

Getting started with the SpeedBoard for GT7 (v8)

<https://github.com/profittlich/gt7speedboard/releases>

Chapter 0: First launch

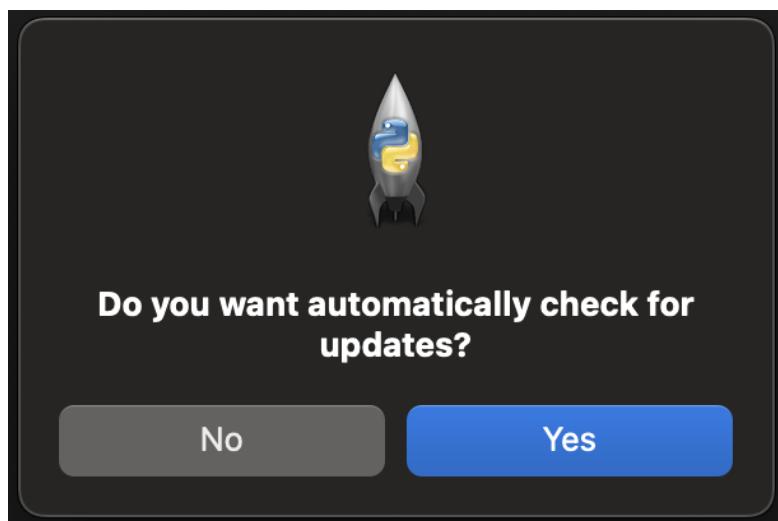
Startup

Double-click **SpeedBoard for GT7** on Mac or **SpeedBoard for GT7.exe** on Windows to launch the dashboard.

Note: On current versions of macOS, you may get a message that the app cannot be checked for malware. To start the SpeedBoard, go to the system settings under „privacy and security“ and allow the app to be launched. Unfortunately, to enable the malware check, the developer needs a paid Apple Developer subscription, which I don't have.

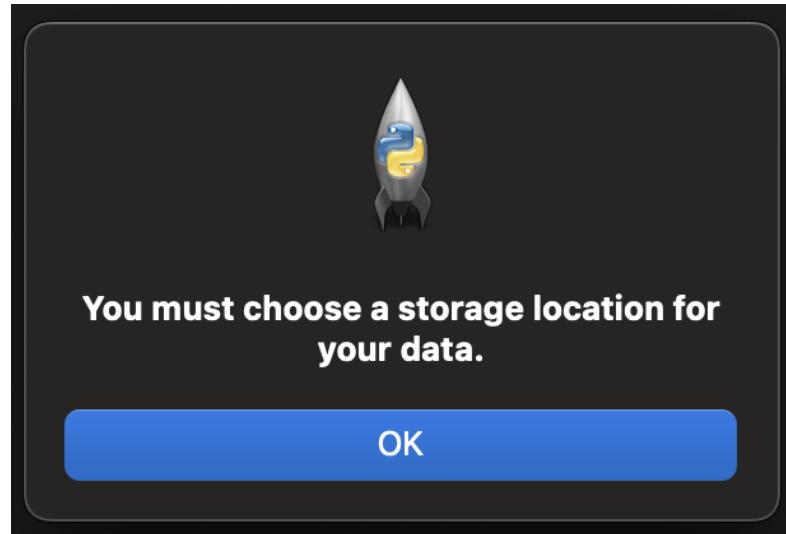
Note: The SpeedBoard has not been tested on Linux. Running the Python code from GitHub may or may not work there.

When you first start the SpeedBoard, you will be asked if you want to **check for updates** every time the SpeedBoard launches.

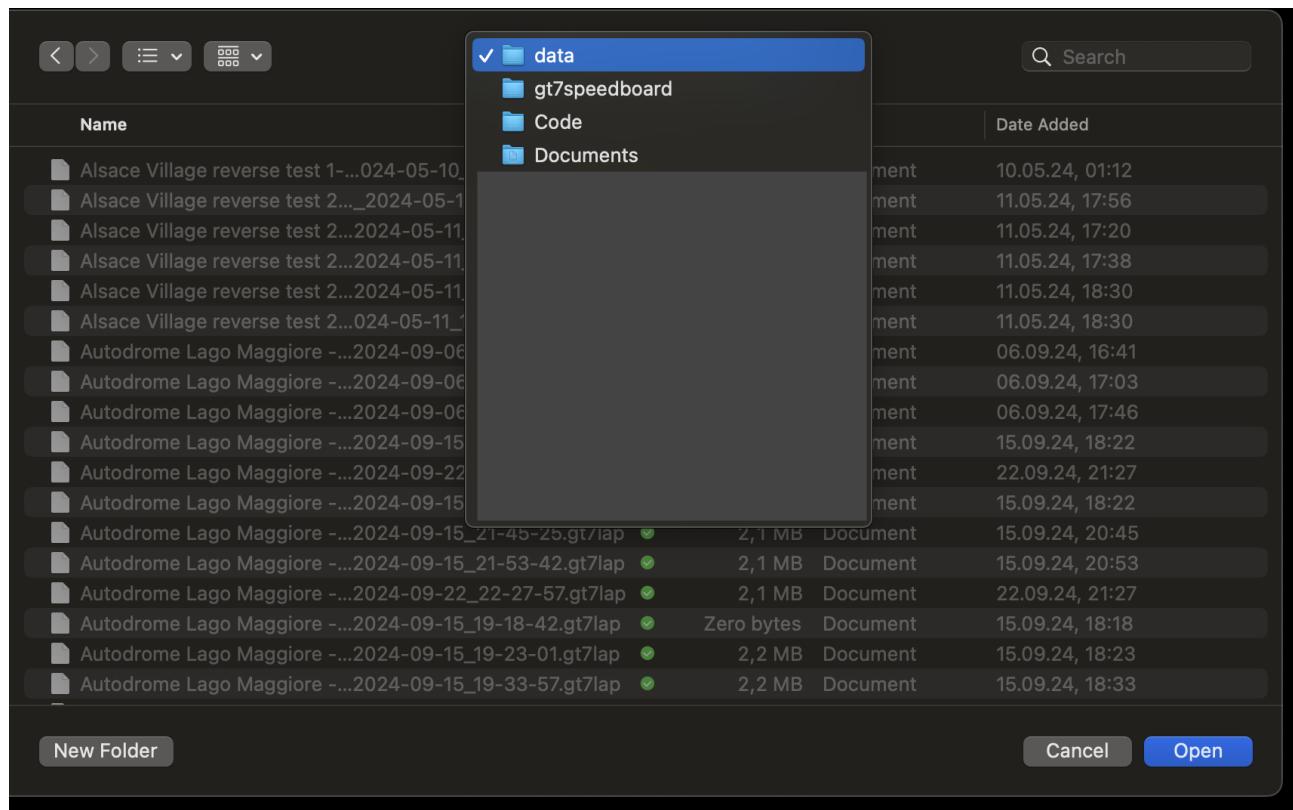


If you choose "Yes", you will be notified about new versions of the SpeedBoard and given a link to the download website. If you choose „No“, you can still check for updates manually on the configuration screen.

