

**Avg/Max/Min Speed View**

Lap	Time (Diff)	Max Speed (Diff)	Min Speed (Diff)	Average Speed (Diff)	Distance
Lap1	00:48.648 (+00:07.476)	48.20 km/h (-5.95)	15.93 km/h (-4.06)	29.75 km/h (-5.77)	396.68 m
Lap2	00:46.178 (+00:04.969)	44.78 km/h (-9.38)	15.58 km/h (-4.41)	31.22 km/h (-4.30)	398.90 m
Lap3	00:43.828 (+00:02.757)	52.94 km/h (-1.22)	15.76 km/h (-4.23)	33.87 km/h (-1.65)	404.52 m
Lap4	00:46.004 (+00:04.832)	51.84 km/h (-2.52)	0.25 km/h (-11.73)	31.41 km/h (-4.11)	401.41 m
Lap5	00:43.322 (+00:02.160)	49.41 km/h (-4.75)	17.22 km/h (-2.77)	33.92 km/h (-1.60)	405.11 m
Lap6	00:42.001 (+00:00.889)	53.01 km/h (-1.15)	17.29 km/h (-2.70)	34.20 km/h (-1.27)	399.57 m
Lap7	00:42.938 (+00:01.166)	53.64 km/h (-0.52)	19.99 km/h	35.03 km/h (-0.49)	408.67 m
Lap8	00:44.032 (+00:02.860)	54.16 km/h	18.57 km/h (-1.42)	33.33 km/h (-2.19)	407.35 m
Lap9	00:41.719 (+00:00.647)	50.45 km/h (-3.71)	19.92 km/h (-0.07)	35.49 km/h (-0.04)	404.03 m
Lap10 (best)	00:41.172	52.85 km/h (-1.31)	18.83 km/h (-1.16)	35.52 km/h	404.52 m

**Experience it with QRacing™**  
**Fulfill your needs**



Autocross

Drag Race

Rally

Karting

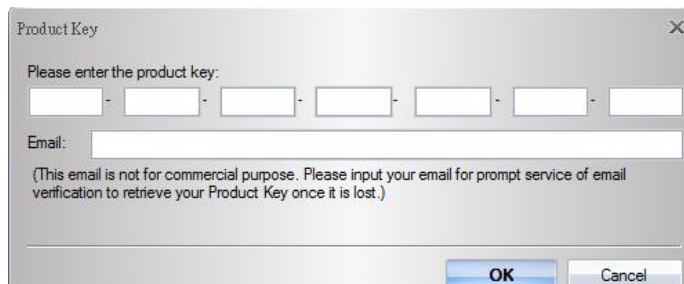
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# 1. System Requirement

Recommended System Requirement
Windows 7 or later
Intel Core i5 or AMD FX 8 Core Series
6GB RAM, more memory improve performance
50GB of free disk space
3D-capable video card with 32Mbytes of VRAM or greater
1980x1060 “32-bit True Color” screen

Users have to enter the product key at the first time of use. [The product key is located on the Warranty Card.](#)



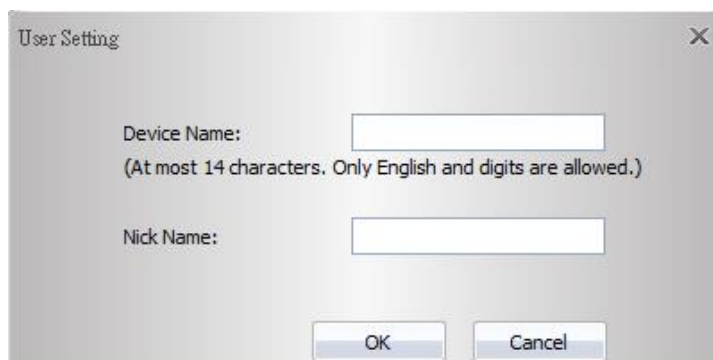
You can click the button “Input Product key” in the [About QRacing]

## 2. Users

### 2.1 Create a new user

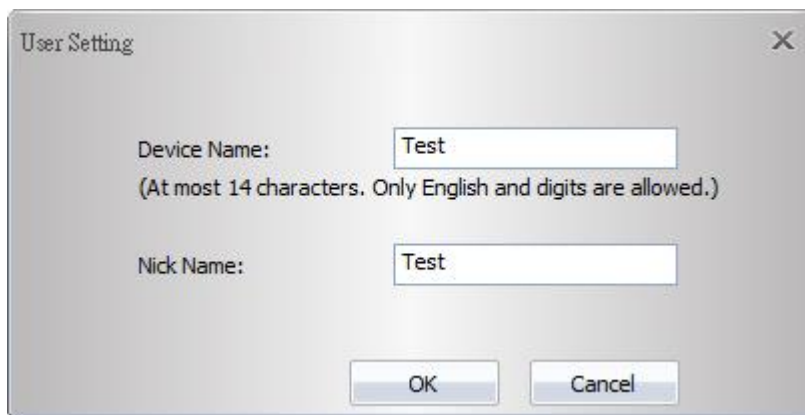
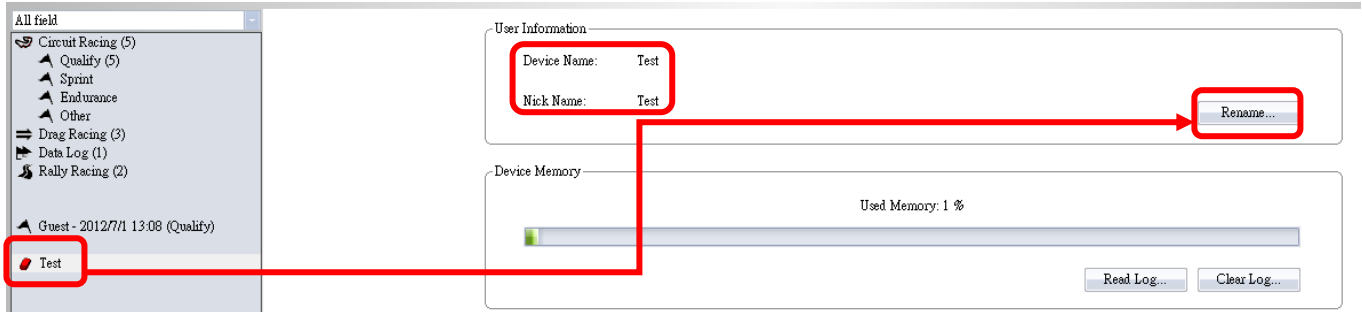
QRacing support multiple users. Users can add a new user by connecting the GPS device to PC. If your device has never been configured, QRacing will pop up the dialog automatically and then you can edit the device name and User’s nick name

p.s. Device name only allow entering 14 characters at most. And only English and digits are allowed.



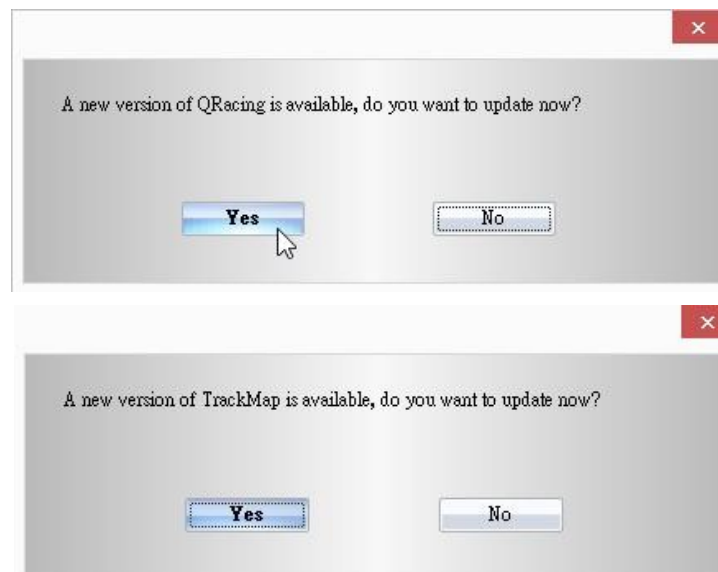
## 2.2 Modify the names

After adding a user, you will see in the left zone. QRacing also allow users to modify the device and nick names. Click the user name in the left zone, your device name and nick name will show in the right zone. Then click the “Rename” button, and you can modify the names.



## 3. Auto-Update

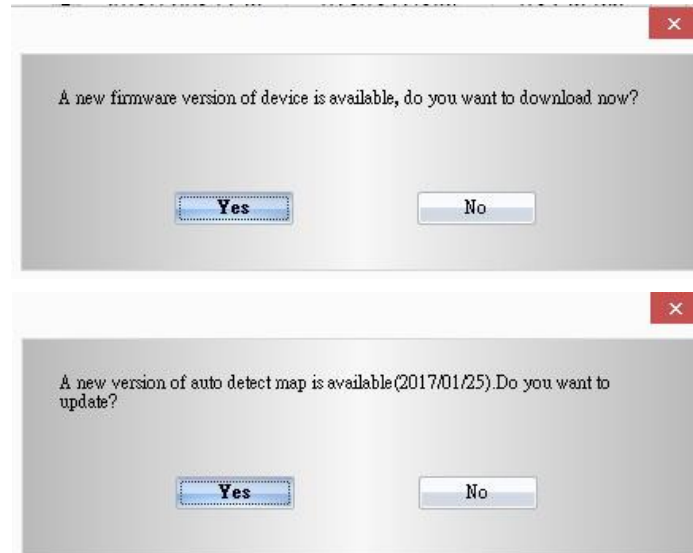
**For QRacing:** QRacing will automatically checks for QRacing software and Trackmap version updates on each startup.



**For LT-Q6000, LT-6000S models:** Turn OFF the device and connect with internet-connected computer, QRacing will auto detect device firmware and auto detect Trackmap version.

**For BL-1000GT model:** Turn OFF the device and connect with internet-connected computer, QRacing will auto detect device firmware.

Update to the latest version to corresponding device and follow the instruction to install the device firmware or Trackmap version.



## 4. Download Data

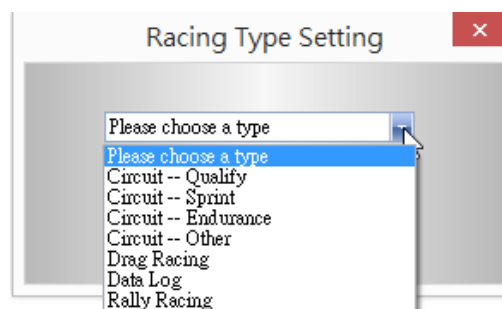
### 4.1 For LT-Q6000, LT-6000S, BL-1000GT models

Turn **OFF** the device and connect with your computer, QRacing will ask you to read log if there's record in it. Click on "Yes" to read the log.

