycling</trp:TransportationMode>
  </trp:Trip>
</extensions>
<rtept lat="53.953857421875" lon="-2.010498046875">
  <time>2017-10-27T10:27:43Z</time>
  <name>Skipton</name>
  <sym>City (Small)</sym>
  <extensions>
    <trp:ViaPoint>
      <trp:CalculationMode>CurvyRoads</trp:CalculationMode>
      <trp:ElevationMode>Standard</trp:ElevationMode>
    </trp:ViaPoint>
    <gpxx:RoutePointExtension>

    <gpxx:rpt lat="53.953857421875" lon="-2.010734081268311" />
    <gpxx:rpt lat="53.95336389541626" lon="-2.01099157333374" />
    <gpxx:rpt lat="53.953042030334473" lon="-2.01124906539917" />
    <gpxx:rpt lat="53.953042030334473" lon="-2.01124906539917" />
  
```

## Using a Basecamp Route in the Zūmo 590 / 595

### Some Definitions - Colour Coded to help identify where they apply - Zūmo or BaseCamp

- **Route** - A route prepared in Basecamp with a profile - or custom profile.
- **Routing Preferences** - Faster, Shorter, Curvy, OffRoad - set in Basecamp.
- **Profile** - the name given to the routing style in Basecamp (Driving, Motorcycling, Trucking, ...)
- **Route Preferences** - Faster, Shorter, Curvy, OffRoad once a route has been loaded into Zūmo
- **Calculation Mode** - The method that Zūmo uses to plot an ad-hoc route (Faster, Shorter, Curvy, OffRoad)
- **Transportation Mode** - The vehicle mode currently active on the Zūmo. (Car, Motorcycle, OffRoad)
- **Avoidances** - The set of avoidances that are set for the current **Transportation Mode** in Zūmo
- **Route** - The **BaseCamp Route** once it has been loaded into the Zūmo and perhaps modified by Zūmo

**Dark Blue** refers to a Zūmo Setting. **Dark Red** refers to a Basecamp setting

### A Brief Summary of What Happens When A Route is Transferred and Loaded into the Zūmo 590 and 595.

- The route contains the **Profile** name (Motorcycling) and **Routing Preferences** (Faster, Shorter, Curvy, OffRoad)
- When 'Go' is pressed, the **Transportation Mode** is set to the profile name (Car, Motorcycle, OffRoad)
- If Zūmo doesn't recognise the **Transportation Mode** (eg Trucking), it switches to Motorcycle mode.
- The sets its **Route Preferences** to match the **Routing Preferences** (Faster, Shorter, OffRoad, Curvy)
- **Route Preferences** are set when a **Route** is loaded - and over-rides the Zūmo's **Calculation Mode**.
- **Calculation Mode** is active when there is no route loaded. Zūmo uses it to calculate 'Where-To' routes.

### When first loaded, the Route is reproduced faithfully in the Zūmo.

If the above isn't true, then something is wrong - see 'Checking Your Route is Transferred Correctly'.

The original **Basecamp Route** will remain intact unless the Zūmo needs to recalculate.

If Zūmo recalculates it will only alter the current section of the **Route** - ie up to the next **Via** or **Shaping Point**).

The Zūmo will recalculate the current section of the **Route** if:

- You deviate from the magenta route - even slightly
- The actual route follows a new road on the map
- The version of the map on the Zūmo is different from the one used by Basecamp
- You press 'Skip'.

### The Zūmo will not re-calculate a route if AutoRecalculation is turned off - unless:

- You press **Skip** to miss the next **Shaping Point** or **Via Point**
- You select a **Via Point** as the **Next Destination** rather than the start point when starting a route. (Zūmo calculates a **Route** to the selected point)
- Traffic via a smartphone link or TrafficTrends is turned on.

### Whenever a Route is active in the Zūmo:

- Zūmo sets the **Transportation Mode** to the equivalent of the **Profile** name - (default to Motorcycling);
- It will use the **Avoidances** set in the Zūmo for the **Transportation Mode** named in the **Route** file.
