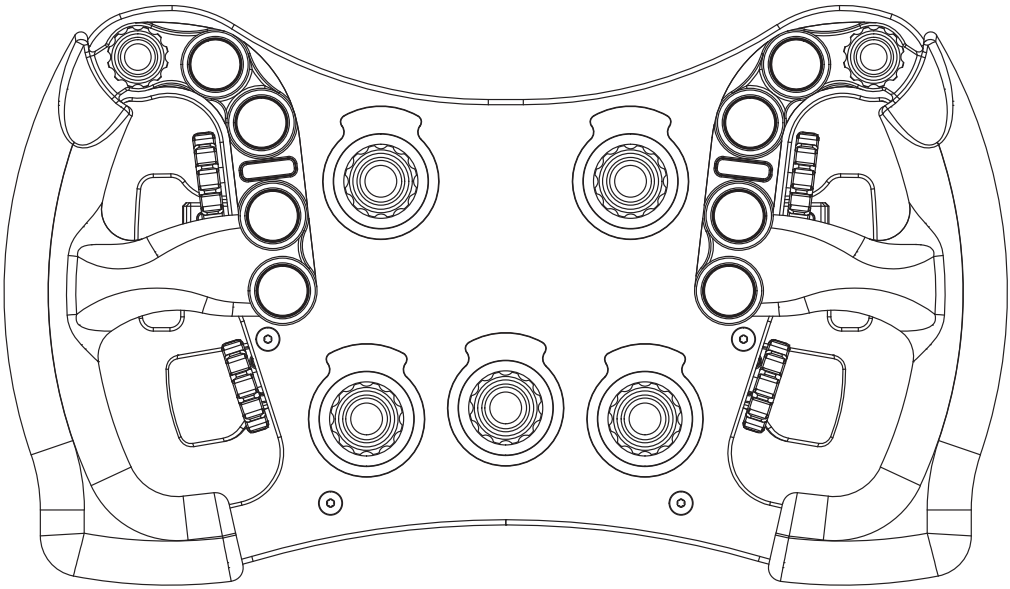
INSTRUCTION MANUAL



MPX
STEERING WHEEL
VERSION 1.2

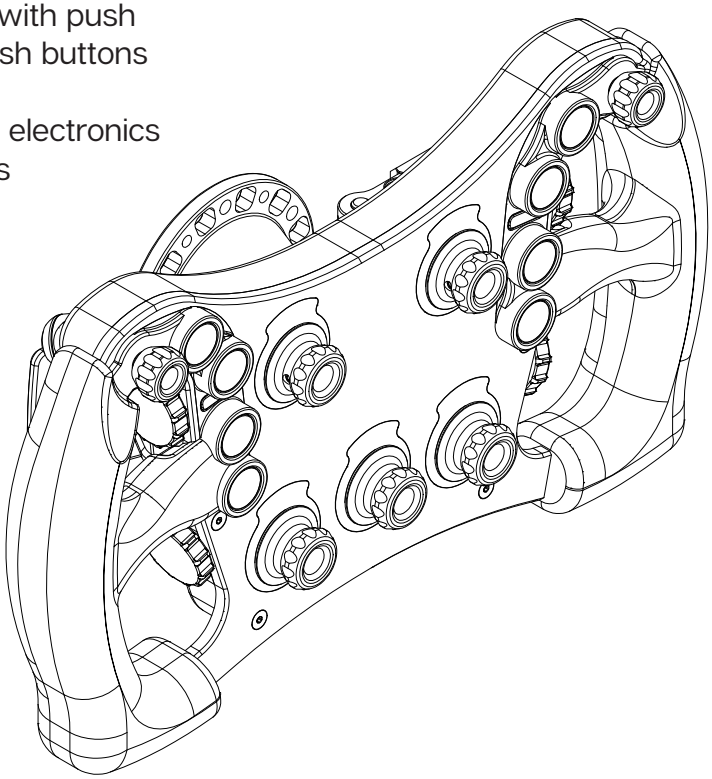
Last updated: 20-03-2024

BEFORE YOU START:

Thank you for your purchase. In this manual we will provide you with the means to get started using your new steering wheel!