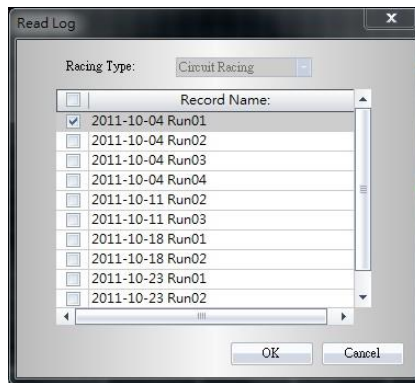


Select the Racing type:

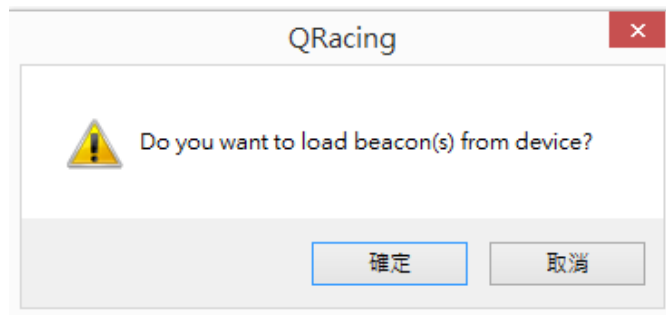
**\*Only LT-6000S support Rally**



Select the session you want to download:



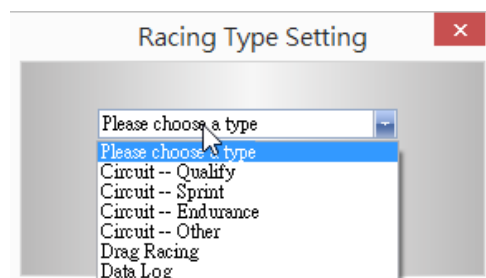
QRacing will ask if you want to load the beacon from device, Click on “Yes” to load the beacon from device or “No” to set the beacon with QRacing: (Beacon is commonly referred to as the virtual start, finish and split lines.)



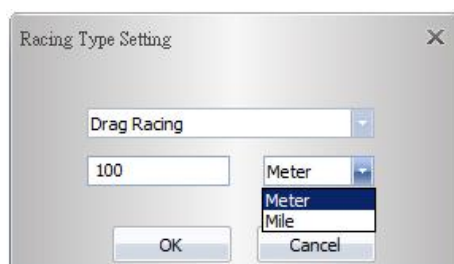
## 4.2 For Q1000EX model

Switch **ON** the GPS device and connect with PC, QRacing will ask you automatically if you want to read log from device. Click “yes”, then you will see the dialog as follows:

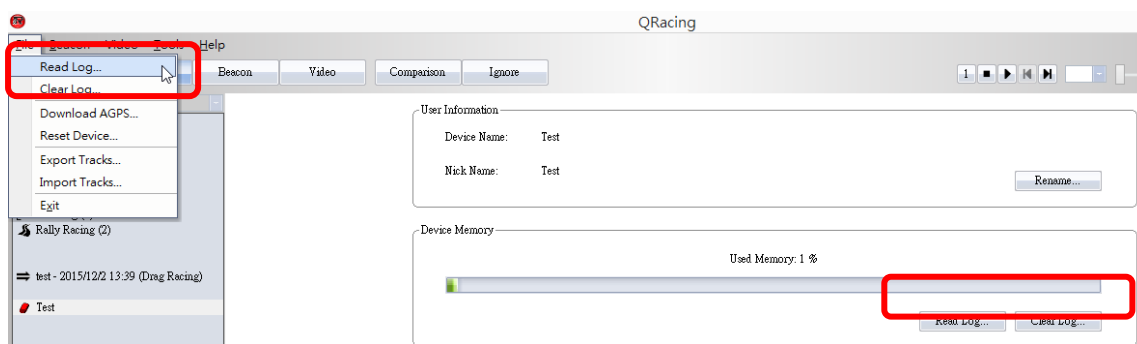
Here you can choose a racing type you want.



If you choose the type “Drag Racing”, you have to enter the distance for this type, and you should choose the distance unit.



### 4.3 Read/Clear Log/Reset device



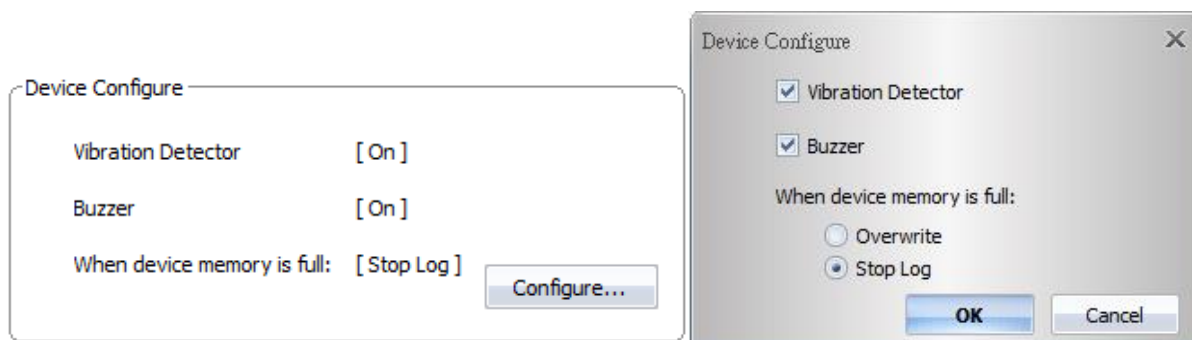
If you want to read log by yourself, you can click the user in left zone to change to user setting page. Then click the “Read Log...” button. Or you also can read log from **[File] --> [Read Log]**.

In the user setting page, you can clear the device log. Plug your device and then click the “Clear Log...” button. Or you can also clear log from **[File] --> [Clear Log]**.

To reset the device to factory setting, click on **[File] --> [Reset Device]**.

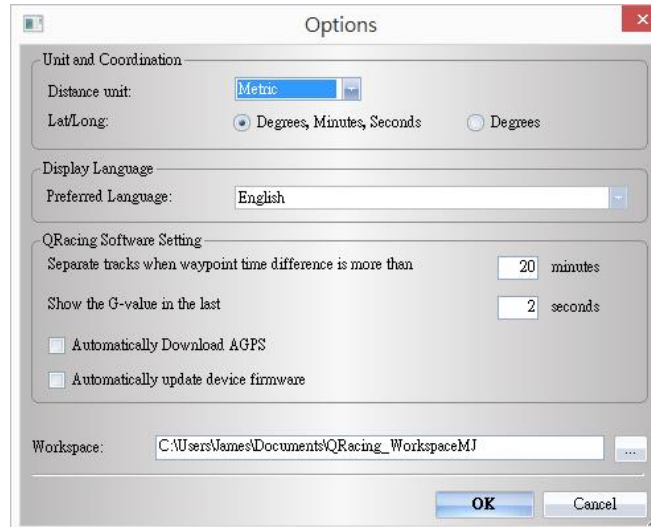
### 5. Device Configure (for BT-Q1000eX model only)

After you plugged your device, you can configure the device. In user setting page, please click “Configure...” button to get the device configuration of vibration detector, buzzer and memory.



### 6. Tools Option

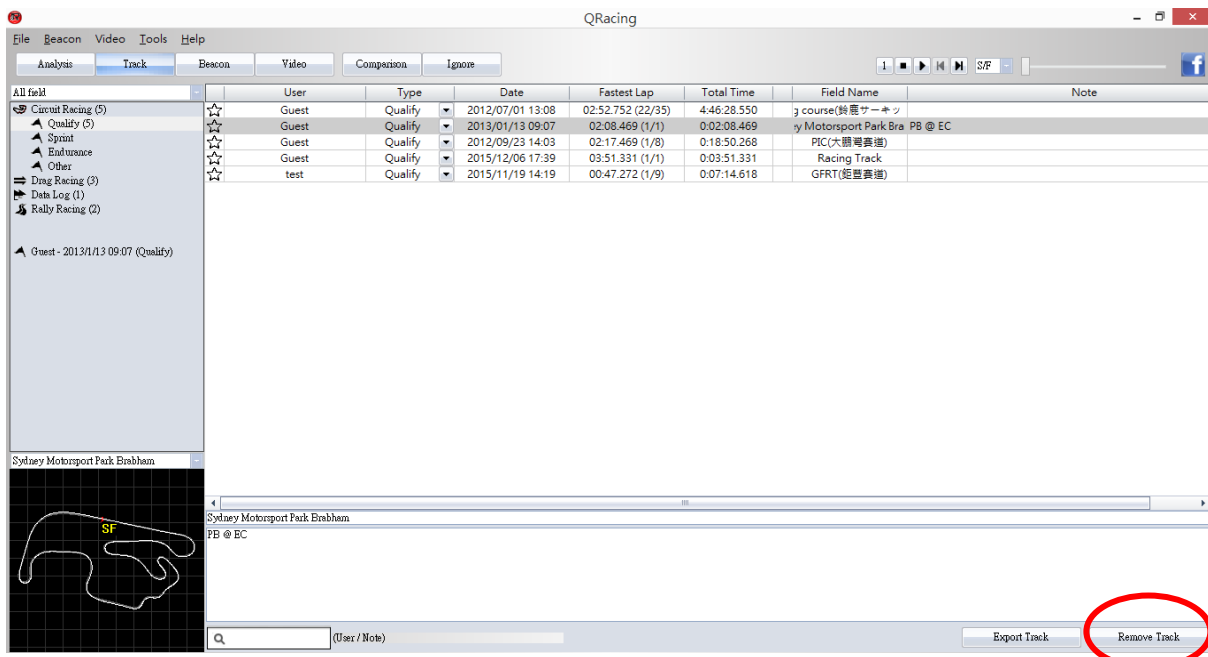
In Menu, click **[Tools] --> [Options]**. You can configure the unit and coordination, display language, separating the track, set G-value lasting time, Enable/Disable automatically downloading AGPS or updates device firmware and choosing the directory path of QRacing workspace.



## 7. Record List

You can double click the selected track, and QRacing will change to Analysis page.

If you want to delete track, select the track you want to delete, and remove it by click “Remove Track”.



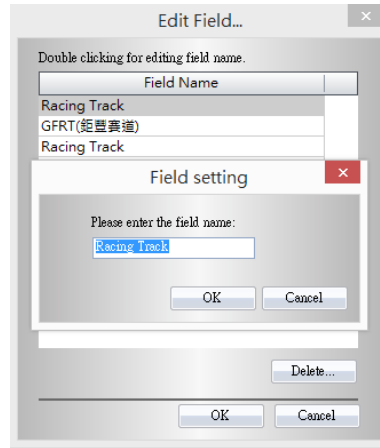
Racing type under Circuit Racing mode is default name as Qualify, Sprint, Endurance, and Other.

Right-click the racing type under Circuit Racing mode, and you are able to custom your own individual name of racing type.



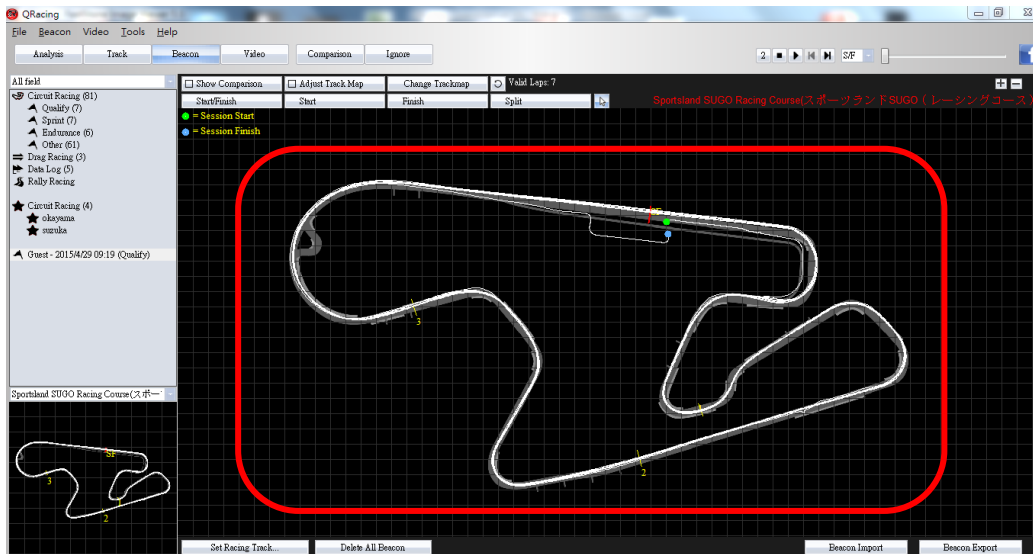


And you can edit the racing track name by double-click on the track name or delete it by click on the Delete button.