- The **Routing Preferences** and **Transportation Mode** for a route can be changed before pressing 'Go'.
- If the **Routing Preferences** are changed, the entire route is recalculated by Zūmo, and saved.
- If the **Transportation Mode** is changed, the entire route is recalculated by Zūmo, and saved.
- The original **BC Route** can be recovered by deleting the **Route** from Trip Planner and importing it again.
- It will use the **Routing Preferences** (Curvy, Faster, Shorter) that was set in the BaseCamp **Profile**.
- The **Routing Preferences** used for the route may be different from the **Calculation Mode** in Settings.
- The **Calculation Mode** that was in the Zūmo before the route was loaded is ignored.

### When the Zūmo Route is recalculated, the new routing will be influenced by:

- **590** only: Historic traffic flow data if **trafficTrends** is turned on for the active **Transportation Mode**
- Traffic information from a connected Smartphone
- **My Trends and Where I've Been** unless **Clear Travel History** has been clicked in Settings / Device
- The **avoidances** that have been set for **Transportation Mode** specified in the **Route**

# A Demonstration of a BaseCamp Route Profile

**A Contrived example to reveal many of the little known features and quirks.**

When I started putting together the sequence of this little demonstration, I thought that I had a pretty good grasp of what would happen. But a few things took me by surprise. I had to go away and rethink some of what I thought that I already knew.

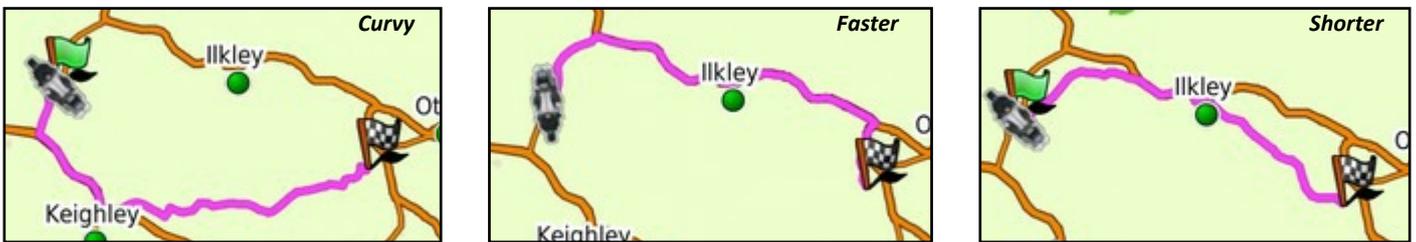
**This is the BaseCamp part of a Series of Tests.**

*On the following page are the results of an investigation carried out on the Zūmo 590. It reveals some interesting characteristics of that model, in particular how a route created on Basecamp with a particular profile switches the operating mode and preferences when it is loaded into the Zūmo 590.*

*The 595 introduces 3 point scales of preferences for routing for Curves, Hills and main roads - which is beyond Basecamps features. So it appears as though Garmin have dispensed with the way that a loaded route switches the behaviour of the Zūmo to match the route. If a Curvy Route is loaded into the Zūmo, the Zūmo defaults to Faster time.*

## Setting it Up.

I wanted 3 routes between the same two points. One of which was calculated by the Zūmo using the Curvy Route preference; one calculated as Faster Route, One calculated as Shorter Distance. This area was ideal - roads North and south of Ilkley Moor, dual carriageway to the south. Twisty roads over the flanks. No roads over the top. Start and finish points to the east and west. No direct route. Here are the 3 routes, shown on the Zūmo screen.



*These three routes have been calculated by the Zūmo from where I am now to the final destination. There are no avoidances set, no historic data, and trafficTrends and the Travel History have been disabled or deleted. They are a reference for working out which Transportation Mode the Zūmo is actually using when it recalculates a route.*

## Transportation Modes that I have set on my Zūmo 590 and 595 for this investigation



Display:Landscape; Calculation Mode: Shorter Distance; Avoidances: None



Display:Landscape; Calculation Mode: Curvy Roads; Avoidances: U Turns, Unpaved Roads.



