



RACE DIRECTOR VERSION 2.1

Last updated: 17-04-2024

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 SimLab, GRID or GRID by SimLab 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.

Our dashes are updated or added to regularly, depending on popular demand or updated functionality.

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 limited for the sake of usability. If you want to go all out on every possible option there is to exist in the sim of your choosing, feel free to use 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 V2.1.0.

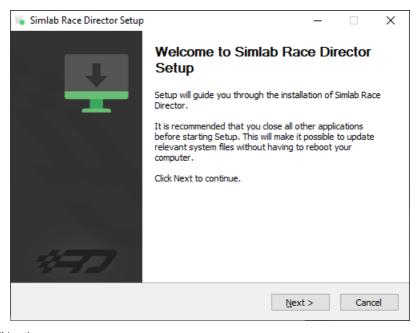
Updates, additions and/or bugfixes will occur when requested by the community. This is not only on a software level but also will be reflected in the way of available profiles and dashes.

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

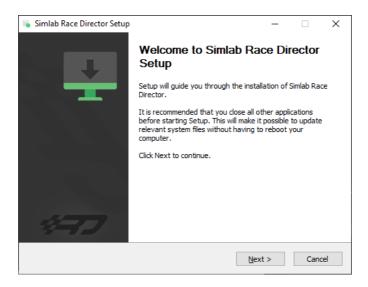
Unzip the downloaded file 'RaceDirector.zip' and extract the folder to a location of your choice, run the installer to start the installation.

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.



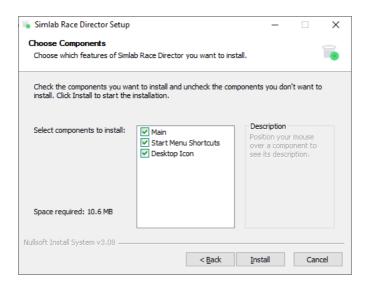
Press 'Next'.

Specify the location where to install the software:



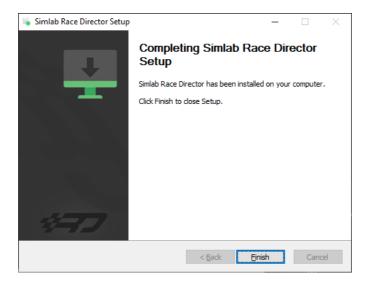
Press 'Next'.

Make sure all options are checked:



Press 'Install'.

RaceDirector will be installed:

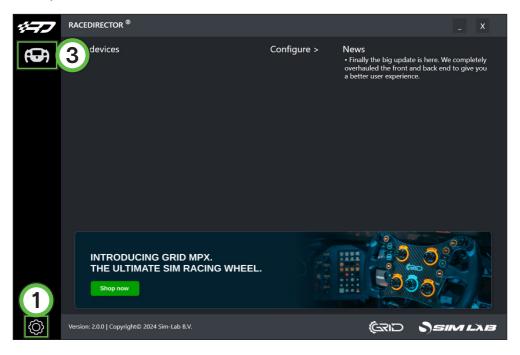


Press 'Finish'.

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, GRID or GRID by Sim-Lab 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

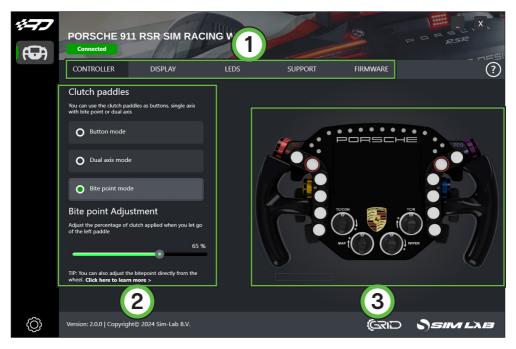
Wheel. This covers allmost all we need to explain, considering the wide range of products we offer.

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



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.

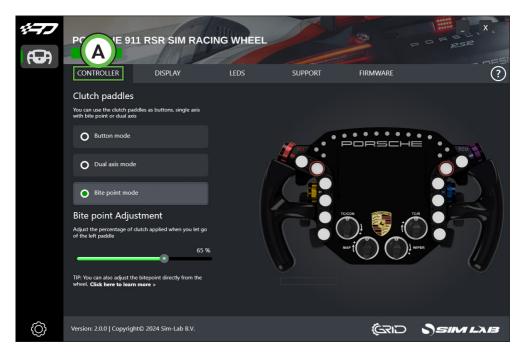
This page also lets you test and inspect all inputs, each button press or encoder rotation will be indicated on screen.