The second thing you will be asked for is a **storage location** for your telemetry data.

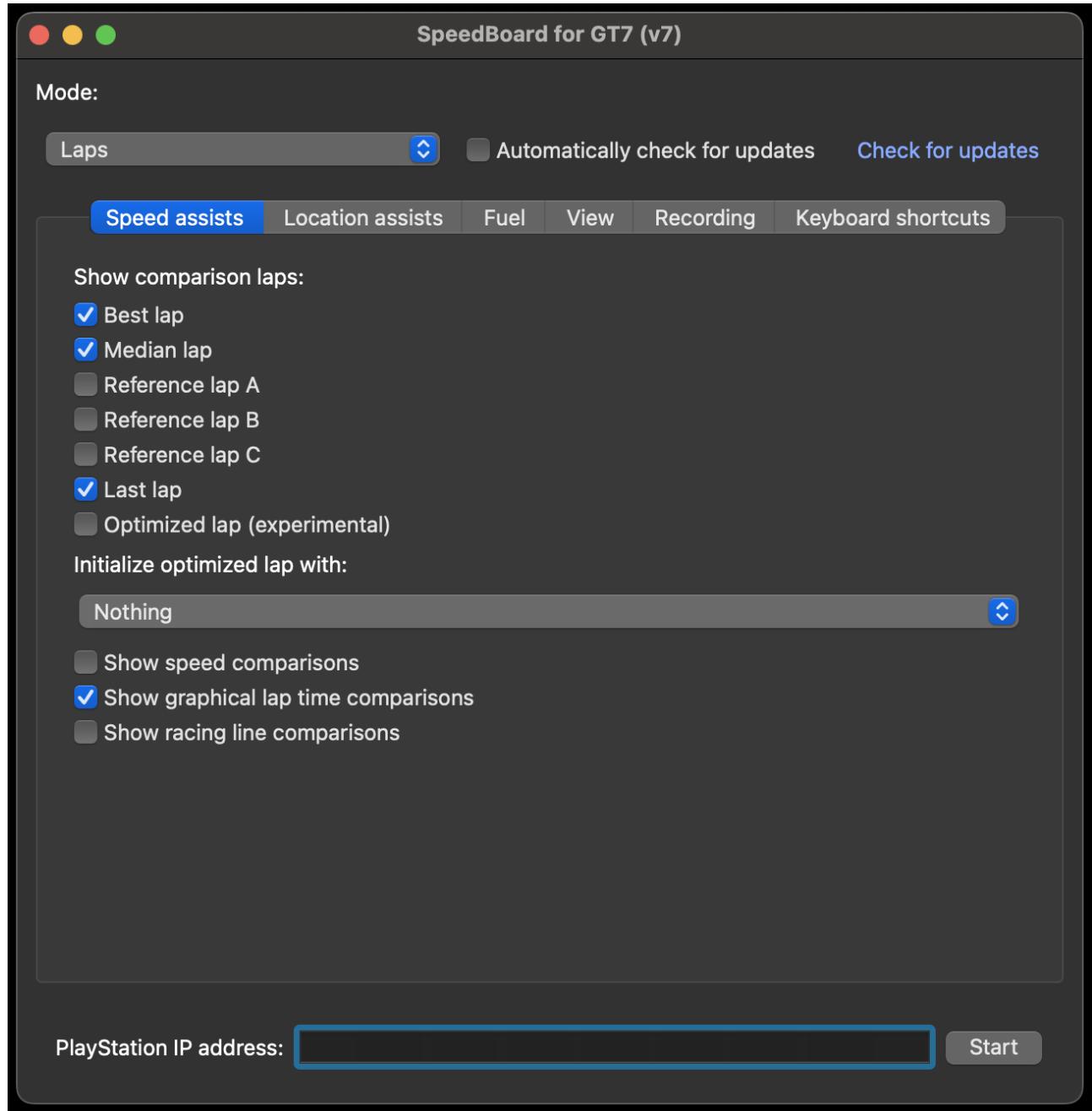


Choose any folder that is convenient for you to hold the data.

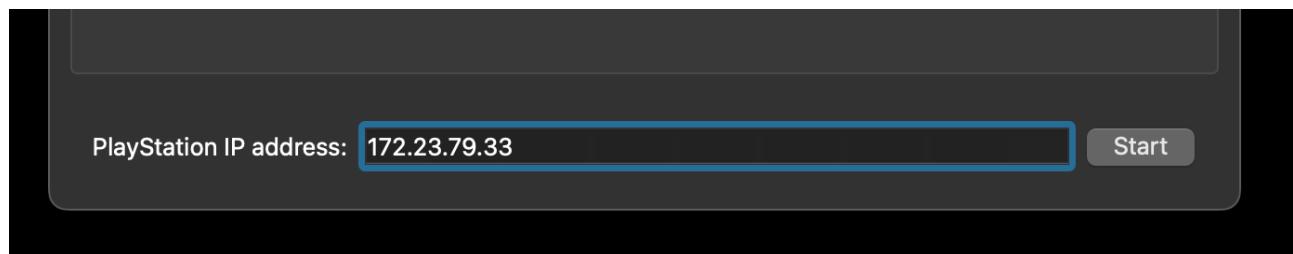


Configuration window

After selecting a storage folder, the main configuration window appears.



At the bottom, enter the **IP address** of your PlayStation.



Here, 172.23.79.33 is used as an example, but your IP address will most likely be different.

You can find your PlayStation's IP address in the network settings of your PlayStation.

