

Experience it with QRacing™
Fulfill your needs

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 (-5.99)	15.93 km/h (-4.06)	29.75 km/h (-5.77)	396.68 m
Lap2	00:46.178 (+00:04.999)	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)	51.64 km/h (-2.52)	8.25 km/h (-11.73)	31.41 km/h (-4.11)	401.41 m
Lap5	00:43.322 (+00:02.150)	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)	34.25 km/h (-1.27)	398.57 m
Lap7	00:42.338 (+00:01.190)	53.64 km/h (-0.52)	19.99 km/h	35.03 km/h (-0.49)	408.67 m
Lap8	00:44.032 (+00:02.460)	54.16 km/h	19.57 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)	19.02 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



Drag Race



Autocross



Karting



Rally

User's Manual

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Update information:

3.99.830

1. Added export session for VBO format. [Session Export/Import](#)
2. Added download all sessions of QWS. [Download all sessions of QWS](#)

3.99.820

1. Supports using Wi-Fi connected with LT-8000GT for below operating: Supports connecting LT-8000GT via Wi-Fi to operate the following functions (AP version 0.03.60 or newer is required).

. ["Qstarz Wi-Fi Device \(LT-8000GT\)"](#)

Download device sessions (Drag and Circuit).

Update official tracks / Upload user defined tracks.

Update firmware / Update AGPS.

2. Trace page does not show the track map as default after first time installation.
3. Save Font size settings.
4. Corrected the adjustment of font size under different screen aspect ratios.
5. Fixed crash issue on changing the installation path during installing software under Windows 11.
6. Fix some bugs.

3.99.810

1. Add Font zoom in/out function in Record list. [" Session List Page "](#)
2. Add to show distance and time info between the two points when marking two points on the track of Trace page. ["Enhanced Analysis Options"](#)
3. Add the function of Distance/Time switch of the X axis and Speed Smooth on the chart on of Trace page. ["Trace Replay View "](#)
4. Add to move waypoints using the left/right keys on the keyboard during playback the track.
5. Add Edit Session's fine-tuning function on the Beacon page. [" Edit Session "](#)
6. Provide the user tracks created by QRacing App can download to QRacing PC software, and export them to 8000GT or 6000S series device. [" Export user track file "](#)

3.99.800

1. Added enhanced analysis option on trace page. ["Enhanced Analysis Options"](#)
2. Improve performance
3. Fix some problems

3.99.700

1. Remove the restriction of not capable of using without logging-in for five times.
2. Support Y-axis scale setting on the chart of Trace page. [" Chart Setting"](#)
3. Add connected device's name setting (for Model: LT-Q6000, LT-6000S, LT-6000S[GNSS], LT-8000GT, BL-1000GT)
4. Modify the position of the play button on trace page. [" Trace Replay View"](#)
5. Enhance the function of Update device firmware and Track map. [" Update"](#)
6. Enhance the Read log dialog. [" Download Data From Device"](#)
7. Enhance the Trace playback function.

3.99.600

1. Add Drag multi condition setting. [“Drag racing setting”](#)
2. Support LT-8000GT.
3. Logging from PC QRacing to automatically obtain the Software Key.
4. Change Trace Preference setting. [“Trace Preference setting”](#)
5. Modify the window resizing function of the track page. Please refer to [" Window resizing "](#)
6. Add edit session function. Please refer to [“Edit Session”](#)

3.99.500

1. Add chart setting .[“Chart Setting”](#).
2. Drag the rcnx file onto the software for import.
3. Under internet connection, closing the QRacing software will not automatically log out.

3.99.400

1. You need to log in to activate the QRacing software. If you fail to log in more than 5 times, the QRacing software will be locked. Please refer to [“Create account”](#).
2. The official track can add/edit beacons, but uploading to QRacing Web will still use the official beacon to calculate the lap time.
3. The track map of the track can be set for the created custom track. Please refer to [“Beacon”](#).

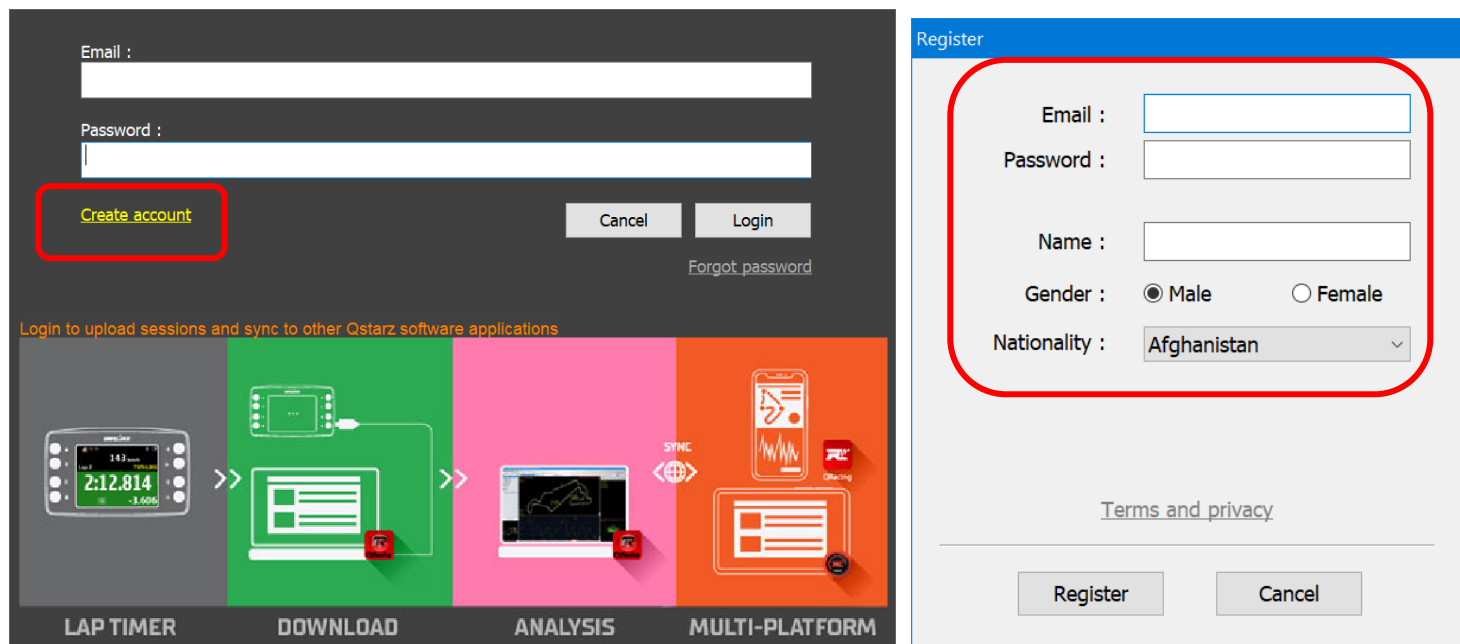
1. System Requirement

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

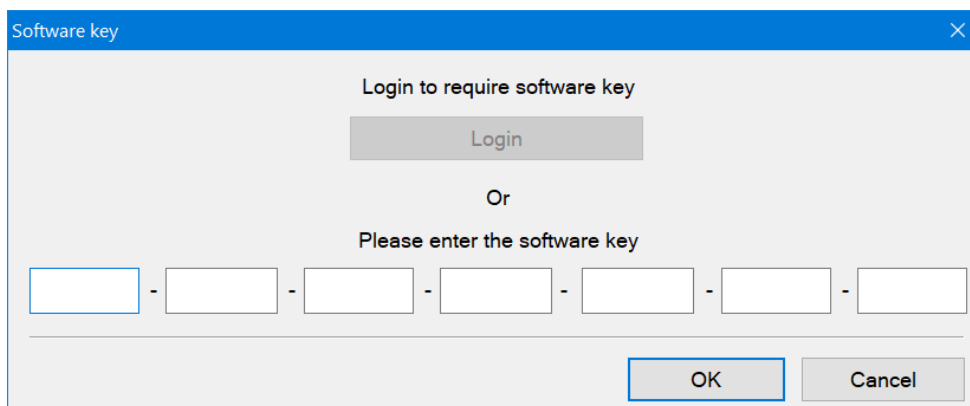
2 Create account and get Software Key

Click Register, enter relevant information and complete the activation of the verification letter, the account will take effect.



The image shows two screenshots. The left screenshot is the Qstarz software login screen, featuring fields for Email and Password, a 'Create account' button (highlighted with a red box), 'Cancel' and 'Login' buttons, and a 'Forgot password' link. Below the login fields is a banner with four colored boxes: LAP TIMER (grey), DOWNLOAD (green), ANALYSIS (pink), and MULTI-PLATFORM (orange), each with an icon and a QR Racing logo. The right screenshot is the QRacing registration form, titled 'Register'. It contains fields for Email, Password, Name, Gender (radio buttons for Male and Female), and Nationality (a dropdown menu set to 'Afghanistan'). A red box highlights the Email, Password, and Name fields. At the bottom of the form are 'Terms and privacy' links, a 'Register' button, and a 'Cancel' button.

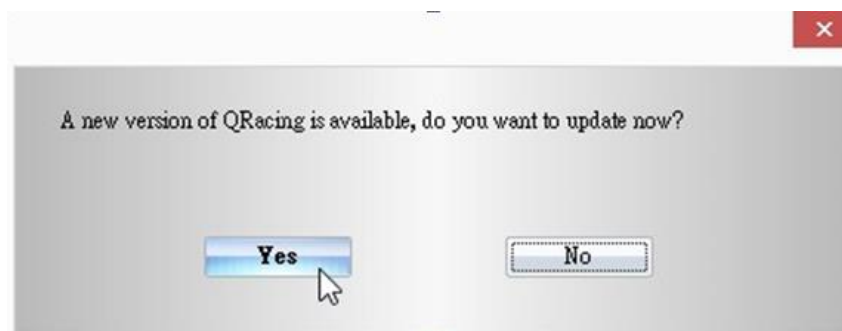
After logging in, you can get the QRacing Software Key. Your key will be saved in the QRacing Web account. When you change the computer, re-login to QRacing will automatically write the Software Key.



From QRacing menu, click “Help” --> “About” --> ”Input Software Key”

3. Auto-Update

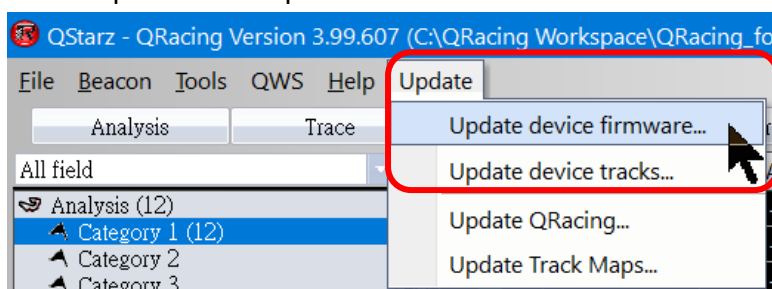
For QRacing: QRacing will automatically checks the latest versions of QRacing software and Track map when software startup.

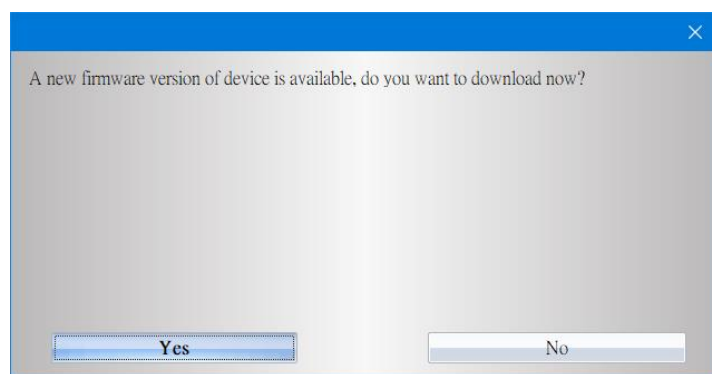
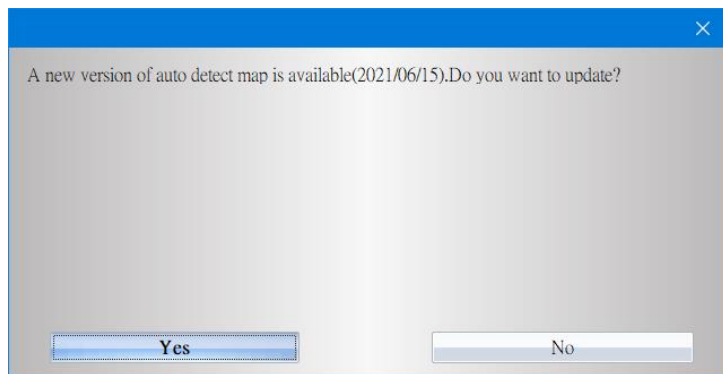


For LT-Q6000, LT-6000S, LT-6000S2, LT-8000GT models: POWER OFF the device and connect to your PC with internet. QRacing will auto detect and update to the latest device firmware and Trackmap version. You can also update the latest version of firmware and Trackmap by click QRacing software [Update] --> [Update device firmware] [Update device tracks].

For BL-1000GT model: POWER OFF the device and connect to your PC with internet. QRacing will auto detect and update to the latest device firmware. You can also update the latest version of firmware by click QRacing software [Update] --> [Update device firmware]..

Before update your 1000GT, please charge the power of battery is more than 50%. The battery does not install properly would cause the failure of update and unpredictable issue.

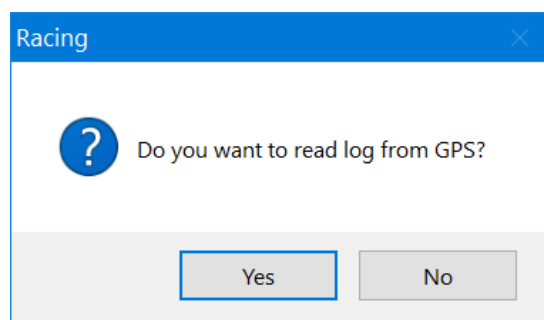




4. Download Data From Device

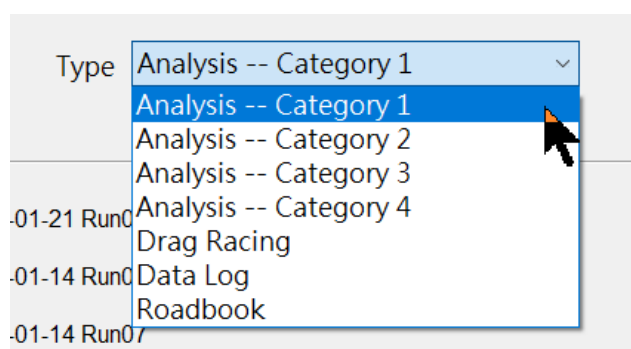
4.1 For LT-Q6000, LT-6000S, LT-6000S2, LT-8000GT, BL-1000GT model

POWER OFF the device and connect to your computer, QRacing will ask you to download your device log. Click “Yes” to download the log data

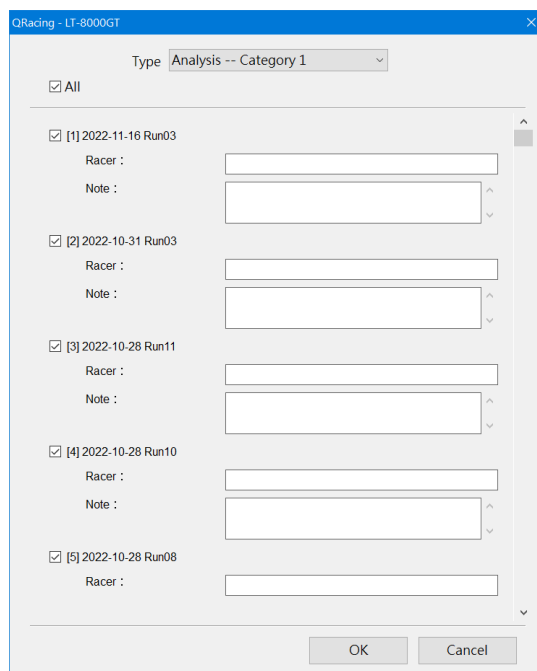


Select the Racing type:

***Only LT-6000S support Roadbook**



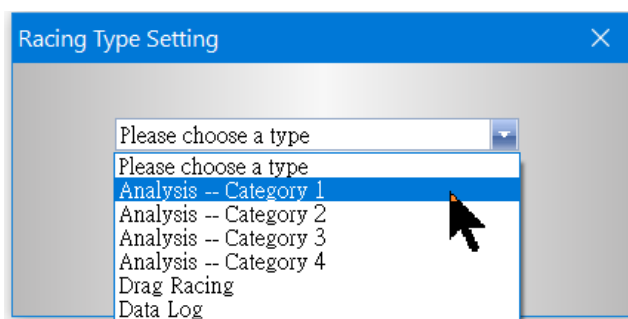
Select the session you want to download:



4.2 For Q1000EX model

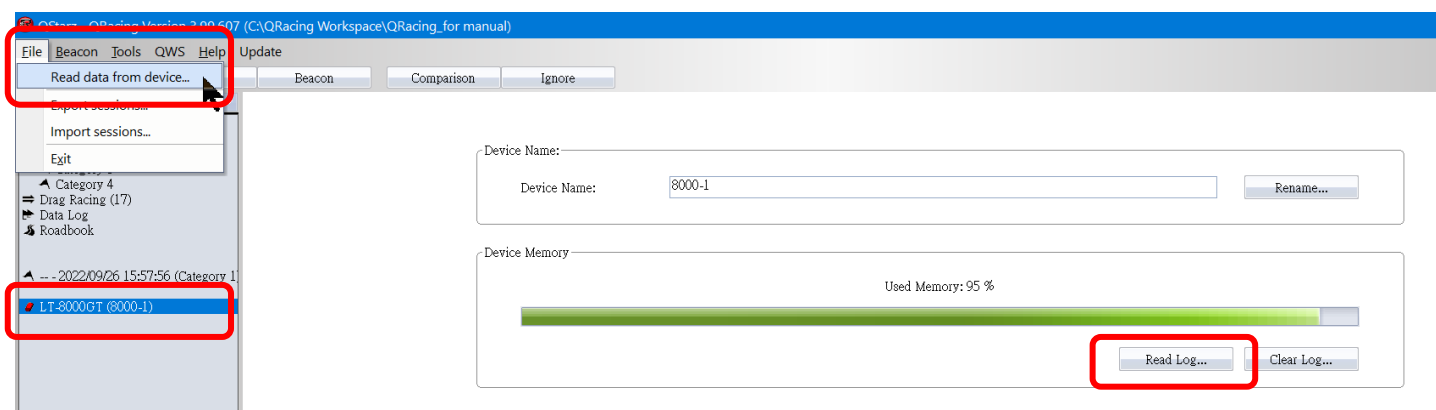
Switch **ON** the GPS device and connect to your PC. QRacing will ask to download the log data from the device. Click "Yes", then you will see the dialog as follows:

Choose one of the racing type:



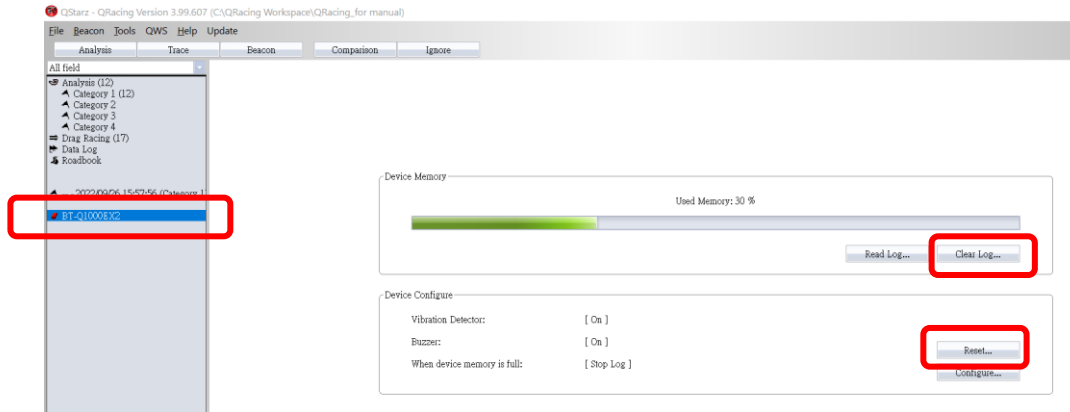
4.3 Read data from device

If you want to manually read the logs, you can click on the device in the left area to enter the device setting page, click the "Read log" button; or you can choose to read from [File] --> [Read data from device] to take sessions.