MPX FEATURES:

Full billet anodized aluminum construction
87 telemetry controllable RGB LEDs
9 ELMA encoders with push
2 OTTO P9 rear push buttons
2 7-Way switches
Motorsports grade electronics
Adjustable clutches
Adjustable shifters
70MM PCD HUB

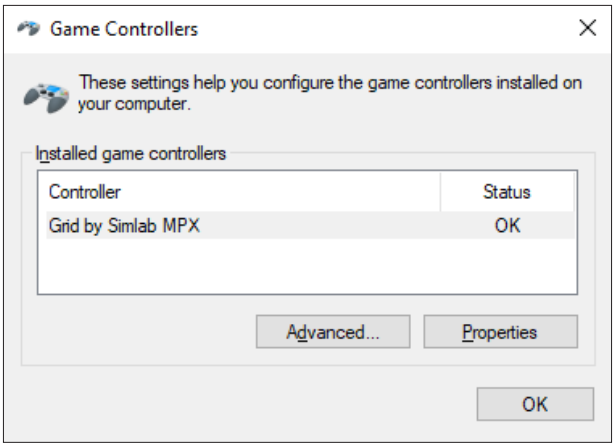


Initial calibration

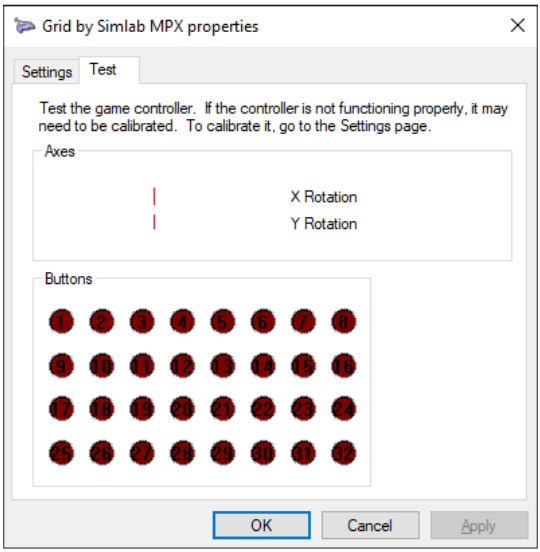
Before using the wheel, we recommend to walk through calibration of all paddles found on the back of the wheel.

To make this an easier and more visual experience, let's open the Windows Game Controller program.

The quickest way to do this is to press the windows-key, type 'Game Controller' and hit 'enter' on your keyboard. This will open the Windows Game Controller program.

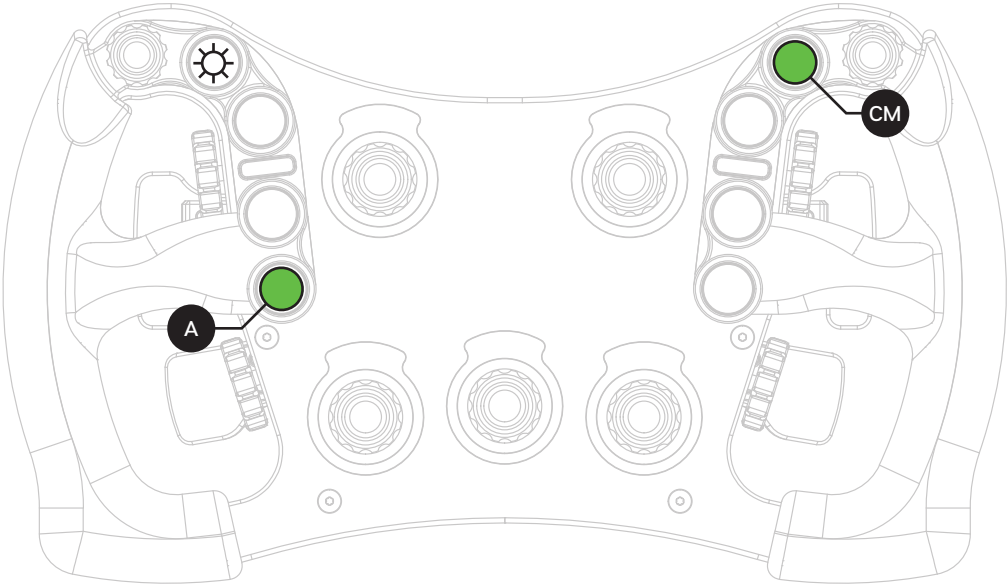


Select 'Grid by Simlab MPX' from the list and press 'Properties' to access the properties window. At this moment, we offer more inputs than possible to display.