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.

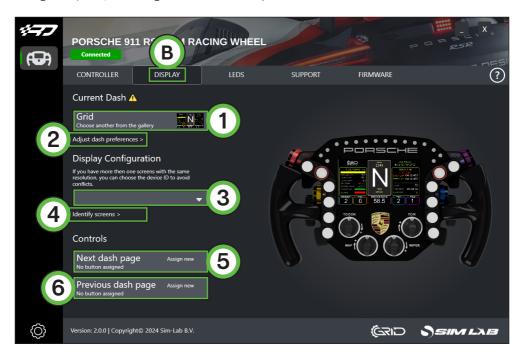


In this case, controller options shown all have to do with operation and function of the clutch paddles. For other devices, this page might be missing entirely, or look completely different (see Page 18).

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.



- 'Current Dash' (1)

This allows you to select a dash for a given car. We do not support all cars in every sim. In case a caution symbol $\widehat{\underline{\hspace{1em}}}$ 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 fonts required. After restarting RaceDirector, you are good to go.

- 'Adjust dash preferences >' (2)

A new window will allow you to adjust some dash preferences.

- 'Display configuration' (3)

This will make sure the chosen dash is rendered on the intended display. When you are not sure which display to select, press 'Identify screens >' (4) to help identifying which display is which. If a single vocore screen has been connected, this will be automatically selected.

- 'Next dash page' (5)

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

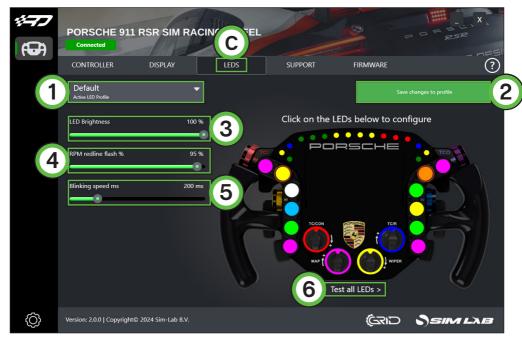
- 'Previous dash page' (6)

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

Note: when the page controls are configured, they won't affect a dash *unless* a sim is running or the 'Run Demodata' option is ticked in the RaceDirector settings.

LEDS (C)

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



- 'Default' (1)

This selection menu is how you select an existing profile and load it, or create a brand new one. In this case, the 'default' LED profile is loaded. You can create and store as many as you like.

- 'Save changes to profile' (2)

Use this button to save changes made to a profile, or use it to save a new profile. This button also warns you have when a change was made to an existing profile, turning orange as a warning.

- LED Brightness' (3)

This slider changes the brightness for all LEDs on the device.

- 'RPM redline flash %' (4)

This is the value in % where your redline flash or shift warning will be listening to. This does require your revlights to have the 'RPM redline flash' behavior enabled. This is a global setting per device.

- 'Blinking speed ms' (5)

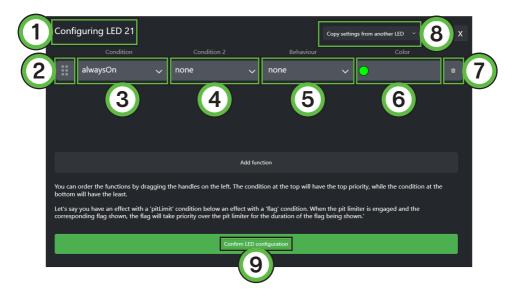
This determines how slow or fast your LEDs will be blinking in milliseconds. This is a global setting per device and requires the 'Blinking' or 'RPM redline flash' behavior to be activated. Warning: please take care with low settings when you are sensitive to seizures. We recommend to start too slow (high ms) and tweak from there.

- 'Test all LEDs >' (6)

This opens up a pop-up window where you use test input to see what the LEDs do using the currently loaded profile.

When we take a look at the visual representation of our device though, comparing it to the prevous page (DISPLAY) some colors have been added.

Clicking on any LED/color brings up the LED setup window. This shows the LED number (1) and the functions which can be configured. Each LED can behave differently and can contain up to 3 functions (rows) at a time. An overview; 'Condition (3), 'Condition 2' (4), 'Behaviour' (5) and 'Color' (6). There is also the possibility to 'Copy settings from another LED' (8). There is also a 'Sorting' (2) and a 'Remove' (7) function.



When happy with your settings, there is the obligatory 'Confirm LED configuration' (9) button. This confirms your LED settings and returns you to the main RaceDirector window

Here are some basic rules:

- Each LED can have up to 3 functions with different behaviors.
- Functions are stacked where Function 3 is lowest and Function 1 is highest in priority.
- Any LED with an 'alwaysOn' behavior should be used with the lowest priority function in case of multiple functions on one LED.
- The visual representation of the wheel prefers to show functions which feature an 'alwaysOn'. If it doesn't find an 'alwaysOn', it will display the first non-black color.

You can see very quickly how the settings behave, just by looking at an existing profile. One thing to note is that it is good to know what is expected of you with some functions. After providing that information, we will go through some examples:

Condition (3) and Condition 2 (4)

- alwaysOn

This condition is always active, unless another function temporarily overrides it. This is the only condition which is prohibited from blinking and has no other options.

- carWarning

This is currently only features a low fuel warning. This will be expanded later.

- drs

This has multiple options which you can divide over multiple LEDs are all use in a single one. Upcoming, available and on can be selected as 'condition 2'

- flag

This condition will be executed while a flag is waved. 'Condition 2 optiones are 'Black', 'blue', 'Green', 'Yellow'.

- pitLimit

This condition will be executed while the pit limiter is active.

- revBar

This condition is your typical way of controlling RPM LEDs. 'Condition 2' allows you to select the percentage from 0-99.

- spotter

Depending on your sim you can light up LEDs depending on the position of an opponent. (Left/Right)

Behavior (5)

After we have established what the functions and their settings are, we also alter their LED behavior.

- Blinking

Almost every type of 'Condition' can be made to blink. Normally, this will result in the function to blink on and off or to blink between two colors. See 'Color' (6). The blinking speed in ms is controlled on the main LED device page.

- On

This mean the LED is on and the default state of any LED.

- None

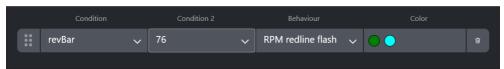
This the default state for any LED with an 'alwaysOn' condition selected.

- RPM redline flash

This was added as a blinking counterpart to be able to easily create a redline flash function. This 'behavior' however is hard coded into always blinking on and off. The blinking speed in ms is controlled on the main LED device page.

Following are some examples to show some functions and how they stack up. Although we intend for RaceDirector to offer a basic feature set, this is still quite complete and allows you to setup your wheel or dash to your liking.

Example #1



Picking an existing LED and adjusting that is easy enough, just select the conditions and behaviors and adjust where needed. In this example, we changed the 'revBar' condition from the 'On' behavior to 'RPM redline flash'. The difference between these two:

- On

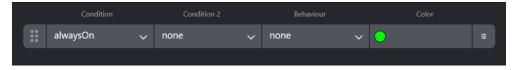
While 'Condition 2' has been met, the LED will light up using the chosen color. Green, in this case. Only one color will be available, with this behavior selected.

- RPM redline flash

With this behavior selected, a secondary color is shown, cyan in this case. The first color, green, will function as it would with the 'On' behavior. The second color will be the color shown when the redline flash is triggered. This will make the LED blink on and off using the selected second color. The redline % and blinking speed can be configured on the LED device page.

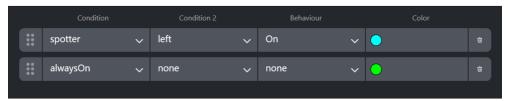
Example #2

Some people will prefer start to build their own profiles from scratch. Let's explore the basics following these examples.



This one is easy. This LED will always show a static, green LED. Note, an 'alwaysOn' does not require any additional settings, other than the color.

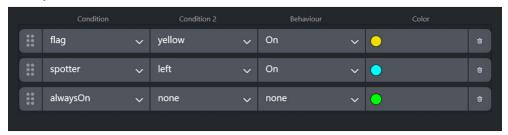
Example #3



As shown above, the 'alwaysOn' moved to the second row, or 'Function 2'.

While the spotter is active, 'Function 1' will be shown. When 'Function 1' is not shown, 'Function 2' will be shown.

Example #4



A bit more complex than the last one but when you break it down, it makes sense as a prioritised stack. Here we go:

While the flag is being waved/shown, 'Function 1' is shown, even if a car is next to you at that moment, as 'Function 1' takes priority over 'Function 2'.

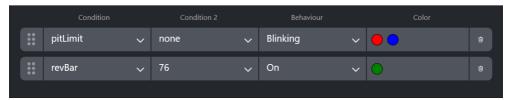
If the flag is not being shown anymore and while there is a car next to you on the right side, 'Function 2' will be shown.

In the case that neither 'Function 2' or 'Function 1' are shown, the 'alwaysOn' from 'Function 3' is shown.

Clear from the last example is that we're looking at a stack of prioritised functions. Some behaviors part of a function can be taken quite literally, 'alwaysOn' is always on. Placing a function on top with 'alwaysOn' behavior will never reveal the functions below. Please keep this in mind.

Example #5

An easy to achieve effect is a blinking pit limiter.

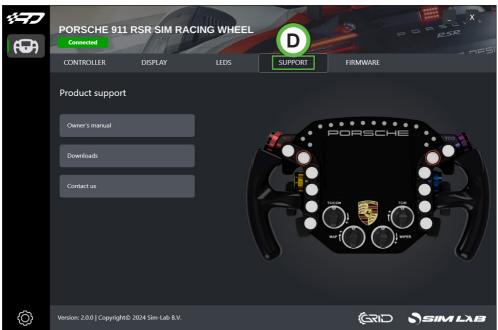


When selecting this behavior, a second color picker will be added. This means the current example is blinking between red and blue. If you want to alternate this effect for every other LED, simply reverse the colors and blink between blue and red instead. This makes it very clear the limiter is active!

When you don't want to switch between two colors, simply select black (rgb 0,0,0) as the second color. This will make the LED simply blink on and off, but without revealing the underlying revBar function.

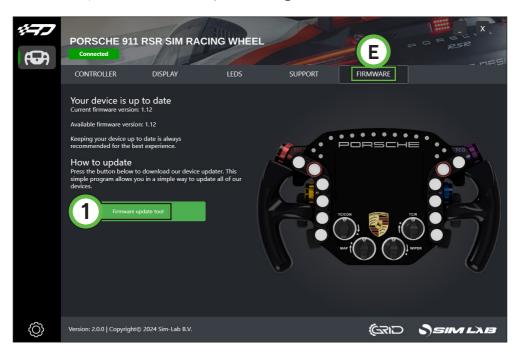
SUPPORT (D)

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

Press 'Firmware update tool' (1) to download the tool.

For more information on how to use the tool, please see its documentation: sim-lab.eu/firmware-updater-manual

Pedals/Handbrake

For our pedals and handbrake, we included functionality which might need some explanation. We wanted to offer the ability to adjust, save and load input curves from the start. When looking at a typical device page, this is what the pedals page looks like.



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
- 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 5 points. The first and last point are controlled by adjusting the deadzones (2). The middle three 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.

Backup

All profiles are stored locally. For each profile you save, a *.JSON file with the name of the profile is stored in the RaceDirector/Settings folder.

It is recommended the create a backup of these files every once in a while, before updating RaceDirector for example.

Having access to these files will also make it easy to share profiles with others!

Windows defender/anti virus software

Although we wish this was not an issue, it sometimes is. In the grand scheme of things, we are still a small company which so happens to offer a software solution. This means sometimes for new releases big or small, Windows Defender or your own antivirus solution has not white-listed our updates for RaceDirector yet.

When you get notifications about our software being recognized as being malicious, rest assured as these are false positives. Although we don't like it being neccesary, we recommend to 'allow' our software through your security solution.

When in doubt, feel free to contact support.

Supported sims

As we just started out developing our own software, our supported sims list is limited for now. This list is ordered in our level of suppport, where we iRacing offers the most functionality, Assetto Corsa the least. We will strive to continually update compatibility and functionality with your favorite software. As most things with Race Director, you guessed it, we love to hear from the community.

- iRacing
- rFactor2
- Assetto Corsa

Some notes per sim.

iRacing

After installation of RaceDirector, it is ready to go.

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' (1) plugin.



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' (2) plugin.



More information

RaceDirector is our very first venture into the software domain. We appreciate all the input you will have probably have and will continue to make this software more user friendly and feature complete.

Feedback is appreciated so we know what you would like to see improved or added. At this moment we only have a limited selection of features and content.

To report bugs we have a bot on our discord server which will request basic information. Please supply clear information and include the steps to be able to reproduce a bug for us to be able replicate the result. This way it is quicker/easier for us to identify and fix.

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

Alternatively, you can visit our discover servers:

<u>www.sim-lab.eu/discord</u>

www.sim-engineering.com/discord