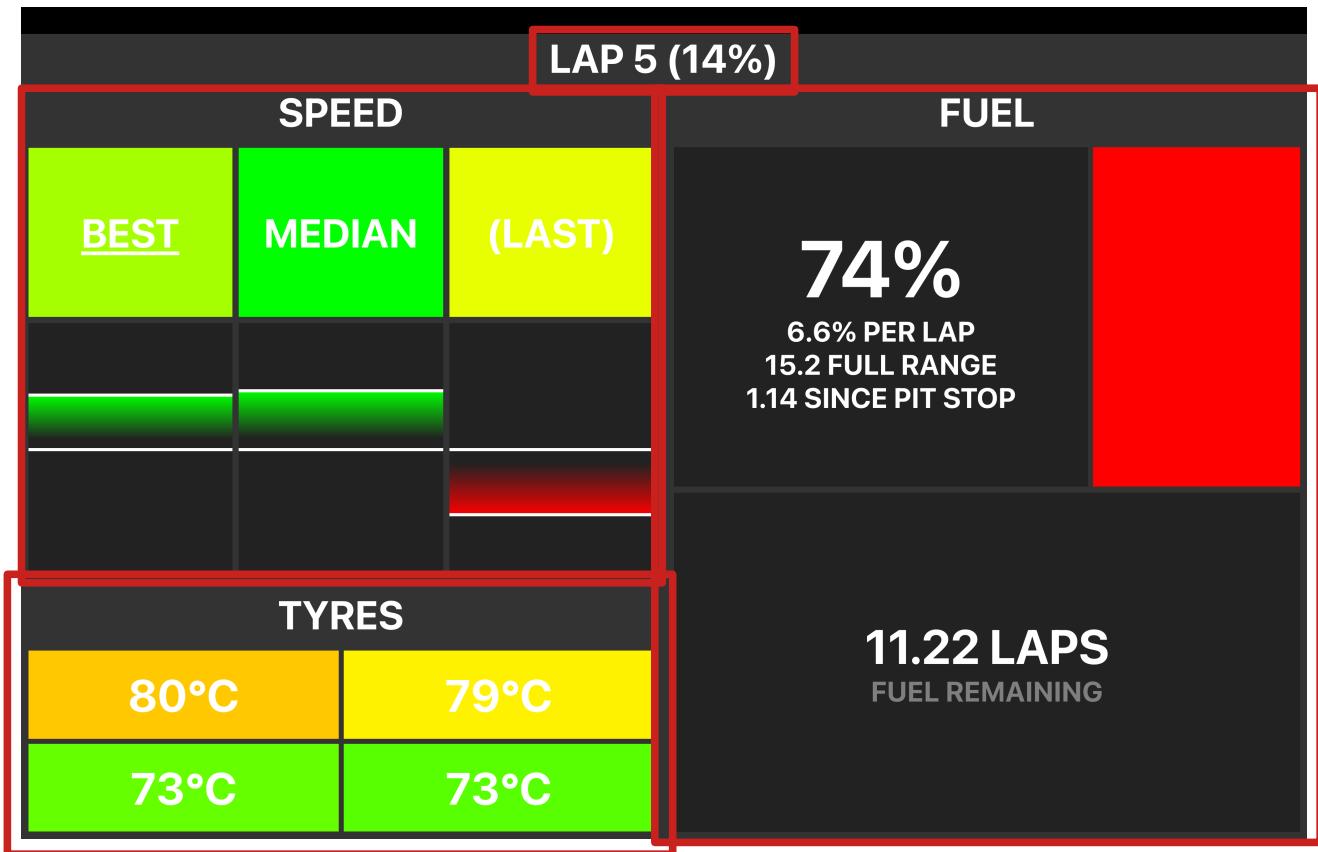
- PS4: *Settings* → *Network* → *View connection status* → *IP address*
- PS5: *Settings* → *Network* → *Connection status* → *View connection status* → *IPv4 address*

Once your IP is set, launch GT7 on your PlayStation, get on a track and click on **Start** (let's not worry about the configuration settings for now).

Chapter 1: The default dashboard

The default dashboard is divided into a header and three areas:

- * The SPEED area
- * The FUEL area
- * The TYRES area



Header

The header shows which **lap** you are in.

LAP 2

If the SpeedBoard has gathered enough information about the circuit, it will also show how much of the current lap you have **completed**.

LAP 3 (50%)

In a race, it will show how many laps are **left to go**.

25.74 LAPS LEFT

Tyres

The tyres area displays the current **temperatures of the tyres**. 70°C will be displayed in green, above 70°C it will gradually turn red, below, it will gradually turn blue.

Fuel

The fuel area provides information about the current **fuel level, consumption and prediction**. It will tell you how much fuel you have, how much fuel you consume per lap with the current driving style and how far you will get with the remaining fuel and with a full tank. In a race, it will also tell you how often you will have to refuel in order to finish the race.

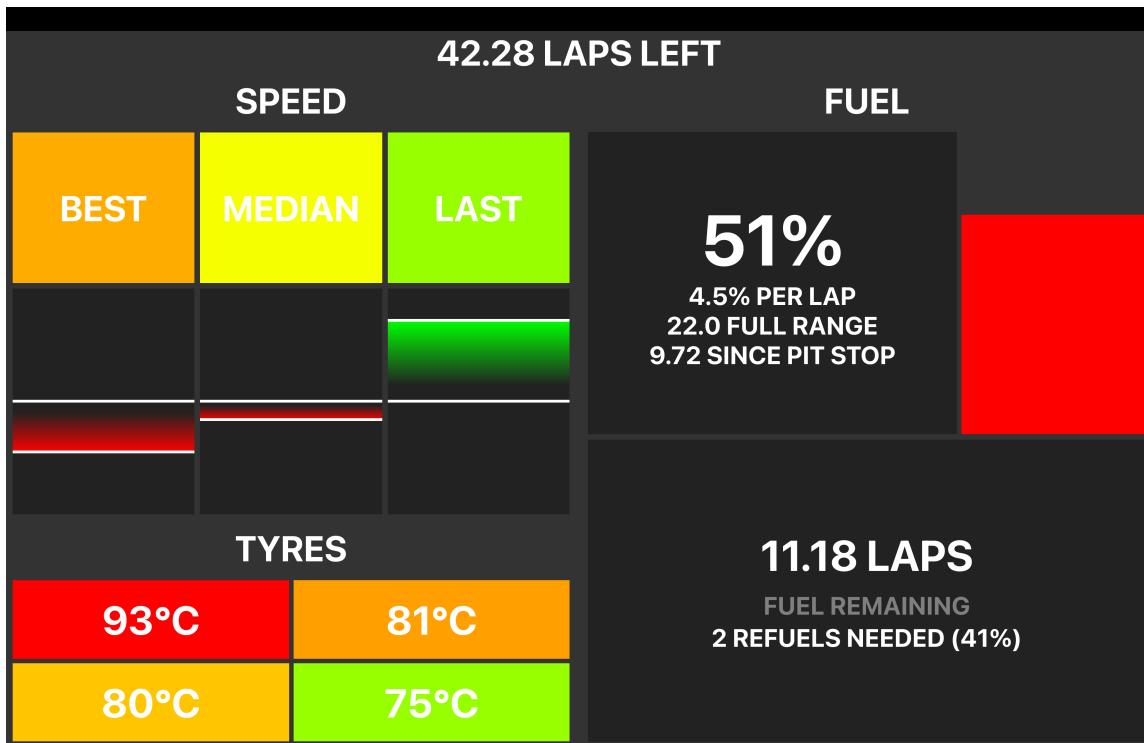
Note: The fuel prediction will differ slightly from what GT7 displays in-game, because this information is not included in the telemetry data and has to be estimated by the SpeedBoard on its own, without full access to the game's internal data.

