



AiM Webinar
"Track Maps in the AiM Sports Universe"
5.7.20
Edited Q&A

1 **Q:**You can configure your own Start/Finish point, correct?

A:Yes, absolutely. Using GPS Manager or RaceStudio3 tracks section. It can also be set manually on some gauges.

2 **Q:**On the GPS track map, when comparing the different lines driven into and out of a corner, how accurate is this map? As were trying to compare 6 inches to a foot of difference in the line taken. Is the GPS accurate enough show the differences between these lines?

A1:There is an available channel, GPS_PosAccuracy, that measures GPS accuracy. I believe it will be covered later the webinar as well. There is a difference between positional/absolute accuracy (I.E. where in the world am I) and relative accuracy (I.E. lap to lap differences). This will be talked about today though.

A2:[Answered live]

3 **Q:**Does the manual track mode have to be done every time you power it on, or does it remember between sessions?

A:It will remember the last track that you have selected. If you use manual to create a track that track can be stored and used again the next time you're at that track.

4 **Q:**If you're at a track with multiple configurations (Ex: Mid Ohio club vs pro, Gingerman long vs short) should you select manual and select the track yourself or leave it on auto?

A1:If you have both tracks loaded into the logger I would choose manual and select the configuration you will be running.

A2:You can do it either way. As Robbie said, when it's on auto if there are multiple tracks you'll still have to select from the tracks in the area or you can do a "recon" lap.

A3:Auto will work, but the device needs the time to 'understand' on which config you are on. Manual will be faster.

A4:Tom, at that track both those configurations have the same start/finish so it won't matter for lap times but if you have a SmartyCam you will want the correct one if your displaying the map image on the overlay.

5 **Q:**Is it possible to manually enter a fast lap from a previous event to use as base fast lap?

A:Sorry, no. But with a Solo2/DL you can choose between fastest lap of day or fastest lap of session. All other loggers are fastest lap of session.

6 **Q:**do you need to load the maps into the hardware?

A1:The maps and start/finish line are tied together in the same file. So yes, to get lap times.

A2:AiM devices come preloaded with a track database but it's a good idea to keep the database updated. You can also choose to load only tracks you'll be racing at or for your region.

A3:Camera's you must add the desired track for the map overlay.

A4:Transmitting the maps from the RS3 software to your devices ensures the device will have everything it needs to get lap times. Some devices feature the possibility to automatically create a map as soon as they recognize you're on a closed circuit .

7 **Q:**Does removing unused tracks from a Solo2 provide any quicker response, startup or other benefit?

A:There's no real noticeable benefit. The tracks in the device are indexed by coordinates, so it's VERY fast at filtering out any unneeded ones.

8 **Q:**What about Autocross? Does the unit learn the track?

A:For most units no. The Solo2/DL have a "point-to-point" setting that allows you to manually set a start and finish line separately from one another.

9 **Q:**When setting up a track in RS3 and adding sectors to the track map, the sectors are labeled 1, 2, 3, etc. so it's assuming a certain direction. Robbie just mentioned the tracks work in reverse, but does that hold true with sectors?

A1:I must have missed it, but I don't think he talked about creating sectors or splits on the actual track map (not the segmented track map seen in RS2). The splits are used to display split times when you're actually driving on track.

A2:[Answered live]

10 **Q:**Will RS3 Analysis use the same maps?

A1:We will have a quick preview of RS3 Analysis at the end today. Stay tuned!

A2:RS3 Analysis will use the tracks maps the in the same manner as RS2 Analysis.

11 **Q:**When comparing data between drivers there seems to often be a 1-2ft discrepancy between starts for different drivers using different loggers. Any reason for that? How do I fix that?

A:Send the same track to both units to ensure they are using the same S/F. You can also align data by GPS lap insert to correct after download.

12 **Q:**I have found sometimes that the pre-loaded S/F lines are slightly off. I have gone in and edited the GPS coordinates of the S/F line based on Google Earth to get it closer.

A1:Always good to verify. Often tracks added are created from user database.

A2:In my experience Google Earth can be off (though it's getting better and better). Anyway, please let us know which one are 'off' and we'll be doublechecking together.

13 **Q:**How does this work with open circuits and what are the items to pay attention to?

A1:Closed circuits will have start/finish and splits, open circuits will have separate start/finish, but creating a map features exactly the same steps.

A2:What device? You can manually create a S/F line in the database using the starting coordinates and add a 'Split' for the finish line with those coordinates.

14 **Q:**Are the preloaded AiM maps based on the geometric centerline of the specific tracks, or by a driver's chosen line driven in some particular car, or something else?

A1:We have gotten the start/finish line coordinates a number of different ways and a lot of the maps have been created from driven line data from that particular track.

A2:Normally we take data shared by users, so it's driven line. But we also feature tracks that we traced by ourselves, so it's basically center line. We're trying to get more consistent in processing tracks in the future, but this is not affecting the capability to get almost perfect lap times.

15 **Q:**Will we be shown how to do lap replay on the GPS map?

A:[Answered live]

16 **Q:**Would you care to advise on how to choose where to segment?