Display: Portrait; Calculation Mode: Off Road; Avoidances: U Turns, Motorway, Car Share, Toll Roads

## The Route Created in BaseCamp



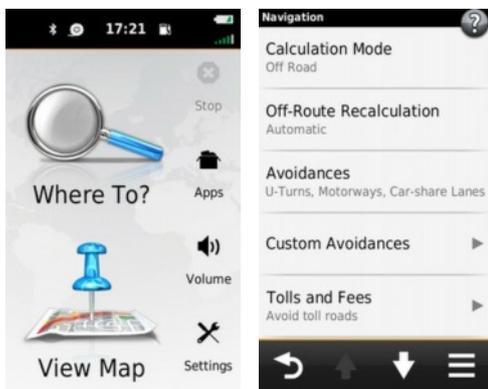
*Basecamp has produced a route that is half the Faster Route that Zūmo produced, and then the same as the Zūmo Shorter Route after Ilkley.*

*But that is good - it is different from any of the ones that the Zūmo will calculate.*

*It was created as a Custom Profile, Route Preferences: Faster Time.*

## OK, so here we go, step by step.

I have deliberately done something out of the ordinary in many of the steps, to illustrate what happens, often without it being noticed. Follow the logic through - I'm sure there is stuff that will be new to you in here.



Initially, the Zūmo 590 or 595 is out of the cradle, and is set to:

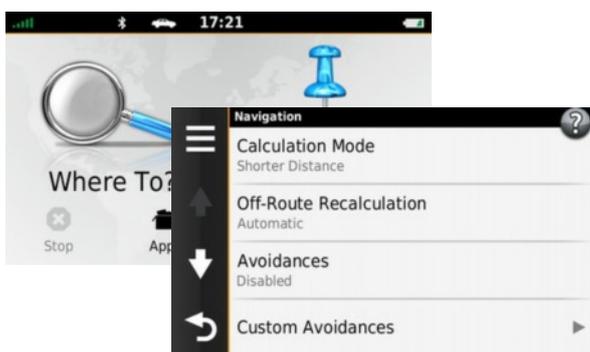
Transportation Mode: OffRoad.

I have set this mode to have the following configuration:-

**Display:** Portrait

**Calculation Mode:** OffRoad

**Avoidance:** A few - which are of no consequence.



**Plug the Zūmo 590 or 595 into the Car Cradle.**

The car cradle is on my desk, with no power. As soon as the Zūmo is locked in place, the display changes to portrait.

The last time the car cradle was used, the Zūmo was in **Transportation Mode: Car** - it has switched itself to Car Mode. The car icon is at the top of the main screen, and all of the car settings are now active.

In particular, **Calculation Mode** is set to Shorter Distance, instead of OffRoad. Note that '**Avoidances**' have changed too.

If the Zūmo is removed from the Car cradle, it will remain in Car Mode (ie not go back to OffRoad). However, if it is then placed in the motorcycle cradle it would change to the **Transportation Mode** that was last set for that cradle. Assuming it was **Transportation Mode: Motorcycle**, it would then have all of the settings for Motorcycle active.

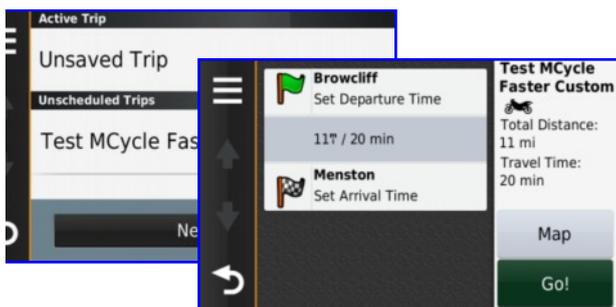
### Loading the Route that has been Transferred From BaseCamp

590

595

This is done from Trip Planner. The BC **Route** was named to remind me that I used a custom profile with Faster Time as a **Route Preference**. Nothing about the **Transportation Mode** is transmitted to the Zūmo for custom profiles, so in this case, the **Transportation Mode** defaults to Motorcycle.