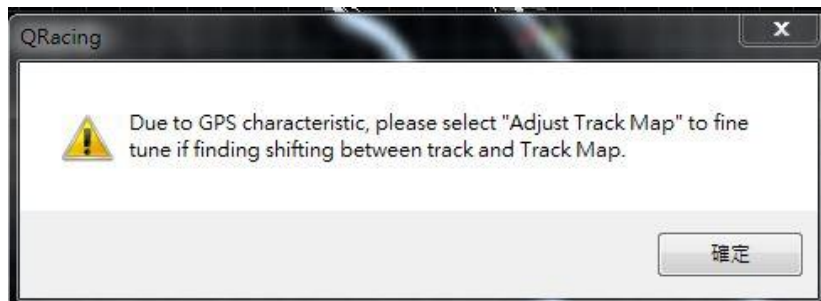


## 8. Track map database

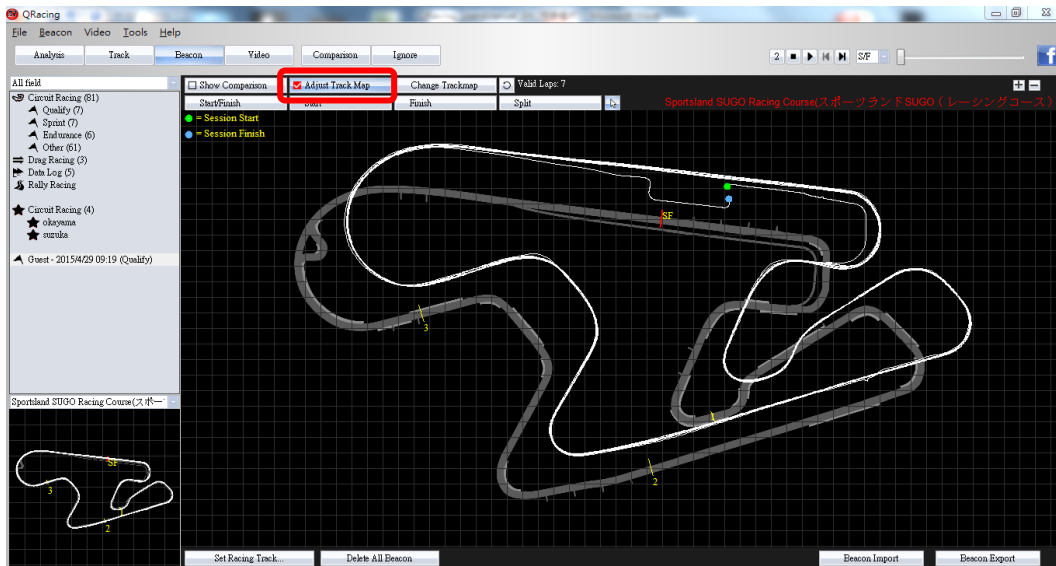
QRacing has built-in Track Map database and will auto detecting and displaying Track Map.



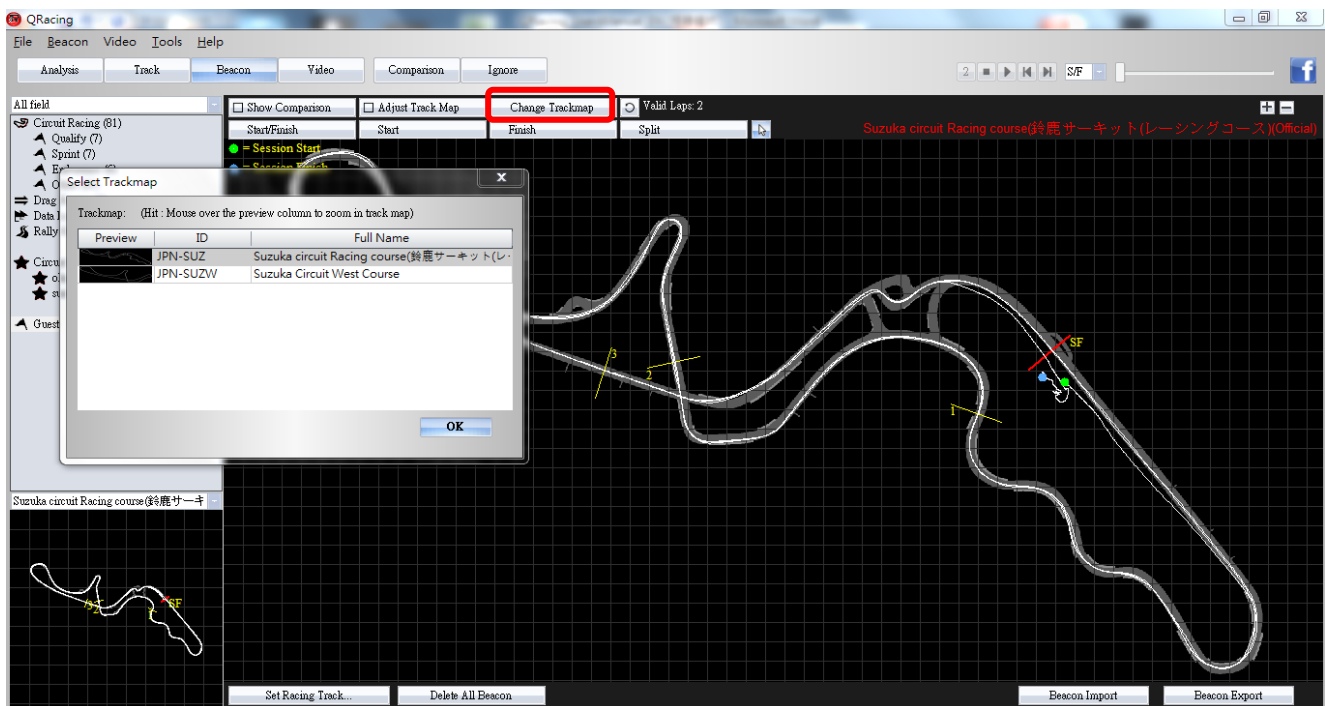
When click on Beacon page, below pop-up window will notice you.



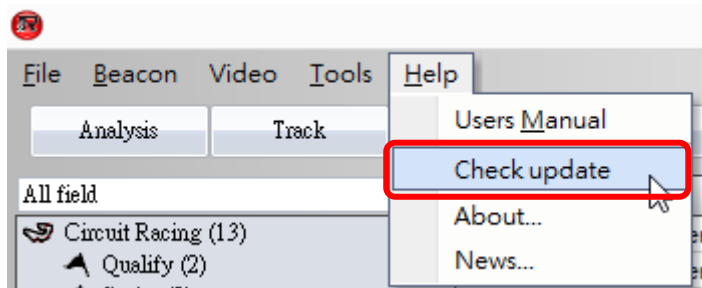
You can click on Adjust Map checkbox and drag the track to the correct position and match with the Track map.



If the Auto trackmap detection is not correct, for example race track is containing multiple track layouts, you can click on Change Trackmap to change to the correct one. Track layout thumbnail can help you on selection.

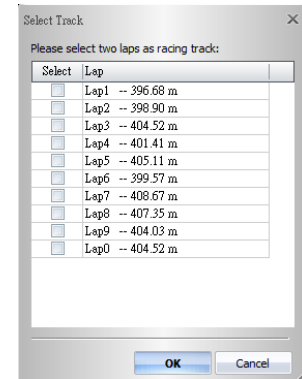
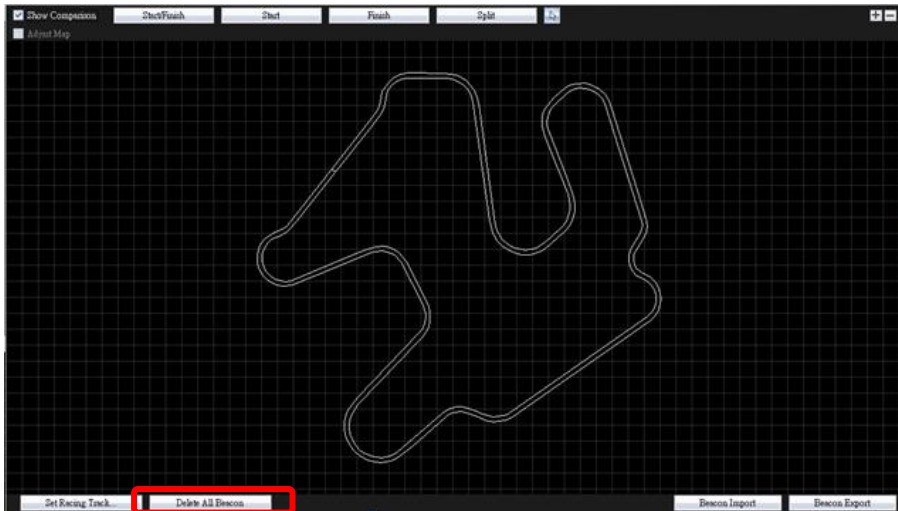


You can download and update the latest track map database by click Menu --> [Help] --> [Check Update]



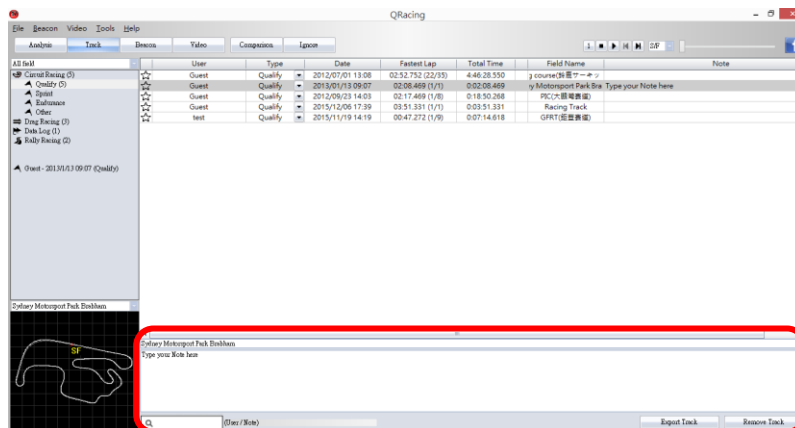
## 8.1 Set Racing Track

If QRacing track database doesn't contain your track map, you can make your own track map. By driving or riding, record one lap for inner edge and one lap for outer edge of the racetrack. Download track data into QRacing, click on button "Set Racing Track", you can select these two laps to mark as inside and outside edge of your track.