A:There are many variables here. Commonly, segments are divided into corners and straights

- 17** **Q:**Not so much a question but just sharing a practice I do. Manually go through the measures graph, look at speed and Gs, then write down specific distances in feet where I want to break the track into segments. I find that I can get much better splitting than trying to use the mouse and cursor to 'divide' the track map.
- 18** **Q:**Is it possible to get a link on creating a track map specific to hard brake zones or flow so it can be analyzed on split reports?
- A:**We did touch on it a bit. I'm not sure if Roger will touch on this exactly today. If not, send us an email to support@aimsports.com and we can give you a hand.
- 19** **Q:**I've noticed GPS positional accuracy varies throughout a lap. Does my SOLO2 DL need to be repositioned for optimal signal?
- A1:**The GPS hardware is on the top of the unit so if it is hidden by the roof or not pointing directly at the sky it is being diminished and may or may not affect the accuracy.
- A2:**The accuracy widely depend on available satellites and where they are in the sky, but Solo2 features an 8th generation GPS and normally doesn't feature this phenomenon. Would you share a picture showing your installation?
- 20** **Q:**Can you turn off the segment shading that overlays the measures graphs?
- A:**Yes, by right clicking on the graph and choosing plot settings, you can change the color of the splits to match the plot background.
- 21** **Q:**In the case of open circuits, if the starting point is passed in the opposite direction, the lap is activated?
- A:**Sometimes we run into issues if the track circles back around close to the start/finish line. You can narrow the track width or move the start/finish line to compensate.
- 22** **Q:**In case of special rally tests, can we create a track using a Google maps route?
- A:**At the moment only AiM Italy can. (hint: this feature may be coming)
- 23** **Q:**Is there an easy way to format the windows automatically to duplicate what Roger is showing or do you have the drag and resize?
- A:**Using "User Profiles" you can drag and resize just once and save the windows configuration.

24 **Q:**Can you segment out the track by clicking on the colors vs. dragging the cursor?

A:If you're referring to the colors on the map, yes, you can click on the map and create a segment at that point, and then segment as you wish.

25 **Q:**If I create my track folder under "Manual Collections" then update my Solo2, how do I display only the tracks I have in my folder?

A:This is for organizing the tracks in the RS3 and does not affect the Solo2.

26 **Q:**How do I add the track map [GPS driven line] to the data measure screen?

A:It's just a matter of moving and resizing the windows to get all of them on there at once. If GPS map isn't active you'll need to click the "GPS Data" button in the top left.

27 **Q:**Is there a way to import a track map that is not in the database, say from a .kmz or .kml file?

A1:You can create a new track with the start/finish line and then input the actual drawn map after you have driven it the first time.

A2:At the moment the only way to load a track map before getting the track is have it shared by someone or write an email to software@aim-sportline.com. We now have 4000+ tracks globally, which should cover the majority of race tracks. If one is missing, let us know.

28 **Q:**How do you bring up the standard 'track map'?

A1:Map > New > Name it. This will create and then display the standard map for you. This should be covered today. To display it, once created, you can use the Show Track Map button or the map menu item.

A2:[Answered live]

29 **Q:**I was considering upgrading from SOLO2 to MXS 1.2, but after these seminars, it appears that I can get much of what I really need for data from the SOLO2 GPS and G's data (I also have SmartyCam). What value is there in using Brake Pressure, Throttle Position and Steering angle?

A:Having those additional 'driver input' sensors will definitely give you additional information and more insight into what the driver inputs were and 'Why' the car reacted as it did. The GPS data is still very powerful on its own though.

- 30** **Q:**My son has trouble understanding the GPS map versus viewing video. How can I help him understand the GPS trace better?
- A:**Overlaying the track on the measures graph and going over each corner is a great way to start. If you have video you can put on another screen to view both together, that's even better.
- 31** **Q:**I would really like to know more about how to manually adjust the corners that it creates in the standard track map. I often find that the corners it auto-generates don't match up with the commonly used corner numbers (turn 1 at Laguna Seca doesn't get included, for example).
- A:**Here are a couple of earlier videos that will also help.
Creating a Standard Track Map – Basic: <https://youtu.be/l8rbcX3nebU>
Creating a Standard Track Map – Advanced: <https://youtu.be/l-kODsh5Whg>
- 32** **Q:**I tried the .kml export to Google Earth last week and found that the lines were cutting well into a corner. I wasn't cutting the corner that much. The line was also off the circuit on a straight. This must be GPS error, right?
- A:**There can be various reasons. Google has historic maps, sometimes these fit better.
- 33** **Q:**You can't incorporate the Google Earth map into to RS2 though, correct?
- A:**Correct.
- 34** **Q:**Will RS Analysis3 allow us to import video from other cameras such as a GoPro?
- A:**It's under consideration, but this data relies on the time sync embedded into the SmartyCam video.
- 35** **Q:**Can the satellite view map be made larger?
- A1:**Yes, views can be customized in RS3, as well as RS2
- A2:**[Answered live]
- 36** **Q:**When will RS3 Analysis be available? Mid May?
- A:**I'm working 110% of my time to hit that target. In these last days I dedicated some hours to the import of the iRacing ibt logs, but now I'm back to RS3A.
- 37** **Q:**Do you have any documentation on creating track splits in RS3 and how this information is displayed?
- A:**Yes, here is a link:
"http://www.aimsports.com/download/faqs/eng/software/rs3/FAQ_RS3_SplitManagement_100_eng.pdf"

38 **Q:**I misplaced my Solo2. Can you locate it via GPS?

A:There is no tracking ability with any AiM device currently. Although, if it was missing or stolen there might be a way to locate it in the future.

Call or email us and we'll be glad to help you out. 800.718.9090

or support@aimsports.com