The images show the two screens that follow. One screen, shows details about the Zūmo **Route**, and the **Transportation Mode** Icon. The 3 bar menu points to other **Route** properties. In particular, in the list of options that are displayed towards the bottom are :



**Routing Preferences:** Faster Time.

**Transportation Mode:** Motorcycle.

Now think about that for a minute. The Zūmo is still in Car **Transportation Mode** and the **Calculation Mode** for car is still set to Shorter Distance.

The answer is that the Zūmo 590 assumes that the **Transportation Mode** is motorcycle as no mode is given in a Custom Profile.

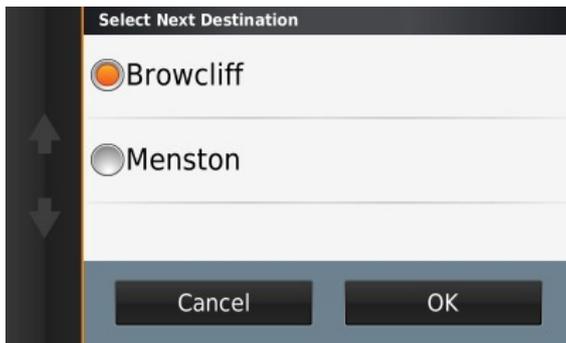


Also, the **Routing Preference** of Faster time is part of the transferred **Route**, and this over-rides the **Calculation Mode** that is still set in the Zūmo.

This had me confused, as the GPX file (3 pages back) is calling this the **Calculation Mode**. However, if it has to recalculate the route, then the Zūmo uses the **Route's Faster Time Routing Preference** rather than the Motorcycle **Calculation Mode: Curvy Road**.

The recalculation will apply the Zūmo **Motorcycle Transport Mode Avoidances**.

## Ok, Click Go



And this is the bit that catches out so many people with Zūmos that have Trip Planner. This route only has two points - a start and an end. By default it does not select the top item in the list, and often the top item isn't displayed - you have to scroll up to get to it.

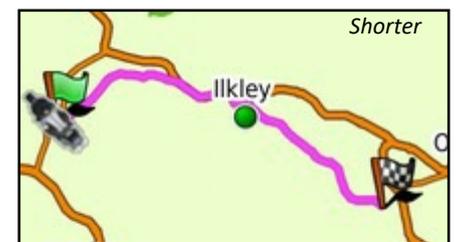
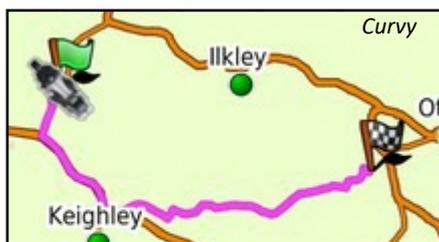
I want my Next Destination to be my first point - Browcliff. I have deliberately set this about 200m beyond the actual start - so that I have to pass the Start Point - knowing that the Zūmo will navigate me to it. This way, the Zūmo doesn't think that I am off route and force a re-calculation.



So I click the first point, Browcliff, and the next screen presents me with a map of the route that I have selected.

Now take a good look at this, and note that the vehicle icon is a car. At this point the Zūmo is still in **Transport Mode: Car**.

This route has **not** been calculated by the Zūmo. How do I know? Well - remember those 3 reference maps at the start of this section? They showed the 3 possible routes that the Zūmo would calculate. This route does not match any of them, so the Zūmo didn't calculate the route. Here are those 3 routes again for comparison.



But it does match exactly the route that was in Basecamp. On the left is the semi transparent Zūmo map overlaid on the Basecamp map. They are identical - so the route in the Zūmo has definitely come from Basecamp.