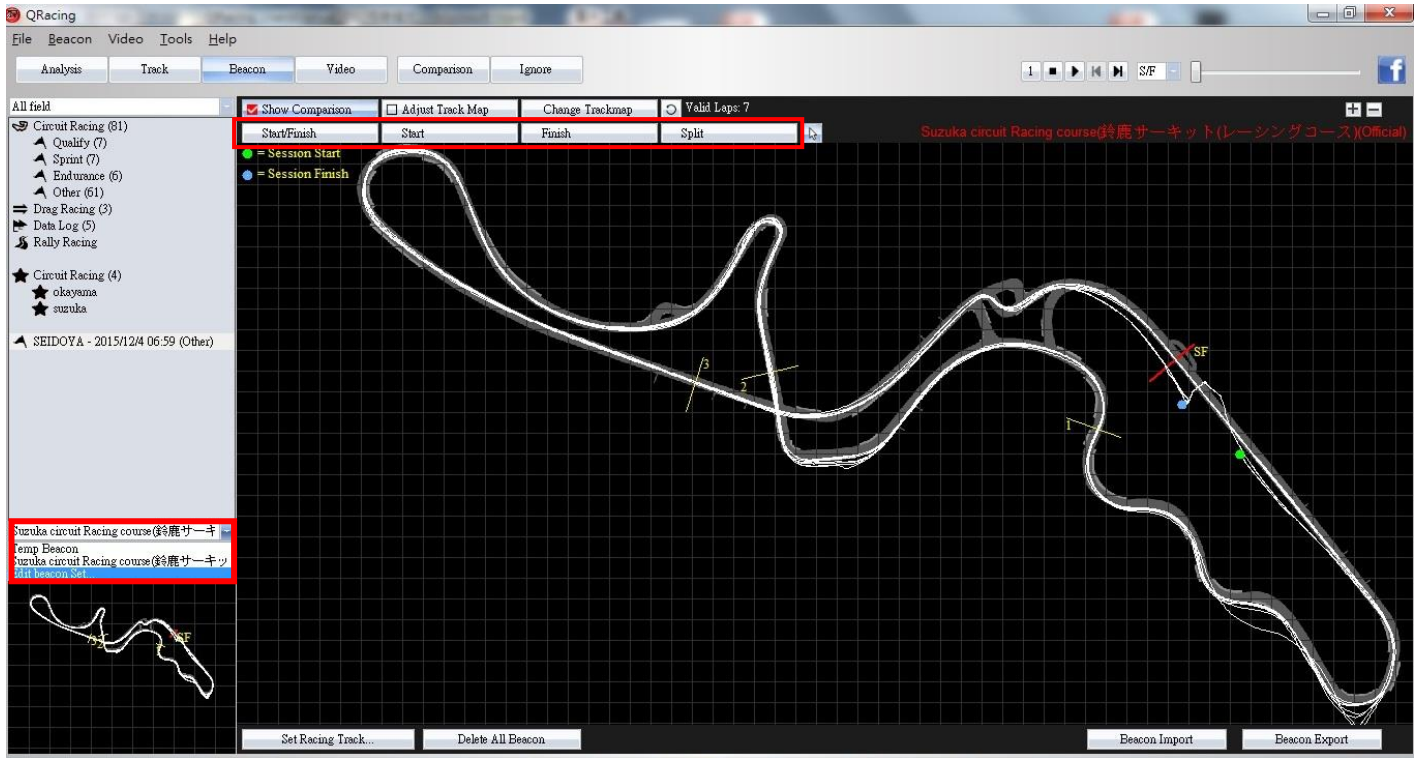
## 8.2 Track Note

After reading log from device, you can add note for the track. First, select the track which you want to add note, and then edit it in below box.

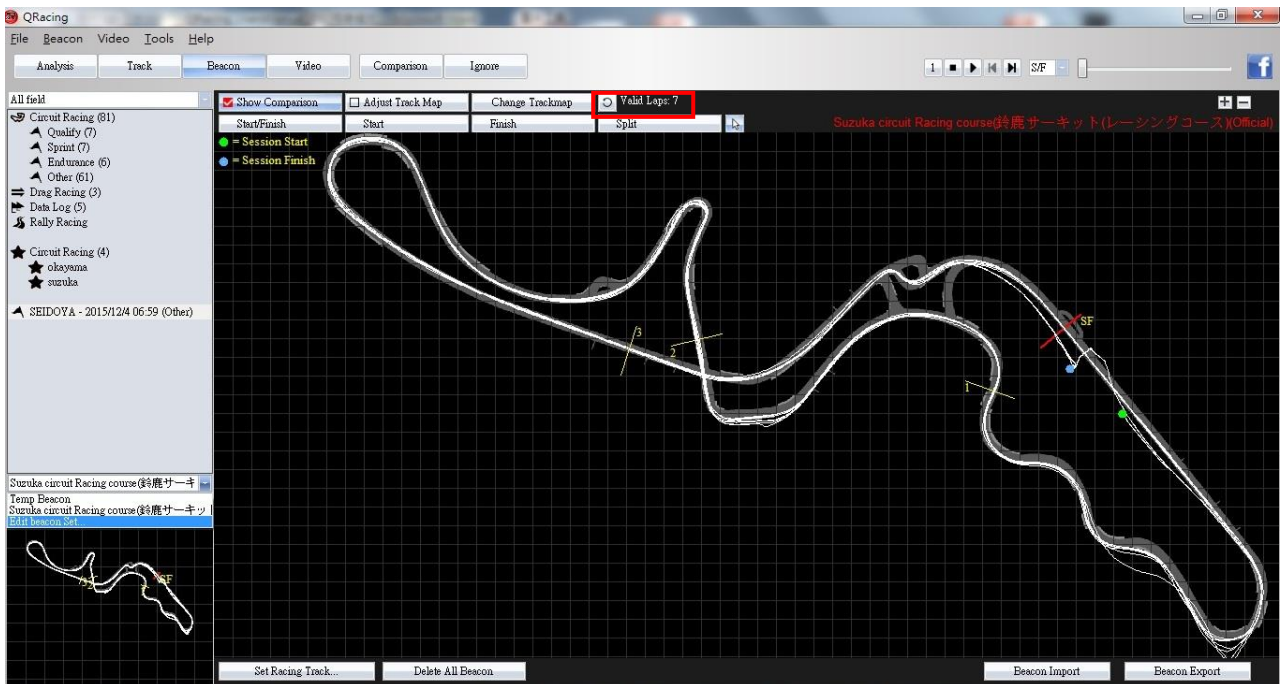


## 8.3 Beacon

If you have not edited beacons for this track, QRacing will ask you to edit beacons. This will make QRacing calculate the analysis data for your racing. In the Beacon page, you can select QRacing default beacon set or you can create your own beacon set. You will see there are four beacon types, Start/Finish, Start, Finish and Split, which you can edit depend on your racing types.



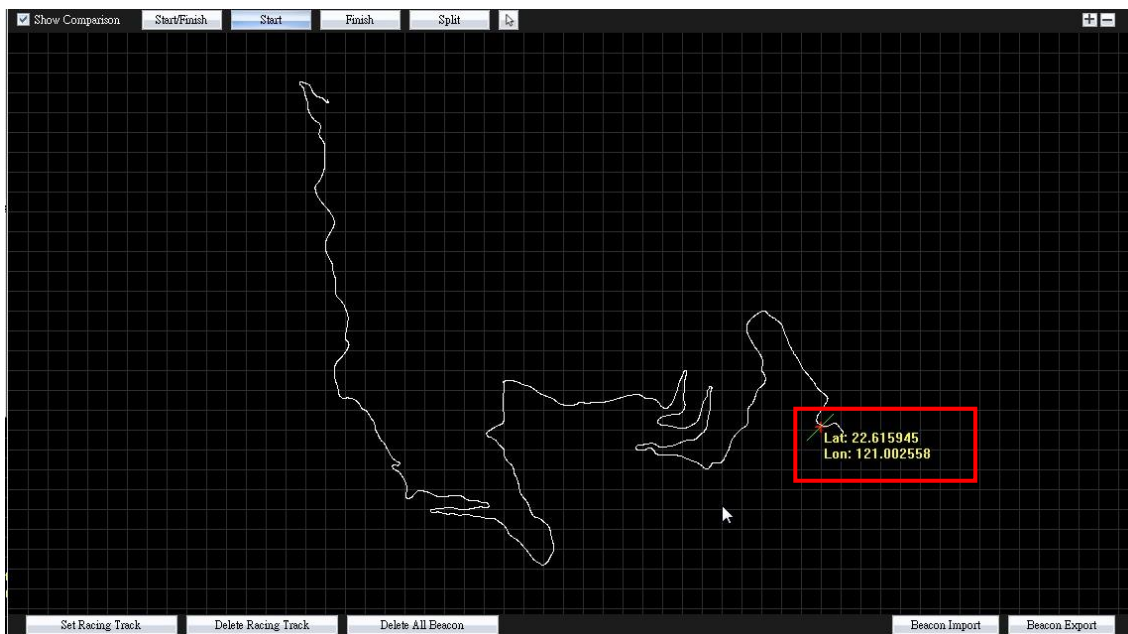
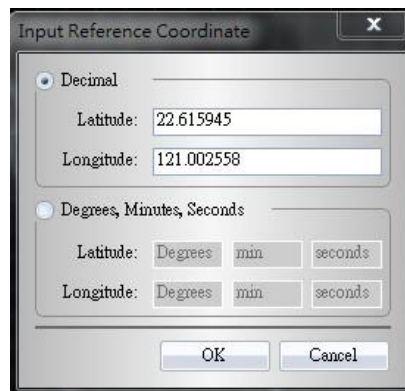
You can click on refresh lap button to re-calculate the Valid lap numbers, for example you adjust the start/finish line or Split line position.



For Rally race, you can add waypoint details (name and note) and print it out to create a Roadbook for upcoming Rally events. Click on **Export Roadbooks** and save as HTML file, you can use browser print function to print the Roadbook. **\*Rally only support LT-6000S**

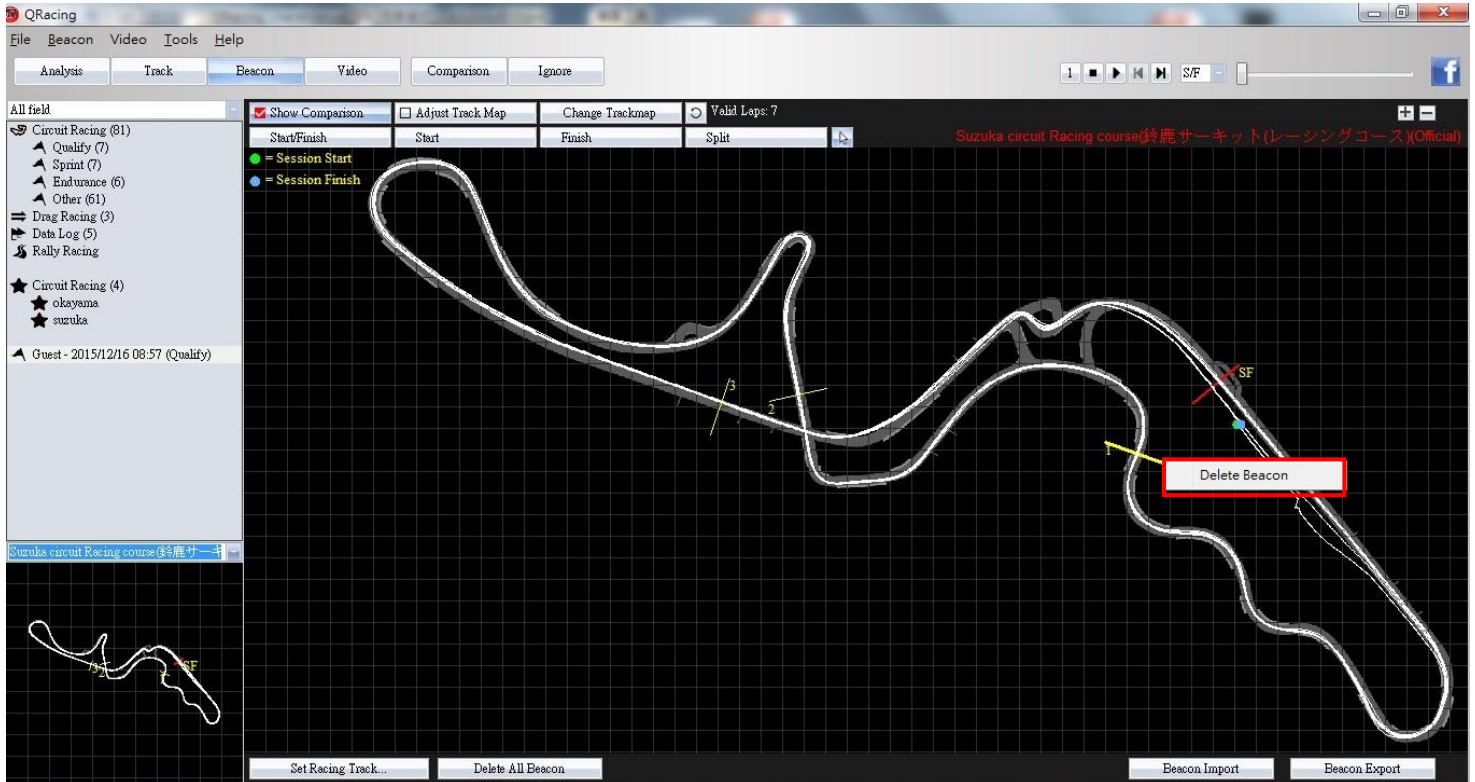


If you know the coordinate position of the beacon you want to place, you can find in Menu --> [Beacon] --> [Input Reference Coordinate], and input the Latitude and Longitude to mark your beacon's position.