Calibration Mode

The calibration is a very straightforward process, but first we need to enter the Calibration Mode on the wheel itself. To activate the wheels' calibration mode, **Press and Hold** the ADJUST (A) button and CALIBRATION MODE (CM) button at the same time. Keep doing so for at least **5 seconds**, until you see BUTTON 1 (top left) flashing. Release both buttons when the wheel successfully entered Calibration Mode.



Calibration

Calibration is easy to do. Simply 'press and hold' one paddle for about a second, release and you're done. After this has been done with both clutches, the wheels' firmware has registered the minimum and maximum values for travel. Press the Adjust (A) button a single time to exit the Calibration Mode.

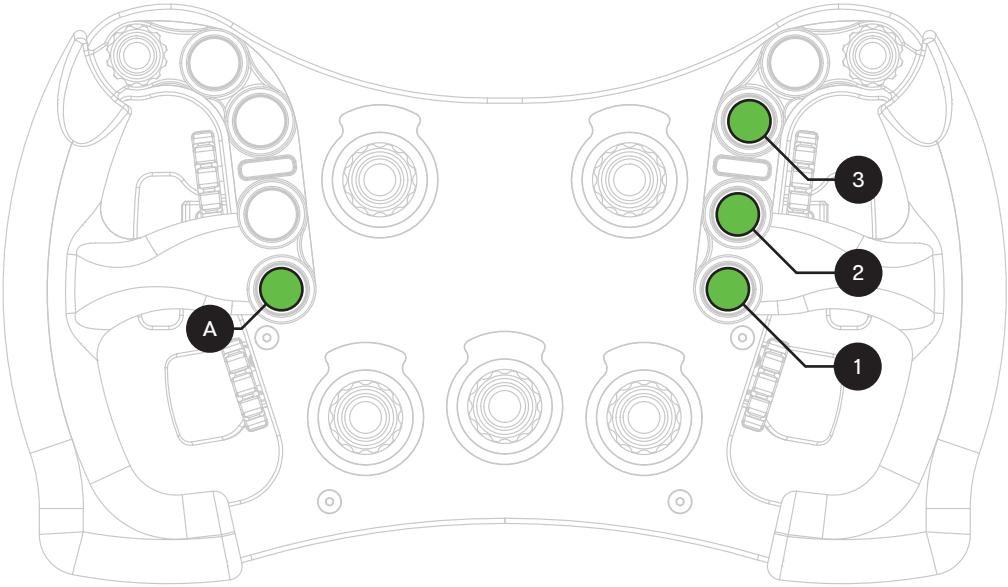
Clutch modes and bite point adjustment

To make the most out of the dual clutches installed, they need to be set-up to your liking and intended use.

Mode selection
We offer multiple modes for different uses. This can be changed on the fly on the wheel itself. The three modes are:

- Bite point: The 2 clutch paddles are working as 1 analog input. Left side is the adjustable bite point clutch and the right side clutch is the master. Bite point adjustment available *ONLY* in this mode.
- Dual axis: The 2 clutch paddles are working as 2 separate analog axis.
- Button: The 2 clutch paddles are working as regular buttons.

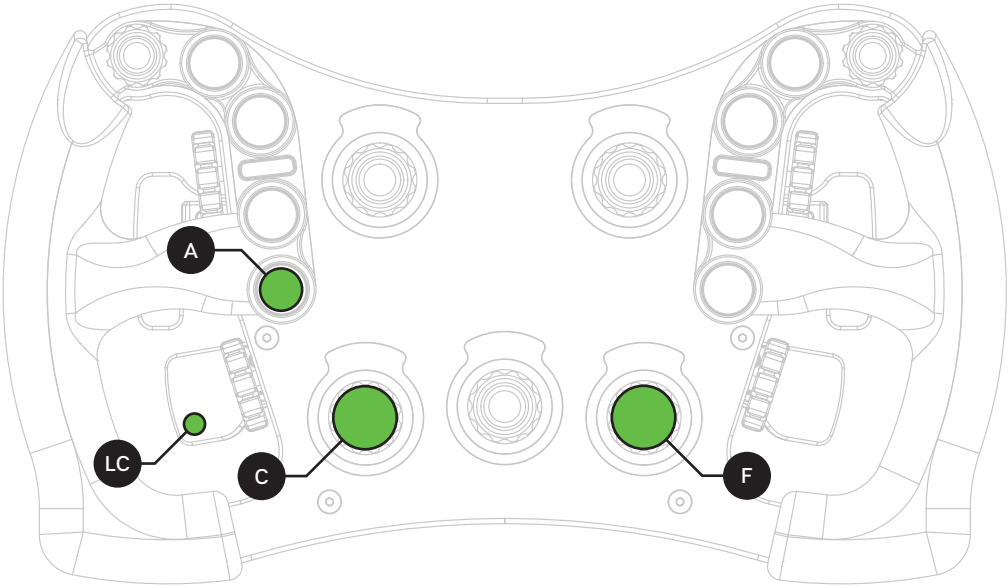
To switch modes, **Press and Hold** the ADJUST (A) button and **Press** the mode of your choice. (1) Bite point, (2) Dual axis, (3) Button. Release both buttons after you have made a selection.