How can this be?

Well the Zūmo didn't *calculate* the route. It simply plotted the 2000+ **Ghost Points** that were transferred so that the route would be reproduced precisely.

This route will remain exactly as it was planned - **as long as the Zūmo is not allowed to recalculate the route**.

The Zūmo will recalculate if you deviate - even by a small amount, from the plotted route. Even if the plotted route has made one of those silly little detours up a side road, that you do not follow. It will recalculate.....

.... unless you can turn off Automatic Recalculation.

You can also leave recalculation turned on, but put in additional **Via Points** and **Shaping Points** - because when it does recalculate, it will only recalculate up to the next one of these.

If you have no such additional points, and auto recalculation is turned on, and you really wanted to follow the route that you plotted in BaseCamp, sorry, it has all gone. Initially, the Magenta route will head off in the right direction, but at some point it is entirely possible that it will deviate from the original route.

And while I am on this topic, and I have a little space at the bottom of the page, the most common error is to have only a **Start** and a **Finish** point in the Route. When the Zūmo asks where you want to go to next, you don't notice that your **Start Point** isn't in the list, and so you choose the **Finish Point**. After all, you are already at the start point and the **Finish Point** is where you want to go to. The Zūmo then calculates a different brand new route for you.

This continues the Zūmo 590 experiment. However, the information is relevant to the 595.

## Ok - Back to the Example Route

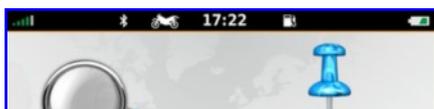
### What has all that got to do with Profiles and Transport Modes ?



Well, I was getting to that.

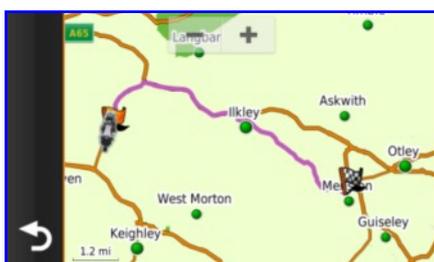
We have transferred a route from Basecamp, imported it into the Trip Planner App, selected the map and now we need to press **Start (Start)**

And this is where that Basecamp profile comes in. If you remember, I set up my route with a Custom profile - which means that no information about **Transportation Mode** is included in the file. Nevertheless in this case, the Zūmo defaults to Motorcycle **Transportation Mode**. The named profiles that are recognised by the Zūmo are Car (Automotive/Driving), Motorcycling & OffRoad. Anything else seems to default to Motorcycling when received by the Zūmo.



So to check, the Vehicle Icon on the navigation screen is now a Motorcycle - the one that is set for **Transportation Mode:Motorcycle**.

If we go back to the Main Screen, the little icon top centre is now a motorcycle - that should clinch it, but just for completeness, if we go to Settings, we can get the next screen - which shows the **Calculation Mode** as Curvy Roads, and **Avoidances** remain set to how I described them at the start for the MotorCycle.



I even went to the extent of changing the display to Portrait, and reloading the route. I don't show the screen shots here, but the moment I pressed START, the screen display changed to Landscape.

So loading this route has changed the **Transport Mode** to Motorcycle and as a result, all of the Navigation and Display options for the Motorcycle mode of transport have become active.

But what does that mean ?

If we go back to the map screen, touch the top bar and then press the 3 bar menu, we can select 'Map'. This displays the entire route on the screen - as shown in the image, on the left. The icon is now the motorcycle and the route is exactly as it was before we started navigation. That hasn't changed.

What I intend to do next is to force the Zūmo to recalculate the route, to see what happens, and what information it uses to arrive at a new route.