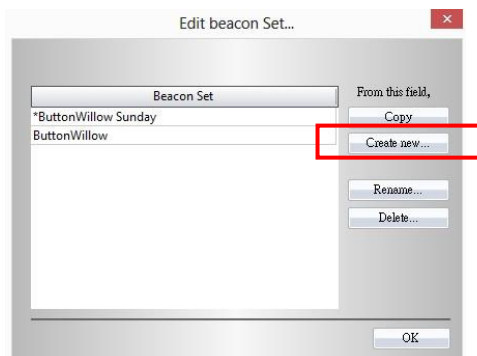
### 8.3.1 Delete Beacon

To delete beacon, please move your mouse on the beacon (beacon will be highlighted), then right click on the mouse to delete it, or you may click on “Delete All Beacon” button to delete entire beacons.

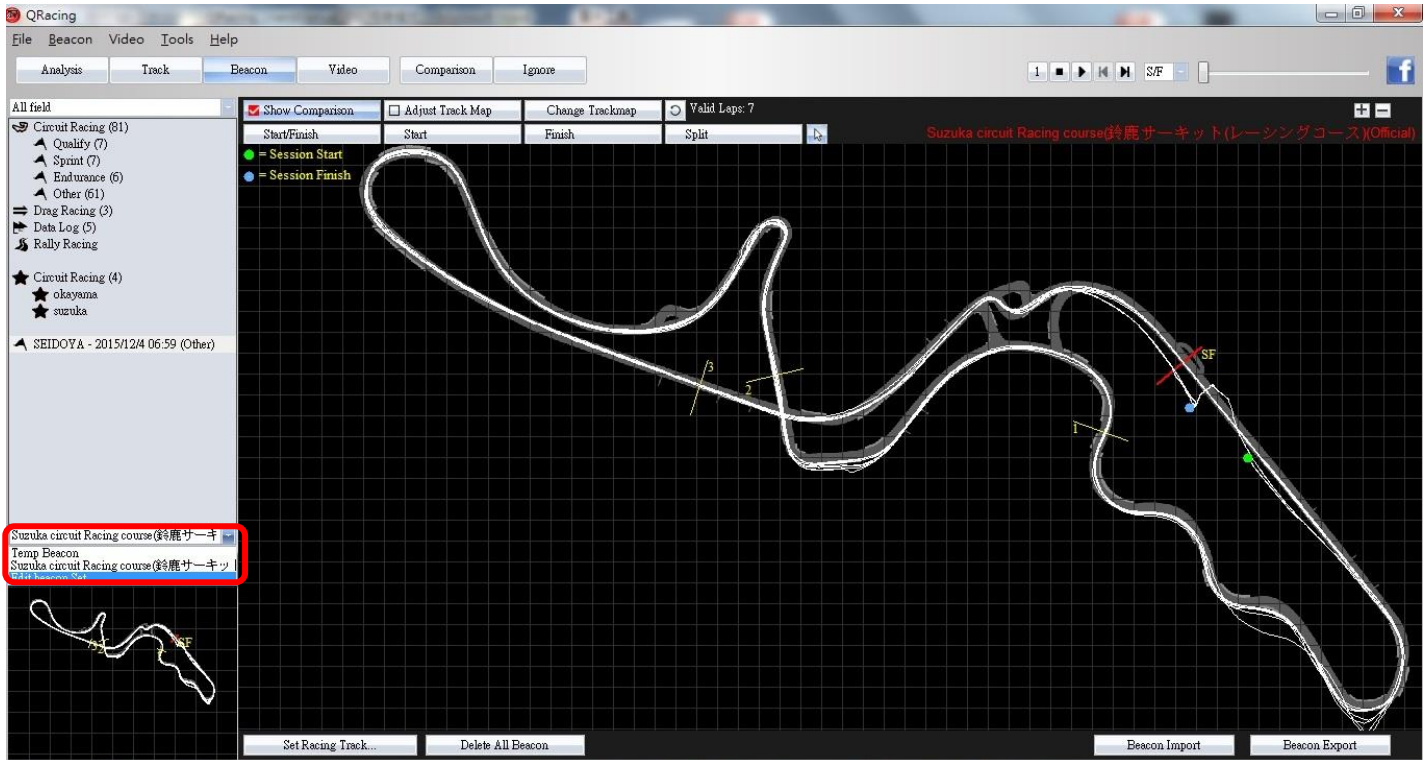


### 8.3.2 Edit Beacon Set

QRacing supports multiple Beacon Set under the same Track Map and able to analyze your race with different beacon set. Click Menu --> [Beacon] --> [Beacon Set..] to manage and edit your own beacon.



You can select QRacing default beacon set or your own beacon set for analyze purpose.



### 8.3.3 Export/Import Beacon

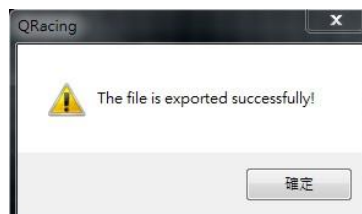
You also can export the beacon set for sharing the racetrack information to your friends. Just click “Beacon Export” and “Beacon Import” for this purpose.

### 8.3.4 Export QRacing beacon file into device (for LT-Q6000, LT-6000S)

You can create the Start/Finish, Split lines with QRacing and then upload them into device for timing your race. In the “Beacon” section, click the “Beacon Export” button >> “Export Beacon to device” to upload the beacon.







## 8.4 Analysis

After setting up beacons, change to Analysis page, and you will see the analysis data of your race.

QRacing will use the best lap as reference lap; you may change the reference lap by clicking on Reference Lap Setting:

Reference Lap Setting: **Lap 6**

Avg/Max/Min Speed View

Lap	Time (Diff)	Max Speed (Diff)	Min Speed (Diff)	Average Speed (Diff)	Distance
Lap1	04:28.851 (+26.487)	151.42 km/h (-43.08)	14.67 km/h (-32.80)	77.67 km/h (-37.01)	5782.04 m
Lap2	04:34.379 (+32.015)	183.76 km/h (-10.74)	0.14 km/h (-47.33)	76.04 km/h (-38.64)	5787.62 m
Lap3	03:11.554 (+09.189)	192.32 km/h (-2.18)	38.23 km/h (-9.24)	109.02 km/h (-5.66)	5784.15 m
Lap4	03:08.635 (+06.271)	194.64 km/h (+0.14)	45.03 km/h (-2.44)	110.79 km/h (-3.89)	5785.63 m
Lap5	03:04.781 (+02.417)	191.00 km/h (-3.50)	42.33 km/h (-5.14)	113.29 km/h (-1.39)	5790.50 m
Lap6(best)	03:02.364	194.50 km/h	47.47 km/h	114.68 km/h	5797.75 m
Lap7	03:12.478 (+10.114)	201.25 km/h (+6.75)	41.68 km/h (-5.79)	109.00 km/h (-5.68)	5813.35 m
avg.	03:31.863	186.98	32.79	101.50	5791.58

Sector View (Split-to-Split)

Lap	Time (Diff)	S-1 (Diff)	1-2 (Diff)	2-3 (Diff)	3-F (Diff)
Lap1	04:28.851 (+26.487)	01:08.449 (+17.076)	00:42.852 (+10.347)	01:24.059 (+18.595)	01:13.491 (+40.468)
Lap2	04:34.379 (+32.015)	02:07.681 (+76.308)	00:35.867 (+03.362)	01:10.745 (+05.282)	00:40.086 (+07.063)
Lap3	03:11.554 (+09.189)	00:54.792 (+03.419)	00:33.171 (+00.666)	01:08.007 (+02.543)	00:35.584 (+02.562)
Lap4	03:08.635 (+06.271)	00:51.903 (+00.530)	00:34.486 (+01.981)	01:06.933 (+01.469)	00:35.314 (+02.292)
Lap5	03:04.781 (+02.417)	00:51.146 (-00.227)	00:32.750 (+00.245)	01:06.667 (+01.204)	00:34.218 (+01.195)
Lap6(best)	03:02.364	00:51.373	00:32.505	01:05.463	00:33.023
Lap7	03:12.478 (+10.114)	00:50.362 (-01.011)	00:31.063 (-01.442)	01:06.244 (+00.781)	00:44.809 (+11.786)
Best Theoretical Time	02:59.910	00:50.362	00:31.063	01:05.463	00:33.023
Best Rolling Time	02:59.911	00:50.362	00:31.063	01:05.463	00:33.023

There are four tables for different analysis, Avg/Max/Min Speed, Sector View (split-to-split), Split View (start-to-split) and Point Current Speed View. It will highlight the best record of each analysis table and the fastest lap time to help you analyze your racing data.

QRacing also calculates **Best Theoretical Time** and **Best Rolling Time** for your reference.

**Best Theoretical Time** is the sum of best split time from the whole race.

**Best Rolling Time** is the sum of your best sequential split time in the race.

Take the figure above for example; the best theoretical time is just the add-up of best split time from all laps. The best rolling time is the sum of your best sequential split time from Lap4 (3-F) to Lap5 (2-3) which marked with underline.

You can compare with other tracks. Click "Comparison" and choose the tracks you want to compare with, and then the analysis table will automatically update the information for you. Please also see section 7.5

### Comparison

If you want to export the analysis data, you can click "Export Lap Info..." QRacing will output this analysis in

Excel, CSV or HTML format.

For drag racing analysis table, QRacing will automatically separate the drag speed into several segments and display each segment's time and distance as below:

**Max Speed View (100 m)**

Lap	Time (Diff)	Max Speed (Diff)
Lap1(best)	08.766	87.74 km/h

**Split View (Start-to-Split)**

Lap	Speed	Time	Distance
0 - 10	00.695	1.13 m	
0 - 20	03.350	10.84 m	
0 - 30	03.819	13.60 m	
0 - 40	04.323	19.46 m	
0 - 50	05.033	26.82 m	
0 - 60	05.677	39.28 m	
0 - 70	07.006	61.50 m	
0 - 80	08.012	83.07 m	

**Sector View (Split-to-Split)**

Lap	Speed	Time	Distance
0 - 10	00.695	1.13 m	
10 - 20	02.755	9.72 m	
20 - 30	00.469	2.76 m	
30 - 40	00.504	5.86 m	
40 - 50	00.710	7.36 m	
50 - 60	00.644	12.46 m	
60 - 70	01.329	22.22 m	

### 8.4.1 Horse Power Analysis

QRacing will be able to estimate the average/max horse power of your vehicle (car, truck, motorcycle) with Drag racing 1/4 run. You need to enter both car and racer's weight in order to get the accurate horse power measurement. Weight should include the mass of the vehicle, driver and passenger.