4.4 Clear Log/Reset device

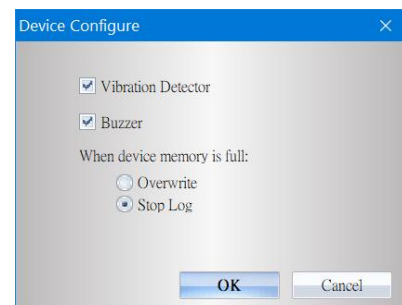
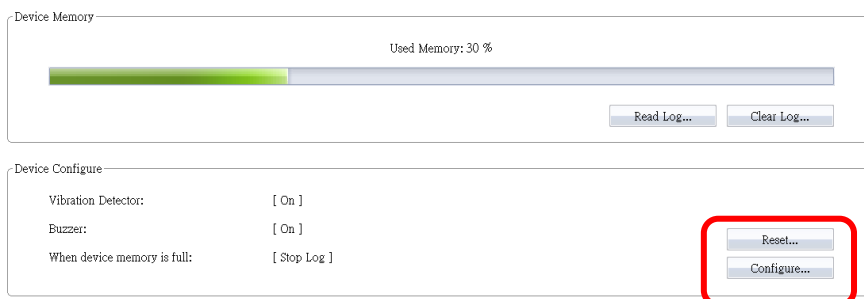
When the device is connected to QRacing software, the device icon would show on the left area of QRacing. You can clear the log or reset the device. (Only Reset BT-Q1000eX will also clear all the device data. Reset other products would only recover to factory settings.)



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

When the device is connected to QRacing, you can configure the device for the vibration detector, buzzer and memory settings.

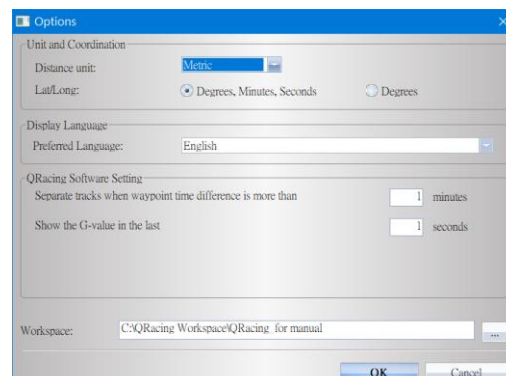
To reset the device to factory setting, click on “Reset ”



6. Tools Option

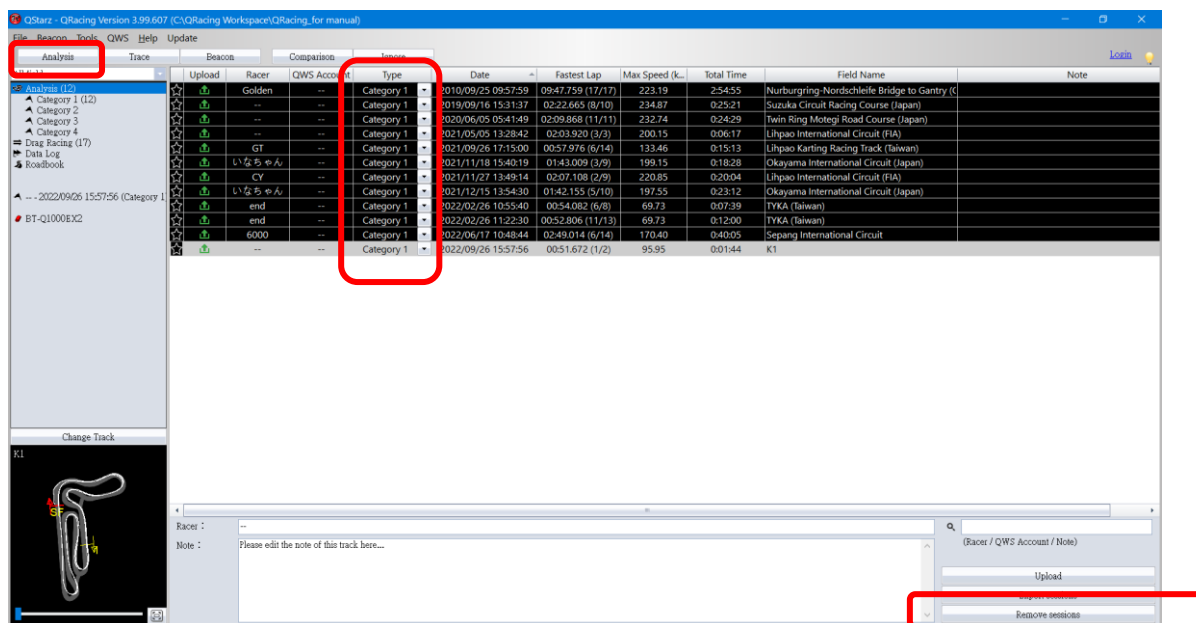
In Qracing Menu, click [Tools] --> [Options]. You can configure the distance unit, coordination, language, separate the trace, G-value setting and the path of your QRacing workspace.

*The function of separate the trace is only available for BT-Q1000eX product.

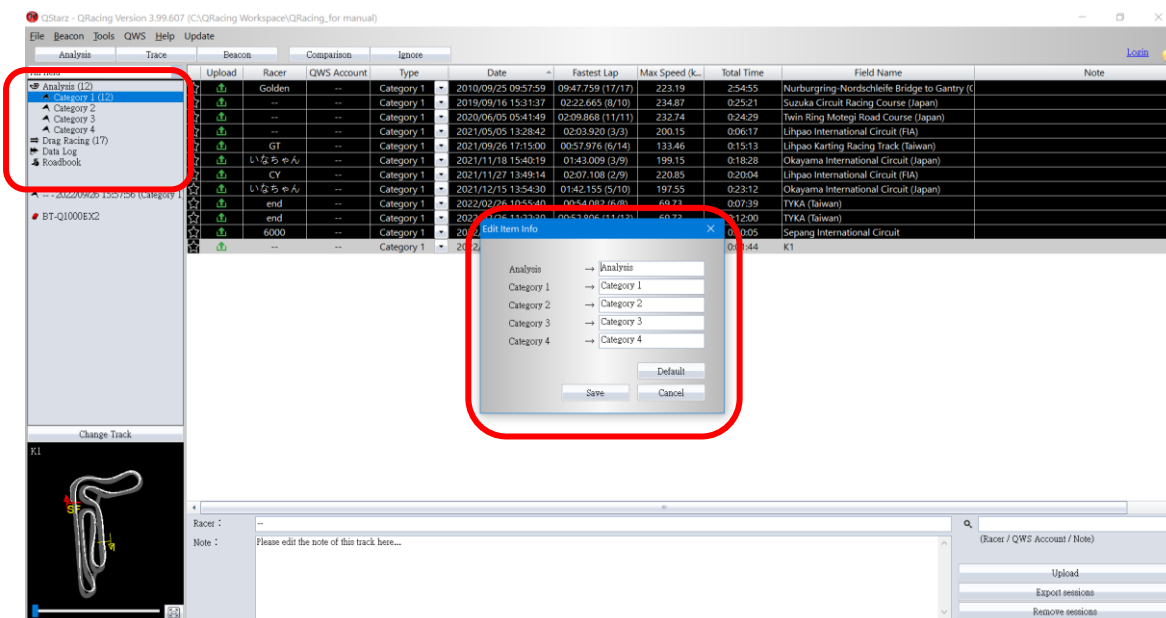


7. Session List Page:

Select one of the sessions on the list and double click on it for analysis page. If you would like to move the session to other catalog, click the “Type” on the field and select the catalog you would like to move in. To delete the session, select the session you want to delete and remove it by click “**Remove session**”.



The default name of the analyzed category is Category 1, Category 2, Category 3, Category 4. Right-click the analysis category to rename the category name suitable for your personal use.



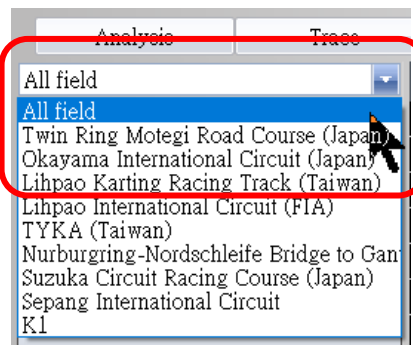
A+ / A- can be used to enlarge or reduce the track list font.

Racer	Date	Fastest Lap	Max Speed (km/h)	Field Name	Total Time
Golden	2010/09/25 09:57:59	10:18.746 (17/17)	223.19	Nurburgring-Nordschleife (G)	3:03:38
--	2010/09/25 09:57:59	10:18.746 (17/17)	223.19	Nurburgring-Nordschleife (G)	3:03:38
--	2019/09/16 15:31:37	02:22.665 (8/10)	234.87	Suzuka Circuit Racing Course	0:25:21
--	2020/06/05 05:41:49	02:09.868 (11/11)	232.74	Twin Ring Motegi Road Course	0:24:29
--	2021/05/05 13:28:42	02:03.920 (3/3)	200.15	Lihpao International Circuit (F)	0:06:17
GT	2021/09/26 17:15:00	00:57.976 (6/14)	133.46	Lihpao Karting Racing Track	0:15:13
いなちゃん	2021/11/18 15:40:19	01:43.009 (3/9)	199.15	Okayama International Circuit	0:18:28
CY	2021/11/27 13:49:14	02:07.108 (2/9)	220.85	Lihpao International Circuit (F)	0:20:04
いなちゃん	2021/12/15 13:54:30	01:42.155 (5/10)	197.55	Okayama International Circuit	0:23:12
ST	2022/02/26 10:55:40	00:54.081 (6/8)	69.73	TYKA (Taiwan)	0:07:39
ST	2022/02/26 11:22:30	00:52.806 (11/13)	69.73	TYKA (Taiwan)	0:12:00
6000	2022/06/17 10:48:44	02:49.014 (6/14)	170.40	Sepang International Circuit	0:40:05
--	2022/09/26 15:57:56	00:51.672 (1/2)	95.95	K1	0:01:44

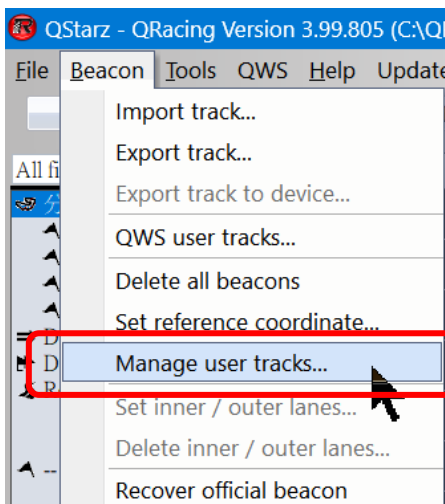
7.1 Racing Tracks management

To manage the racing Field, you can find all the sessions under the same track by the racing field selection. When you import or download a new session into QRacing, it will ask you to select the racing track. Then you can use the filter to find out the session by racing track.

* Only display the official tracks



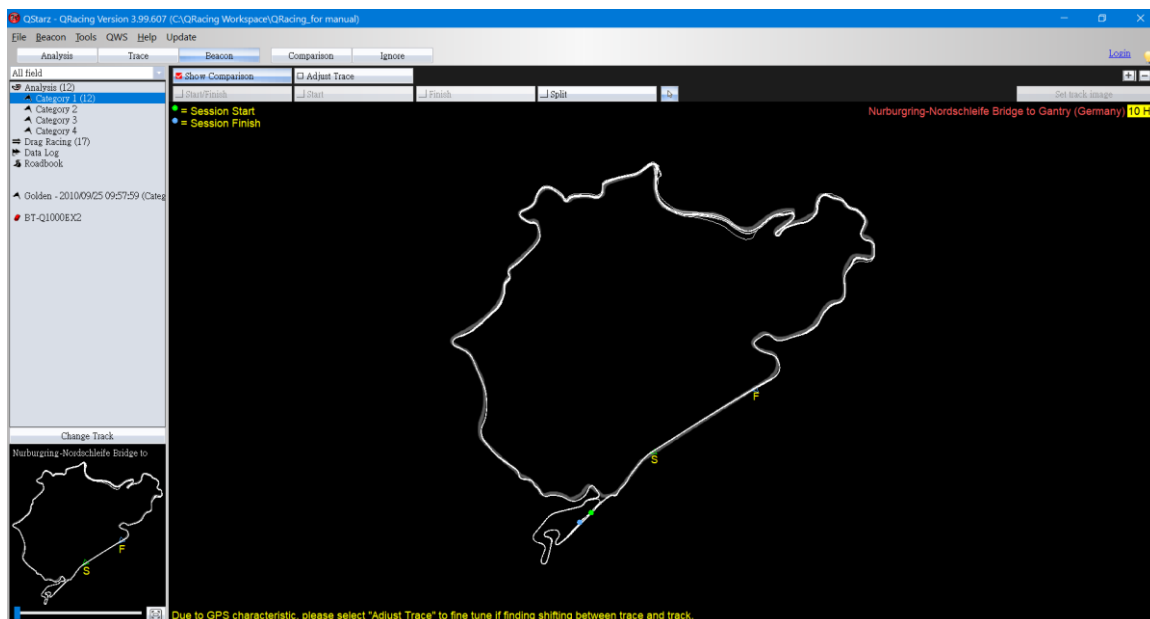
To edit the name of the racing track, click on **[Beacon] --> [Manage user tracks]**:



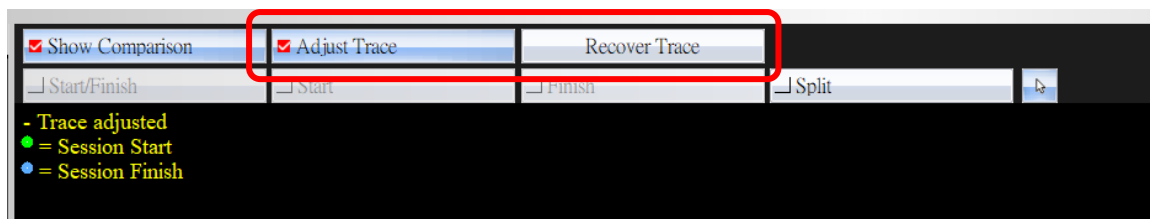
Beacon Set	Type
Lihpao Karting Racing Track (Taiwan)	Official Track
Lihpao Karting Racing Track 2018 (Taiwan)	Official Track (History)
Lihpao International Circuit 2018 (Taiwan)	Official Track (History)
Lihpao International Circuit (21T) (Taiwan)	Official Track
Lihpao International Circuit (2020) (Taiwan)	Official Track (History)
Lihpao Circuit (A+B) (Taiwan)	Official Track (History)
Lihpao Circuit (Others) (Taiwan)	Official Track (History)
Lihpao International Circuit (FIA) (Taiwan)	Official Track
*FIA COPY	User track
*FIA NO MAP	User track
*QSTARZ	User track

8. Track map database

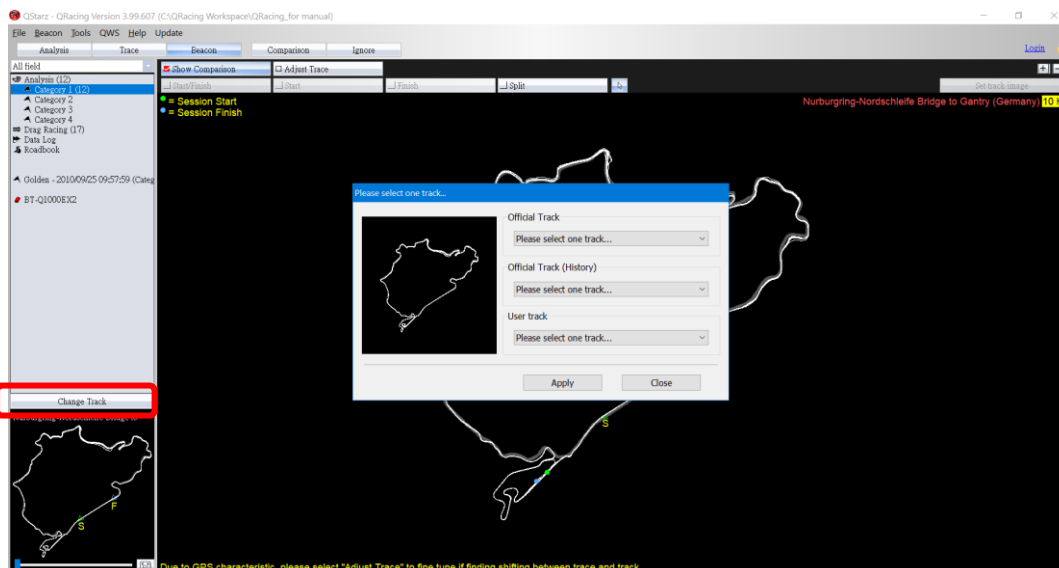
QRacing Global Track Map database will auto detect your sessions to display the official track map



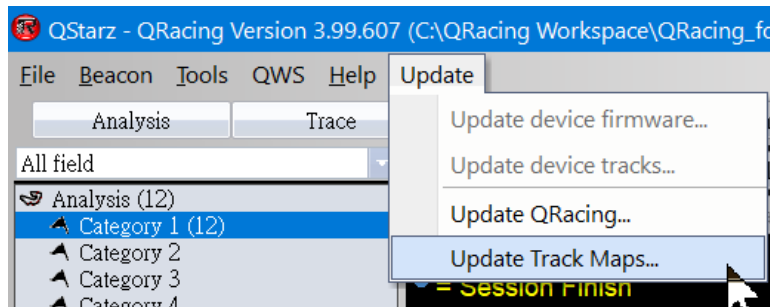
You can click on **“Adjust Trace”** to match the correct position with the track map by move the trace. The session is NOT available to upload to QRacing Web after adjusted the trace. The **“Recovery Trace”** button only available when the trace has been adjusted.