### Deviating from the Route

Now - remember, the **Transportation Mode** is Motorcycle. The **Calculation Mode** for Motorcycle have not changed:

 **Display:** Landscape; **Calculation Mode:** Curvy Roads; **Avoidances:** U Turns, Unpaved Roads.

I am going to head towards my **Start Point**, (Browcliff) which is 200m up the road, to make sure it is navigating properly. Before I get there, I am going to press '**Skip**'. This forces the satnav to ignore the next Routing Point and this will force the satnav to recalculate. Because the route has only the End Point left, it will recalculate the entire route. I could (and did) set the satnav to auto recalculate, and simply drive to the **start point**, and then turn the wrong way. The Zūmo recalculated the route from where I was, just after the **Start Point** all the way to the next route point - the **End Point**.

Using **Skip** is a way that you can reproduce the same effect sitting in the comfort of an armchair.

So the route has been recalculated. But what information does it use in order to do that ? Did it produce a Curvy Road route or a Faster Time Route - or did it do something different ? How does it decide what to do ?

# So What Information does the Zūmo Use to Recalculate a Route ?

...An aside to look at what goes on in the Zūmo 590

Normally when the route is transferred to the Zūmo, it also transfers the **Transportation Mode** (Eg Motorcycling), and the **Calculation Mode** - eg Curvy Roads. In my Example, the route used a **Custom Profile**, so it didn't have a **Transportation Mode** - but with no other information, the Zūmo defaults to MotorCycling mode. However, my route does have the **Calculation Mode** of the route from Basecamp. If you remember, that was Faster Time.

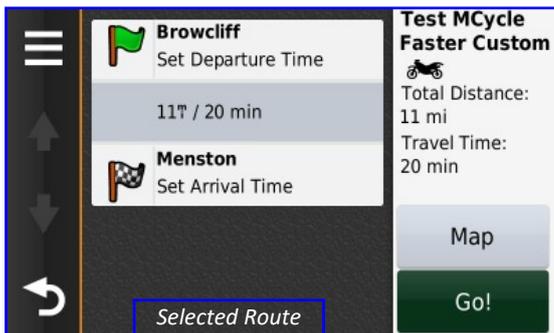
Here (below) is the Zūmo route displayed immediately after I had Skipped the starting point. Compare this route to the three reference routes that I obtained at the outset - it is identical to the one produced using **Faster Route** as the **Calculation Mode**.



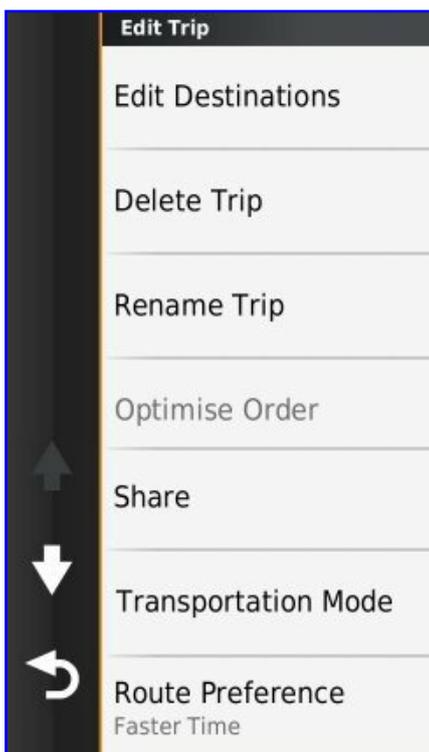
So the Zūmo has used the **Calculation Mode** that came from the Basecamp profile, and not the settings for the Motorcycle **Calculation Mode** - which I checked - are still set as Curvy Road.

That is quite reassuring. At least the Zūmo is making an effort to reproduce the gist of the original route.

In fact - after a little more experimentation - the Zūmo doesn't use the **Calculation Mode** that is set for Motorcycle at all. Instead, it always uses the Calculation Mode that came with the Route from Basecamp - except the Zūmo now refers to this as **Route Preferences**. That makes sense - it was called **Route Preferences** in BaseCamp.