Click on Update to setting the weight.

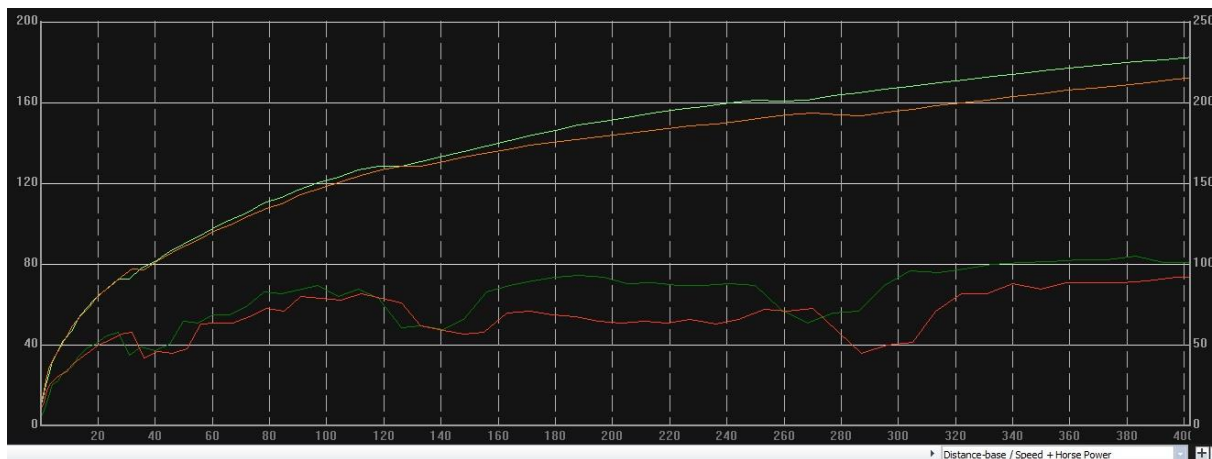
**Note: Only 1/4 run support horse power measurement**

**Horse Power View**

Car Weight: 200.00 kg  
Racer Weight: 70.00 kg

Lap	Lap1	Lap2	Lap3
max.Horse Power	0.5 hp	1.6 hp	1.1 hp

And you can also analyze the speed v.s. horse power graph in "Track" page.



**Note:** this is an estimation of power calculated from GPS data, and as such when carried out correctly will probably be within 5% of the true figure.

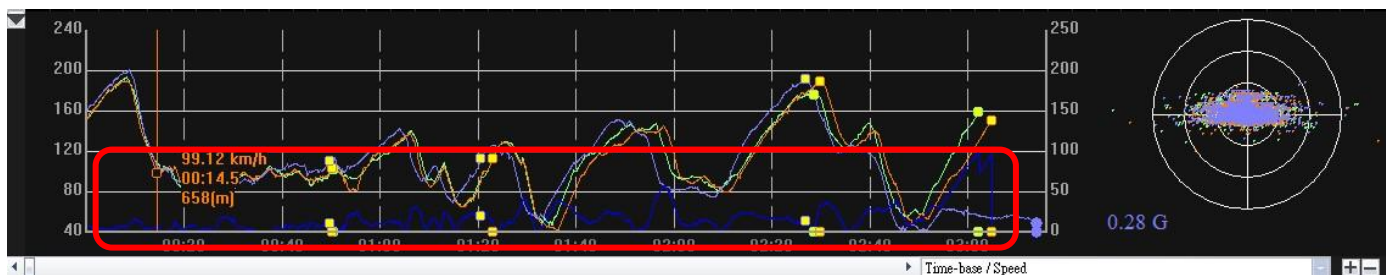
## 8.5 Track

### 8.5.1 Compare laps

In Track page, you can select up to three laps for showing and compare the data. You can also compare the laps by line graph with Distance-base or Time-base.



Select by **Time-base** will show the fastest and slowest speed difference line on the graph when doing multiple lap comparison.



For drag racing, there is one more analyzing type. You can divide the laps into four or ten segments. And the duration of every segment will show on the screen.

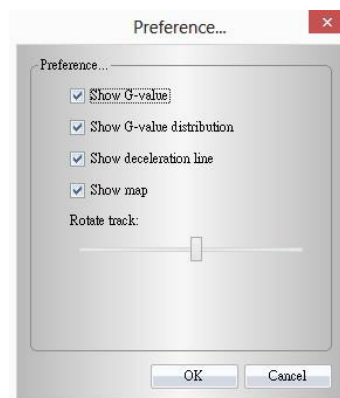


In Map View, you can give tags on the track or on the graph line with three different colors, red, green, and white. You can mark the position for define accelerate point or break point purpose.

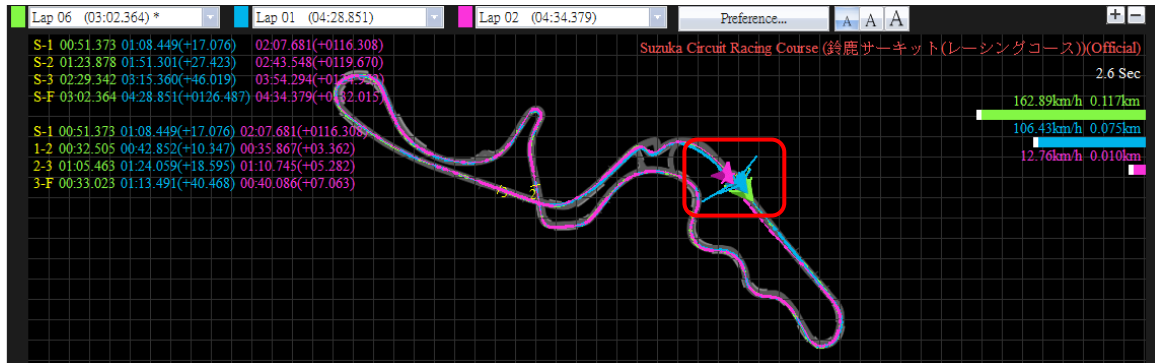


## 8.5.2 Track preference setting

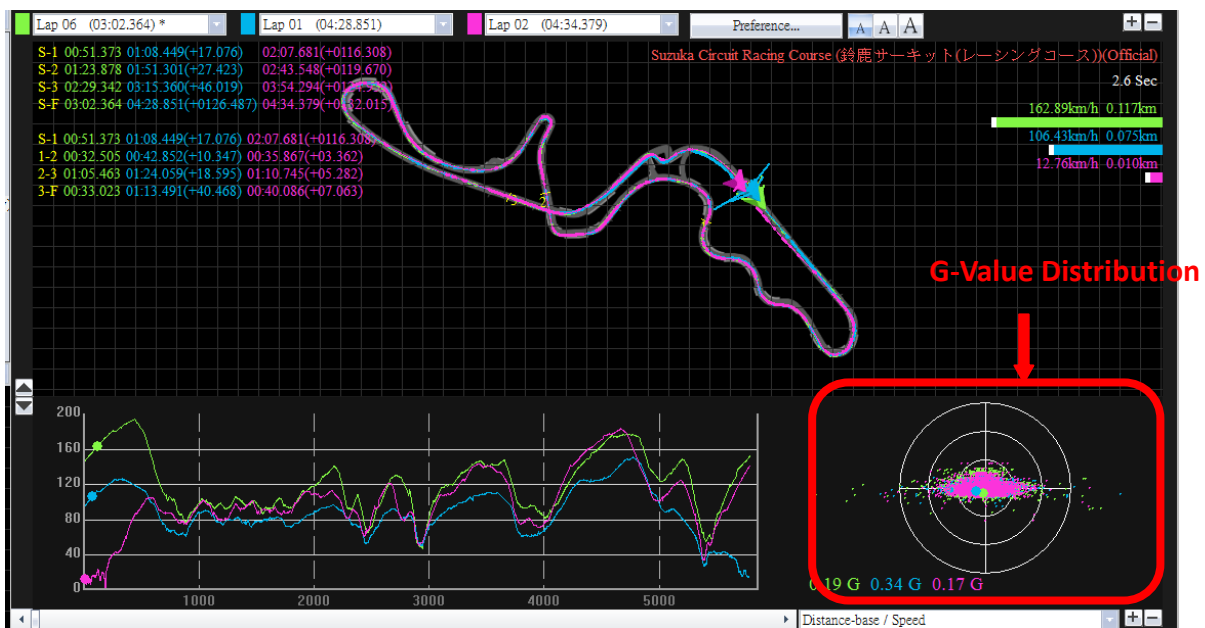
In the **Menu > Tool > Preference** or click on the Preference button on Track page will allow user to select their preference setting when playing the track.



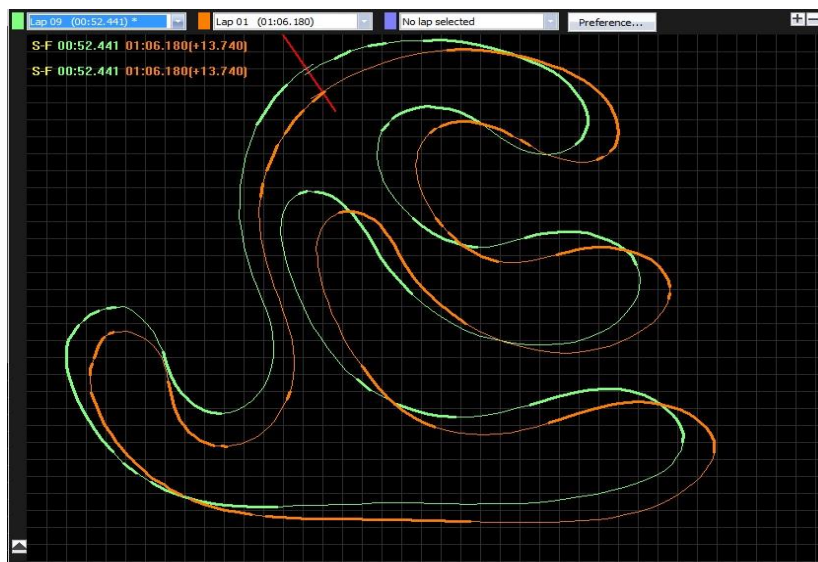
- ◆ **Show G-Value:** It will show the G-Value line on the track while replay the track



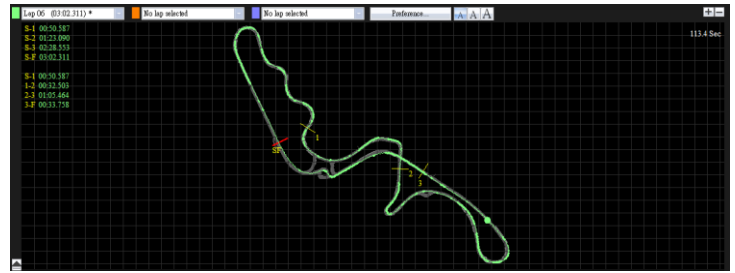
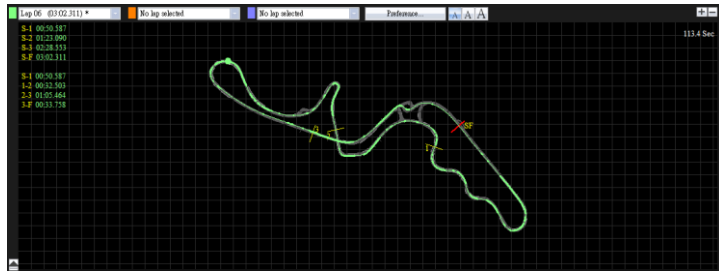
- ◆ **Show G-Value distribution:** It can show you the G-value distribution zone of the selected track.