Bite point adjustment
Bite point adjustment is available only in the BITE POINT mode. If you are not in this mode, please see the previous page on how to switch to this mode. Also, it is important that both paddles are calibrated before adjusting their behavior. Please see Page 4 before following the steps on this page, if you have not calibrated your clutch paddles already.

To adjust the bite point, **Press and Hold** the ADJUST (A) button and the left clutch paddle (LC) ***fully***. Next, start by dialing in the bite point roughly by using the Coarse (C) adjustment knob, tweak using the Fine (F) adjustment knob.

The Coarse (C) adjustment adjusts in roughly 10% increments, while Fine (F) roughly does 1% of adjustment. This way you can really dial in your clutches without compromise.



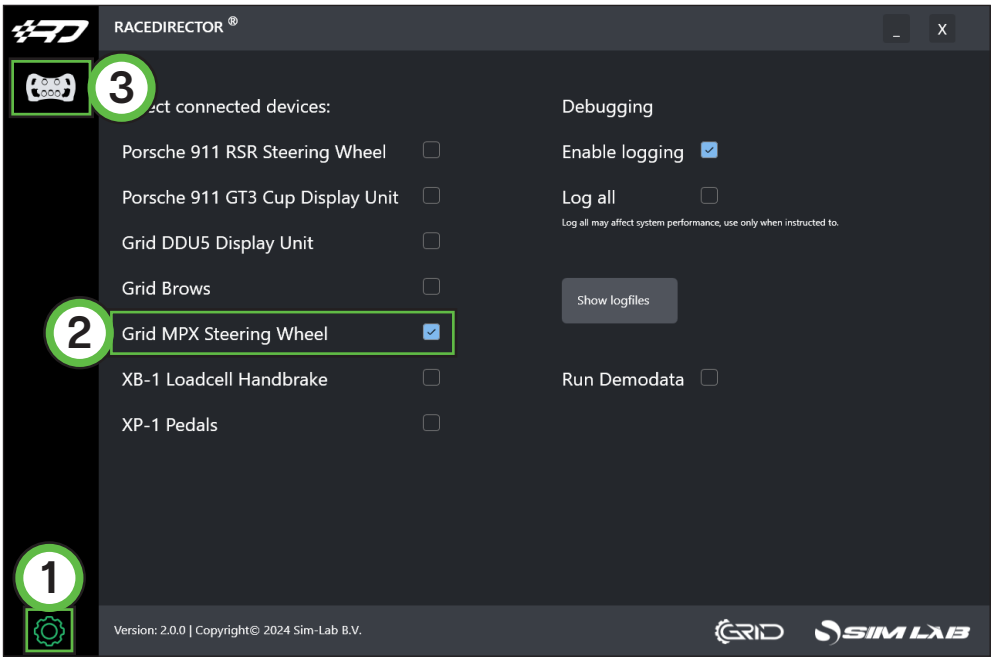
RaceDirector

Download and install the lastest version of RaceDirector from
www.sim-lab.eu/srd-setup

For explanation on how to install and use RaceDirector, please read the manual.
This can be found here: *www.sim-lab.eu/srd-manual*

We will now go over the very basics to get going using RaceDirector to get you on track asap. We really urge you to go through the manual for a more in depth explanation of the possiblities RaceDirector has to offer.

First we need to activate the product, this is done on the 'Settings' (1) page.