Some race circuit contain multiple track layouts. When the trackmap is not showing the correct track, you can click on **“Change Trackmap”** to select the correct layout. The track layout thumbnail will help you to select. (User Track: Personal custom track beacon set)



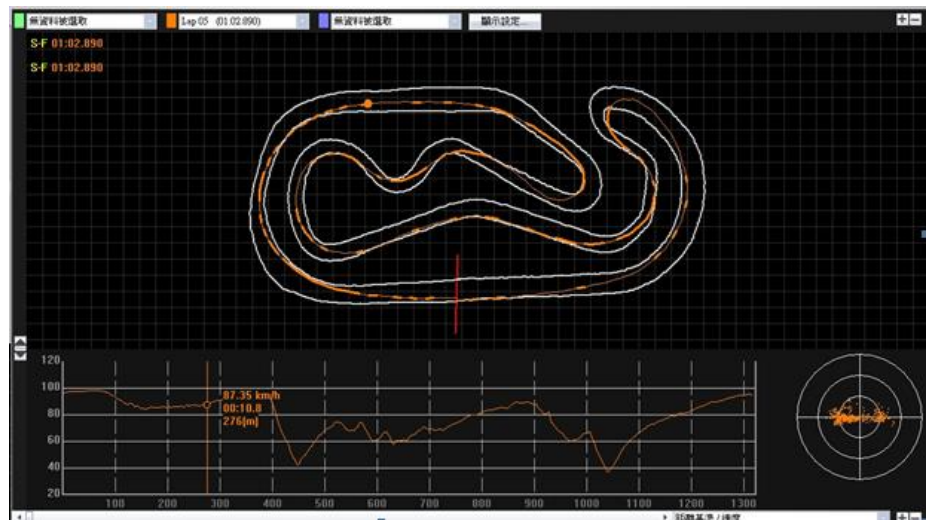
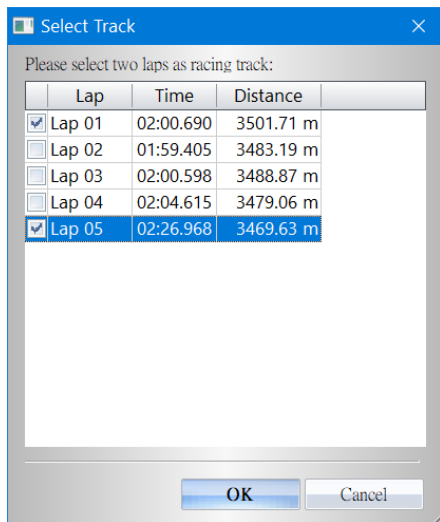
Download and update the latest track map by click QRacing Menu --> **[Update]** --> **[Update Track Maps]**



8.1 Set inner / outer lane

If QRacing track database does not contain your track map, you can create your own track map by setting the inner/ outer line.

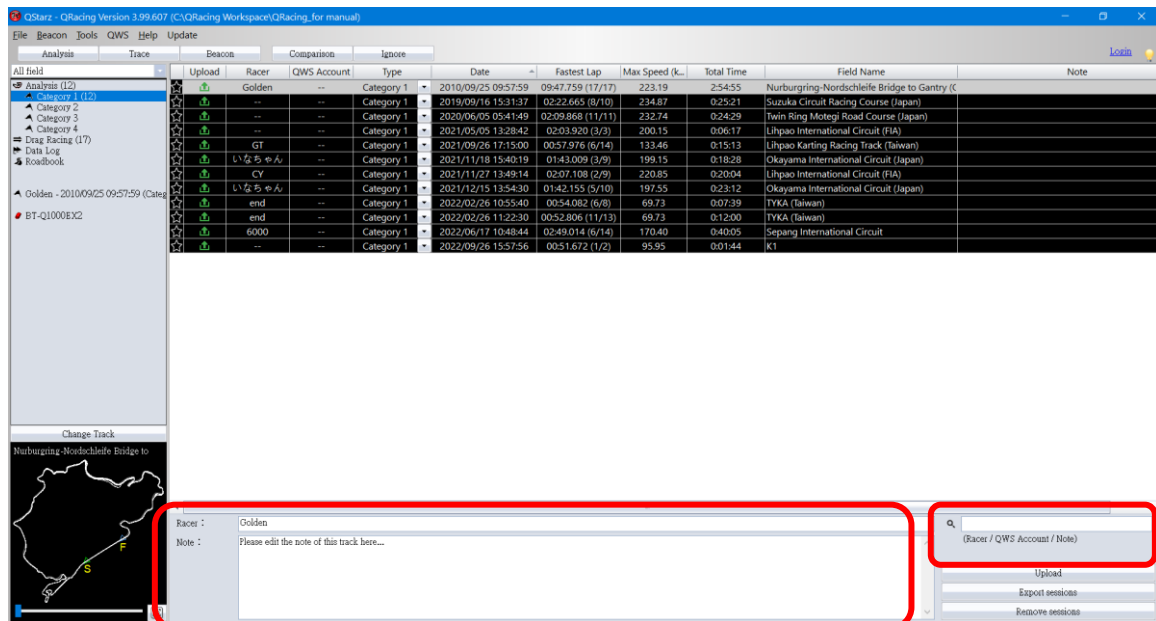
First, Use Qstarz device to log one to two laps for the inner and outer edge of the racetrack. Download the log data to QRacing , click Menu --> **[Beacon]** --> **[set inner/outer lanes]** , you can select the two laps to mark as the inside and outside edge of the track.



8.2 Note for the Sessions

After downloaded the log data to QRacing, you can add “Note” for the session. Select the session and edit it in the box below, and you can edit racer name.

Tip: Type keyword on the “Search bar” would be easy to find the sessions.



8.3 Beacon

If you have not edited the track beacons of the session, you can use the **“custom track beacon”** function. After all the beacon marks are completed, QRacing will update the analysis data for you.

From the QRacing menu --> **[Beacon]** --> **[Manage user tracks]**, choose **"Copy"** or **"Create"** for a new custom track.

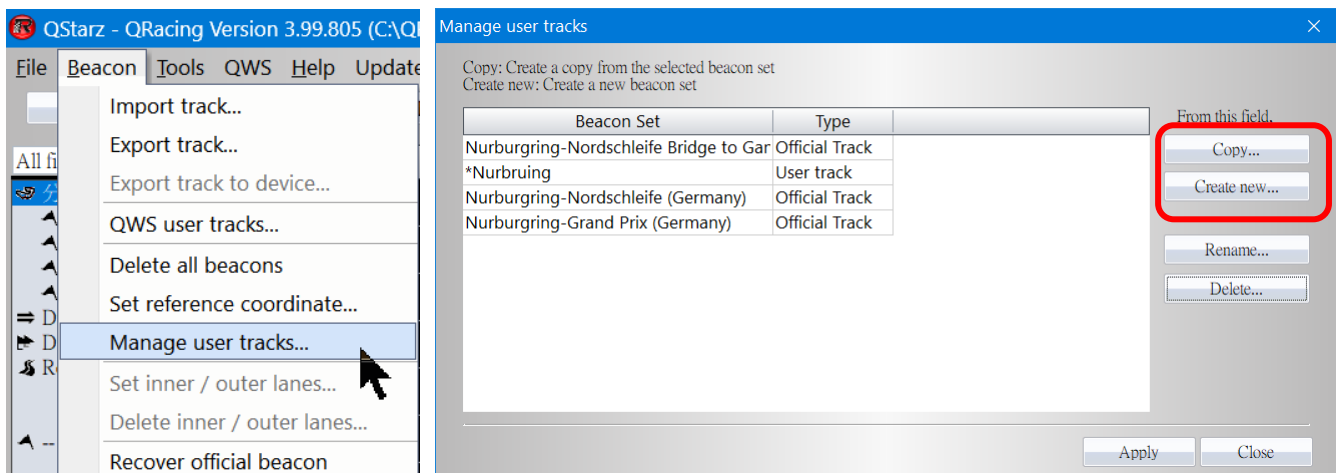
"Copy" --> Copy all the beacons from the selected track to edit.

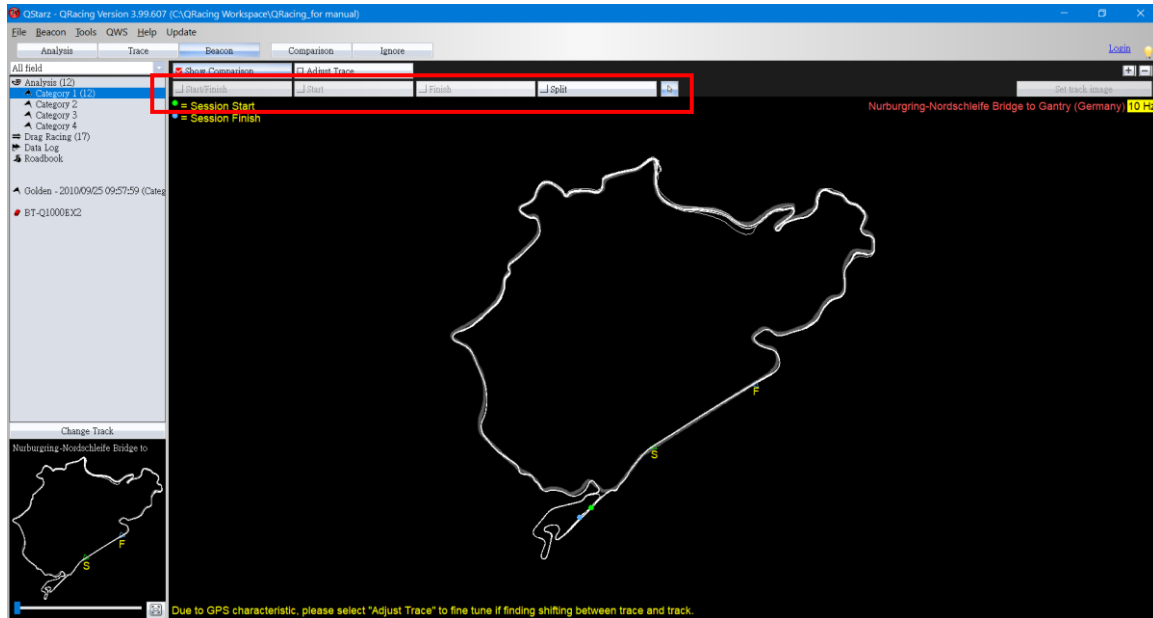
"Create" --> Create a track without any beacon.

After created a custom track and click **“Apply”**. You can edit the beacon marks on the **“BEACON”** page. There are four types of beacon markings: **“Start/Finish”** line, **“Start”** line, **“Finish”** line and **“Split”** line. Select and edit the beacons according to your analyze purpose.

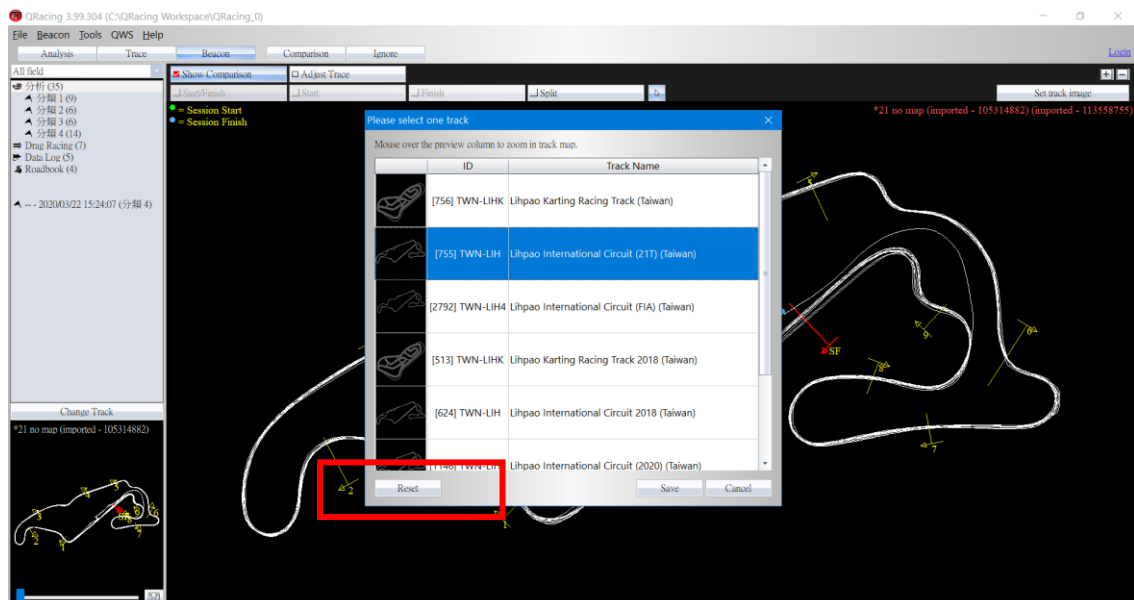
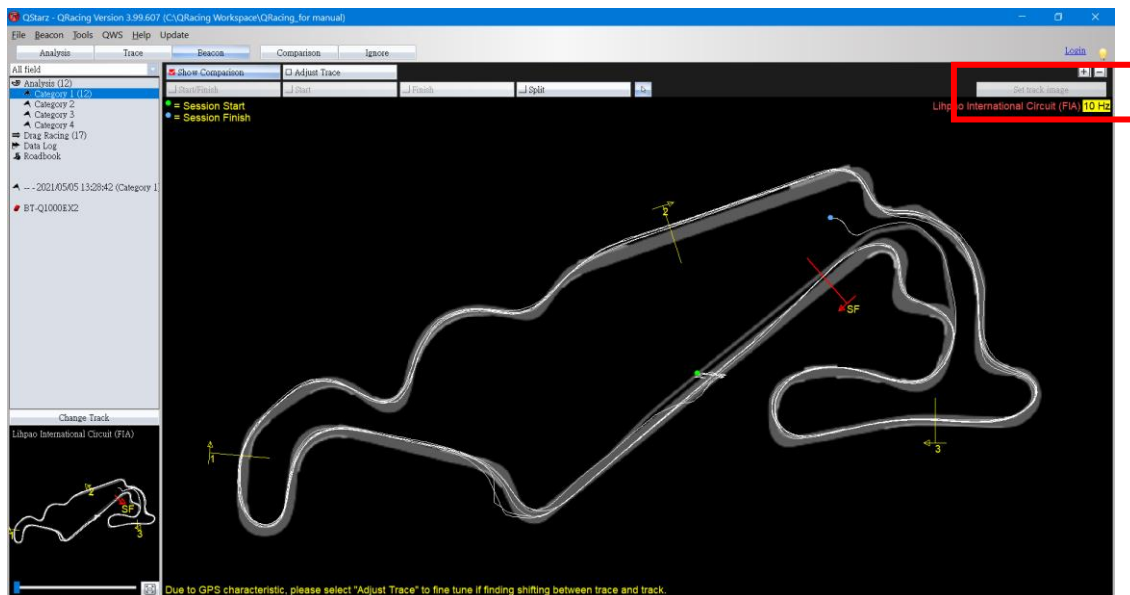
*Each custom track can only have one **“Start/finish”** line or **“Start”** and **“Finish”** line. **“Split”** lines can be multiple.

*When the button of the beacon is under grey color, the beacon is already existing on the trace. Please remove it first before making new beacon. Each User track (custom) only allows to make one **“Start/Finish”** line or one **“Start”** line + one **“Finish”** line.





You can set the track map on the Beacon page for the created user track, and you can click the reset button to not display the track map.



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



You can set the coordinate position for the beacon setting. Go to QRacing Menu --> **[Beacon]** --> **[Input Reference Coordinate]**. Input the Latitude and Longitude to mark the position of the beacons.

Input Reference Coordinate

☒ Decimal

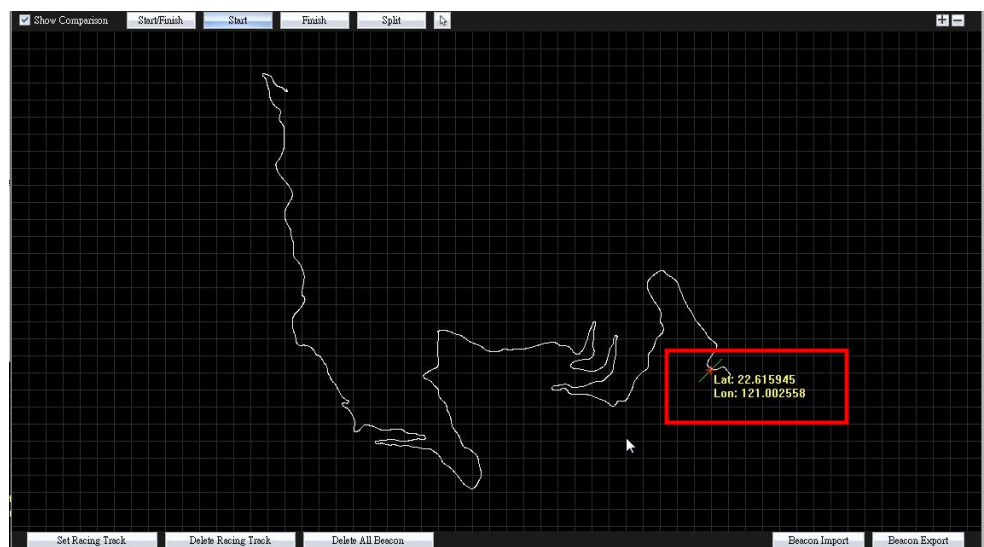
Latitude:
Longitude:

☐ Degrees, Minutes, Seconds

Latitude: Degrees min seconds
Longitude: Degrees min seconds

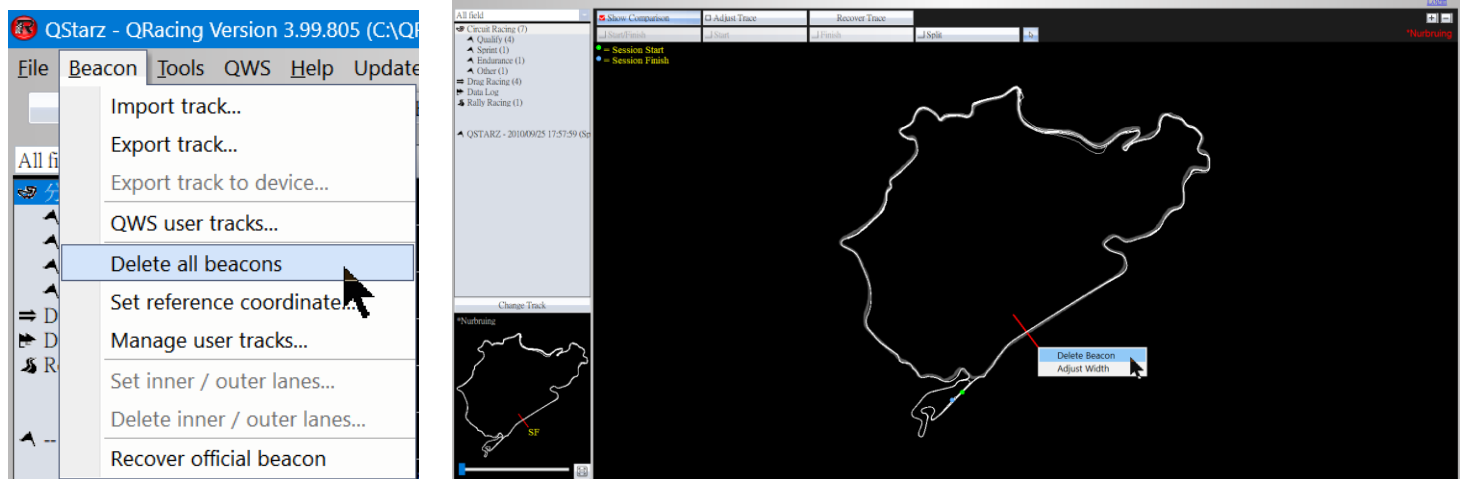
OK

Cancel



8.3.1 Delete Beacon

To delete beacon, please move your mouse on that beacon (the beacon will be highlighted), then RIGHT CLICK on the mouse to delete it. You may click **"Delete All Beacon"** to delete all beacons.