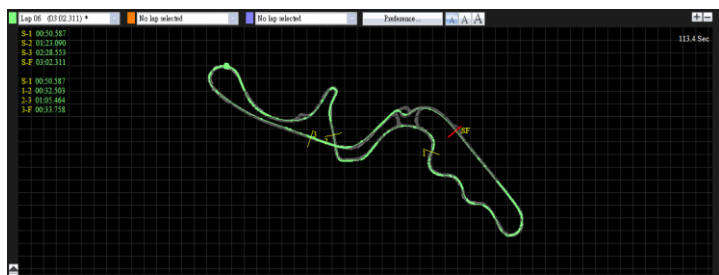
- ◆ **Show Brake line:** It can show you the braking line on the track. You can compare the tracks and get acceleration and braking information. (The thick lines present the braking zone, and the thinner lines present the acceleration zone.)



◆ **Rotate Track:** you can rotate heading of the track with 360 degrees.



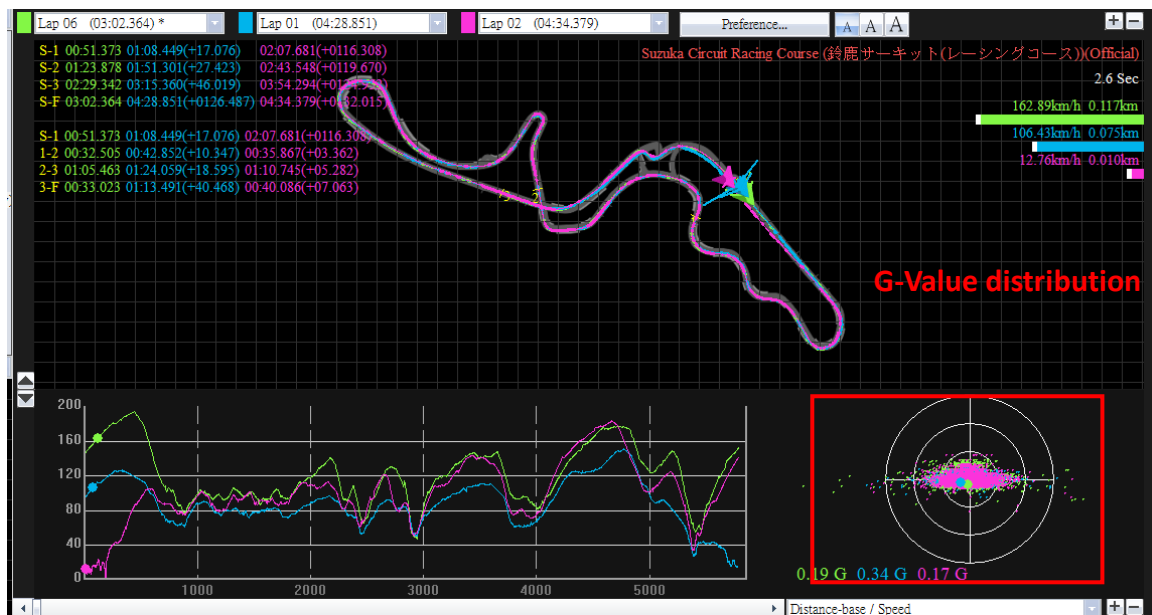
◆ **Show map:** you can check this option to display track map or uncheck to disable track map.



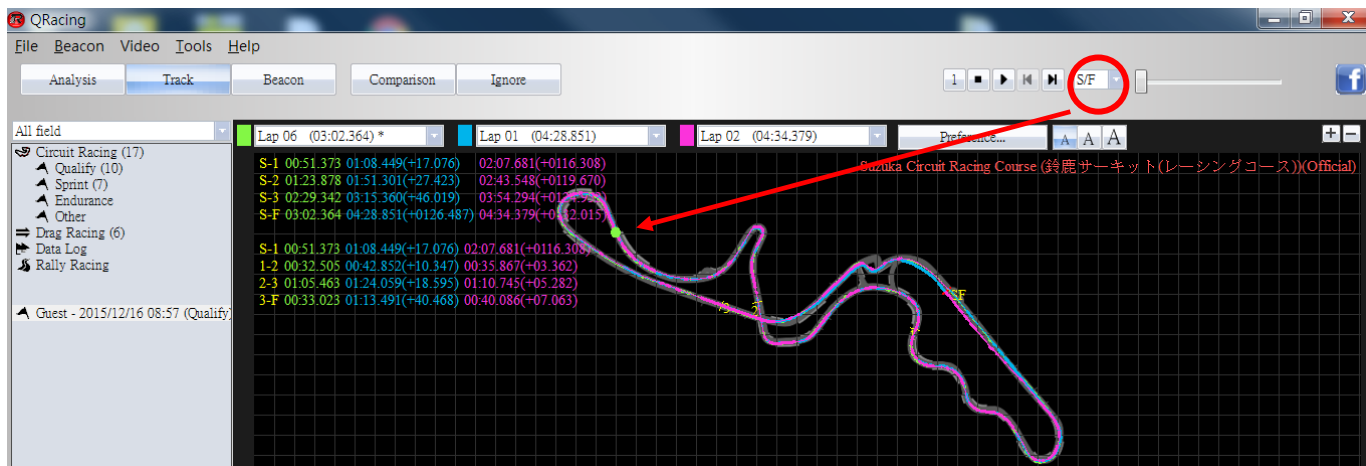
### 8.5.3 Replay View

Click the play button on the status bar. It can replay the selected 3 laps and display the racing information by time, speed and G-value distribution zone simultaneously.

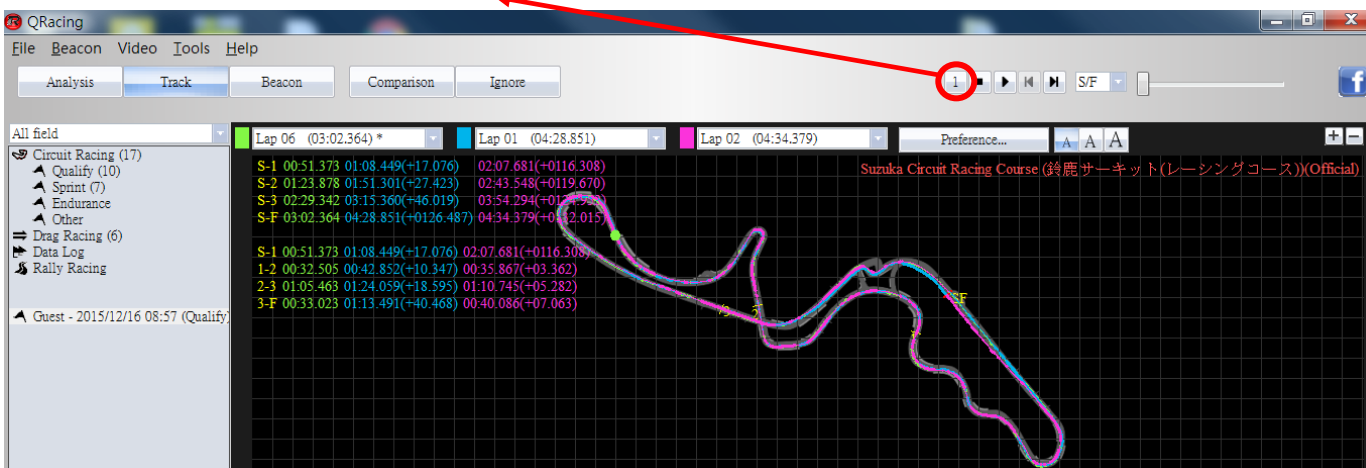
It will display the G-value distribution zone on the bottom screen and also G-value line on the track for reference.



If you want to compare with another racer and find out from which sector he drives better than you. You can select the split number and QRacing will start replay the track from that split.



The playback speed can be change from 1, 1/2, 1/4, and 2.

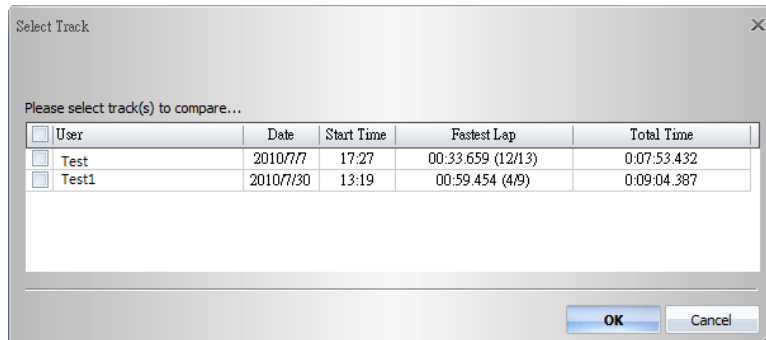


Click on the font size button to select the text whose size you want to use



## 8.6 Comparison

Click “Comparison” and you will see as follows:



Click on “Comparison”, you can choose tracks belong to the same racing type (Circuit, Drag or Rally racing) and compare with other user’s track.

## 8.7 Ignore

You can set ignored lap by clicking “Ignore”. After you set laps ignored, they will be shown “Lap0”. You also can cancel ignored laps here.

On Analysis page, you will see “ Show Ignore Laps” button if there is lap to be ignored. Click to check the Ignore lap detail.

Reference Lap Setting: **Lap 3** Show Ignore Laps Porsche Leipzig on-road Circuit(Official)

**Avg/Max/Min Speed View**

Lap	Time (Diff)	Max Speed (Diff)	Min Speed (Diff)	Average Speed (Diff)	Distance
Lap1	02:15.424 (+00:00.443)	176.15 km/h (-10.83)	38.35 km/h (-5.88)	99.25 km/h (-0.87)	3721.97 m
Lap2	02:21.216 (+00:06.234)	183.10 km/h (-3.88)	40.93 km/h (-3.30)	95.18 km/h (-4.94)	3727.77 m
Lap3(best)	02:14.982	186.98 km/h	44.23 km/h	100.12 km/h	3726.79 m
Lap4	02:25.192 (+00:10.211)	187.18 km/h (+0.20)	0.07 km/h (-44.16)	95.21 km/h (-4.91)	3834.76 m
avg.	02:19.204	183.35	30.89	97.44	3752.83

**Sector View (Split-to-Split)**

Lap	Time (Diff)	S-F (Diff)
Lap1	02:15.424 (+00:00.443)	02:15.424 (+00.443)
Lap2	02:21.216 (+00:06.234)	02:21.216 (+06.234)
Lap3(best)	02:14.982	02:14.982
Lap4	02:25.192 (+00:10.211)	02:25.192 (+10.211)
Best Theoretical Time	02:14.981	02:14.982
Best Rolling Time	02:14.982	02:14.982

