USER MANUAL

RACE DIRECTOR

VERSION 3.0

Last updated: 01-12-2025

BEFORE YOU START:

Thank you for choosing RaceDirector!

We at Sim-Lab like to offer you an accessable way to configure and use your favorite Sim-Lab or GRID hardware.

RaceDirector takes the mission statement above and allows you to basically plug and play. Options vary depending on hardware but all in all, there will be enough to get you going on track without missing out on functionality. We feel all basics are covered and are clearly labeled and easy to understand.

They way we handle LEDs will enable you to access functionality in a refreshing way while keeping it easy to configure.

All of this we try to offer in a simple visual style so you don't have to edit files or wade through pages and pages of options. We could, but we don't, in trying to keep this user experience simple and quick. The less time spent in our software to get what you need out of it, the better.

Because of the above, possiblities are intentionally simplified for the sake of usability. In case you want to go all out on every possible option, we thoroughly recommend using Simhub (www.simhubdash.com).

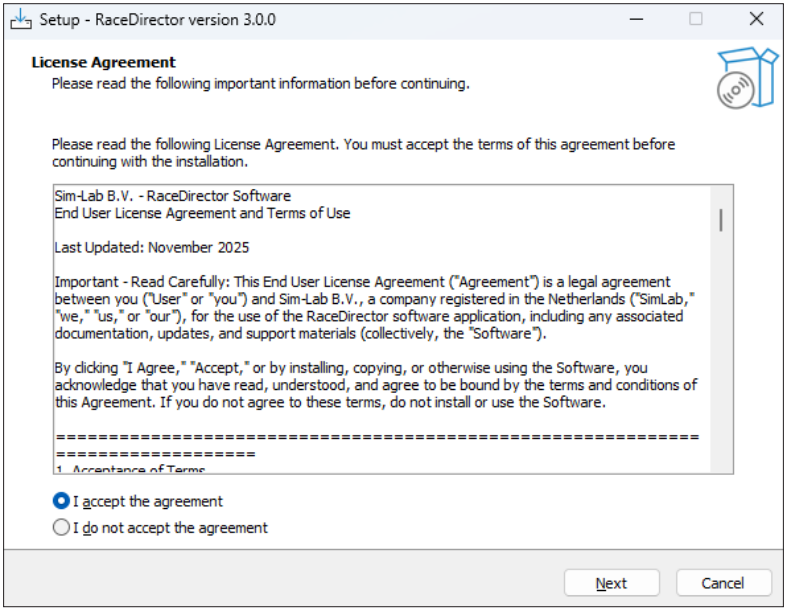
Download and installation

Download the lastest version of RaceDirector from *http://www.sim-lab.eu/srd-setup*

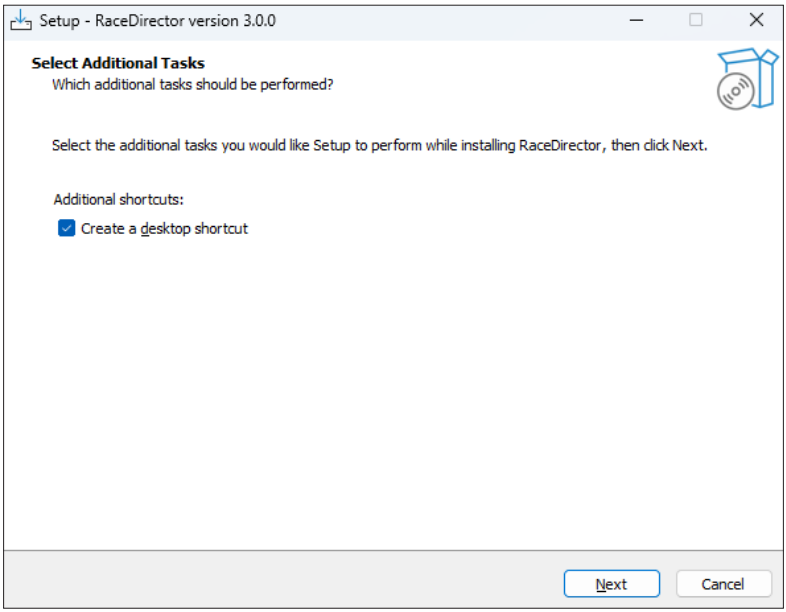
At the moment of the writing the latest version is V3.0.0.
Due to the nature of some fixes or possible changes this manual may slightly differ from what you see on screen. We try and keep this manual up to date as much as we can, following developments.

Installation
Unzip the downloaded file 'RaceDirector.zip' and extract the folder to a location of your choice, run the installer to start the installation.

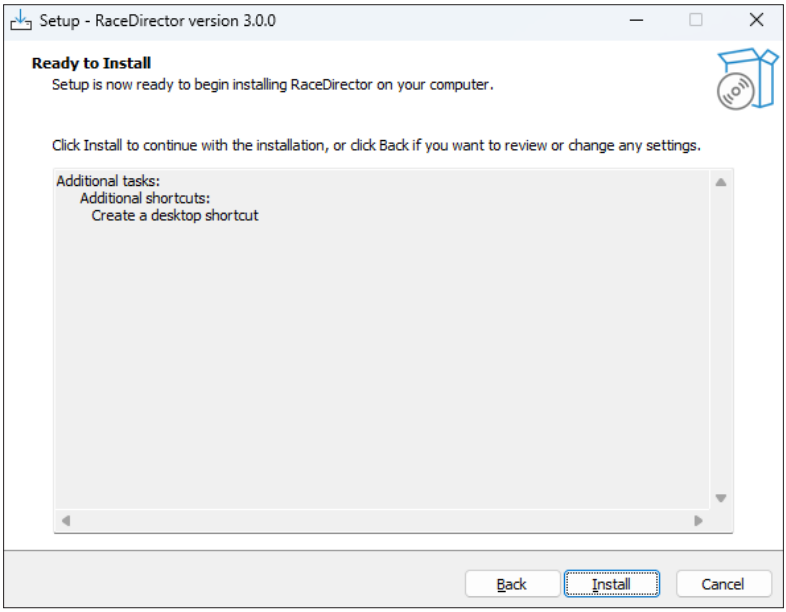
If you encounter a Windows Defender/Smart Control screen warning you of only software of trusted sources, please press 'Run anyway'. This warning will dissapear when more and more people start using RaceDirector and the software has been proven safe for use.