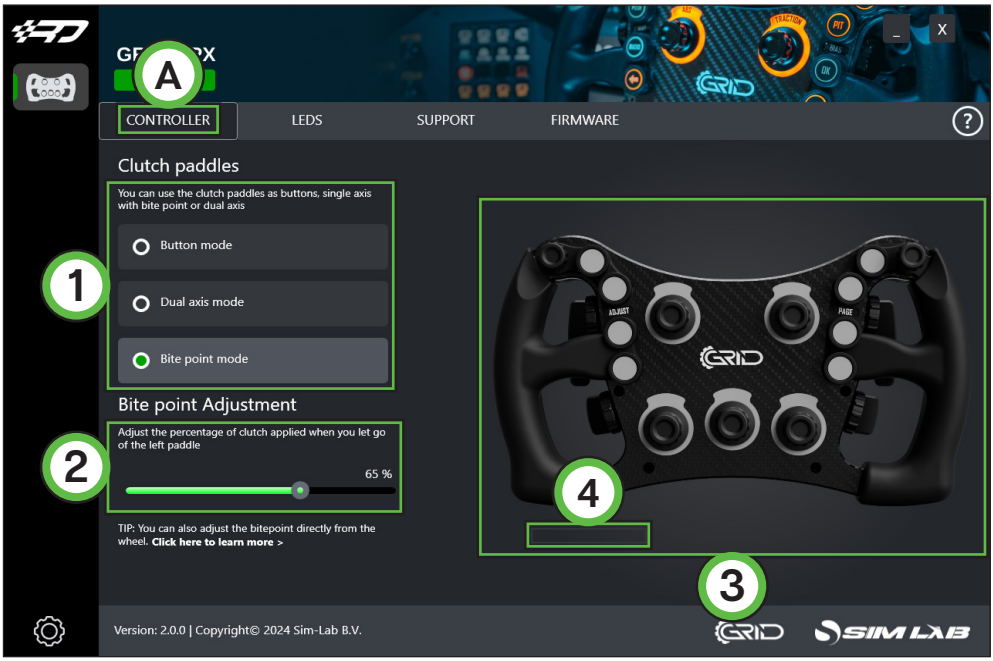


Tick the 'Activate' tickbox next to 'Grid MPX Steering Wheel' (2) and its icon (3) should appear on the left side of the screen. Selecting the icon (3) will take us to its device pages.

Device pages

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

CONTROLLER (A)
This device page focusses more on the mechanical part of controlling the device. Seeing the options mentioned, it is probably clear this page has to do with the controls on the wheel.



The left side of the screen contains some options, all having to do with the clutches for this wheel. The various 'Clutch modes' (1) can be selected as would be done on the wheel.

One option which is easier done through software than on the actual wheel is precisely dialing in a bitepoint for the clutch in 'Bite point mode'. Using the 'Bite point Adjustment' (2) slider, you are able to specify a bite point from 0-100%.

On the right is the 'Visual Representation' (3) of the wheel and the 'Clutch indicator(s)' (4) which show the clutch input. The clutch indicator will be a single or double one, or hidden, depending on your clutch settings.

LEDS (B)
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.

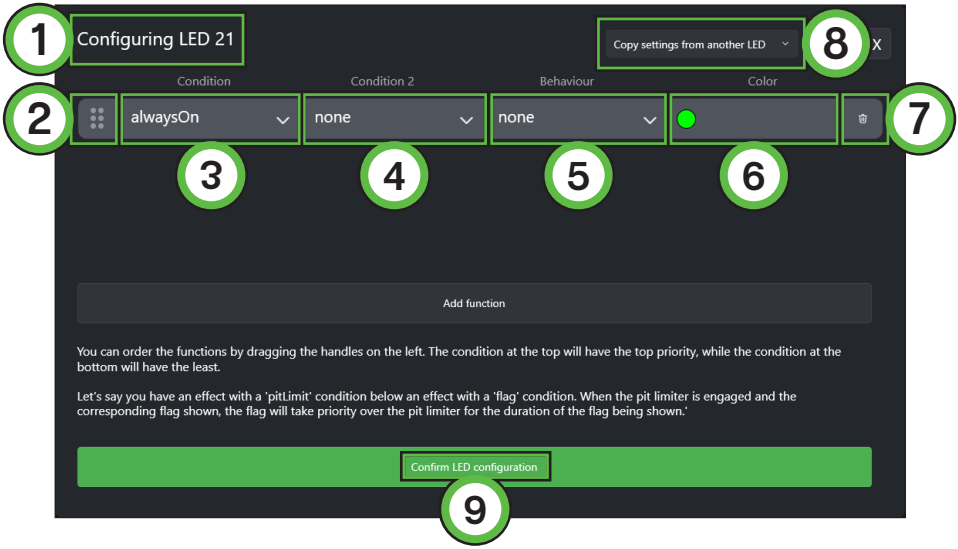
- LED Brightness' (2)
  This slider changes the brightness for all LEDs on the device.