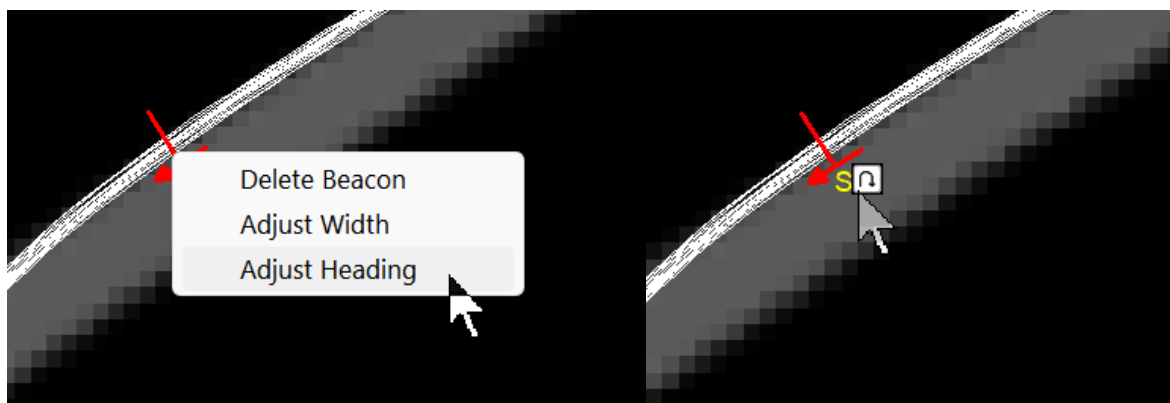


8.3.2 Adjust Beacon Width / Move Beacon / Adjust Heading

To adjust the beacon width, move the mouse on that beacon (the beacon will be highlighted). RIGHT CLICK on the mouse and select "Adjust Width". Use "+" or "-" to adjust the width.

To move the beacon, move the mouse on the beacon (the beacon will be highlighted). LEFT CLICK on your mouse and drag the beacon to the position you need.

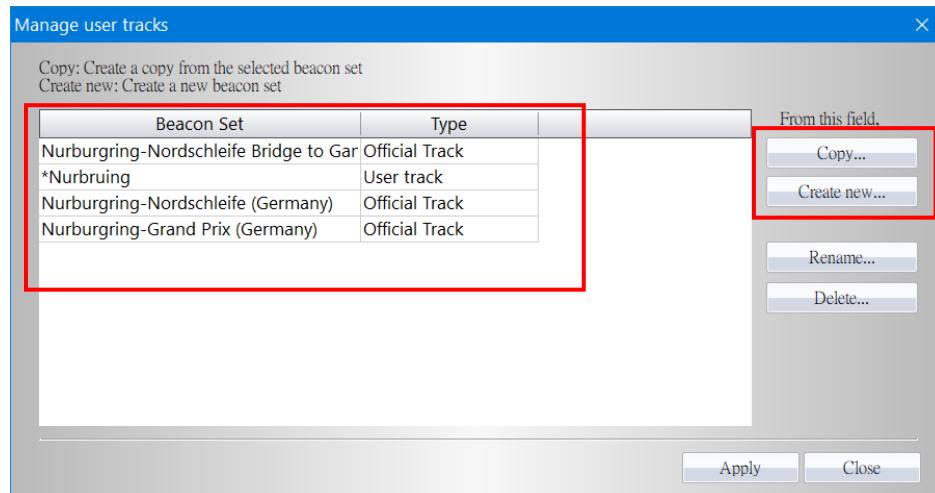
To adjust the beacon heading, move the mouse on that beacon (the beacon will be highlighted). RIGHT CLICK on the mouse and select "Adjust heading". Use "turn" to adjust the heading.



8.3.3 Manage user tracks

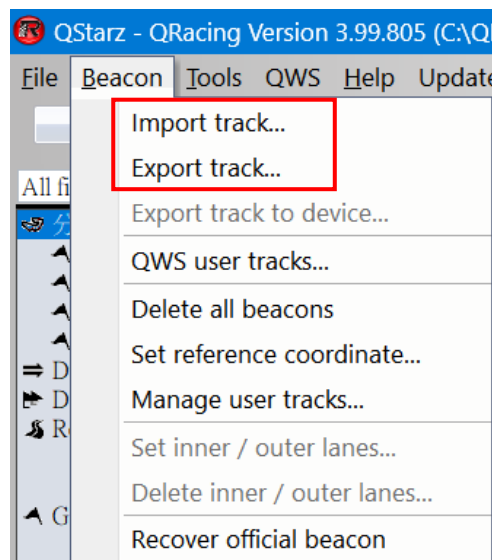
You can use different beacon set to analyze your log data. Click Menu --> **[Beacon]** --> **[Manage user tracks]** to manage different beacon set.

You can select QRacing official beacon set or create your own beacon set to analyze.



8.3.4 Export/Import track (Custom beacons)

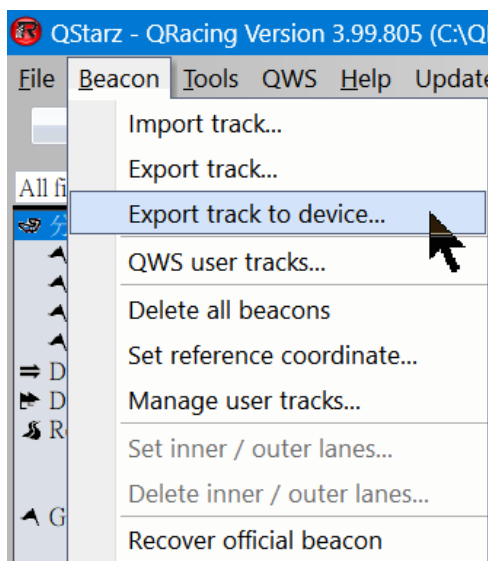
You can export/import the user track (Custom beacons). Click **[Export track]** and **[Import track]** .



8.3.5 Export user track file into device (for LT-Q6000, LT-6000S, LT-6000S2, LT-8000GT)

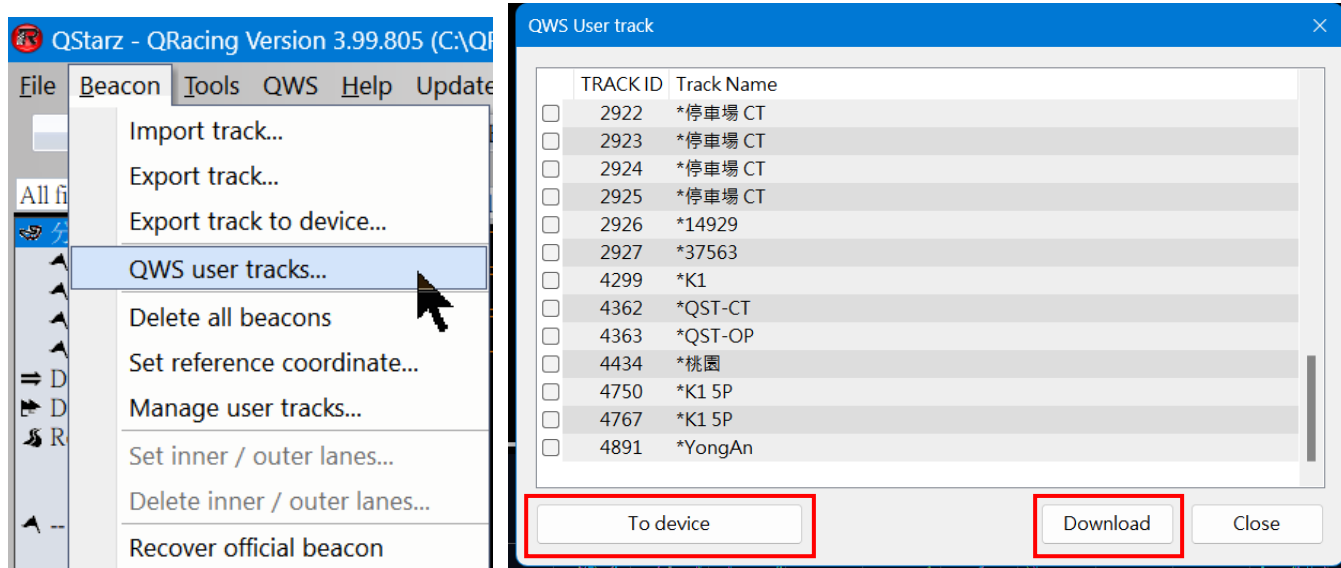
You can create the Start/Finish, Split lines from QRacing and then upload the beacon set into your Qstarz device. In QRacing menu, select “Beacon” and click the “**Export user track to device**”. The custom user track file with beacons will export to your Qstarz device directly. The file would be stored on your device document

“C_Beacon\Shared”. The file name would be like “BCN1.BIN”. With your Qstarz L LT-Q6000, LT-6000S, LT-6000S2, LT-8000GT, you can use the exported tracks from “Circuit Race” --> “Load Shared Track”.



Or use the QWS user track function to download the beacons to the QRacing software or export them to the device.

1. First use the QRacing APP to add a user track in the circle
2. In the QRacing software, [Beacon] > [QWS User Track] > select the desired track and download it to the QRacing software or export it to the device



8.4 Analysis

In Analysis page, you can review the analysis data for each lap.

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 8**
 Min Lap Time: **140** seconds

Avg/Max/Min Speed View

	Time (Diff)	Max Speed (Diff) (km/h)	Min Speed (Diff) (km/h)	Average Speed (Diff) (km/h)	Distance (Diff) (m)
Lap 1	02:25.641 (+02.976)	230.89 (-0.18)	57.04 (-5.00)	143.58 (-3.18)	5808.60 (-7.21)
Lap 2	02:24.705 (+02.040)	229.83 (-1.24)	56.84 (-5.20)	144.08 (-2.68)	5791.33 (-24.48)
Lap 3	02:24.529 (+01.864)	231.65 (+0.58)	58.23 (-3.81)	144.33 (-2.43)	5794.58 (-21.23)
Lap 4	02:24.934 (+02.269)	232.81 (+1.74)	58.78 (-3.26)	144.24 (-2.52)	5807.18 (-8.63)
Lap 5	02:24.501 (+01.836)	231.48 (+0.41)	56.15 (-5.89)	145.10 (-1.66)	5824.36 (+8.55)
Lap 6	02:24.586 (+01.921)	233.83 (+2.76)	59.47 (-2.57)	145.17 (-1.59)	5830.38 (+14.57)
Lap 7	02:23.312 (+00.647)	233.94 (+2.87)	58.30 (-3.74)	145.59 (-1.17)	5795.62 (-20.19)
Lap 8 - BEST	02:22.665	231.07	62.04	146.76	5815.81
Lap 9	02:26.324 (+03.659)	234.87 (+3.80)	56.71 (-5.33)	143.07 (-3.69)	5815.13 (-0.68)
Lap 10	03:40.451 (+01:17.786)	183.05 (-48.02)	42.23 (-19.81)	95.20 (-51.56)	5829.95 (+14.14)
avg.	02:32.165	227.34	56.58	139.71	5811.29

Sector View (Split-to-Split)

	Time (Diff)	S-1 (Diff)	1-2 (Diff)	2-3 (Diff)	3-F (Diff)
Lap 1	02:25.641 (+02.976)	41.026 (+00.115)	25.294 (+00.757)	51.727 (+00.274)	27.594 (+01.830)
Lap 2	02:24.705 (+02.040)	41.464 (+00.553)	25.786 (+01.249)	51.702 (+00.249)	25.753 (-00.011)
Lap 3	02:24.529 (+01.864)	41.403 (+00.492)	24.847 (+00.310)	51.701 (+00.248)	26.578 (+00.814)
Lap 4	02:24.934 (+02.269)	40.990 (+00.079)	25.286 (+00.749)	52.244 (+00.791)	26.414 (+00.650)
Lap 5	02:24.501 (+01.836)	40.762 (-00.149)	25.595 (+01.058)	52.261 (+00.808)	25.883 (+00.119)
Lap 6	02:24.586 (+01.921)	41.453 (+00.542)	25.452 (+00.915)	51.643 (+00.190)	26.038 (+00.274)
Lap 7	02:23.312 (+00.647)	41.028 (+00.117)	25.194 (+00.657)	51.045 (-00.408)	<u>26.045</u> (+00.281)
Lap 8 - BEST	02:22.665	40.911	24.537	51.453	25.764
Lap 9	02:26.324 (+03.659)	41.514 (+00.603)	27.520 (+02.983)	51.738 (+00.285)	25.552 (-00.212)
Lap 10	03:40.451 (+01:17.786)	53.095 (+12.184)	33.850 (+09.313)	01:24.954 (+33.501)	48.552 (+22.788)
Best Theoretical Time	02:21.896	40.762	24.537	51.045	25.552
Best Rolling Time	02:22.538	<u>40.911</u>	<u>24.537</u>	<u>51.045</u>	<u>26.045</u>

There are four different analysis tables, Avg/Max/Min Speed, Sector View (split-to-split), Split View (start-to-split) and Point Current Speed View. The best results will be highlighted on each analysis table.

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

Best Theoretical Time is the sum of each best split time (Highlight with green color) in this session.

Best Rolling Time is the sum of your best sequential split time (marked with underline) in the session.

For example, the best theoretical time is the add-up of best split time (Highlight with green color) from all laps.

The best rolling time is the sum of your best sequential split time from Lap7 (2-3) and (3-F) to Lap8 (S-1) and (1-2) which marked with underline.

You can compare with other sessions by using “Comparison” function. Choose the sessions you want to compare with. The analysis table will automatically update the information. Please also see Chapter **8.5.1 “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:

Split View (Start-to-Split)					
	Time (Diff)	S-1 (Diff)	S-2 (Diff)	S-3 (Diff)	S-F (Diff)
Lap 1	02:00.632 (+01.191)	34.015 (+00.222)	58.863 (+00.953)	01:28.410 (+00.919)	02:00.632 (+01.191)
Lap 2 - BEST	01:59.441	33.793	57.910	01:27.491	01:59.441
Lap 3	02:00.605 (+01.164)	34.238 (+00.445)	58.933 (+01.023)	01:28.484 (+00.993)	02:00.605 (+01.164)
Lap 4	02:04.567 (+05.126)	35.878 (+02.085)	01:01.059 (+03.149)	01:32.131 (+04.640)	02:04.567 (+05.126)
Lap 5	02:26.955 (+27.514)	43.140 (+09.347)	01:12.519 (+14.609)	01:49.864 (+22.373)	02:26.955 (+27.514)

Point Current Speed View					
	Time (Diff)	1 (Diff) (km/h)	2 (Diff) (km/h)	3 (Diff) (km/h)	F (Diff) (km/h)
Lap 1	02:00.632 (+01.191)	117.81 (-0.96)	168.37 (-9.76)	143.83 (+1.02)	106.64 (-10.61)
Lap 2 - BEST	01:59.441	118.77	178.13	142.81	117.25
Lap 3	02:00.605 (+01.164)	118.97 (+0.20)	168.53 (-9.60)	142.92 (+0.11)	119.34 (+2.09)
Lap 4	02:04.567 (+05.126)	106.90 (-11.87)	166.03 (-12.10)	140.36 (-2.45)	108.10 (-9.15)
Lap 5	02:26.955 (+27.514)	92.49 (-26.28)	107.95 (-70.18)	109.82 (-32.99)	105.19 (-12.06)

8.4.1 Horsepower Analysis

QRacing will be able to estimate the average/max horsepower 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 horsepower measurement. The weight should include the vehicle, driver and passenger.

Click on "Update" to input the weight.

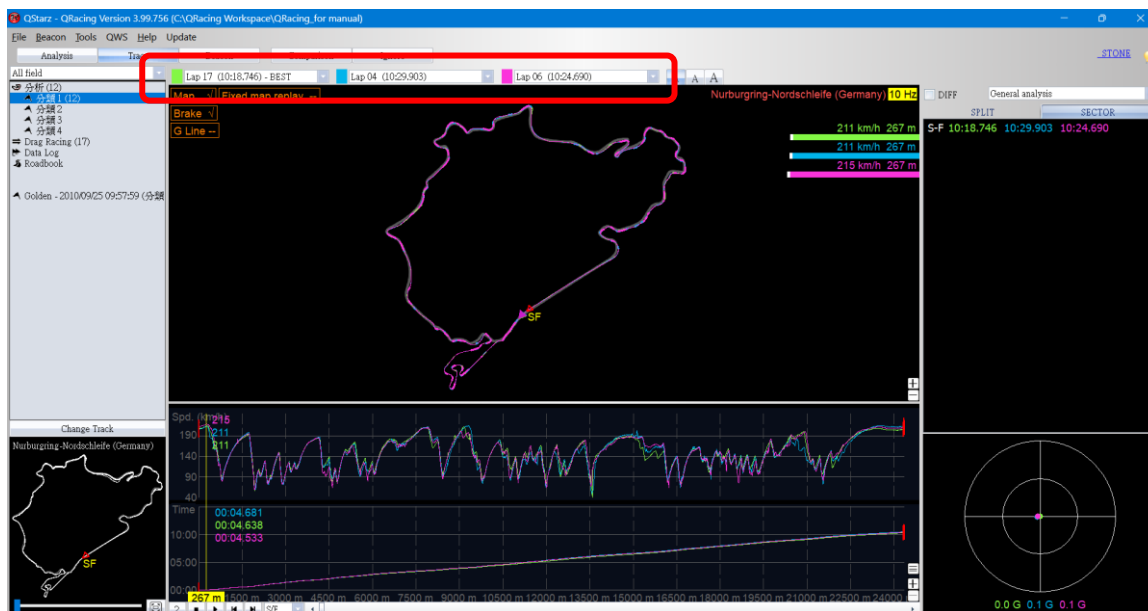
Note: Only 1 / 4 run support horsepower measurement

Horse Power View	
Car Weight : 200 kg	
Racer Weight : 70 kg	Update
	max.Horse Power (hp)
Lap 1	0.7
Lap 2	0.9
Lap 3	0.9
Lap 4 - BEST	1.0

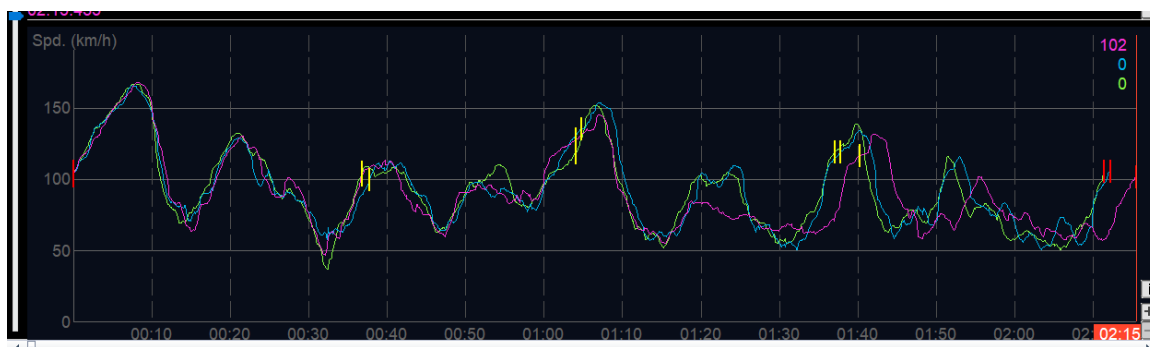
8.5 Trace

8.5.1 Compare laps

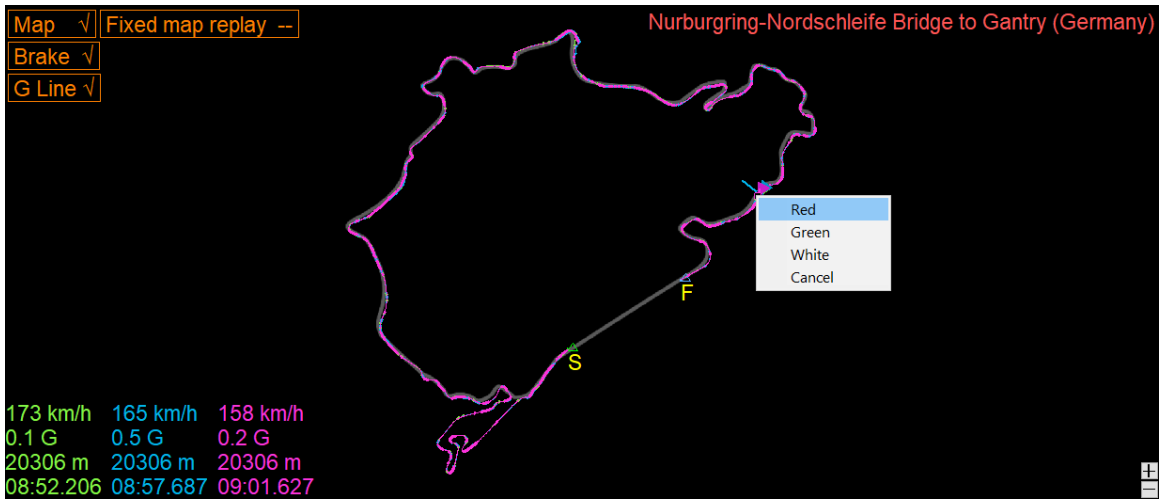
In Trace page, you can select up to three laps for comparison. The Speed Graph can be shown by distance-base or time-base.



When using **Time-base**, the speed difference line will be shown on the graph by two laps comparison.

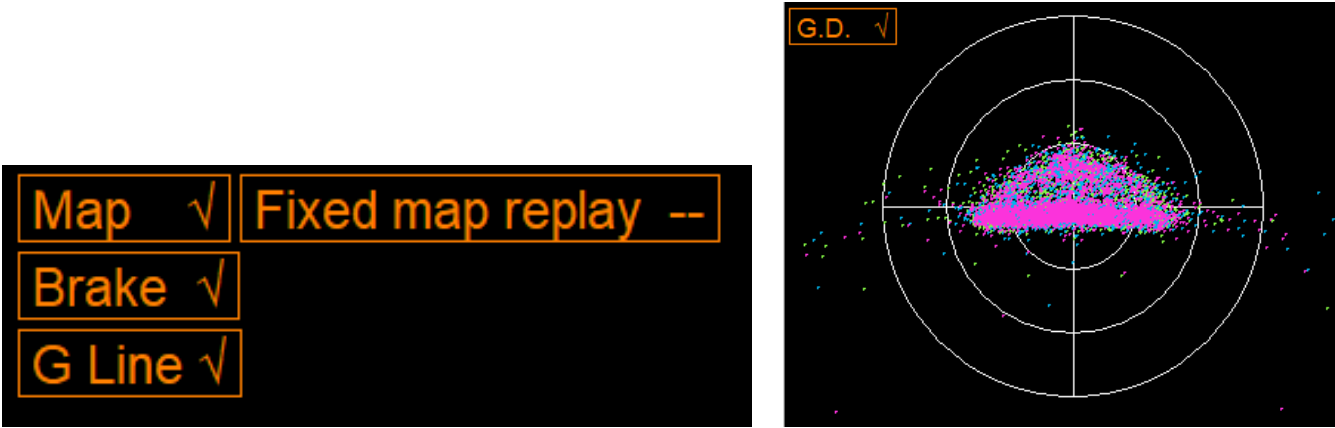


In Trace Map View, using the color tags on the trace or on the graph table to mark the position for define accelerate point or break point purpose.



8.5.2 Trace Preference setting

On Trace page allows users to select the display settings they want when the trace is playing.



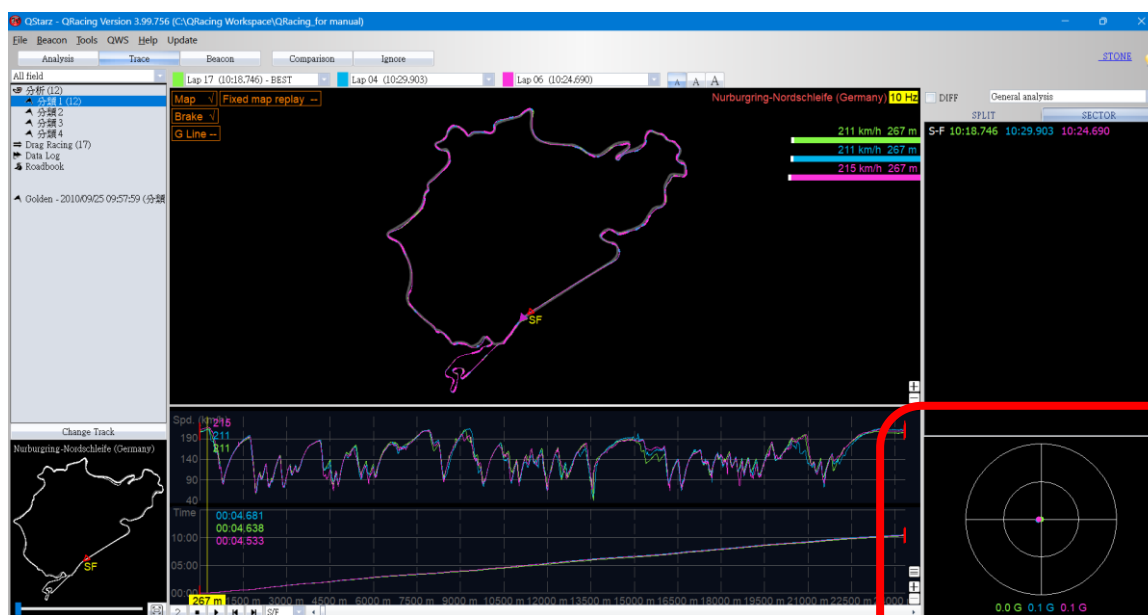
8.5.2.1 Show G-Value: It will show the G-Value on the trace while replay the trace

G Line ☒



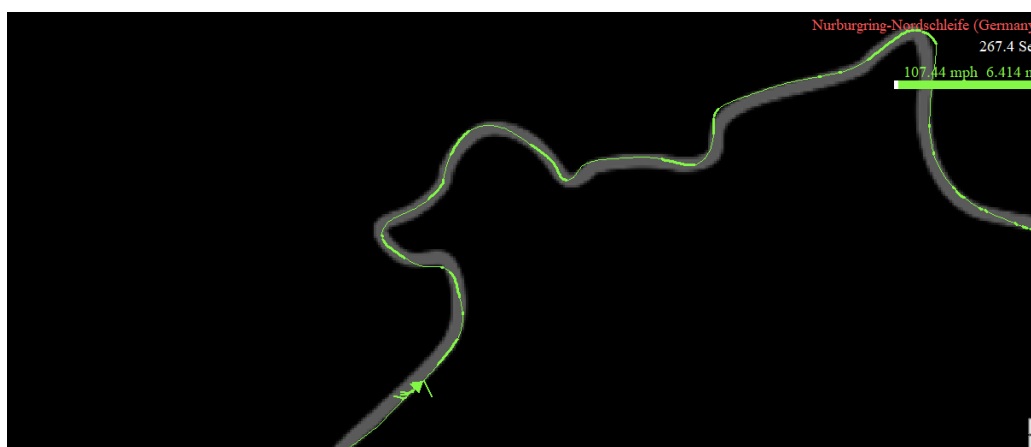
8.5.2.2 Show G-Value distribution: It shows the G-value distribution zone of the selected trace.

G.D. ✓



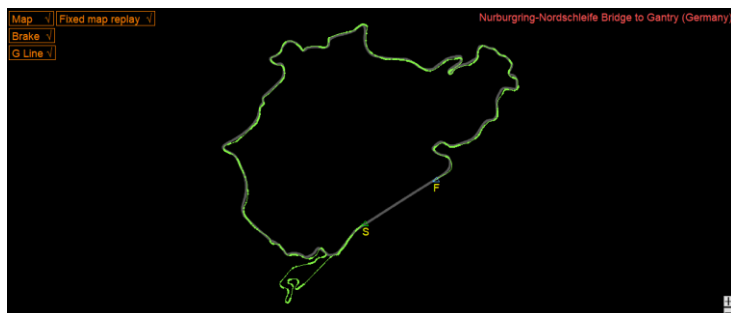
8.5.2.3 Accel line (acceleration) / Braking line (Deceleration): It shows the accelerate and decelerate lines on the trace. You can compare the accel line and braking line for difference laps. (The thick line presents the braking zone, and the thinner lines present the acceleration zone.)

Brake ✓



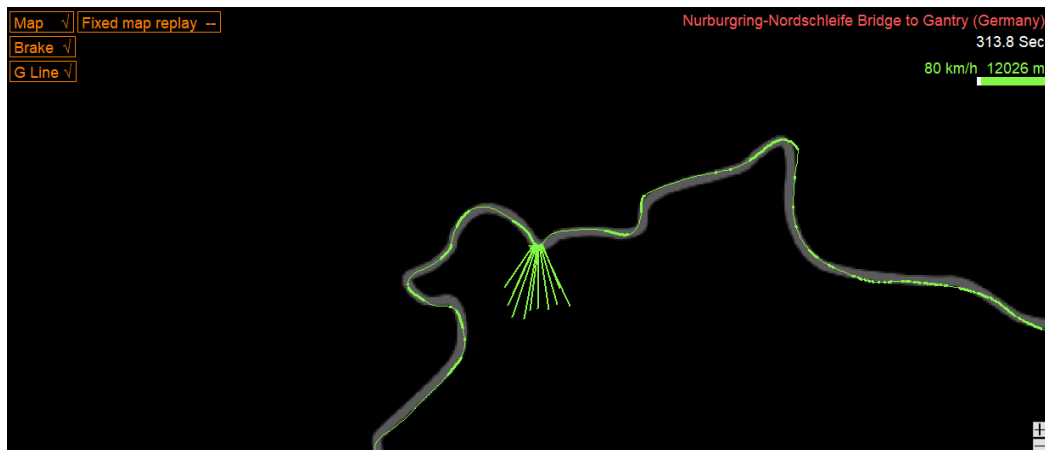
8.5.2.4 Show trackmap: From "Option" setting, to display the track map or to hide the track map.

Map ✓

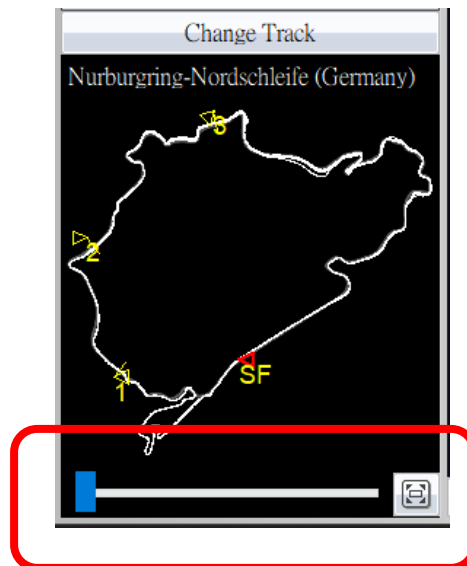



8.5.2.5 Fixed map during replay: Keep the trackmap or the position on the center while trace replay.

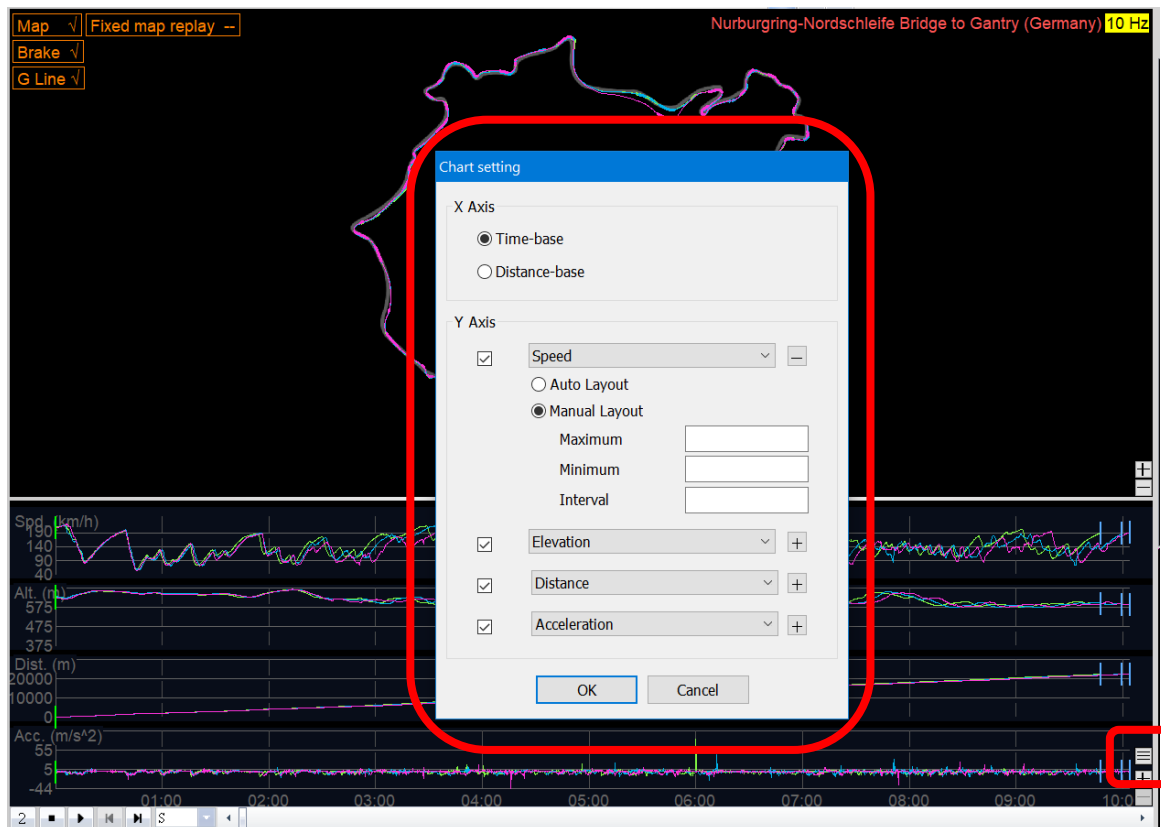
Fixed map replay --



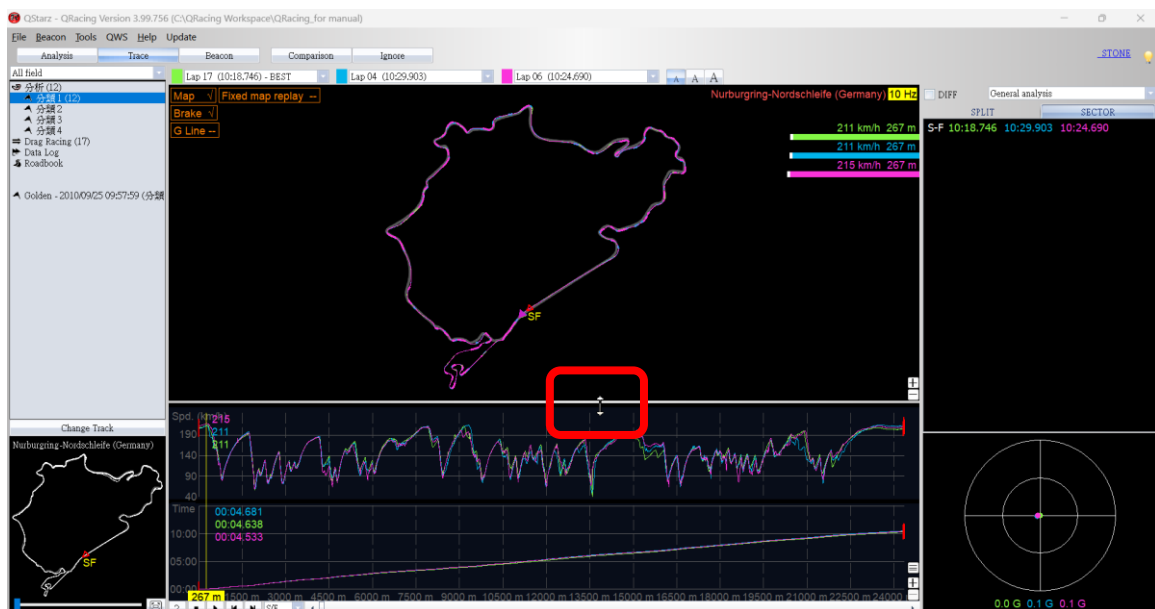
8.5.2.6 Rotate Track: Rotate the heading of the track with 360 degrees. The default setting of the heading is facing North.

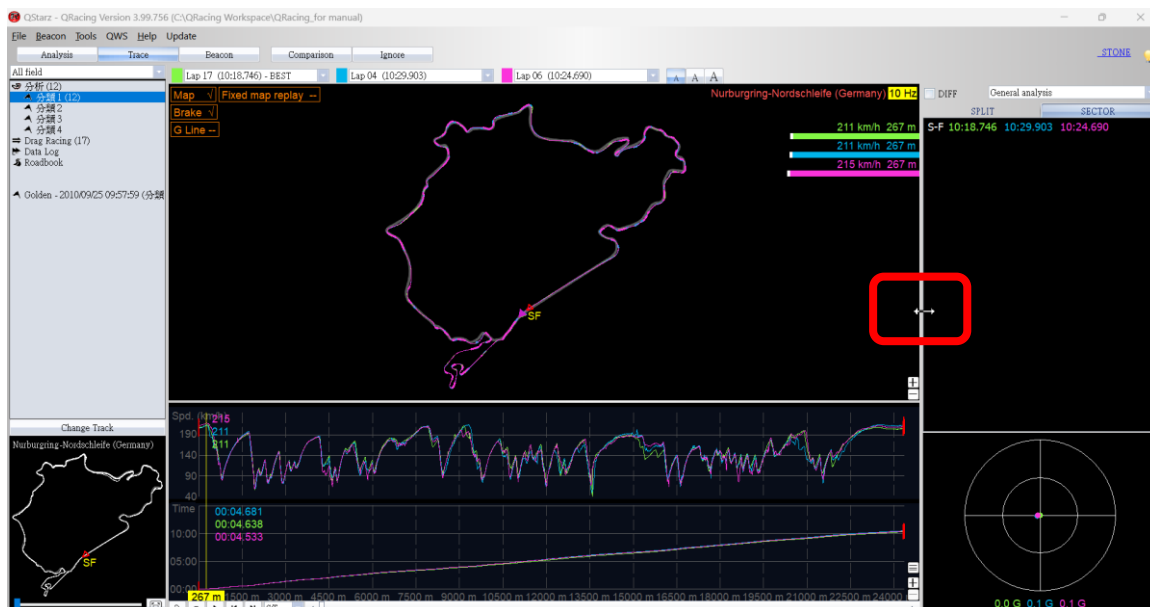


8.5.2.7 Chart Setting: Click the  in the chart, you can set to display various charts and Customize chart Y-axis scale setting.



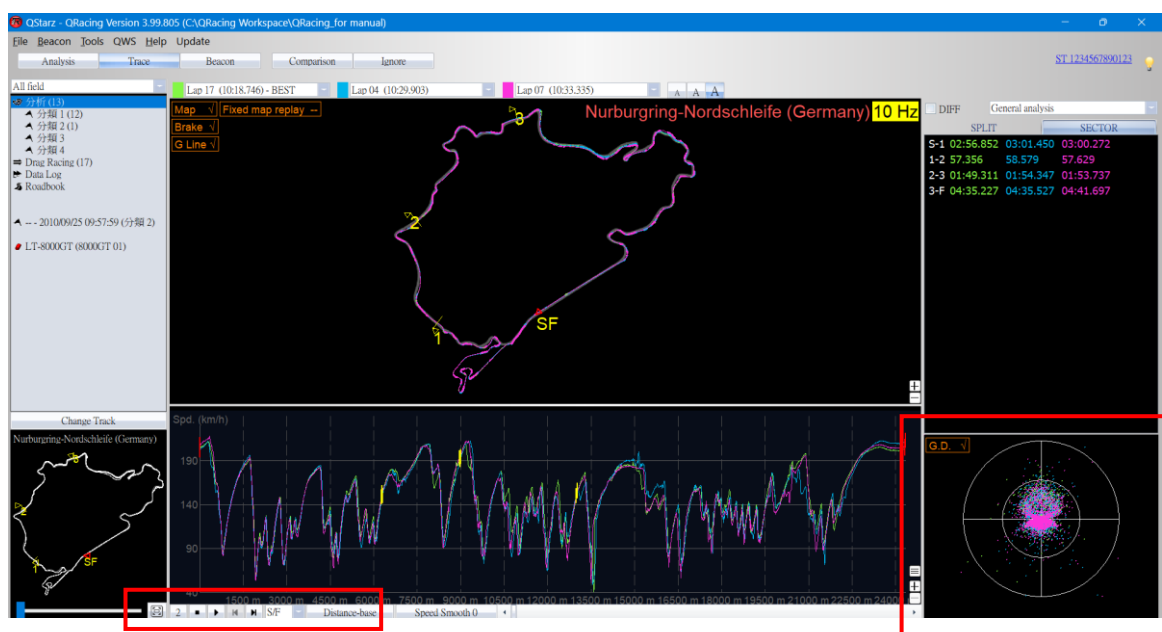
8.5.2.8 Window resizing: If you want to resize the window horizontally/vertically, point to any edge of the window. The mouse pointer will change to indicate that you can resize the window. Grab the edges and drag the window to the new size.



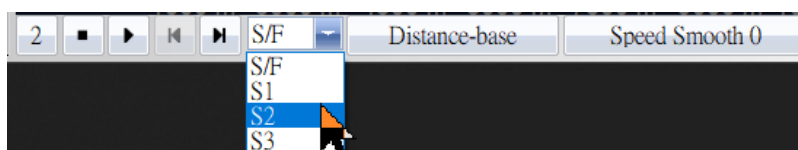


8.5.3 Trace Replay View

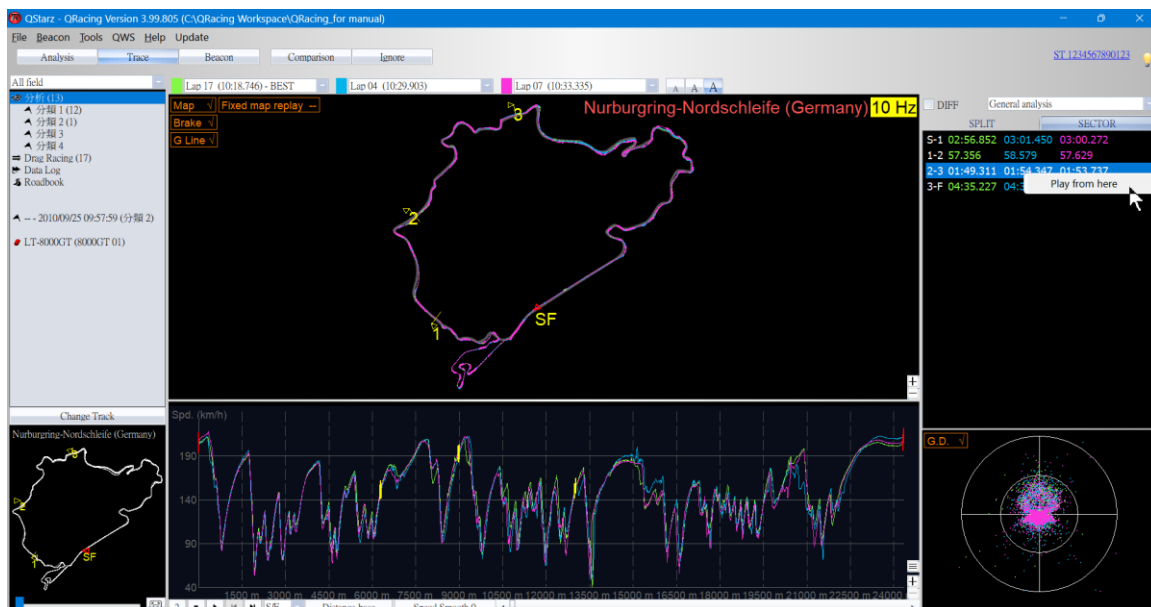
Click the play button on the status bar. It will replay the selected laps and show the racing information by time, speed and G-value simultaneously.



To compare with other racer by sector, you can select the split zone and QRacing will start replay the track from that split.



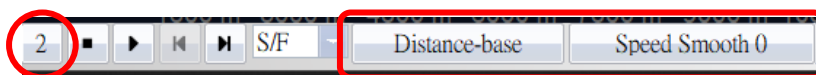
You can also select the SECTOR number you want to play from the SECTOR, right-click mouse and choose to play from here.



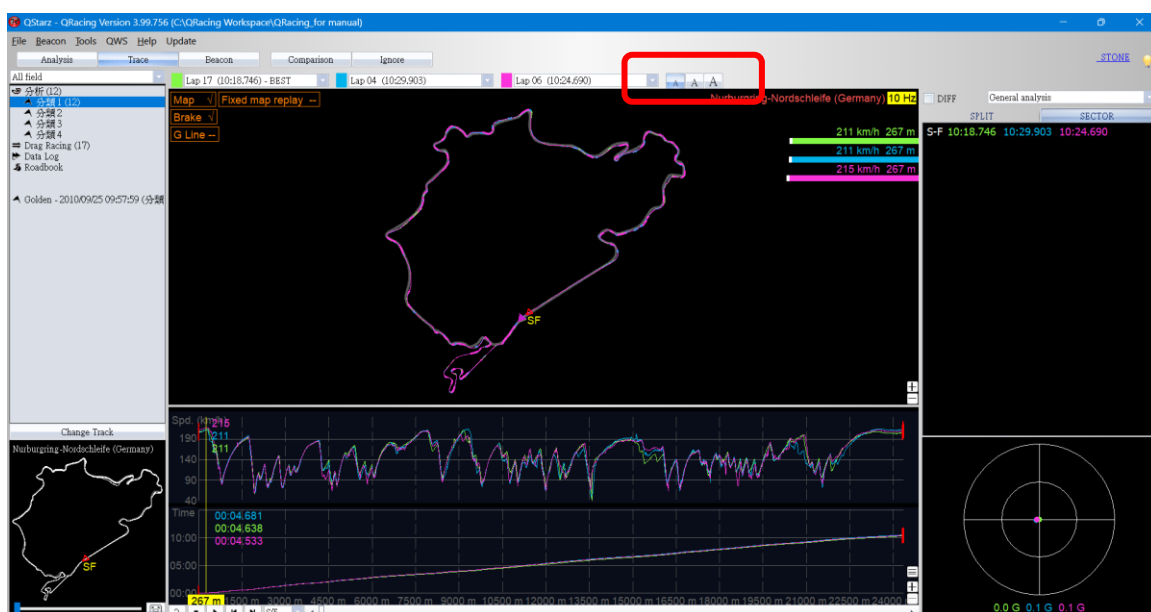
The playback speed can be change from 1, 1/2, 1/4, and 2.

You can use the shortcut keys to switch the display unit of the X-axis, and you can set the time reference or distance reference.

And use the speed smoothing setting to adjust the fineness of the speedometer.



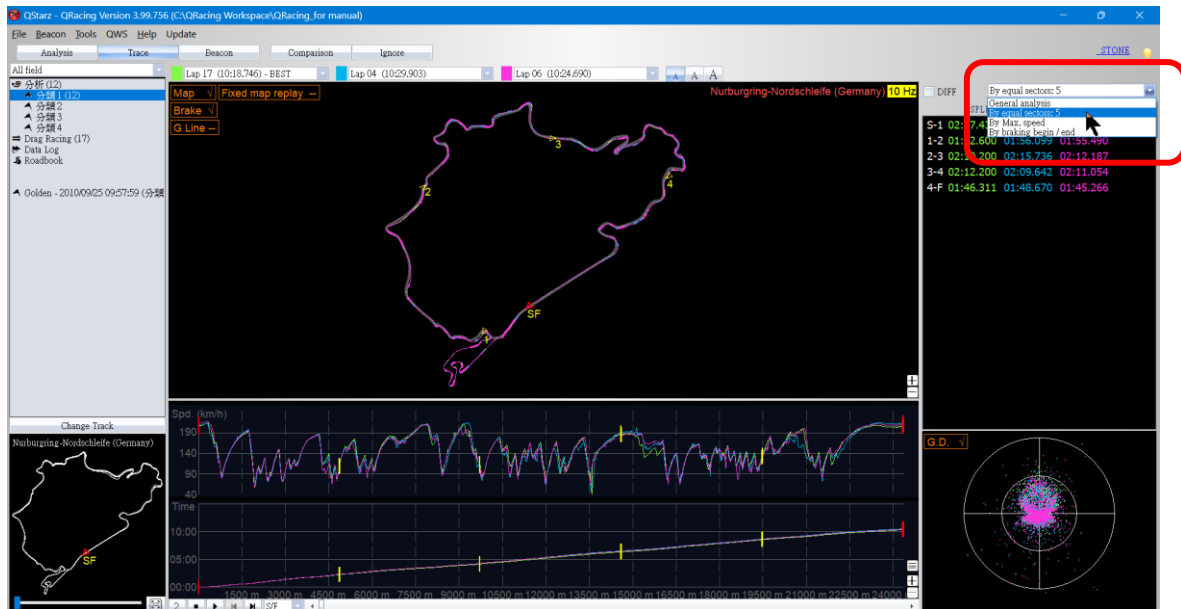
Select different size of text font.



8.5.4 Enhanced Analysis Options

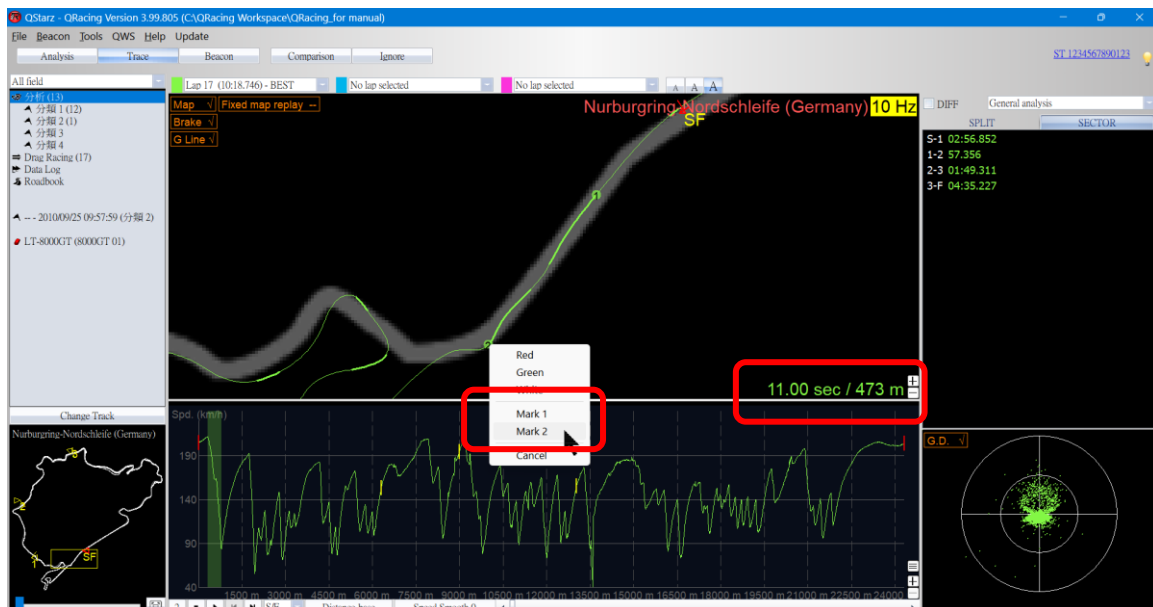
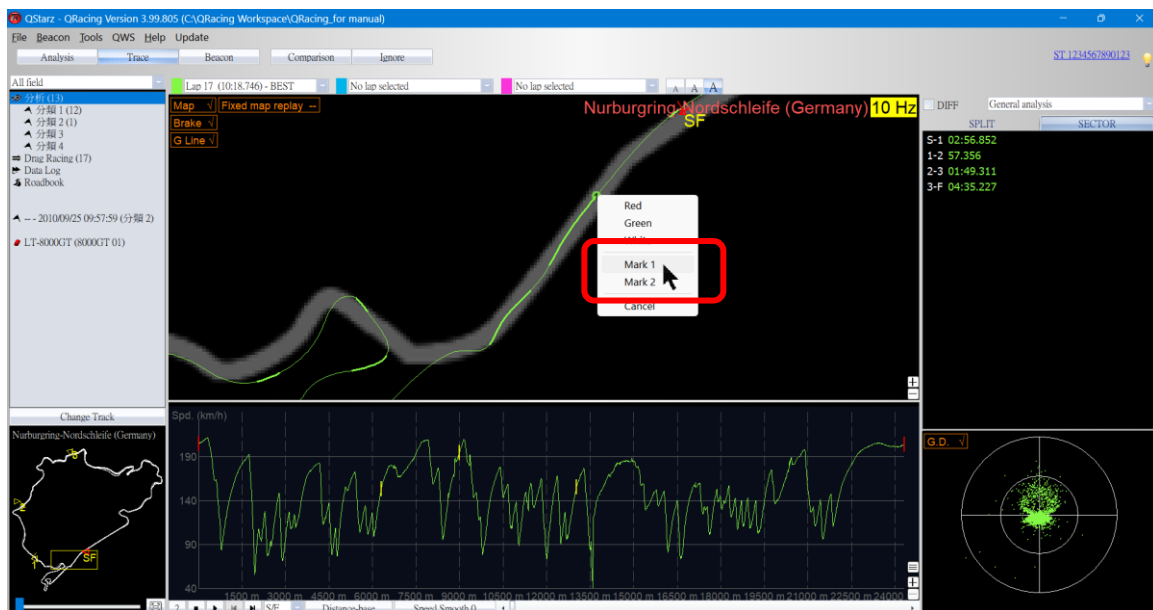
By using the enhanced analysis option, you can apply an analysis of equal sectors, or an analysis of relative speed. Using the drop-down menu, select a split method.

For example, you can use the equal sectors option to split the equal distance along the trace. Click the equal sectors, and enter the number of sectors, It will be divided into equidistant sectors.



You can use the mark function to get the distance and time between two points.

Click the left mouse button on the trace and set Mark 1 and Mark 2 to get the time and distance between the two points.



8.6 Comparison

Click “**Comparison**” to select the same track sessions for comparison.

Select session

Please select session(s) to compare...

	User	Type	Date	Field Name	Fastest Lap	Total Time	
<input type="checkbox"/>	☆	--	Qualify	021/05/05 10:18:0	Lihpao International Circuit (FIA	01:59.441 (2/5)	0:10:32

☐ Only show yellow ☆

OK Cancel

C1: -- 2021/05/05 10:18:05

Reference Lap Setting: **Lap 2**

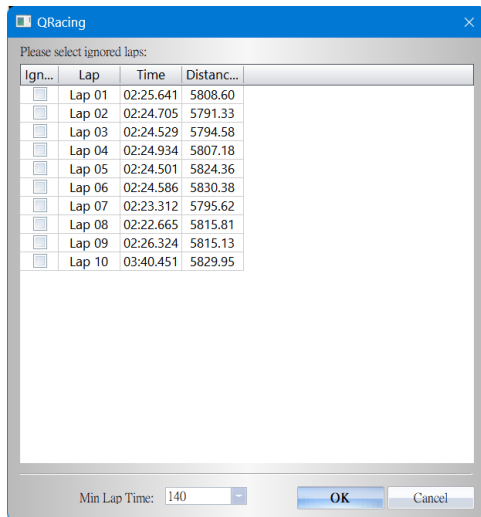
Avg/Max/Min Speed View

	Time (Diff)	Max Speed (Diff) (km/h)	Min Speed (Diff) (km/h)	Average Speed (Diff) (km/h)	Distance (m)
Lap 1	02:00.632 (+01.191)	208.09 (+4.28)	63.02 (-1.06)	104.50 (-0.49)	3501.71
Lap 2 - BEST	01:59.441	203.81	64.08	104.99	3483.20
Lap 3	02:00.605 (+01.164)	193.03 (-10.78)	63.38 (-0.70)	104.14 (-0.85)	3488.86
Lap 4	02:04.567 (+05.126)	182.70 (-21.11)	63.91 (-0.17)	100.55 (-4.44)	3479.07
Lap 5	02:26.955 (+27.514)	121.18 (-82.63)	51.93 (-12.15)	85.00 (-19.99)	3469.63
C1: Lap 1	02:00.632 (+01.191)	208.09 (+4.28)	63.02 (-1.06)	104.50 (-0.49)	3501.71
C1: Lap 2 - BEST	01:59.441	203.81	64.08	104.99	3483.20
C1: Lap 3	02:00.605 (+01.164)	193.03 (-10.78)	63.38 (-0.70)	104.14 (-0.85)	3488.86
C1: Lap 4	02:04.567 (+05.126)	182.70 (-21.11)	63.91 (-0.17)	100.55 (-4.44)	3479.07
C1: Lap 5	02:26.955 (+27.514)	121.18 (-82.63)	51.93 (-12.15)	85.00 (-19.99)	3469.63
avg.	02:06.440	181.76	61.26	99.83	3484.49

Click on “**Comparison**”, you can choose different sessions with the same track for analyze.

8.7 Ignore

Use “**Ignore**” function to ignore the laps. The ignored laps result would not be calculated for analyze data and it will be shown “Lap (Ignored) “. The ignored laps still can be recovered.



Nurburgring Nordschleife Bridge to Gantry (Germany)

Reference Lap Setting: Lap 17

Avg/Max/Min Speed View

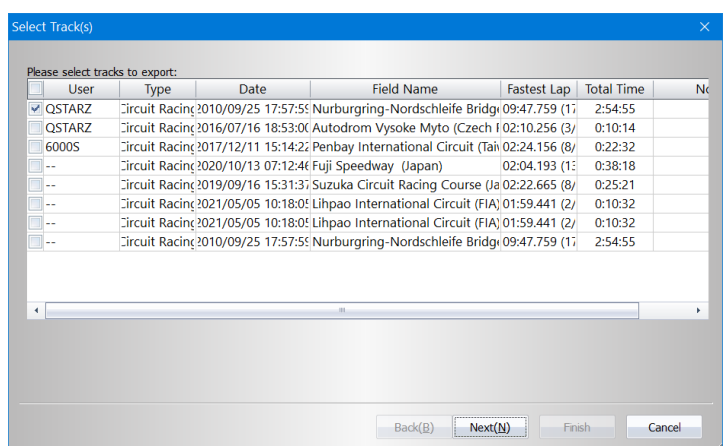
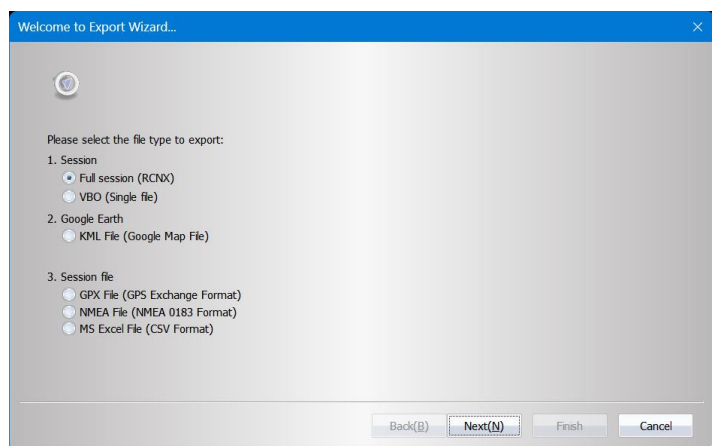
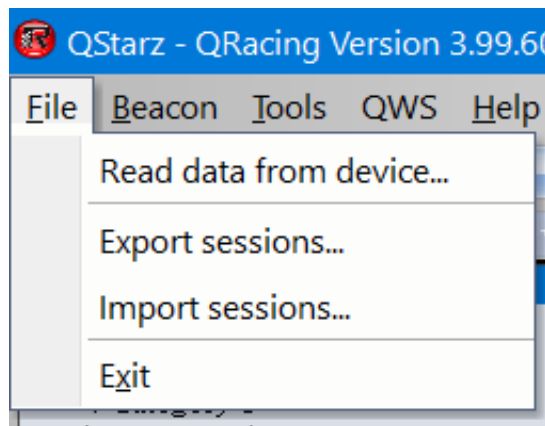
	Time (Diff)	Max Speed (Diff) (km/h)	Min Speed (Diff) (km/h)	Average Speed (Diff) (km/h)	Distance (m)
Lap 1 (Ignored)	10:16.976 (+11.211)	209.84 (-1.121)	51.46 (-1.121)	116.17 (-1.400)	21001.11
Lap 2 (Ignored)	10:02.000 (+11.211)	177.81 (-4.45)	52.40 (-1.121)	119.82 (-1.400)	21791.87
Lap 3	10:07.280 (+10.931)	211.14 (+3.49)	55.71 (+2.510)	114.16 (-4.111)	21608.81
Lap 4	09:59.710 (+11.951)	212.32 (+3.67)	49.89 (-4.28)	119.81 (-2.50)	21603.75
Lap 5	09:56.270 (+10.511)	218.38 (+3.93)	56.78 (+1.97)	116.16 (-2.11)	21568.11
Lap 6	09:54.366 (+8.607)	215.65 (+1.20)	58.81 (+18.00)	117.03 (-1.32)	21627.06
Lap 7	10:02.650 (+14.891)	218.01 (+6.51)	51.56 (+0.72)	114.90 (-3.47)	21182.84
Lap 8	10:01.812 (+14.051)	212.54 (+1.09)	55.75 (+11.94)	115.32 (-3.05)	21621.13
Lap 9	10:03.840 (+16.110)	218.67 (+5.22)	54.49 (+3.88)	115.49 (-2.87)	21712.18
Lap 10	10:07.117 (+19.391)	216.85 (+3.50)	49.76 (-4.85)	114.18 (-4.18)	21628.18
Lap 11	10:13.466 (+25.707)	225.19 (+11.74)	51.99 (+10.28)	112.40 (-3.97)	21561.83
Lap 12	11:18.014 (+81.08.210)	219.18 (+3.73)	6.00 (-40.81)	99.12 (-39.25)	21323.28
Lap 13	10:16.546 (+18.787)	211.37 (+4.11)	59.82 (+10.11)	111.81 (-4.52)	21380.18
Lap 14	10:32.885 (+34.126)	214.20 (+3.75)	24.30 (-14.51)	118.41 (-8.96)	21773.14
Lap 15	09:57.876 (+10.117)	211.74 (+0.29)	54.48 (+3.22)	116.14 (-2.25)	21609.08
Lap 16	09:53.886 (+6.127)	211.10 (+1.65)	59.82 (+10.01)	117.21 (-1.14)	21618.21
Lap 17 - BEST	09:47.759	211.45	49.81	116.17	21091.62
avg	10:17.381	214.94	41.44	112.65	21608.14

9. Session Export/Import

9.1 Session Export

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

Click **[File]** --> **[Export sessions]**. Select *.rcnx format for full track QRacing file or another file format for different use.



9.2 Session Import

If you click **[File] --> [Import Sessions]**, choose the imported session (*.rcnx / *.rcn file only).

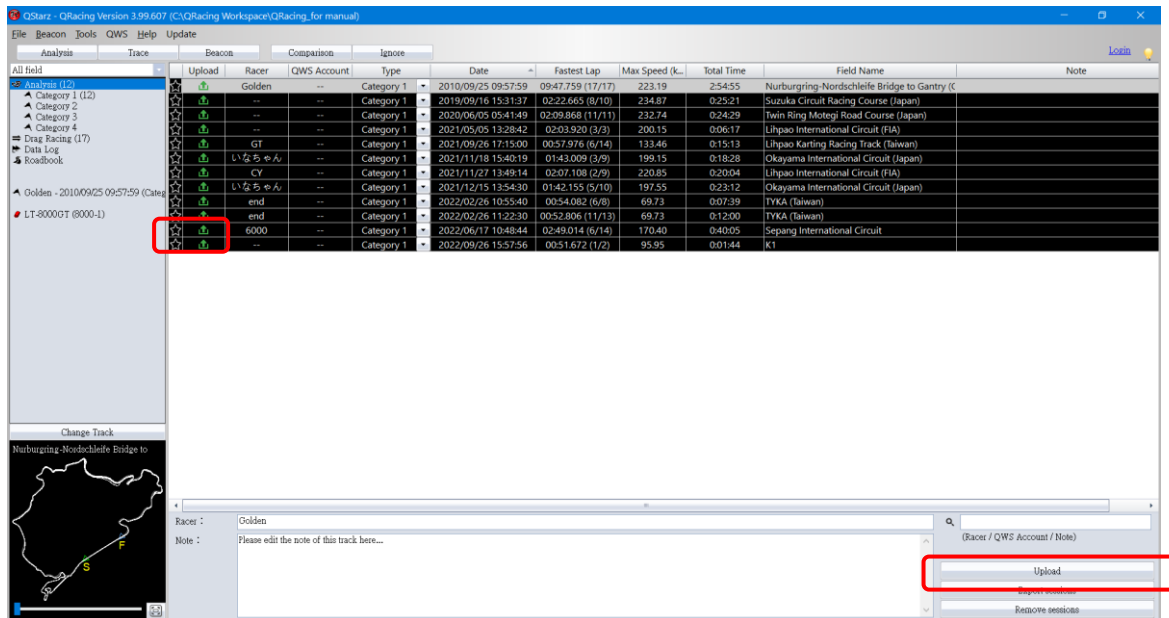
10. Upload sessions to QWS cloud

QRacing PC software can upload your sessions to QRacing Web (<https://qws.qstarz.com>). Create your own account and log in to upload your sessions now. Using any browser to login your QRacing Web account, you can review your session data and ranking anytime.

Succeed to upload your sessions, the username will change to your nickname of QRacing account.

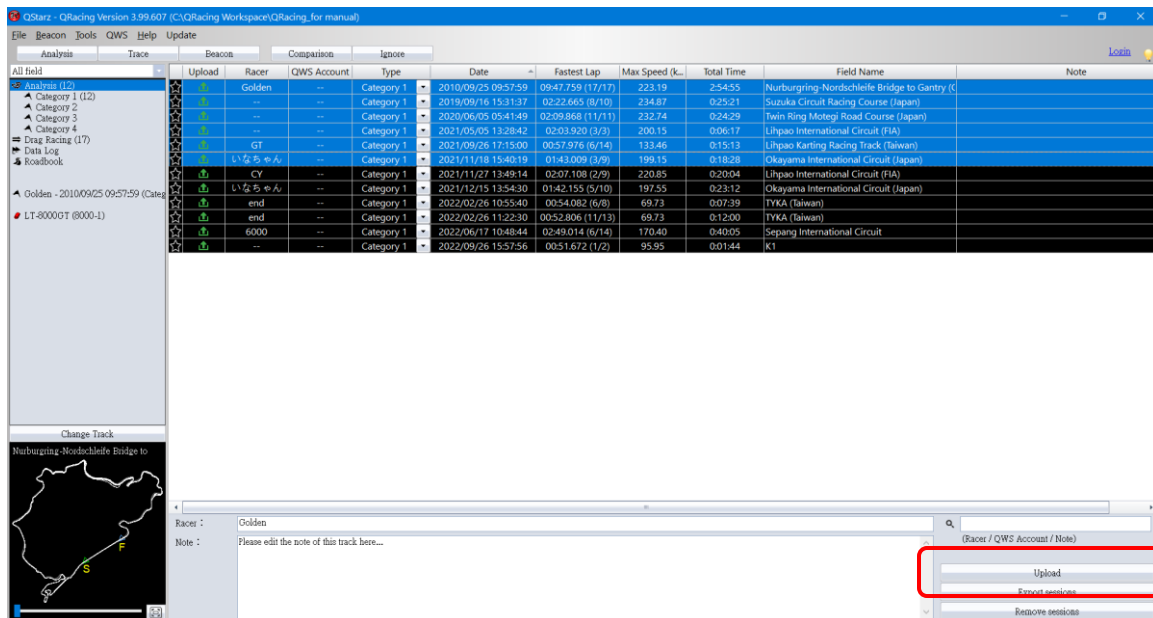
*Upload function is only available for official tracks only.

Upload a single session: After selecting a session, you can click the green upload arrow or click the "Upload" button in the lower right corner to upload a single session.

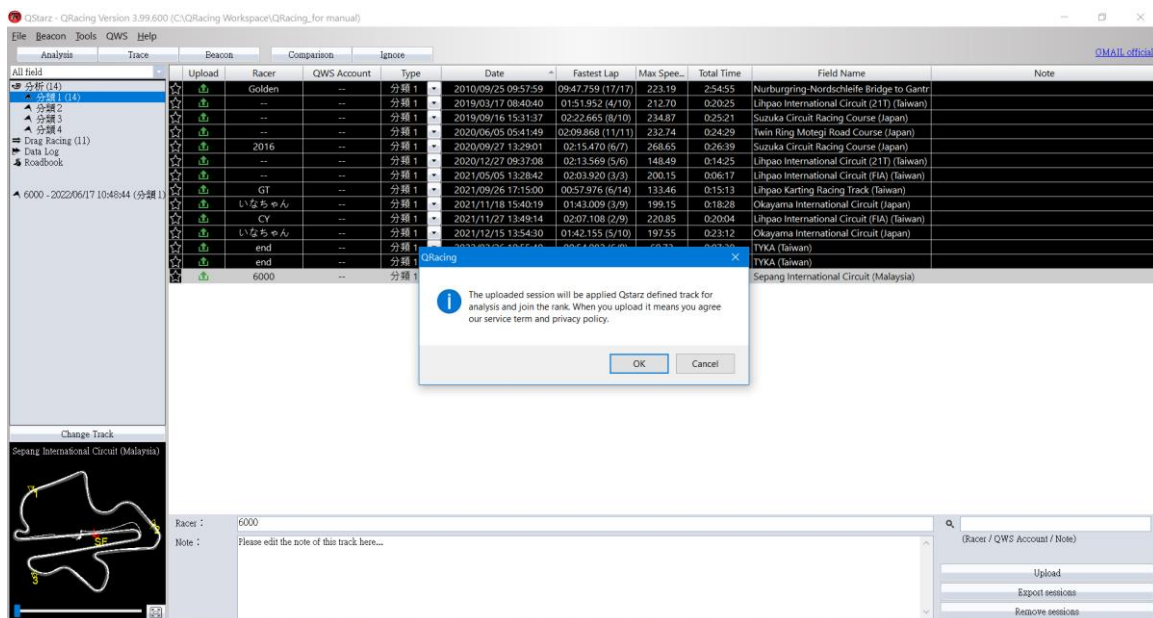


Multiple sessions upload: After selecting multiple sessions, click the "Upload" button in the lower right corner to upload multiple sessions.

(To select multiple adjacent sessions, hold down Shift and select sessions, to select multiple sessions that are not adjacent, hold down Ctrl and select sessions.)



Click OK to agree to accept the relevant terms of Qstarz and upload the session.



Blank column >> Cannot upload , session is under customized user track.

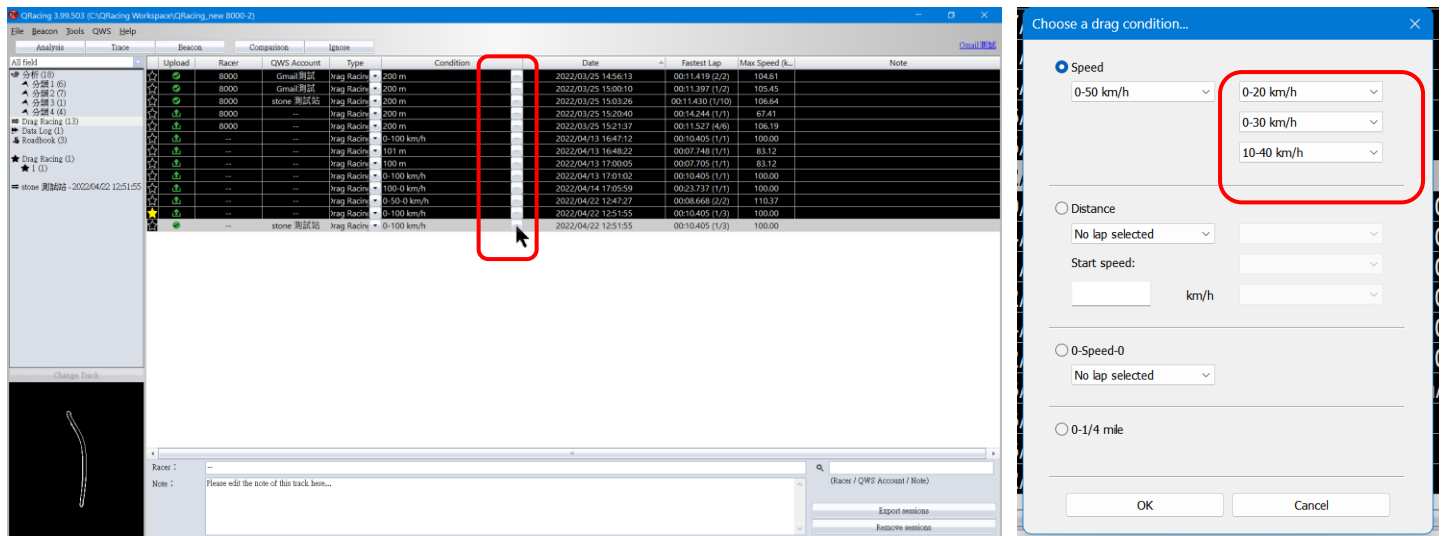
Green Arrow >> Available for Upload

Green Tick >> Successful Uploaded

Red Restriction >> Cannot upload, the session is no result or not in the original trace position.

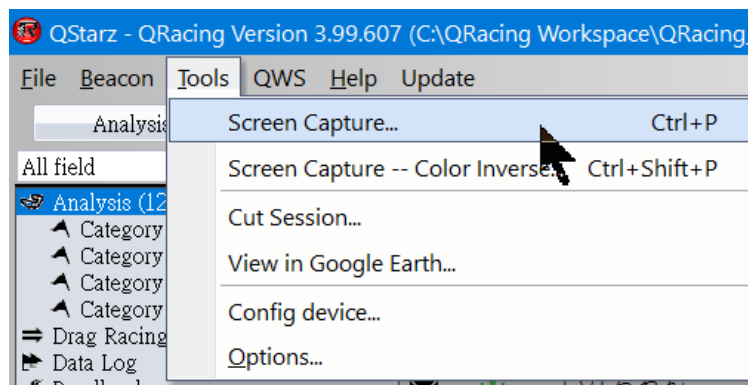
11. Drag racing setting

Click the condition to set one primary condition and three secondary conditions. The secondary condition must be set within the range of the primary condition.



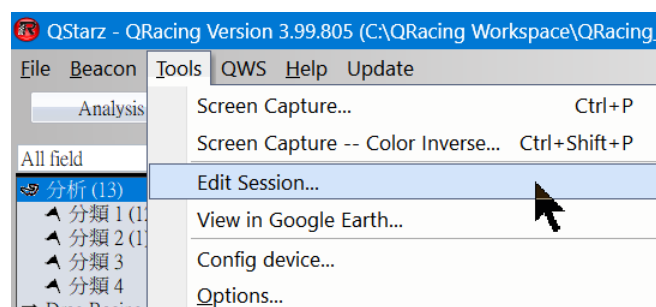
12. Screen Capture

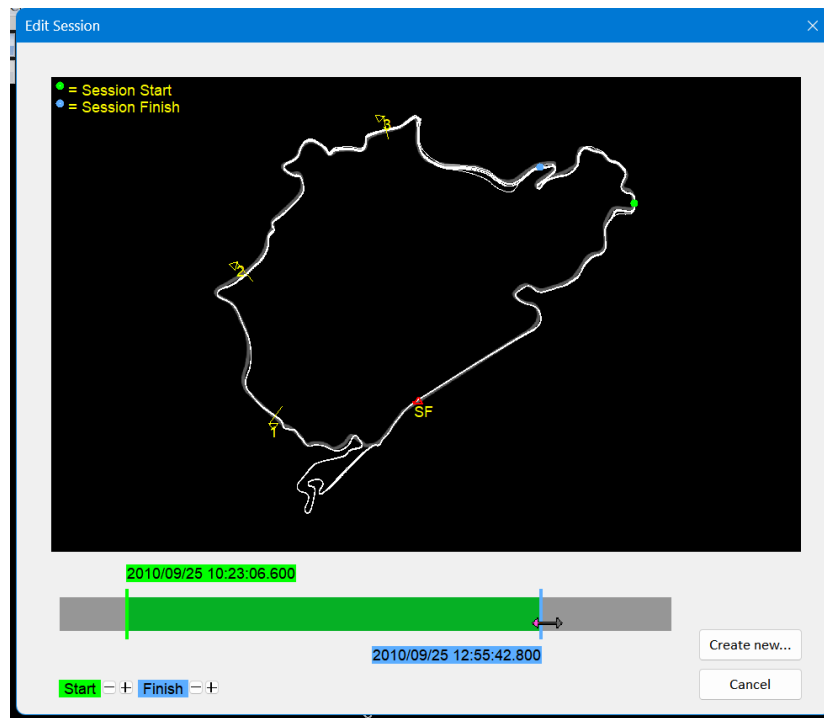
The software can capture the screen pictures directly. The capture pictures will be saved in the computer my document folder “QRacing Workspace”.



13. Edit Session

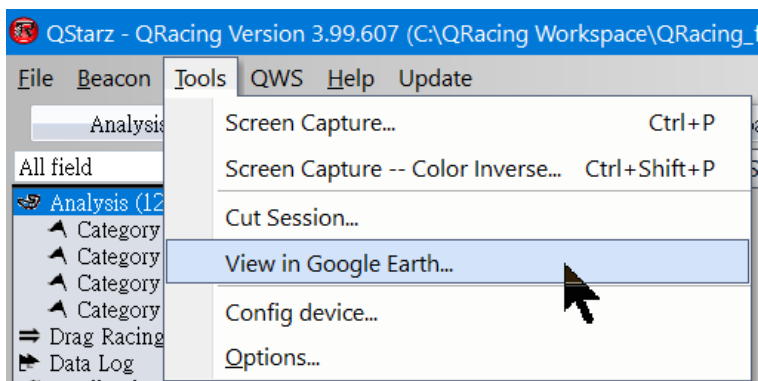
When there is too much waiting time or traces outside the track in the session, you can adjust the start and end points of the trace through the edit session function to obtain the trace range you need, and filter out traces that are not on the track or unwanted traces. The session can also be divided into multiple different sessions. For the edit session function, please use the mouse pointer to move the scales on the left and right sides of the green (green line is the starting point and blue line is the end point), after adjusting the desired starting point and ending point, Click "Create new" to capture the data and save it as a new session for analysis.





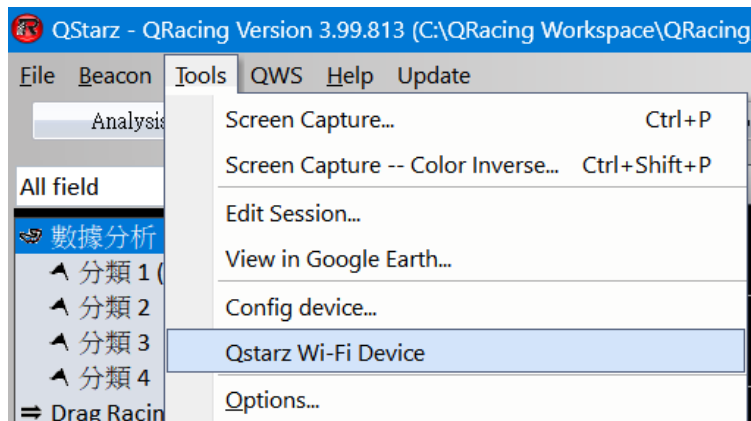
14. Google Earth

To view and display your trace on Google Earth by clicking on **Tools >> View in Google Earth...**
(Note: Need to install Google Earth software.)

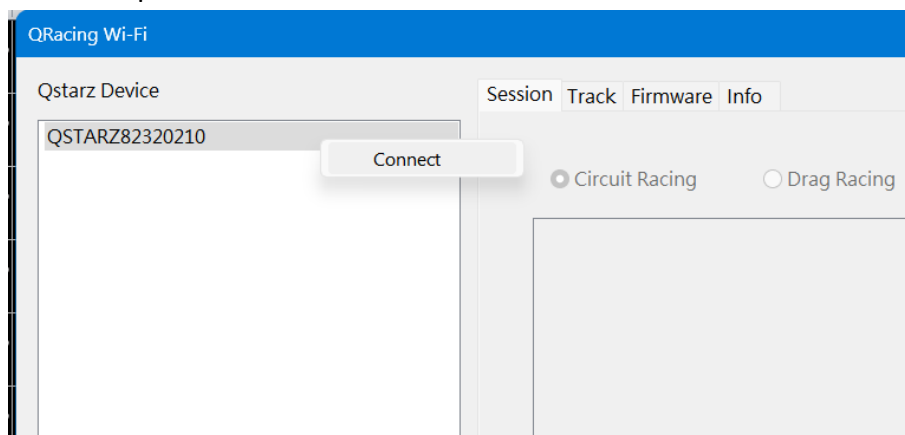


15. Qstarz Wi-Fi Device(LT-8000GT)

In the function menu, click [Tools] --> [Qstarz Wi-Fi Device], you can connect to LT-8000GT via Wi-Fi to download sessions, update official tracks and upload custom tracks, firmware updates and naming Device name.

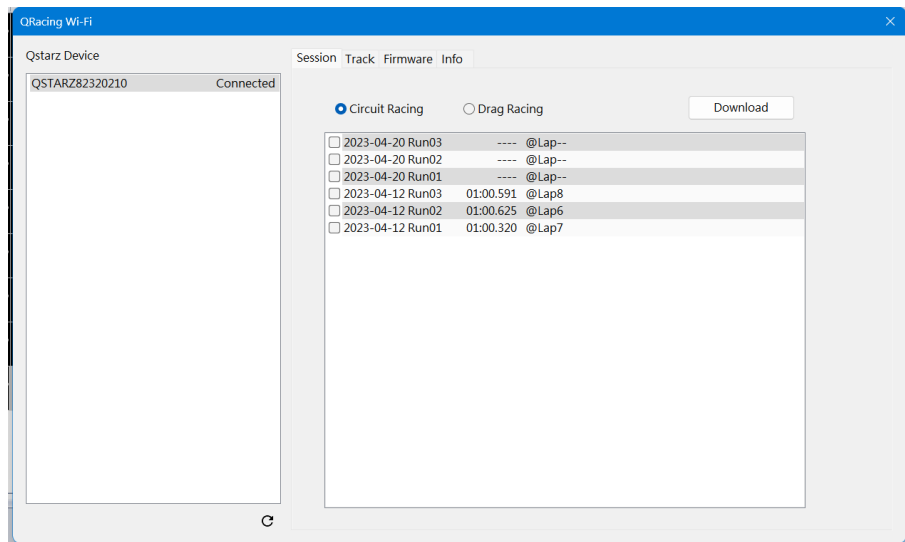


Turn on the device Wi-Fi function , after selecting the Qstarz Wi-Fi device to connect to, click Connect and enter the Wi-Fi password.



Download Circuit and Drag sessions.

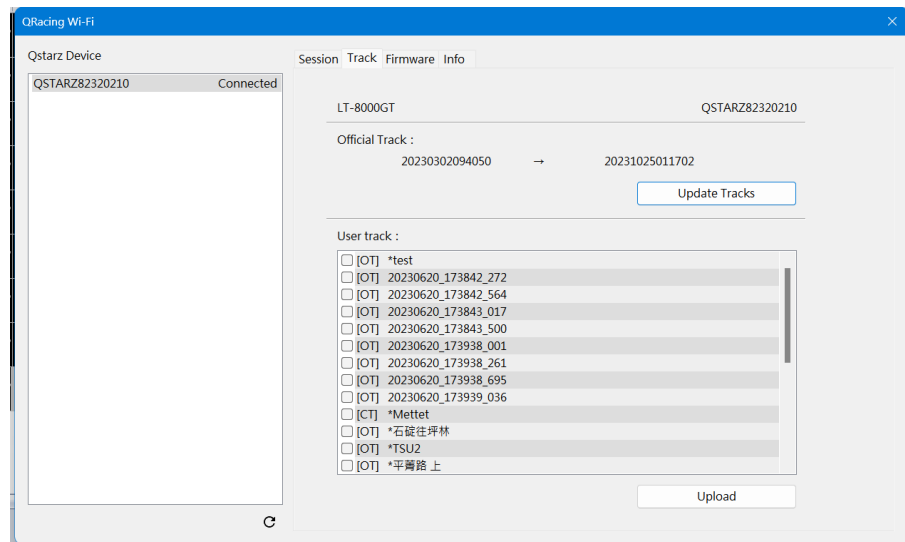
Select the sessions to be downloaded and click the download button. The download of LT-8000GT sessions to QRacing PC will begin.



Update official track/upload custom track. (after AP version 0.03.57)

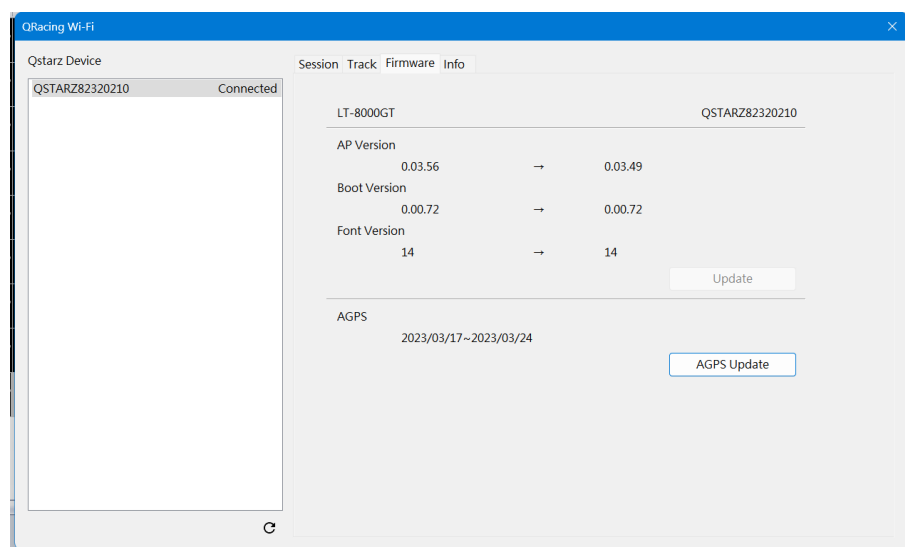
Click the official track update track button to update the LT-8000GT track to the latest version.

Select the custom track to be uploaded, and after clicking upload, the custom track will be stored in LT-8000GT [Circuit] [Load Shared Track].



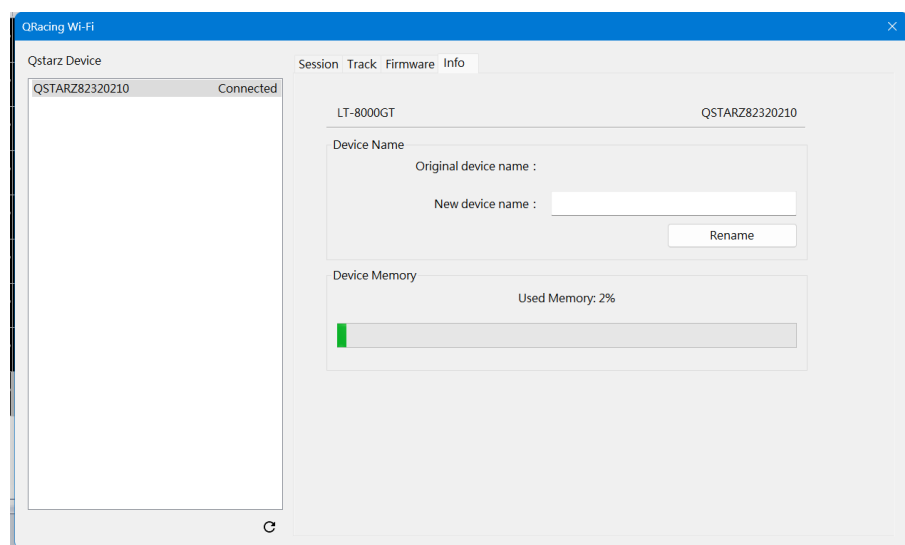
Update firmware/update AGPS.

The firmware page can update the LT-8000GT to the latest firmware version and update AGPS.



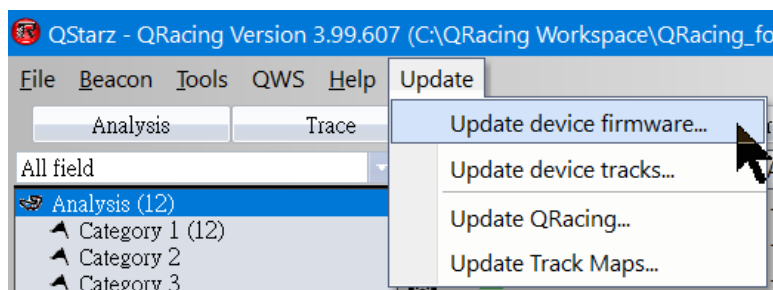
Modify device name/display memory space. (after AP version 0.03.57)

The information page allows you to name the device and obtain device memory space information.



16. Update Software/firmware (LT-Q6000, LT-6000S, LT-6000S2, LT-8000GT, BL-1000GT)

In QRacing Menu, select (**Update => [Update QRacing] / [Update device firmware]**) to update QRacing software and the firmware of your Qstarz device.



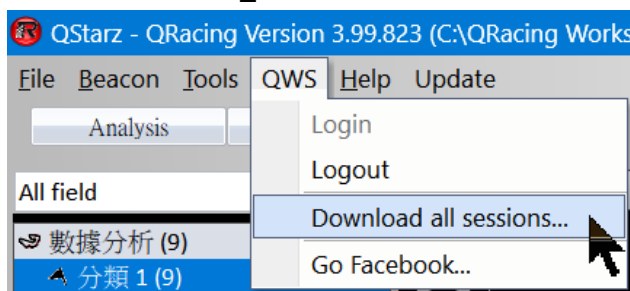
QRacing will check and update to the latest software version when there is a new version released. If your Qstarz device is connected to QRacing, it will also check the firmware version. For firmware update, please visit Racing.Qstarz.com for more information.

Before update your device, please charge the power of battery is more than 50%. The battery does not install properly would cause the failure of update and unpredictable issue.

17. Download all sessions of QWS

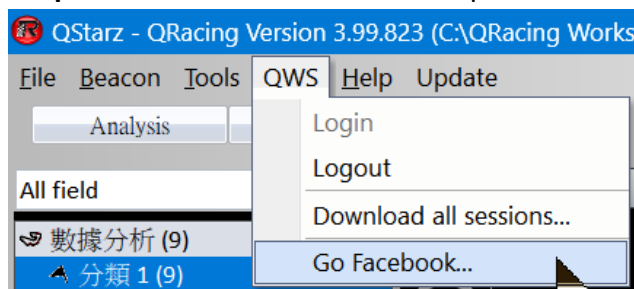
All sessions on QWS can be downloaded to QRacing PC for data analysis.

Downloading QWS sessions will create a new SYNC_WORKSPACE folder.



18. Follow Qstarz on Facebook

Follow our Facebook **Qstarz GPS Lap Timer** for the latest news and product information.



19. FAQ

Is QRacing support windows 8, 10 drivers?

Yes, if you have any issue to install QRacing software to your PC, please email to info@qstarz.com

New track not show up in QRacing?

Please update the trackmap database to the latest version. If the trackmap is still not in QRacing trackmap database, please export your track data to RCNX or RCN format file and email to info@qstarz.com. We will update the trackmap to QRacing trackmap database soon as possible.