Press the 'I accept the agreement' radio button.
Press 'Next'.



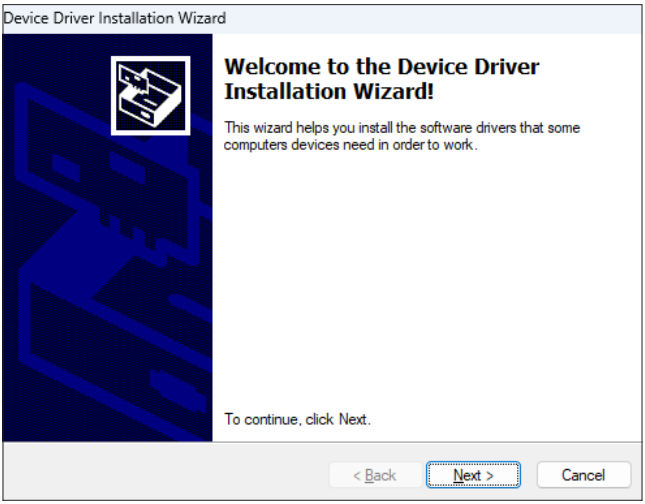
Press ‘Next’.



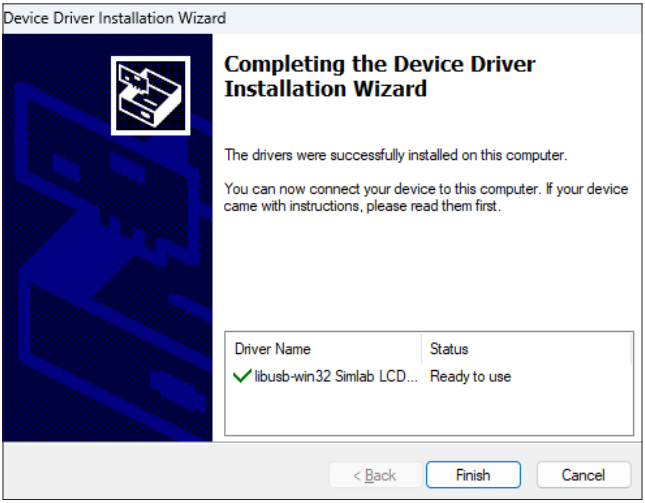
Press ‘Install’.

After copying some files over to the RaceDirector installation folder, you will be prompted to install additional device drivers. These drivers are required for the latest generation of Sim-Lab and GRID product featuring displays.

Sim-Lab display driver installation:

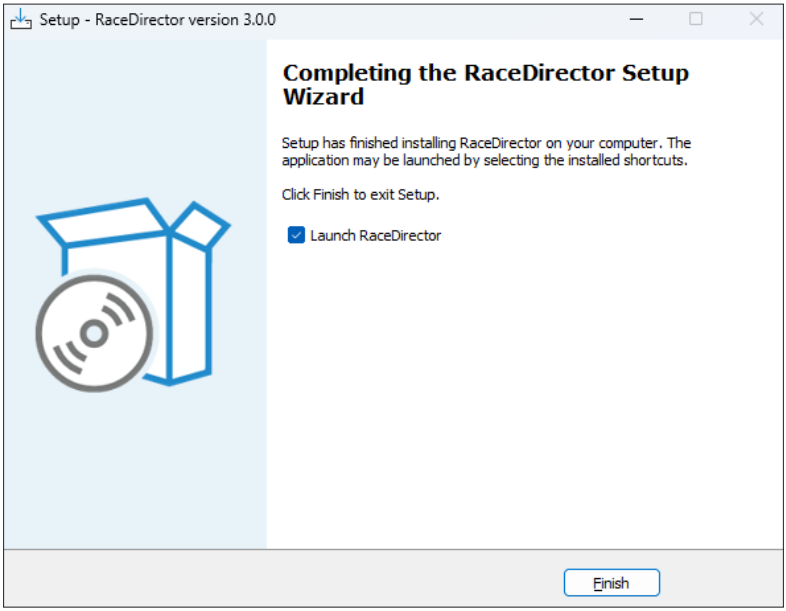


Press 'Next'.



Press 'Finish'.

You will be returned to the RaceDirector installer to finish installation:

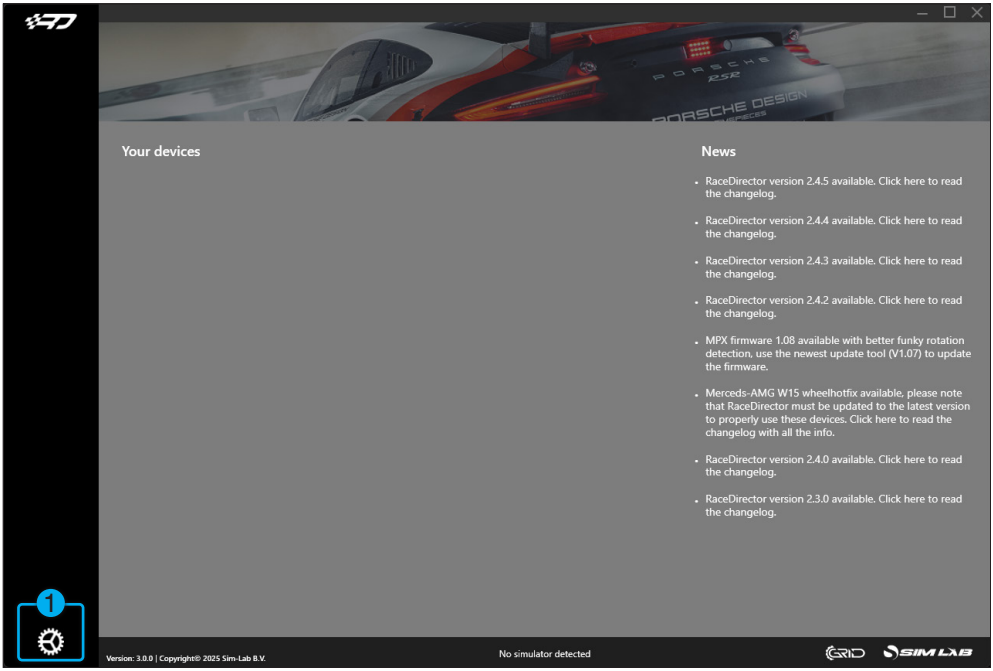


Press 'Finish'.

First start

The very first time starting RaceDirector, you will probably be greeted with an empty screen.

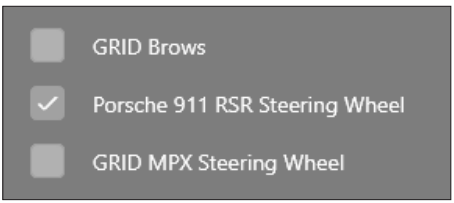
Don't worry, this is normal, some additional files might be downloaded/updated. To keep things visually clear and clutter free, we only want to show the options you actually need.



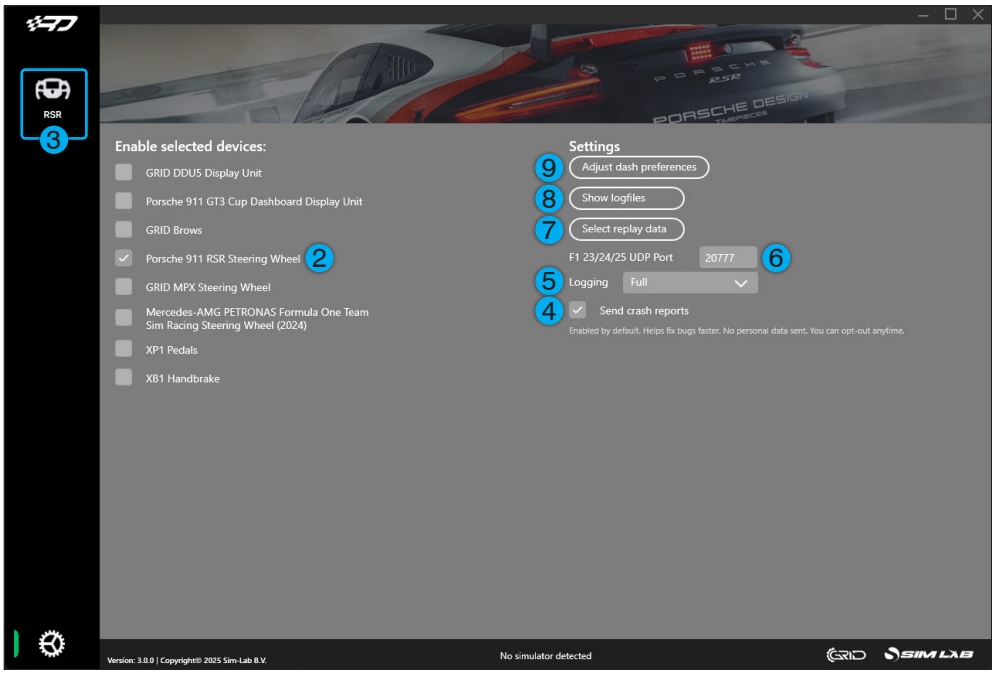
RaceDirector only works with Sim-Lab and GRID devices. These devices need to be activated or enabled on the 'Settings' (1) page.

For the remainder or this manual, we are going to use the Porsche 911 RSR Steering Wheel. This covers almost all we need to explain, considering the wide range of products we offer.

Simply tick the Porsche 911 RSR tickbox (2) and its icon (3) should appear on the left side of the screen. Selecting its icon (3) will take you to its device pages directly.



While still on the settings page, we might as well go over those options first.



The device selections on the left speak for themselves. Let's start from the bottom right.

- 'Send crash reports' (4)
  This helps us improve RaceDirector going forward. You can opt out at any time.

- 'Logging' (5)
  You can allow logging in various degrees, also turn it off complely. In case of support, having logs to refer to helps tremendously in diagnosing issues or possible bugs.

- 'F1 23/24/25 UDP Port' (6)
  This port is required for RaceDirector to work with these titles.

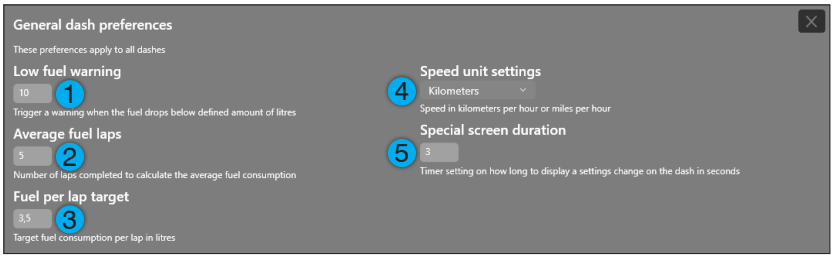
- ‘Select replay data’ (7)

  We pre-recorded a couple of laps of driving for you use as demo data. This way you can preview your dash and LED profile without having to load up your sim of choice. While replay data is running, the button also doubles as a means to stop running the replay.

- ‘Show logfiles’ (8)

  This opens a windows exlorer window, showing the folder where the log files are stored. When you are requested to provide log files in case of a support case, this is the quickest route to get to those. Provided you had logging set to anything other than ‘off’.

- ‘Adjust dash preferences’ (9)



  The ‘Low fuel warning’ (1) option has one important take away, the value is in **litres**, and not in laps remaining.

  The ‘Average fuel laps’ (2) is intended to give you a reasonable insight in fuel used per lap. To do this we allow a number of laps to be stated in order to come up with an average number. If however you only want to know the fuel usage of the last lap, put a 1 for laps and this will work just fine.

  The ‘Fuel per lap target’ (3) is only supported by a limited number of dashes, mainly for fuel limited cars or classes.

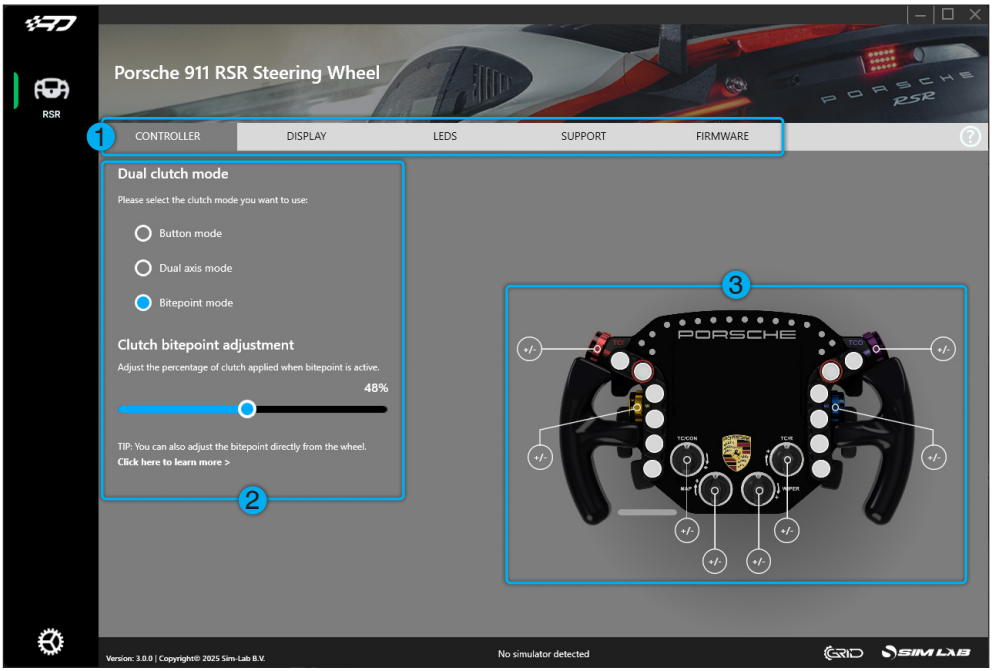
  The ‘Speed unit settings’ (4) do what they imply, these do only influece speed measurements. Anything to do with fluids or temperatures are not affected.

  The ‘Special screen duration’ (5) option is a short pop up to confirm changes to for example brake balance or traction control. These tend to last short as is, but you change the legth they appear to your preference. To switch these off entirely, simply put 0 as the value in seconds.

With this information out of the way, let's cirlce back to discovering the device pages. Please click on the RSR icon on the upper left corner of the RaceDirector window. We will go over the basic layout of the device pages next.

Depending on your device, the layout will look similar. The menu layout is basically divided in 3 major elements:

1 Device pages, these may vary or will not be visible, depending on device.
2 Options, depending on device page.
3 Visual representation of device, contents depending on device page.



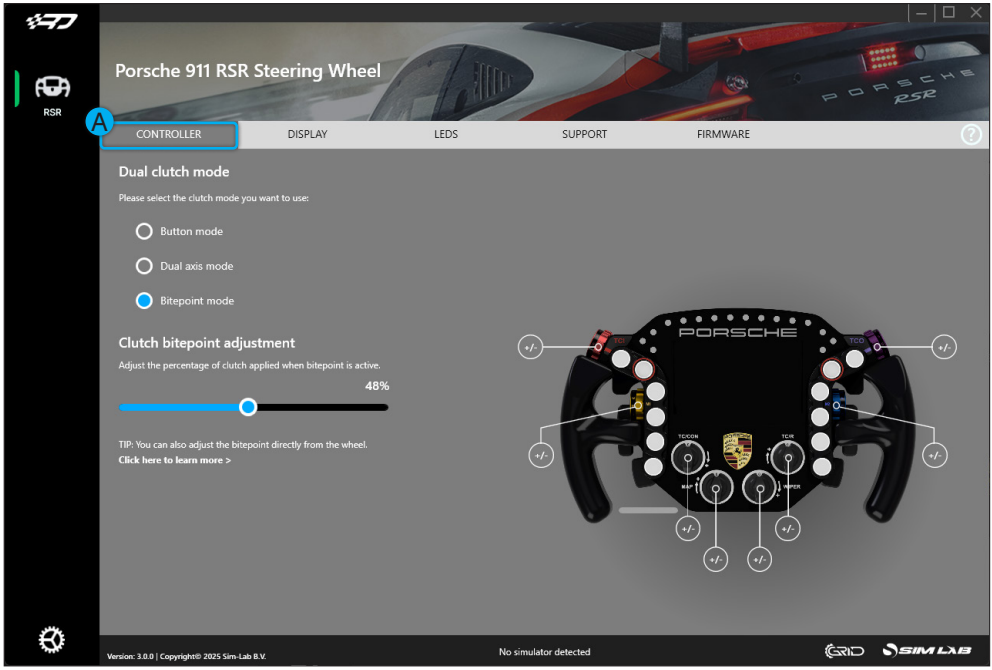
Not every device may show the same device pages and options, depending on its features.

This page also lets you test and inspect all inputs, each button press or encoder rotation will be indicated on screen. For some products, this also where you can change encoder behavior.

Device pages

We will go over each device page in order, explaining its contents per page.

CONTROLLER (A)
This device page focusses more on the mechanical part of controlling the product. Seeing the options mentioned, it is probably clear this page has more to do with wheels than dashes for example.

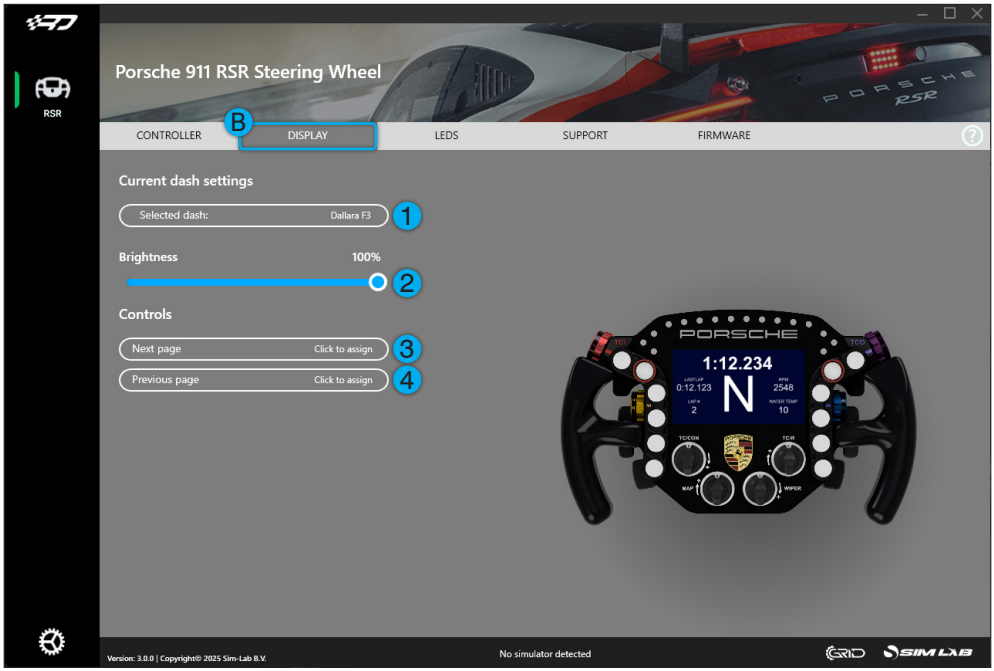


In this case, controller options shown all have to do with operation and function of the clutch paddles. For other devices, this page might be missing entirely, or look completely different (see Page 20).

More information on the contents of this page, can be found in the manual for each device.

DISPLAY (B)

Almost all of the options found here speak for themselves, though for the sake of being complete, we will go over them on by one.



- 'Selected dash' (1)

  This opens the dash gallery and allows you to select a dash for a given car. In case a WARNING is shown, the selected dash requires installation of a font. Click the icon and a window with instructions will pop up. Follow these to manually install the missing font(s) required. After restarting RaceDirector, you are good to go.

- 'Brightness' (2)

  Adjust the brightness of the screen.

- 'Next dash page' (3)

  Cycle to the next page of the loaded dash. Select the appropriate button you want to use and press 'Confirm'.

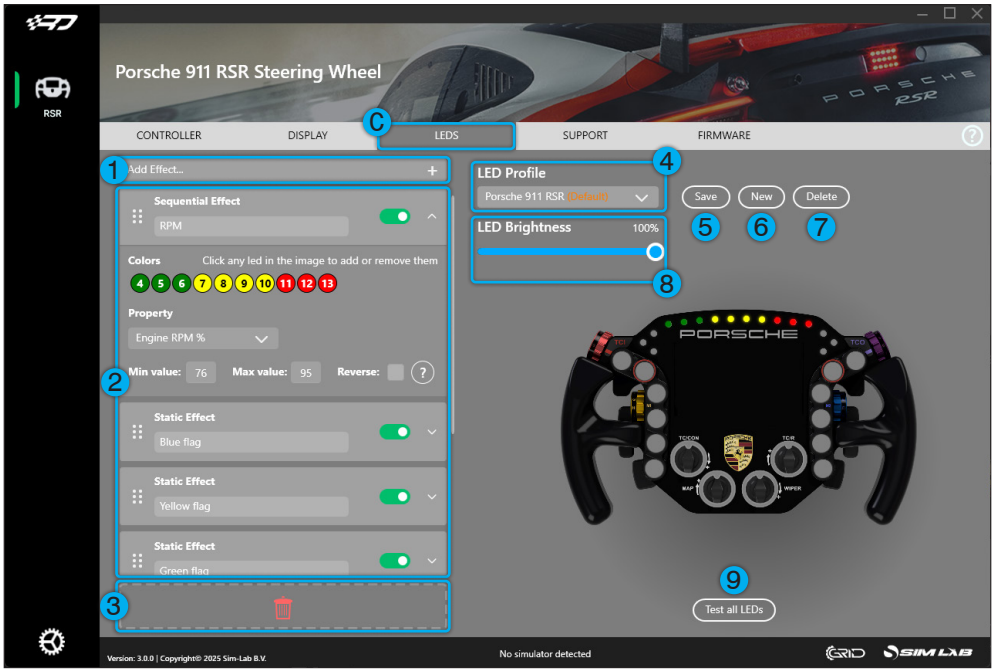
- 'Previous dash page' (4)

  Cycle to the previous page of the loaded dash, works like described above.

Please not, when the page controls are configured, they won't affect a dash *unless* a sim is running or the 'Select replay data' option is used in the RaceDirector settings. Additionally, not every dash features multiple pages.

LEDS (C)

This will be explained in two parts, first we will go over the main options.



For this latest release of RaceDirector, we decided to for an 'effect-based' LED approach. You can simply add any type of effect in the stack (2), choose which LEDs to assign to the effect, and tell the effect which property to listen to in order to activate.

One element we kept since the older method, is that the position in the stack states its priority and visibility. A good example of when this matter is when using 'Always On' properties on effects. Those should be kept at the bottom of the stack, to prevent other warning/temporary effects placed below those to never show up.

Don't worry, it's quite intuitive, especially after we show some examples and you have a look at our default LED profiles.

A quick overview of what you see on screen when you access this device page. We also changed the behavior of our default profiles. They are now write protected, so you can always have a working default you can refer back to, when working on your profiles. These can be copied to use a starting point, or you can start from scratch and simply have a look how other profiles have done things, it is up to you.

- 'Add Effect...' (1)
  Choose different types of effects to add to the stack. By default, the stack is added to from the bottom up. Please see the next page for effect types.

- 'Effect Stack' (2)
  All the effects you have added live here. You can adjust their properties, change their position in the stack, enable or disable them.

- 'Effect Bin' (3)
  Dragging an effect from the stack over to the bin area, to remove effects from the stack.

- 'LED Profile - drop down menu' (4)
  This selection menu is how you select an existing profile and load it. In this case, the 'default' LED profile is loaded. You can create and save as many LED profiles as you like.

- 'Save' (5)
  Use this button to save changes made to a profile, or use it to save a copy of the currently loaded profile.

- 'New' (6)
  Creates a new, empty profile.

- Delete' (7)
  This removes the currently loaded LED profile from RaceDirector and your PC. Warning, there is no undo! Default profiles can not be deleted.

- LED Brightness' (8)
  This slider changes the brightness for all LEDs on the device.

- 'Test all LEDs ' (9)
  This opens up a pop-up window where you use test input to see what the LEDs do using the currently loaded profile.

Let's look closer at some simple effects to understand how the effects generally are setup and function. In principle, they all adhere to the same frame work. An effect can be:
- assigned LEDs to
- a function can be chosen
- depending on the chosen function, properties can be tweaked
- an effect can be dragged using the dot symbol on the left hand side of the effect
- an effect can be disabled
- for flashing effects, you can change timing per effect

There are multiple effect types at the moment, here is quick description:

Breathing effect
Smooth fades between LEDs on and off.

Static effect
Depending on conditions, these are mostly a static color. This is pretty much the bread and butter of your effects stack, and will mostly be the base colors for your buttons and encoder LEDs for example. Using the properties, these are still quite effective and versatile, despite how simple they are in use.

Sequential effect
This will turn on LEDs in sequence, ideal for RPM LEDs.

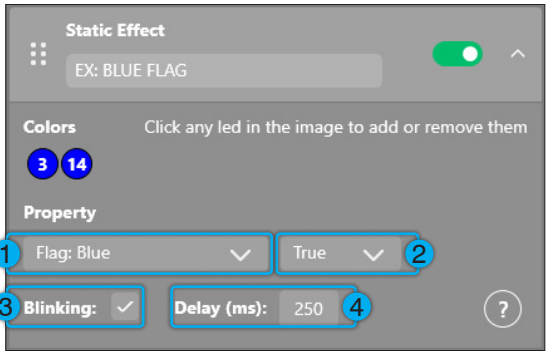
Wave effect
This has the appearance of a rolling wave, combining the sequential and breating effects.

Examples
On the next page, we will look at some examples, you can also follow along with a creating these yourself and/or looking at the default 911 RSR default profile.

Example #1 - Blue Flag

This is a simple one to replicate and understand. These two LEDs will turn blue when the conditions (2) for the property (Flag: Blue) (1) have been met.

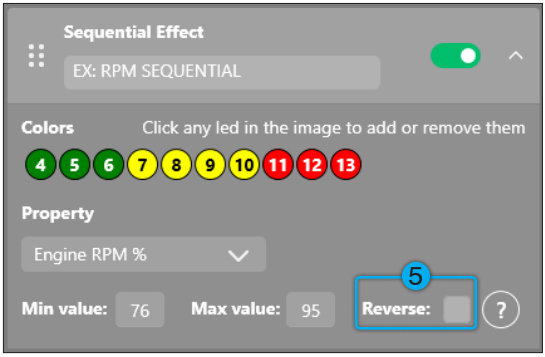
Also, they do not just turn on, they will blink (3) on and off with a set delay (4) of 250ms.



Example #2 - RPM Sequential

This is just your run of the mill RPM LED bar.

The 'Engine RPM%' property requires two values, to generated the steps in between. It divides those over the selected LEDs, and shows them in sequence from left to right by default.

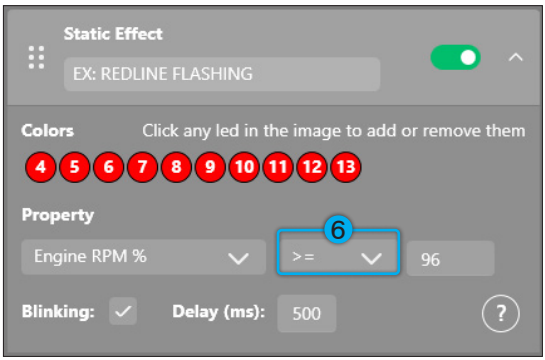


Just in case you need to mirror the default behavior and have the selected LEDs sequence from right to left, you can tick the 'Reverse' (5) option. This is useful for example where you have an RPM bar which works from the outside to the center, instead of completely left to right as in most cases.

To get a working preview of the aforementioned method of 'outside in' RPM LEDs, please have a look at the Porsche 911 GT3 Cup Dashboard Display Unit. The default LED profile has this method included. One take away from this, method, is that you need to seperate the left and right effects, to utilize the 'reverse' option. You do not need to own the actual hardware, to be able to have a look around in the LED profiles.

Example #3 - Redline flashing

This used to be an individual function. We have no need for it anymore, as it can be replicated very easily.

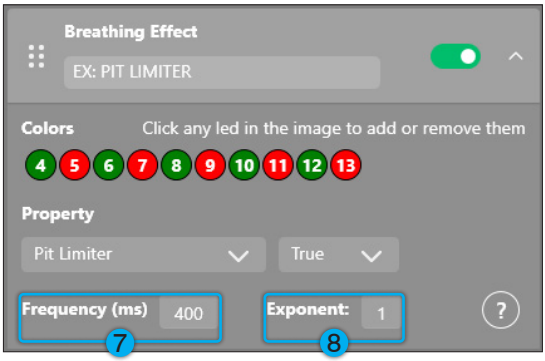


Some properties feature additional math based modifiers (6). For example, the modifer chosen here is the 'greater or equal to' modifier, and this is in relation the 96 number given.

In plain English:
When the engine RPM reaches 96% or above, all the given LEDs start blinking red, with the set delay of 500ms.

Example #4 - Pit limiter

This example serves just one purpose, and that is to show off the breathing effect. The pit limiter, is just an example.

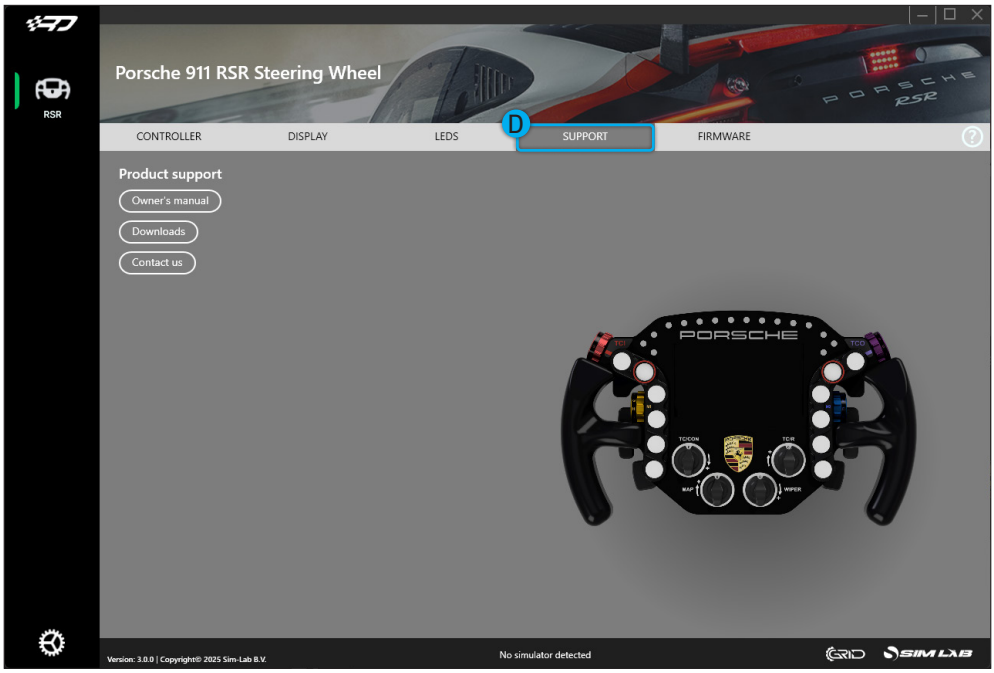


Where this differs from LEDs simply blinking on and off in a steady pattern, is the timing and fades which can be influenced. The big advantage of this breathing type of effect, is especially noticable with lower numbers of 'Frequency (ms)' (7) as opposed to 'Delay (ms)' for statis effects.

The added fades make this **much** easier on the eyes, especially for a longer duration. As for the timing, this is controlled by the 'Exponent' (8) value. With a value of 1, the time between brighest and dimmest is roughly the same. Rule of thumb, a value below 1 is going to favor longer pauses. Values above 1 favor shorter pauses.

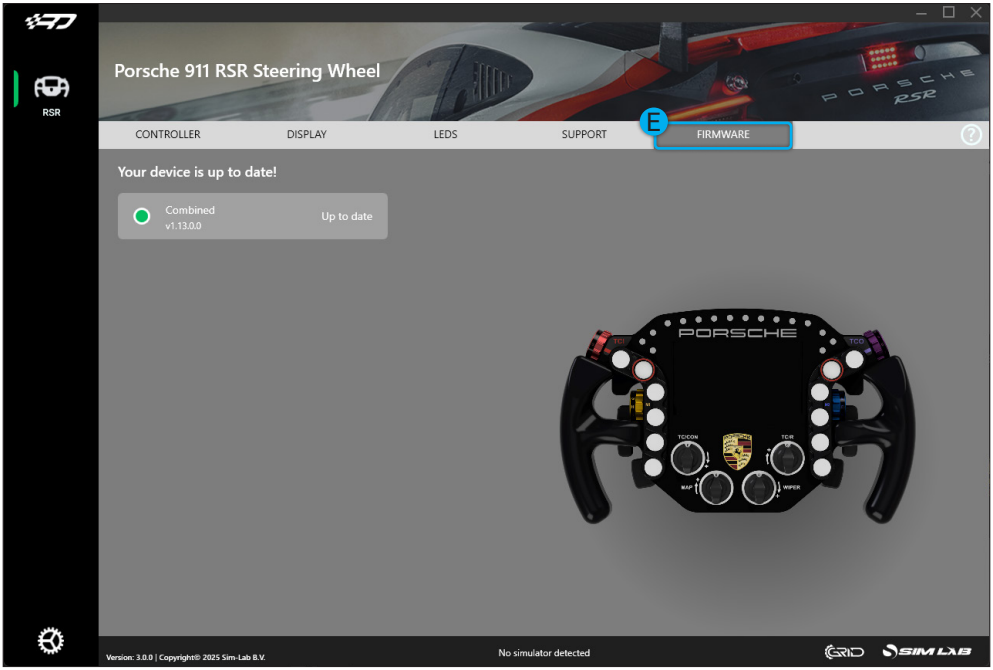
SUPPORT (D)

If you run into trouble with your hardware, here are a few options to help you in finding a timely solution.