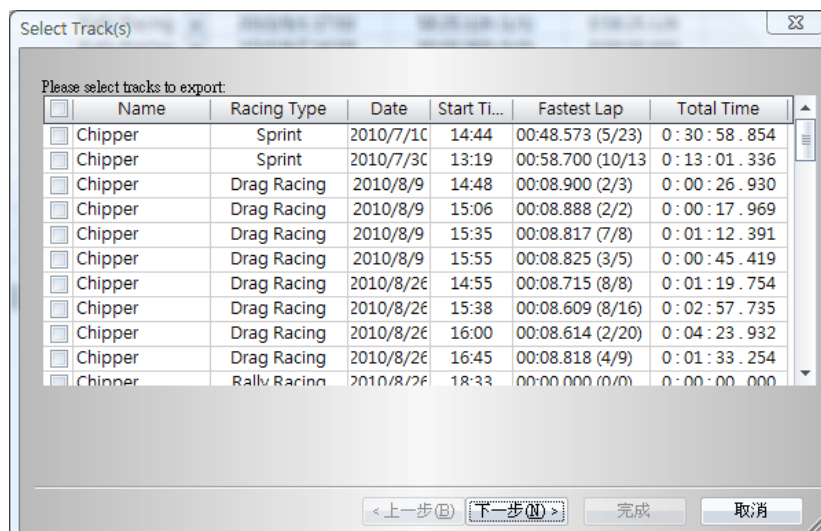
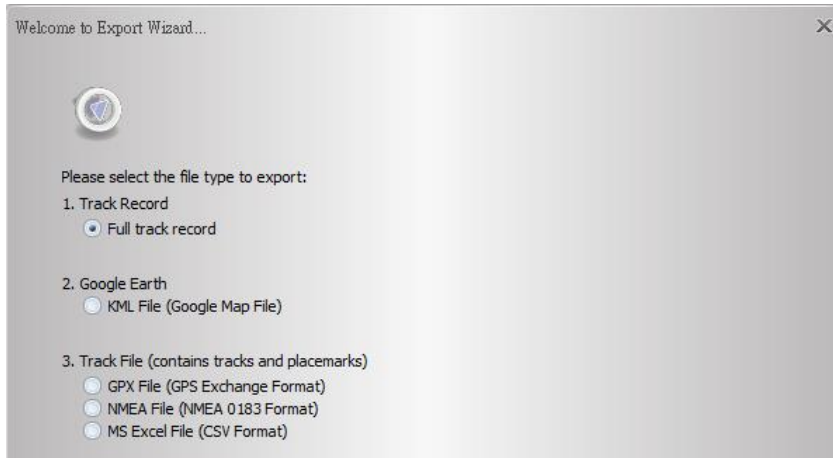
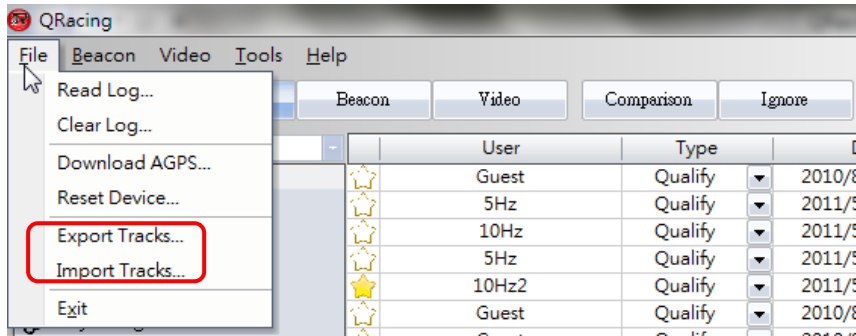


# 9. Track Export/Import

## 9.1 Track Export

You can share your best tracks record to your friends or backup the tracks by exporting to \*.rcn file (QRacing supported file) or other files format (KML, GPX, NMEA, and CSV).

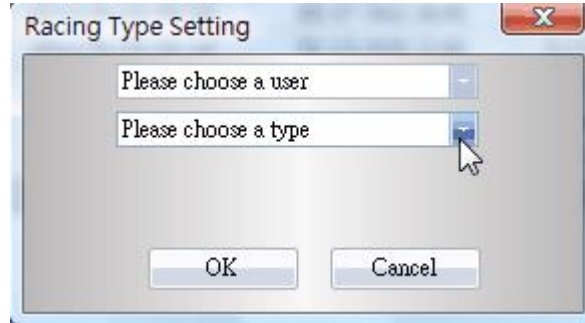
Click [File] --> [Export Tracks]. Select full track records (\*.rcn file) or others files format, and select the tracks you want to export.



## 9.2 Track Import

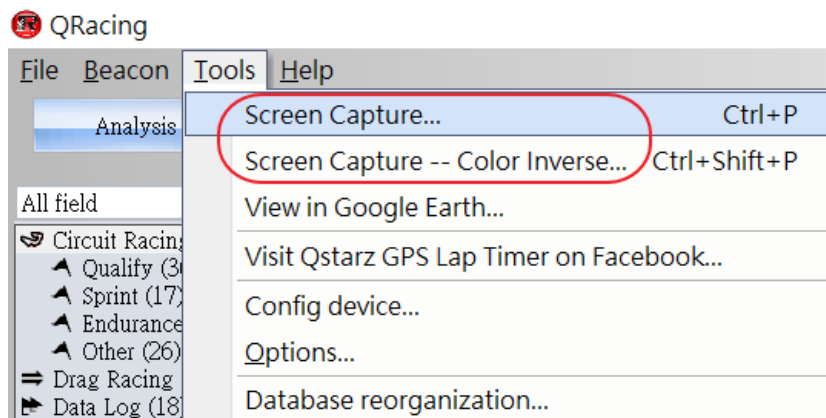
If you click [File] --> [Import Track], choose the imported track (\*.rcn file only), then QRacing will pop up a dialog for you to set the racing type.

(You can download other racer's track log data (.rcn) from Qstarz Web site and import it into QRacing for data compare and analysis.)



## 10. Screen Capture

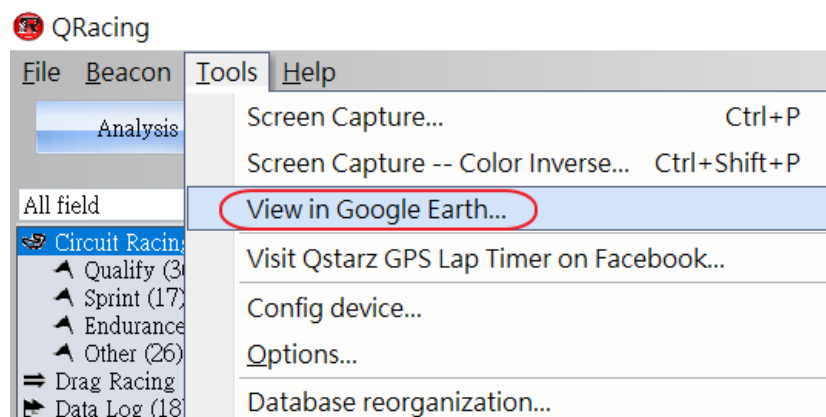
The software can help to capture pictures for the working area in QRacing as follows. And the capture file will be saved in the folder QRacing\_Workspace.



## 12. Google Earth

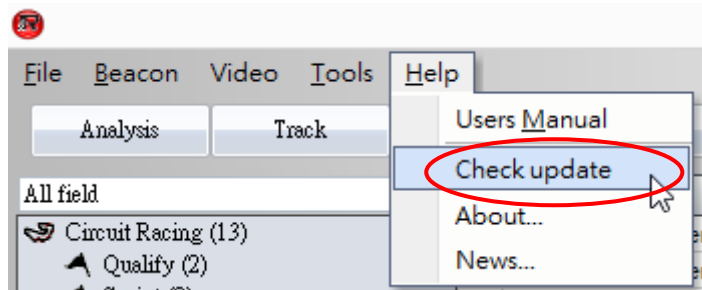
You can view and display your track with Google Earth by clicking on **Tools >> View in Google Earth....**

**(Note: Google Earth program needs to be installed in your computer.)**



## 13. Check Software/firmware update (LT-Q6000, LT-6000S, BL-1000GT)

You can find in Menu Bar (Help => Check Update) to update QRacing or device's firmware.

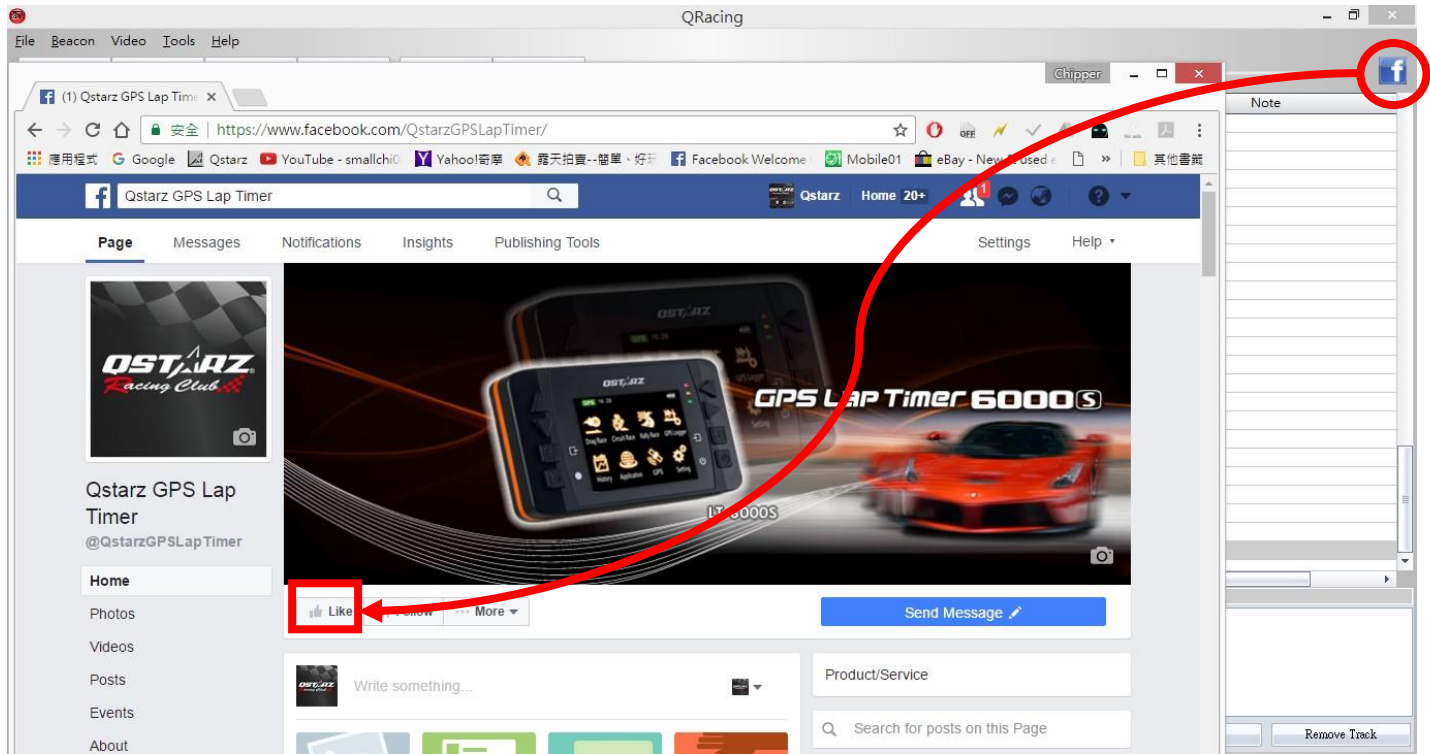


QRacing will check for the latest software version release on server. If there is a new version release, QRacing will ask you to download for update. If device is plugged, it will also check the firmware version and QRacing will automatically download the latest version firmware into the device.

When the download is completed, unplugging USB cable and holding "Enter" and "Power" button at the same time to upgrade 6000S's firmware.

## 14. Follow Qstarz on Facebook

After clicking this button, QRacing will open your default web browser and navigate to the **Qstarz GPS Lap Timer** fans page on Facebook. Click on "Like" button to follow us on Facebook.



## 15. FAQ

### Is QRacing support windows 8, 10 drivers?

Yes, please email to [info@qstarz.com](mailto:info@qstarz.com) to request for Windows 8, 10 driver.

### My track map doesn't show up in QRacing?

Please try to update Trackmap database or export the track as .rcn file and email it to [info@qstarz.com](mailto:info@qstarz.com) we will make the Trackmap and update it into Trackmap database.