You won't find **Route Preferences** anywhere in the main **Settings** menus on the Zūmo. However, when a route is selected from within the Trip Planner App, and a screen like the one on the left is displayed, the 3 bar menu gives access to a whole load of options for the selected route. It is from here that you can share routes, and edit destinations - eg by changing Shaping Points to Via Points, or move the routing points around. But you can also mess about with the **Transportation Mode** and with the **Route Preferences** for the route.



The image on the left shows the full list of options from that 3 bar menu from the 'Selected Route' screenshot. The **Transportation Mode** is there, but the Motorcycle icon on the Selected Route screen gives the game away. The **Route Preferences** - Faster Time - come from the Selected Route as well.

Both are different values from the way that the Motorcycle Mode was set up for the **Transportation Mode** and **Calculation Mode**. - Both of which are still set to Car and Shorter Distance. If you change either of these two values from this menu, the Zūmo will recalculate the entire route, and the original Basecamp route will be lost. It will still have the same **Shaping and Via points**; it will still use Faster Time; but it will be subject to the avoidances set in the Zūmo for Motorcycle as well as any trend information.

So it is unlikely that it will follow your original planned route.

The bottom line is, that if there is a route loaded, then the Zūmo is switched to the **Transportation Mode** of the route.

The **Route Preferences** take priority over the **Calculation Mode** that is set up in Settings / Navigation / Calculation Mode.

## Our Recalculated Route

[Back to Our Example Route - I had just Skipped the Browcliff and the route had recalculate.](#)

So we now know that the route has been recalculated using the **Route Preferences** from the Basecamp profile. In this case it was Faster Time. Note that it does not use the Zūmo's Motorcycle **Calculation Mode** settings that I set up right at the start - Curvy Roads.

The new, recalculated route will not be exactly the same, but it stands a better chance of being close. It means that you do not have to match your Zūmo settings for the Calculation Mode to the settings in Basecamp. The **Route Preferences** were set in Basecamp and the same preferences will be used in the Zūmo (ie Faster, Shorter, Curvy, OffRoad). The Route Preferences are saved as part of the route, and will be used regardless of what the Zūmo's **Calculation Mode** is set to.

Nevertheless, even with the same **Route Preferences**, the recalculated **Route** will not be the same as the original. This is because:

**Avoidances.** These are taken from the avoidances that are set in the satnav for each **Transportation Method**. The Transport Method used by the route, normally comes from Basecamp. In my route, I used a **Custom Profile**, so the Zūmo defaulted to Motorcycle. The settings for **Motorcycle Avoidances** are used.

**Your Own Riding Trends.** This is built up as you use the SatNav on the bike or in the car, and the effect on the recalculated route can be significant. To be sure you are starting without these trends, clear it out. The option to do this is in Settings / Device / Clear Travel History. This does not clear the 20 Trip Log files. The Travel History can remain ticked, as that allows the trip log to be maintained. But you may want to clear your own riding trends again periodically, as with Travel History ticked, your riding Trends will build up again.

**TrafficTrends.** A historic picture of traffic flow on roads at different times is built up (not by you) and this information is on the satnav - I guess it is distributed along with the map, but I do not know. The satnav will calculate a route which may be different depending upon the day of the week and the time of day.



**Traffic.** If you have a smartphone link, I guess that the information that it presents may result in different routes being presented. But I don't know about that - I choose not to have a smartphone.

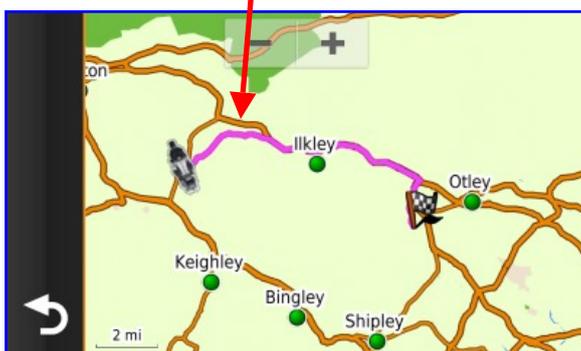
### Same Route with an Avoided Road

Just to prove that the Zūmo picks up **Avoidance** information from the settings for the **Motorcycle Transportation** mode, I set up a custom avoidance, and marked a section of road as being the one to avoid. **Avoidances** can be set up differently for each of the **Transportation Modes**. The top image shows the road that I have chose to avoid.