Speed

The speed area provides information about how the **current lap** compares to **previous laps**, such as the fastest lap, the last lap or the lap with the median lap time (among others). It will compare current speed and current lap time (among others).

Reading the dashboard

Here's an example of the default dashboard displays:



It tells you:

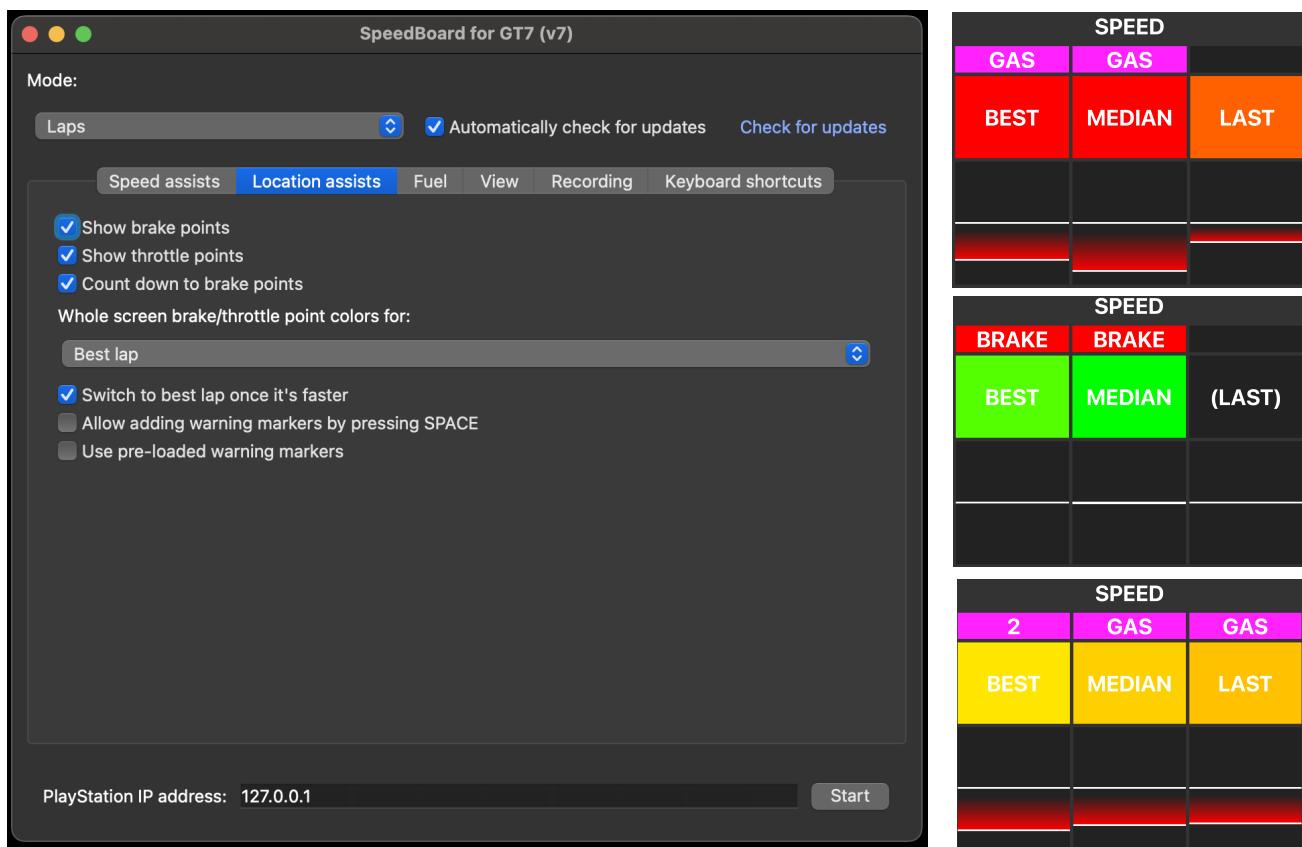
- There are **42.28** laps left in the race
- Compared to your **best** (i.e. fastest) lap, you are now
 - **Slower** (in km/h) than you were before at the same location on the track (**orange** background)
 - Almost **half a second behind** the fastest lap time (**red bar**)
- Compared to the **median** lap, you are now
 - About the **same speed** as you were at the same location on the track (**yellow**)
 - **Slightly behind** in lap time (**smaller red bar**)
- Compared to the **last** lap, you are now
 - **Faster** than you were at the same location on the track (**green**)
 - About **¾ of a second ahead** in lap time (**green bar**)
- Your tyre temperatures are:
 - **93°C** on the front left tyre
 - **81°C** on the front right tyre
 - **80°C** on the rear left tyre
 - **75°C** on the rear right tyre
- Your fuel tank is **51%** full
 - You have been consuming an average of **4.5%** of fuel every lap in the last couple of laps
 - With a full tank and your current driving style, you can drive **22 laps**
 - It has been **9.72 laps** since the last pit stop
 - With your current driving style, you can drive **11.18 laps** before the tank is empty
 - To finish the race, you will have to refuel **twice**
 - On the final refuel, the tank has to be filled only to **41%** in order to finish the race
 - Your current fuel comsumption (during the last ~1/60 of a second) is quite **high** (**red bar** on the right)

Chapter 2: Brake points and throttle

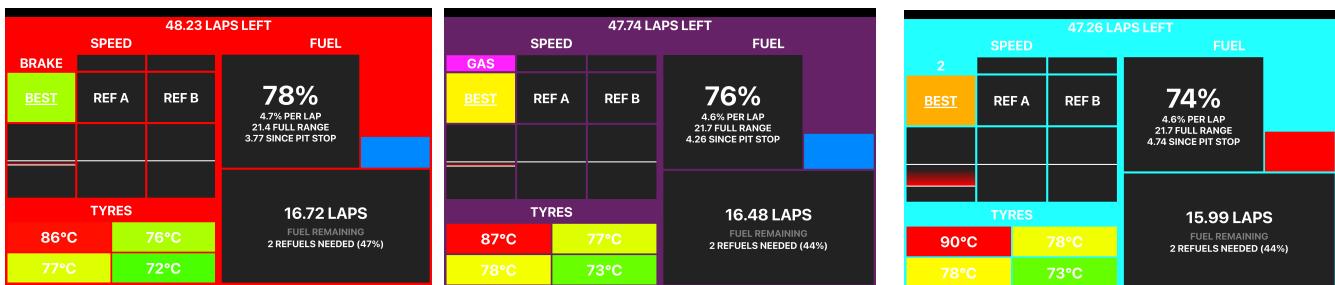
Visualisation

When **show brake points** and **show throttle points** are activated in the **Location assists** configuration, the speed section will display the state of the pedals during the comparison lap at your current location on the track.