- 'Save changes to profile' (3)
  Use this button to save changes made to a profile, or use it to save a new profile. This button also indicates when a change was made to an existing profile, turning orange as a warning.

- 'Test all LEDs >' (4)
  This opens up a pop-up window where you use test input to see what the LEDs do using the currently loaded profile.

One thing which is quickly apparent from switching to this page, is the addition of all sorts of colors. The loaded LED profile is shown on the steering wheel, which can be adjusted very easily. Every LED can be clicked on and adjusted inside the LED setup window.

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.

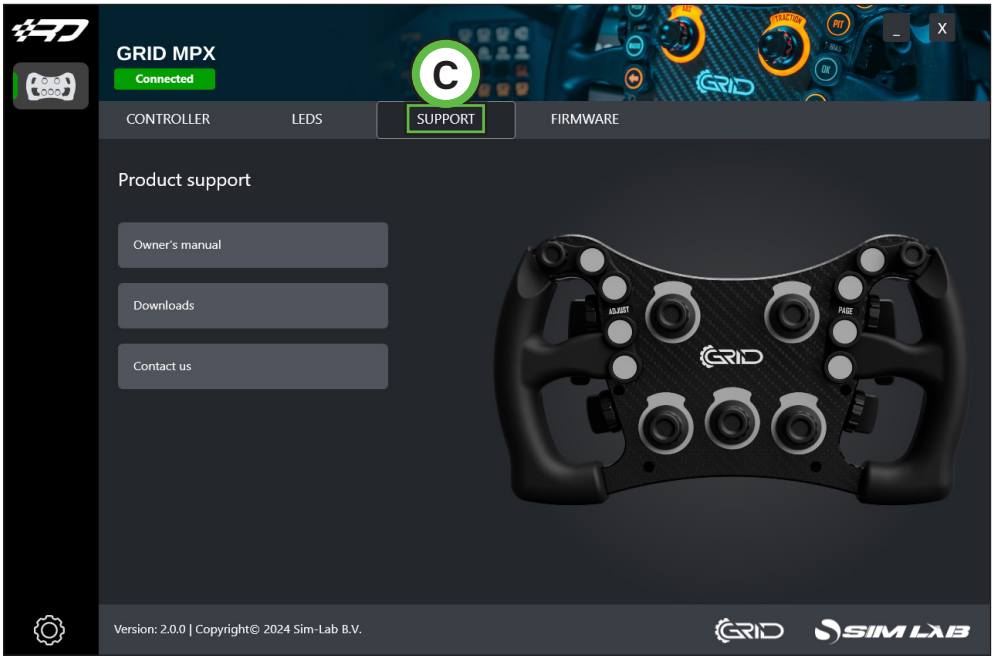


When happy with your settings, there is the obligatory 'Confirm LED configuration' (9) button. This confirms your LED settings and returns you to the main RaceDirector window.