FIRMWARE (E)

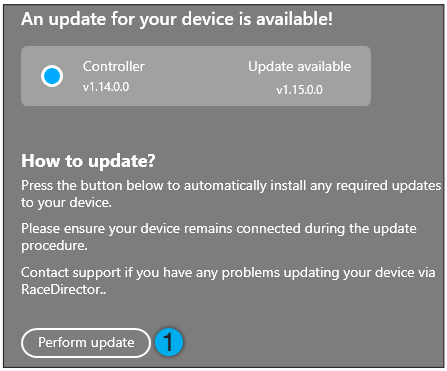
On this page you can see the current firmware loaded on the wheel. If your firmware is out of date, we recommend to update it using our tool.



RaceDirector keeps tabs on current firmware versions. When it detects a difference, a notification ● will let you know more recent firmware has been detected.

When a updated firmware versionhas been deteced, please follow the instructions and click the 'Perform update' (1) button.

RaceDirector will show the progress and will take care of the updating for you. If you see a windows explorer or USB device poppping up, don't worry, it is part of the process.



Older devices might still require the former firmware update tool. In that case, RaceDirector will tell you what to do.

Pedals/Handbrake

For our pedals and handbrake, we included functionality which might need some explanation. When looking at a typical device page, this is what the pedals page typically looks like. (No clutch was used in this case)

Calibration

- Press 'Calibrate' (1) for the device to enter calibration mode.
- Calibrate by moving the pedal or handbrake from minimum to maximum a couple of times. A percentage % indicator is shown (only) for the brake for reference.
- Press 'Finish calibration' for the device to exit calibration mode.

Graph

This is where most of the device page for this product type revolves around. The curve in the graph can be adjusted to your liking by manipulating 7 points. The first and last point control the deadzone (2). The middle five (three for the handbrake) can be manipulated by clicking and dragging to really dial in your input.

As a means of providing a starting point, we provide three presets (3) which are Linear, Aggressive, Progressive.

Supported sims

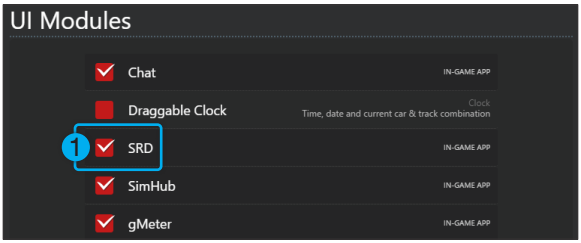
As we just started out developing our own software, our supported sims list is limited for now. We will strive to continually update compatibility and functionality with your favorite software. As most things with RaceDirector, you guessed it, we love to hear from the community.

- Assetto Corsa/ACC
- F1 2023/2025
- iRacing
- Le Mans Ultimate
- rFactor2

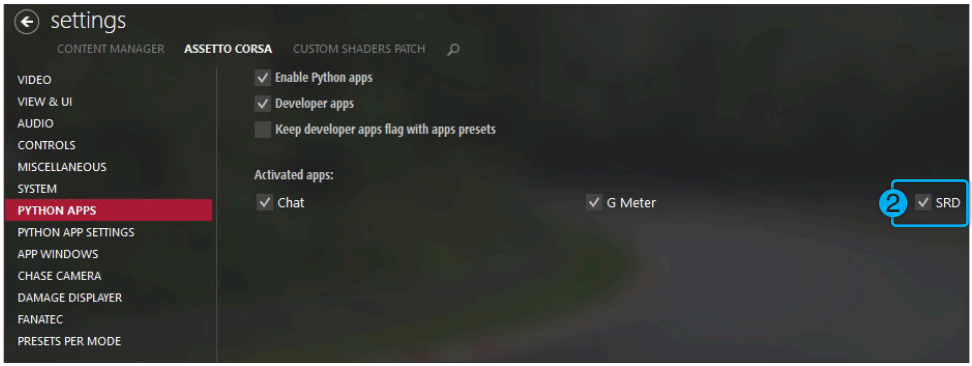
Some notes per sim:

Assetto Corsa
After installation of RaceDirector, the RaceDirector plugin needs to be enabled.

Go to your settings menu, in the bottom right section, enable the 'SRD' (1) plugin.

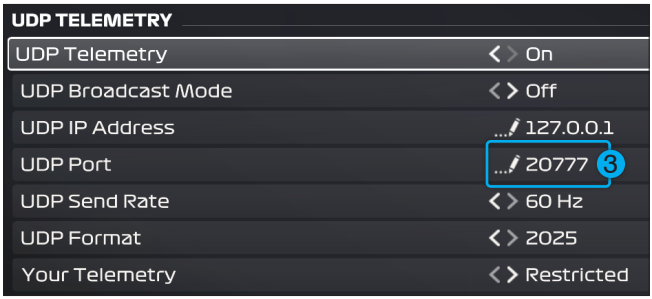


For the people who use Content Manager, please go the Settings->Assetto Corsa->PYTHON APPS and make sure 'SRD' (2) is enabled.



F1 2023/2024/2025

After installation of RaceDirector, you should be good to go. A UDP port is already configured in the RaceDirector settings page. Please verify this is correctly configured ingame, if you are experiencing issues. To do so, please navigate to Options->Settings->Telemetry Settings

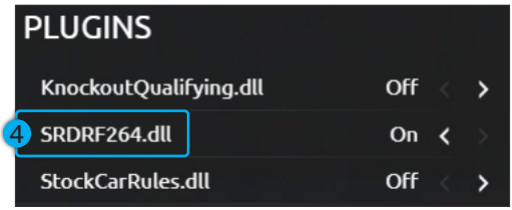


Make sure the 'UDP Port' number (3) matches what has been set in RaceDirector on the settings page. You can find a screenshot of this on Page 8 of this manual.

rFactor2

After installation of RaceDirector, the RaceDirector plugin needs to be enabled.

Go to your settings menu, in the bottom right section, enable the 'SRDRF264.dll' (4) plugin.



More information

We are continuously trying to keep up with the community. If you feel like we forgot or need to add some functionality, or have any other form of feedback, please let us know!

If you have other questions regarding RaceDirector or about the manual itself, please refer to our support department.

Alternatively, you can visit our discover server:
www.sim-lab.eu/discord