When **Count down to brake points** is selected, there will also be a 3-2-1 countdown to the next upcoming brake point. With this countdown, you can replicate the exact brake point moment of the comparison lap, just brake at „zero“.



The **Whole screen brake/throttle point colors** setting allows you to select one of the comparison laps whose brake and throttle indicators will color the whole dashboard.

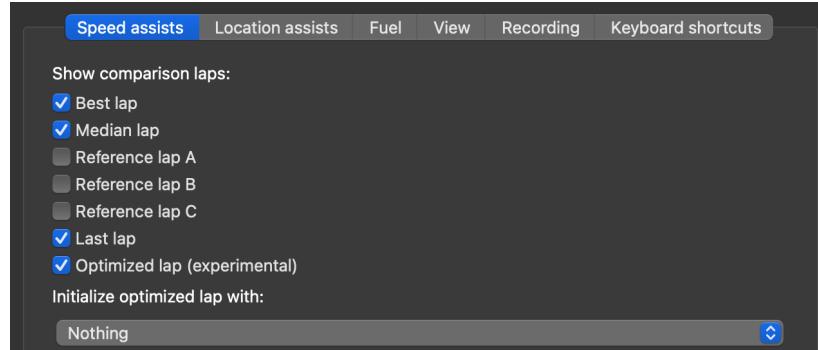


This allows you to keep your eyes on the road and still notice the changing colors from the **corner of your eye**. This is especially useful when you use the countdown feature to **hit the right brake point**.

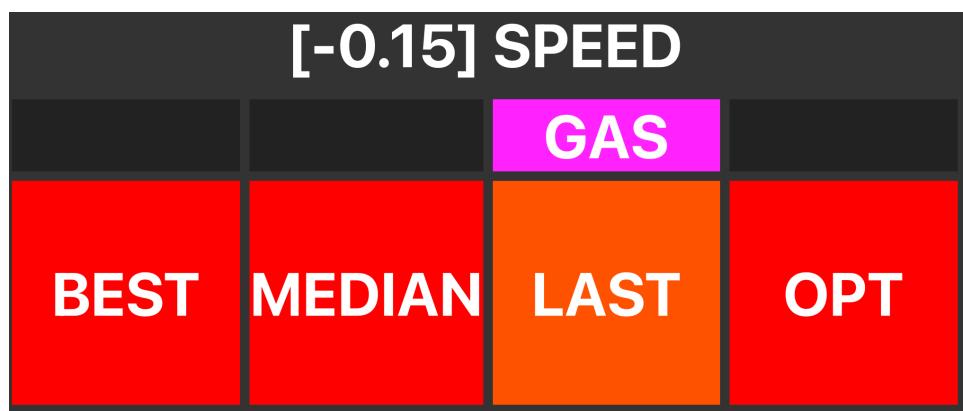
You can use the **Tab** key to cycle through which comparison lap is used or turn the feature off during driving.

Finding the best brake points

Using the **countdown** feature on the **best lap** can be helpful to find and remember good brake points for a track. The experimental **Optimized lap** feature goes one step further and tries to combine the best segments of all previous laps into one synthetic lap with all of the best brake points you used before. This means you don't necessarily have to drive one overall great lap to find good brake points. It's enough to drive every part of the track well at least once.



Additionally, you can adjust the **timing** of the countdown to fine tune your brake points. Press the **Up** and **Down** keys to shift the displayed brake point indications in time. This way, if you decide you want to brake a little bit earlier or later, you can adjust the countdown to get the timing just right. Negative numbers mean an earlier brake point, positive numbers mean later.



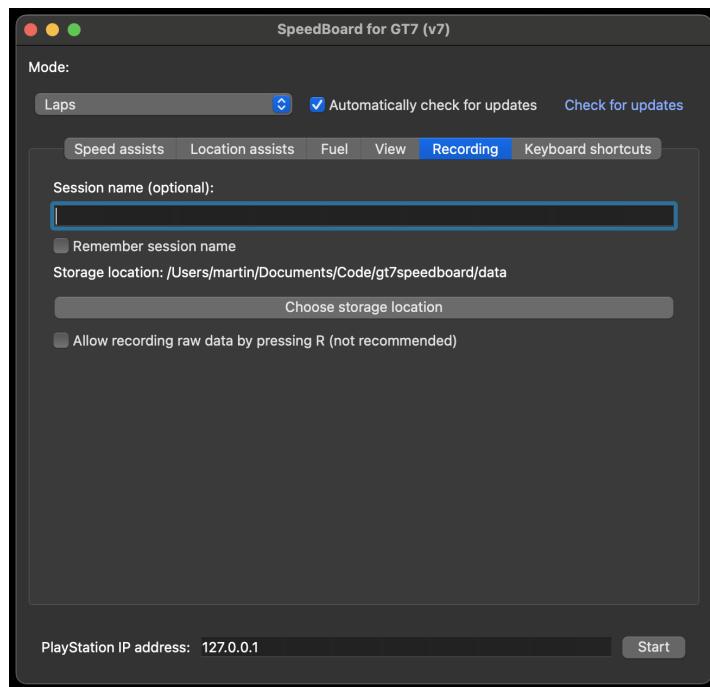
Chapter 3: Making and using recordings

Saving laps

While running the SpeedBoard, you can use the following keys to save telemetry data in the storage directory:

- B → Save the data of the **best**/fastest lap
- M → Save the data of the lap with the **median** time
- L → Save the data of the **last** lap
- A → Save the data of **all laps** to a single file
- O → Save the data of the experimental synthetic **optimized** lap

The storage directory was configured on the first startup of the SpeedBoard and can also be selected on the **Recording** page of the configuration window.