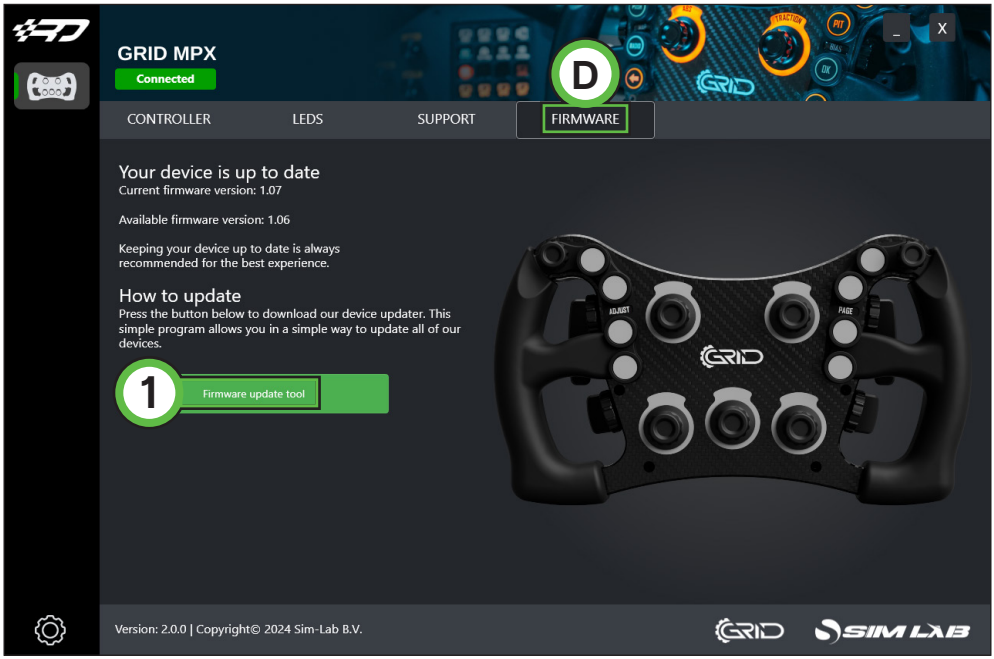
There should be enough info in the provided default LED profiles to be able to adjust LED settings to your liking. To start building your own profile, we suggest to copy an existing one and change where needed. The advantage is you always have a backup of the default profile to fall back to.

We do recommend to read the RaceDirector manual for detailed information on functions, settings and basic rules for the LED settings and the LED setup window.

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



FIRMWARE (D)
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.



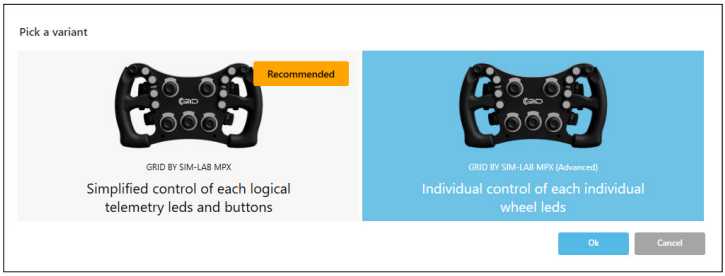
RaceDirector keeps tabs on current firmware versions. When it detects a difference, a notification ● will let you know more recent firmware has been detected.

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

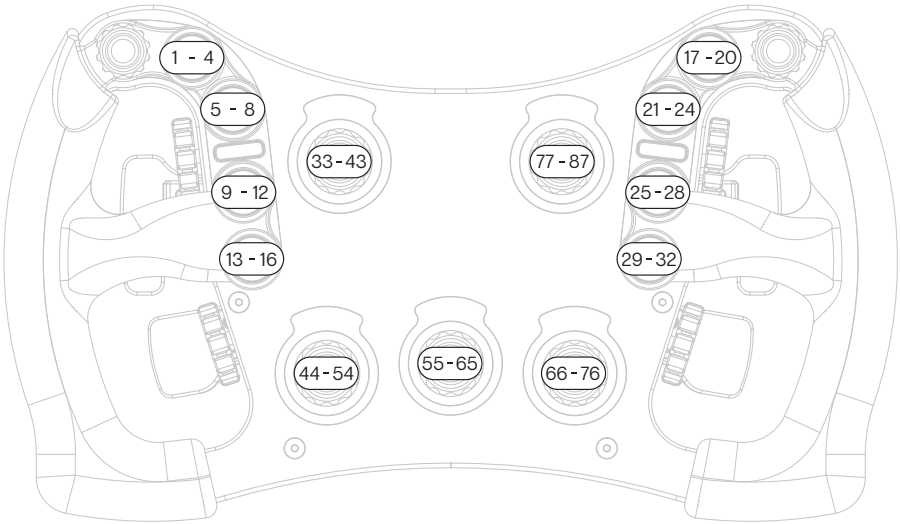
For more information on how to use the tool, please see its documentation:
sim-lab.eu/firmware-updater-manual

Simhub Support

For advanced users, we do still support people who prefer using Simhub. When adding a device, choose the advanced option as indicicated below to get indiviual access to all 87 LEDs to go all the way.