So then I went through exactly the same process as before - started the route, and skipped the start point, which forced a recalculation.

In the two images on the left, the top image shows the road that I have marked to avoid. The red arrow points to the same (brown) road in relation to the rest of the route.

The new plotted route takes a road south of the avoided route, and then continues on the fastest route that it selected before.



When I tried the same thing with the same route using a Car / Driving profile with Faster Time, the **Road Avoidance** that I had set when in Motorcycle Mode was completely ignored and it calculated the fastest route that is shown at the top of the previous page.

Note that when the route is first loaded, none of the route settings or the setting in the Zūmo have any effect whatsoever. The route is the one that is governed by those thousands of **Ghost Points** and is an exact replica of the original BaseCamp route.

Only if this route is allowed to be recalculated do the **Transportation Mode**, **Avoidances** and **Trends** come into play.

## Summary - Use of Basecamp Profiles for a Zūmo Route.

### The Zūmo can be used to plan ad-hoc routes.

In this case, the Zūmo can be configured with its own:-

- **Calculation Mode** (Faster, Shorter, Curvy, OffRoad);
- **Avoidances**;
- **Transportation Mode** (Car, Motorcycle, OffRoad)

### The Zūmo can also receive routes that have been planned in Basecamp.

A Route plotted in Basecamp should appear in the Zūmo exactly as planned. If not, the maps are not the same, or there are settings in Basecamp that need to be changed.

In addition to the route and the routing points, Zūmo sends two pieces information that are useful should the Zūmo need to recalculate the route. These are:

- **Transportation Mode** (Car, Motorcycle, OffRoad),
- **Routing Preference** (Curvy, Faster, Shorter, OffRoad)

### When a Basecamp Route is active in the Zūmo

- The Zūmo **Transportation Mode** is switched to match the **Profile Name** from Basecamp (Regardless of which cradle is in use)
- The **Avoidances** for the route's **Transport Mode** will become active.
- The **Route Preferences** will be set to match the **Route Preference** set in Basecamp (Faster, Shorter, Curvy, OffRoad)
- The **Display** settings for the **Transport Mode** will become active.

### When a Basecamp Route is selected from the Trip Planner

- It is possible to edit the **Route Preferences**
- It is possible to edit the **Transportation Mode**
- It is possible to edit and move the points around and make **Shaping Points** into **Via Points** and vice versa. Note that a glitch results in a change of name and location when a Via Point is changed to a Shaping Point on the Zūmo screen. This fault does not exist on the 590.
- If the routing or transport is changed, then the entire route gets recalculated, (**and saved with the route**).
- If the above happens, it is possible to delete the route and re-import the original from the Zūmo.

None of the above settings will have any effect on the original plotted route as long as the route is not recalculated.

### If the route IS allowed to recalculate:

- Only the current section of the route will be calculated, up to the next **Route Point (Via, Shaping or End)**
- The new route will take into account your riding trends and trafficTrends unless these are cleared or disabled.
- The new route will use the Zūmo settings for **Avoidances** for the routes Transport Mode. (The **Avoidances** set in Basecamp are not used)

### If a motorcycle route is loaded into the Zūmo when it is in the car cradle

- The **Transportation Mode** switches to Motorcycle and the route is navigated with settings from the route (In effect the route is navigated as if it were in the motorcycle cradle)
- The setting for the car cradle become 'Motorcycle' even after the route is stopped.
- The next time the Zūmo is placed in the car cradle, the unit will switch to Motorcycle Mode.
- But it is easy enough to switch back.