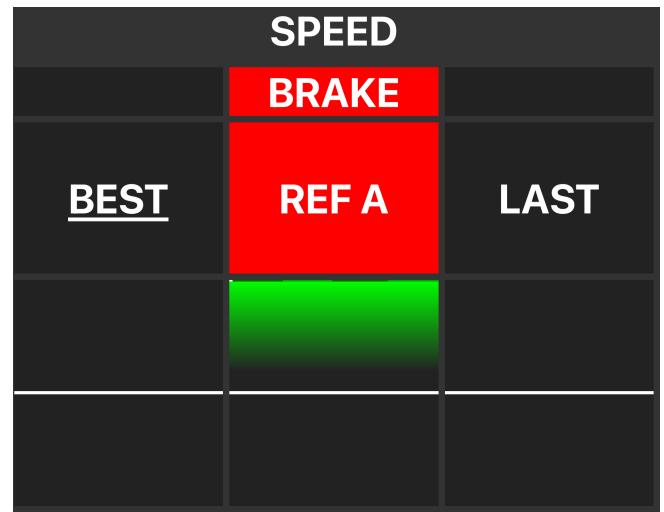
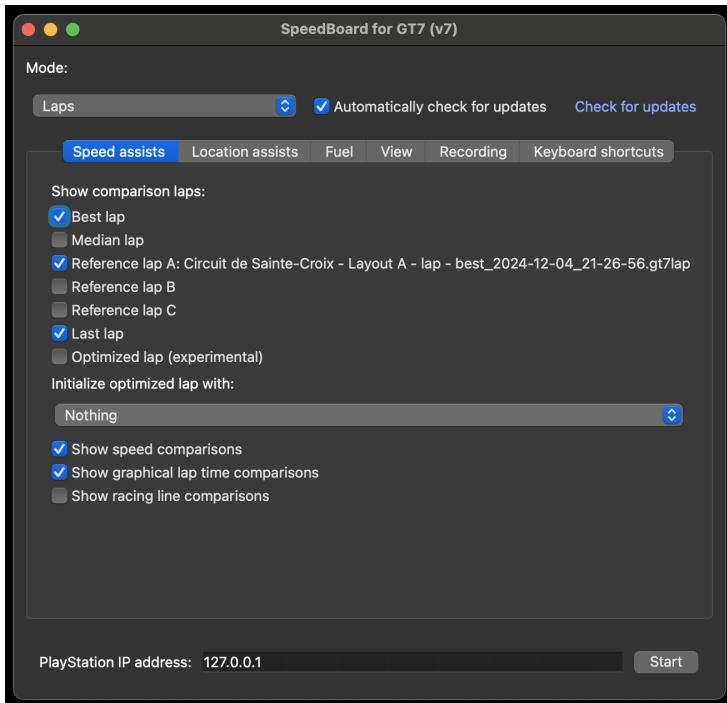
The **Session name** can be left blank. If it is set, it will be included in the file name of the saved data. The file name will also include the name of the track (if it has been identified) and the time and date of the recording.

Example file names:

- *Autodrome Lago Maggiore - Full Course - lap - best_2024-09-06_16-41-40.gt7lap*
- *Circuit de Sainte-Croix - Layout A - laps - combined_2024-12-04_21-26-56.gt7laps*
- *Team Training - Autodrome Lago Maggiore - lap - best_2024-06-16_00-34-05.gt7lap*
- *Unknown track - lap - best_2024-08-05_21-34-09.gt7lap*

Reference laps

Once you have saved a lap, you can load it as a comparison lap in your next session. This way you can continue to use the brake points and speed information even after your session ends.



If you use lap optimization, you can use the **Initialize optimized lap** option to give it a starting point for quicker results.

Note: If you load a reference lap from a different track than the one you're driving on, you might get unexpected results.

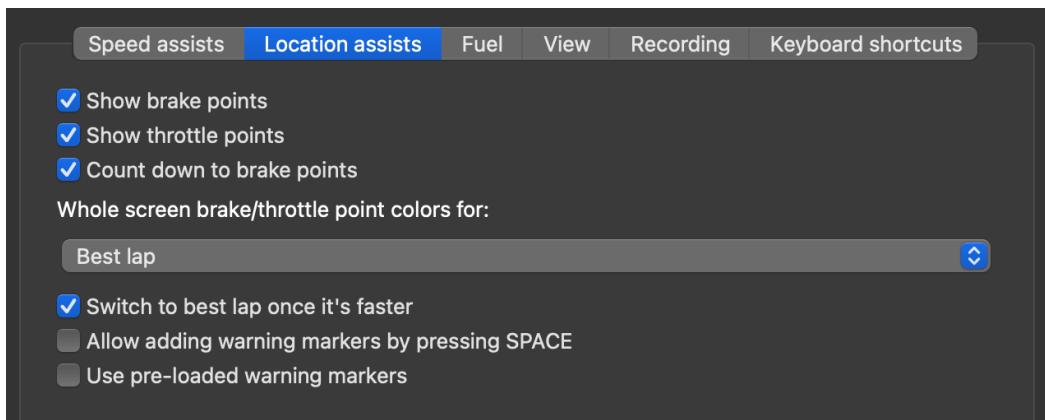
Chapter 4: More stuff

Here are some additional features, without going into too much detail.

Warning markers

You can press the space key while driving to set a **warning marker** to the current location. On subsequent laps, you will be warned (in the fuel area) before approaching this location. Note that there is currently no way to remove the markers, short of restarting the dashboard.

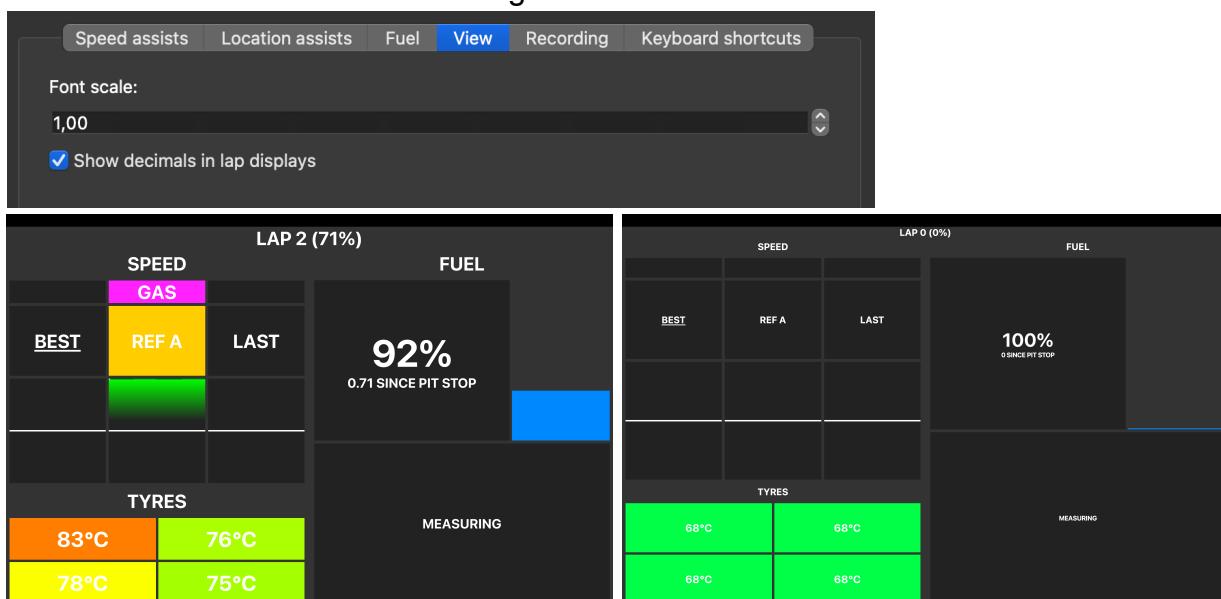
To activate this feature, select the **Allow adding warning markers** option in the **Location assists** settings.



You can also **save** the current markers to a file by pressing the W key while in the dashboard. You can then load these markers with the **Use pre-loaded warning markers** setting.

View settings

You can change the overall font size in the dashboard to suit your screen size or preference with the **Font scale** setting.



You can also turn off decimal numbers if you prefer only whole numbers for laps.

Racing line comparisons

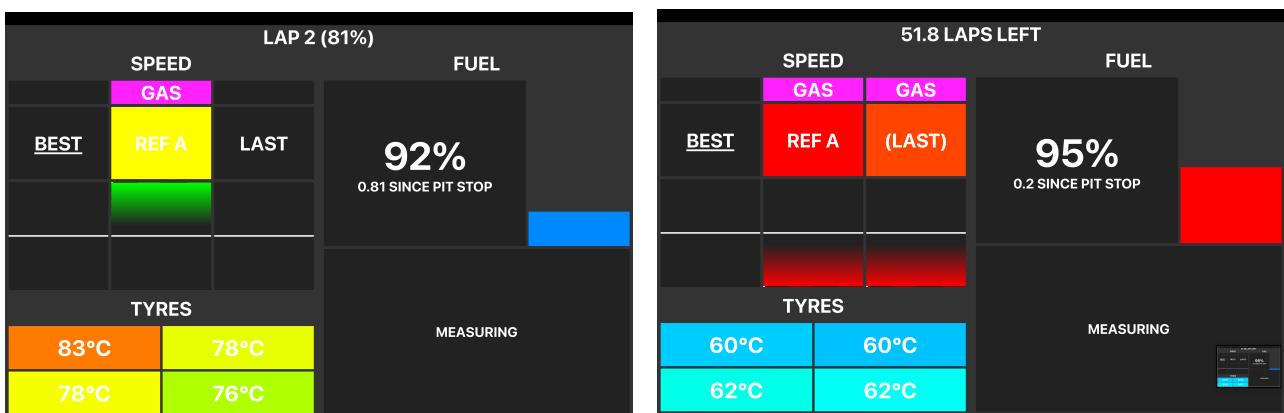
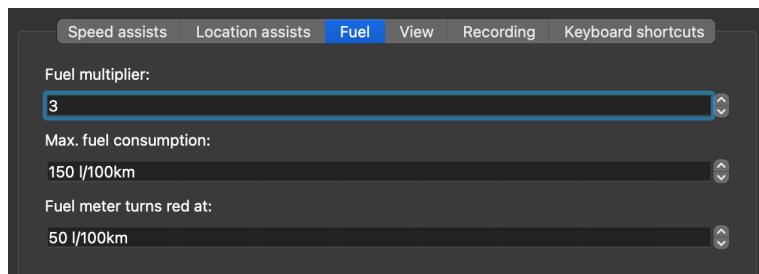
You can compare your current racing line to a comparison lap using the **Show racing line comparisons** option in the **Speed assists** configuration. The visualisation will show you if you are to the right or left of the line you were driving before.



Note: This feature may not be as useful as it may seem, which is why it is not more heavily featured in this document.

Configuring the fuel consumption bar

The fuel consumption bar on the right side of the default dashboard show the current short-term fuel consumption. It will be blue on low consumption and red on high consumption. The levels of the bar, as well as the fuel multiplier of the race, can be configured on the **Fuel** page of the configuration.



Display the keyboard shortcuts

Press the ? Key to display a list of keyboard shortcuts while driving. Press ? again to return to the dashboard.

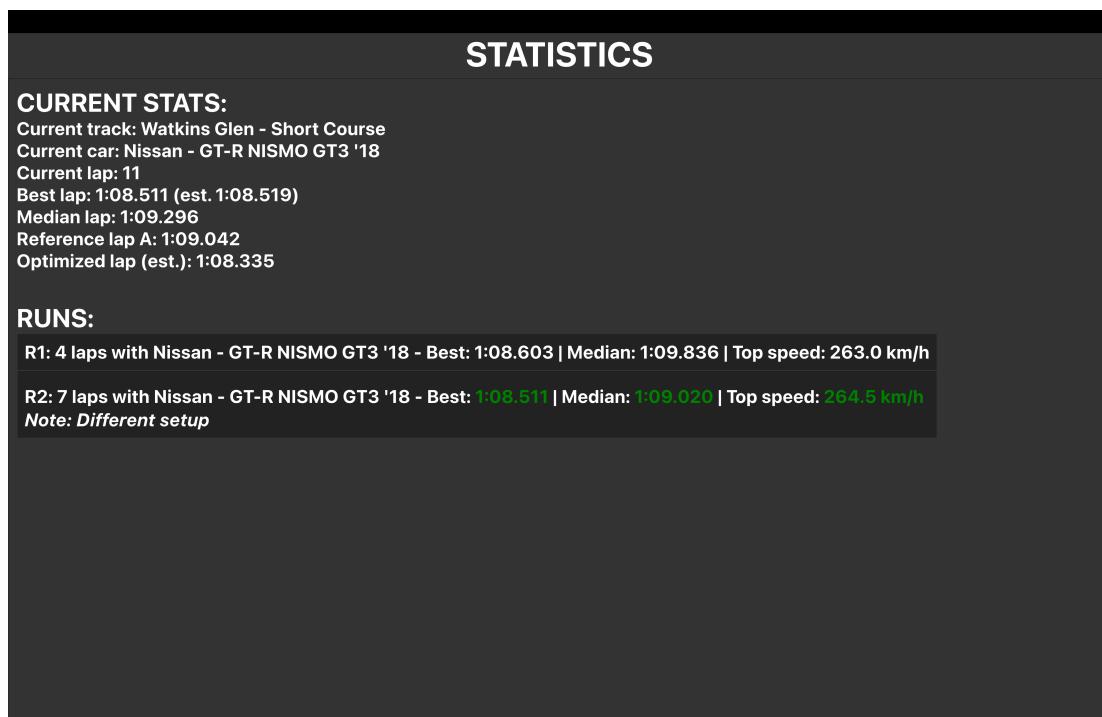
Session statistics

Press the **S** key to display an overview of your current session. Press S again to return to the dashboard.

This is useful to compare times with different cars or different setups.

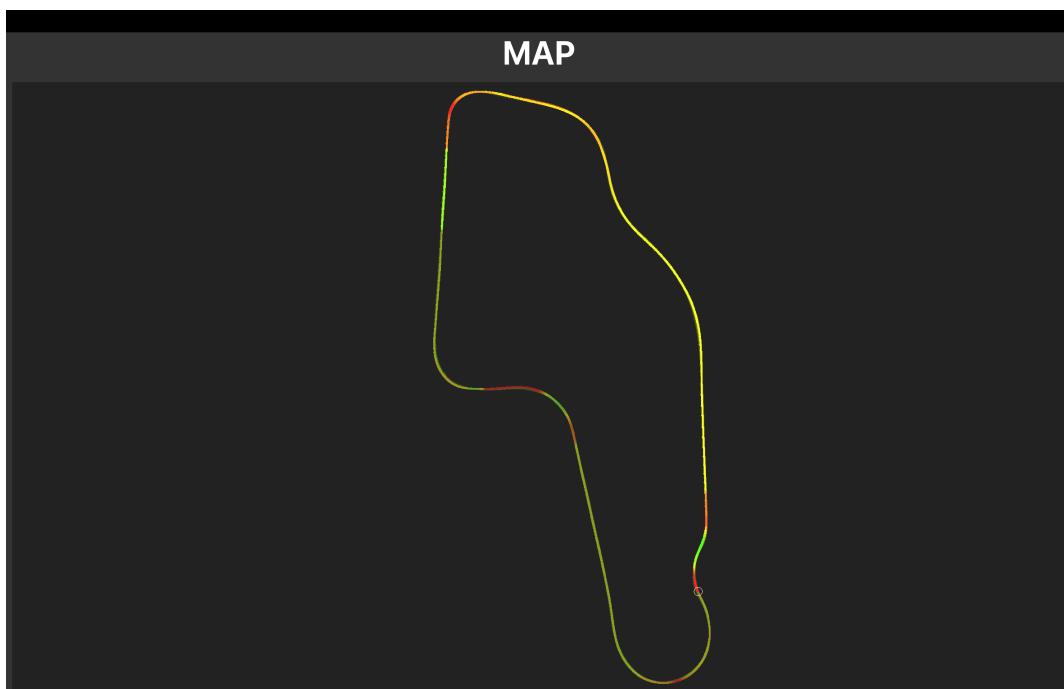
Press the **D** key to add a **description** to the current run.

Press the **T** key to **save** a table of the run statistics to a file.



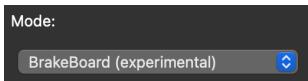
Map

Press the **V** key to display a map of your **racing line**. Press V again to return to the dashboard.



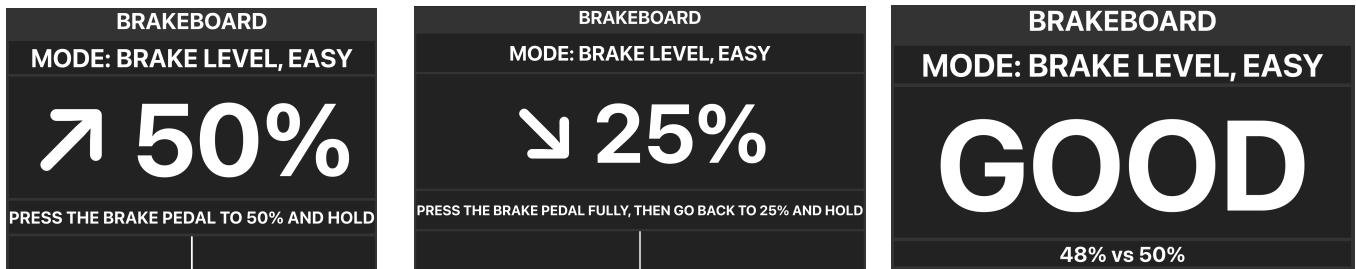
BrakeBoard

The BrakeBoard mode can help you practice brake timing and intensity.



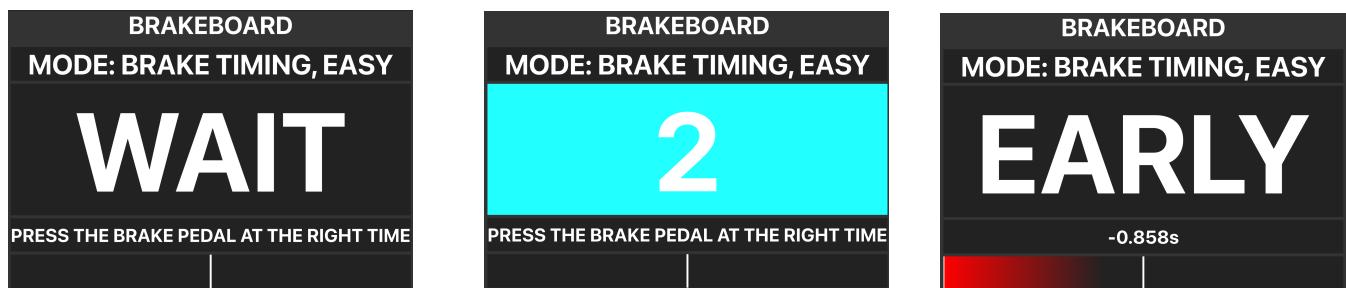
You do not have to (and should not) actually drive. It is sufficient to park the car in the pit or elsewhere, as long as you are somewhere on a track.

The **brake level** mode of the BrakeBoard lets you practice braking with a specific intensity, either coming from no brake at all or from full braking.



It will then tell you how close you were to the target.

The **brake timing** mode shows you a countdown to a brake point. After stepping on the brake, it will show you how close you were to the right time to brake.



There are a few difficulty levels that determine how quick and accurate you have to be to get a „good“ rating. Switch difficulties by pressing *D*. Switch modes by pressing *Tab*.

Appendix A: License

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Version 3, 29 June 2007

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