Changing the LEDs' functions.
To change the LED effects you need to know their numbering to identify them on the wheel. The following schematic shows the LED numbering for the available inputs and encoder LEDs.



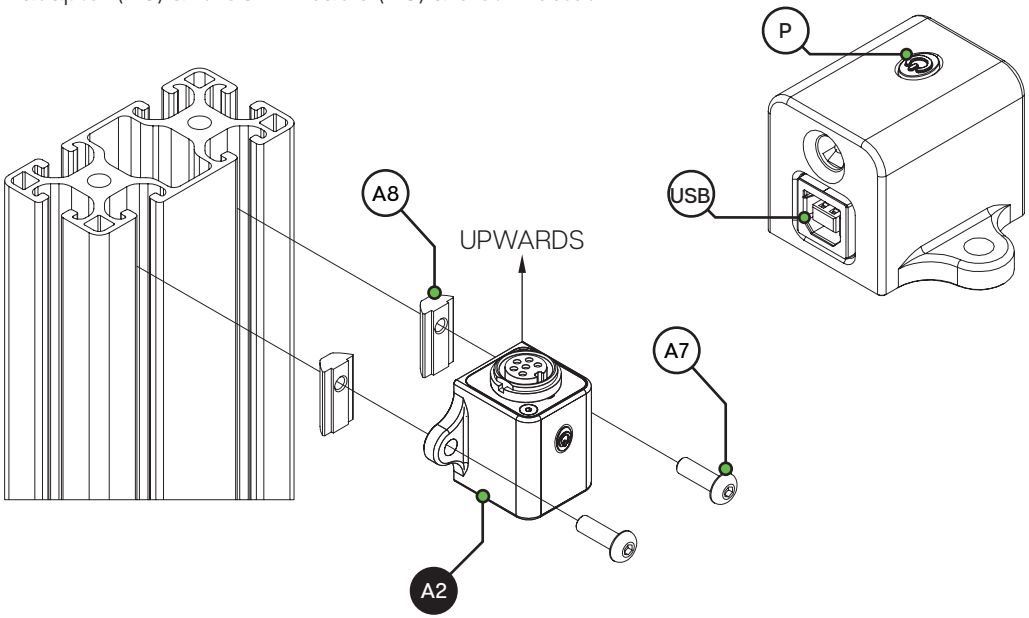
There should be enough info in the provided default LED profiles to be able to adjust LED settings to your liking. To start building your own profile, we suggest to copy an existing one and change where needed. The advantage is you always have a backup of the default profile to fall back to.

Note: for issues/troubleshooting your Simhub profiles, please refer to Simhub documentation or Simhub support.

Power Injection Box installation

The connection between your new wheel and PC is handled through the Power Injection Box (A2). This will transfer signals and power to the wheel.

Installation is very straightforward. We recommend to have the connector for the coiled cable (A4) oriented upwards. The bottom of the PIB is where your DC power adapter (A5) and USB-A cable (A3) are connected.



Connect all cables to and from the power injection box before plugging in the power supply. This ensures there are no grounding issues when plugging in cables while the device is powered. The current version of the power injection box has an on/off power button (P), you might need to press this if your wheel isn't recognized immediately. Also this makes it easier for you to turn off power for the wheel, just press the power button (P) once.

Secure all cables in such a way they can't be tripped on or accidentally pulled from their sockets.

When experiencing intermittent signal loss, we recommend using a powered USB hub.

ONLY connect approved 'GRID' sim racing steering wheels or risk DAMAGE to your steering wheel or PC!

Bill of materials

IN THE BOX			
#	Part	QTY	Note
A1	MPX Steering Wheel	1	
A2	Power Injector Box	1	Interface between wheel and PC.
A3	USB-A Cable	1	
A4	USB Coiled Cable	1	
A5	DC power adapter	1	
A6	Label package	1	
A7	Bolt M5 X 16 DIN 7380	2	
A8	Slot-Nut M5	2	

More information

If you still have some questions regarding assembly of this product or about the manual itself, please refer to our support department. They can be reached at:

support@grid-engineering.com

Alternatively, we now have Discord servers where you can hang out or ask for help.

www.sim-lab.eu/discord / www.grid-engineering.com/discord

Product page on the GRID Engineering website: