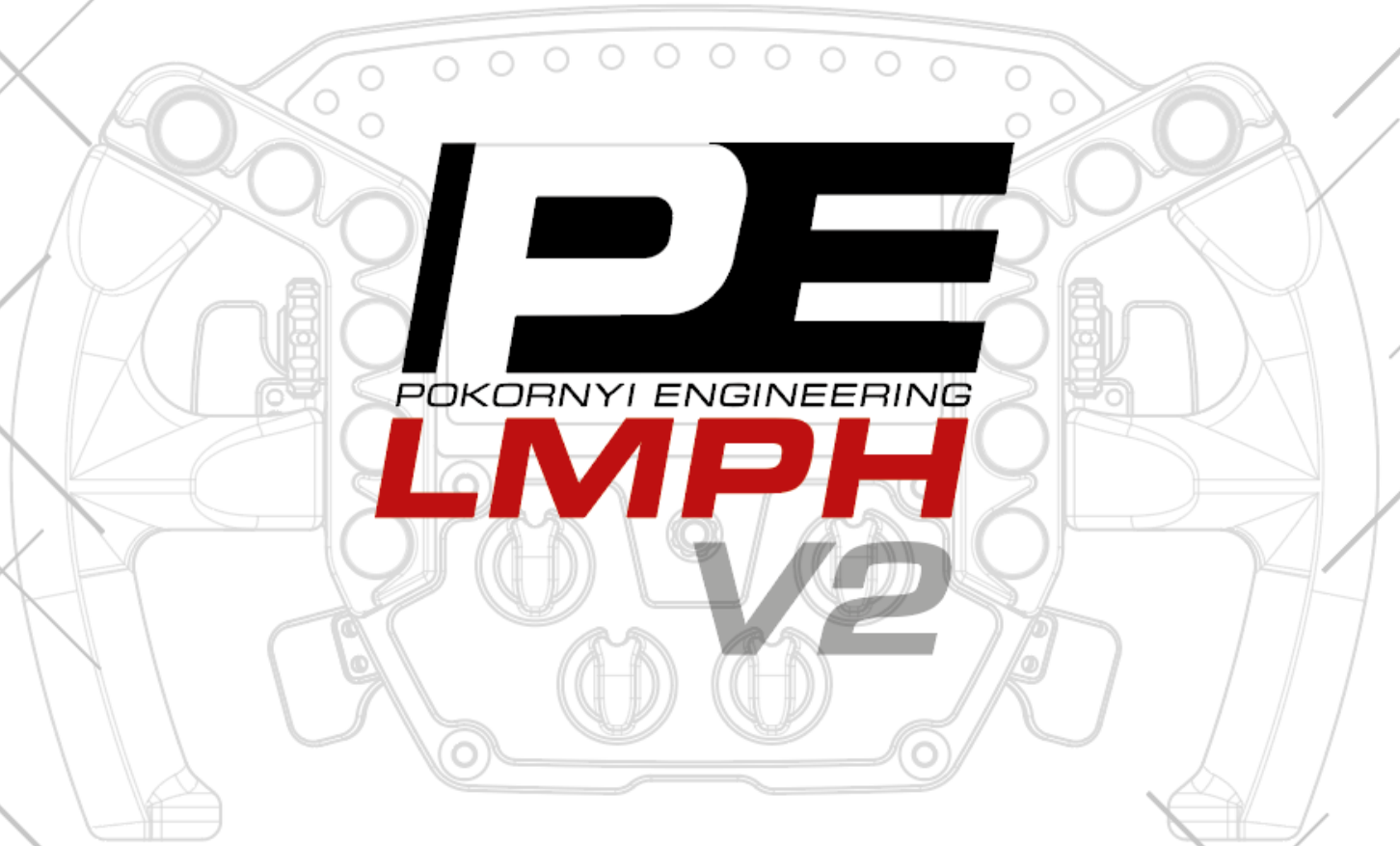


User Manual

V2.1

SAFETY NOTICE

- Please read the User Manual carefully before you use the racing wheel.
- This product is designed for simulation game use only.
- The device must not be exposed to rain or humidity in order to avoid the risk of fire and the danger of electric shock.
- Operating temperature: 15°C – 35°C room temperature.
- Indoor use only.
- Not intended for children under the age of 16 years. Contains small pieces. Danger of swallowing!
- Do not open the casing of the device. Never power and/or operate the device with opened casing due to safety reasons.
- This device contains components that cannot be repaired by the user, opening will void the warranty.
- Disconnect the USB cable from both sides if you will not use this product for a long time.
- Do NOT use the steering wheel in a real car!

COMPATIBILITY

The PE LMPH Sim Racing Steering Wheel is compatible with PC only.

The display and the LEDs can be driven by SimHub.

If you find any problems with your product, please contact us at **info@pokornyiengineering.com**; do not repair it yourself!

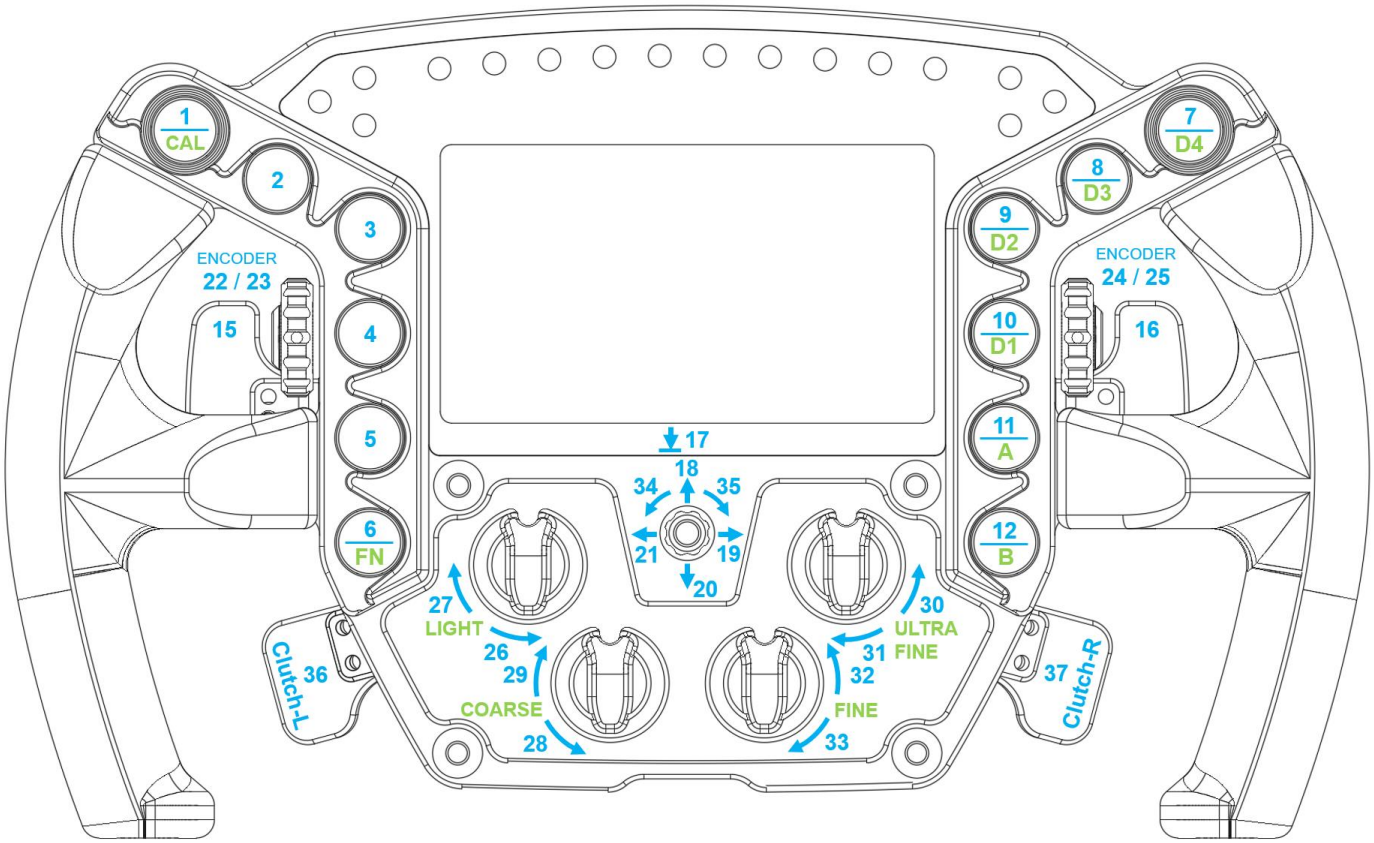
PACKAGE CONTENTS

- ***LMPH V2* Sim Racing Steering Wheel**
- Coiled USB Cable
- Sticker Sheets
- Quickstart Guide
- Accessories
    - Mounting screws
    - HEX 2.5mm Allen key (paddle adjustment)
    - HEX 4mm Allen key (mounting)
    - Plastic Tweezer (for applying the stickers)

MAIN FEATURES

- 6mm Carbon Fiber Front Plate
- Moulded Motorsport Spec. Silicone Grips
- 6061 Aluminium Components
- 5" LCD Screen with Scratch Resistant Gorilla Glass
- Backlight buttons (white) with 2 Telemetry Controllable Buttons
- RGB backlight rotary encoders
- 300mm Diameter, 1700g including HUB
- Automotive Hall-Sensor Dual-Clutches
- Magnetic Shifters with Twin-Contact Switches
- 7-Way "Funky" Switch
- 6x ELMA High-Detent Encoders
- Native SimHub Integration

INTERFACE



FN KEY

The **FN** (function) key (**BUTTON 6**) is a button/encoder modifier key that works like a *Shift* key to activate a second function on a dual-purpose button or encoder. The **FN** key is used to control hardware functions such as button brightness, clutch mode selection, or bitepoint adjustment.

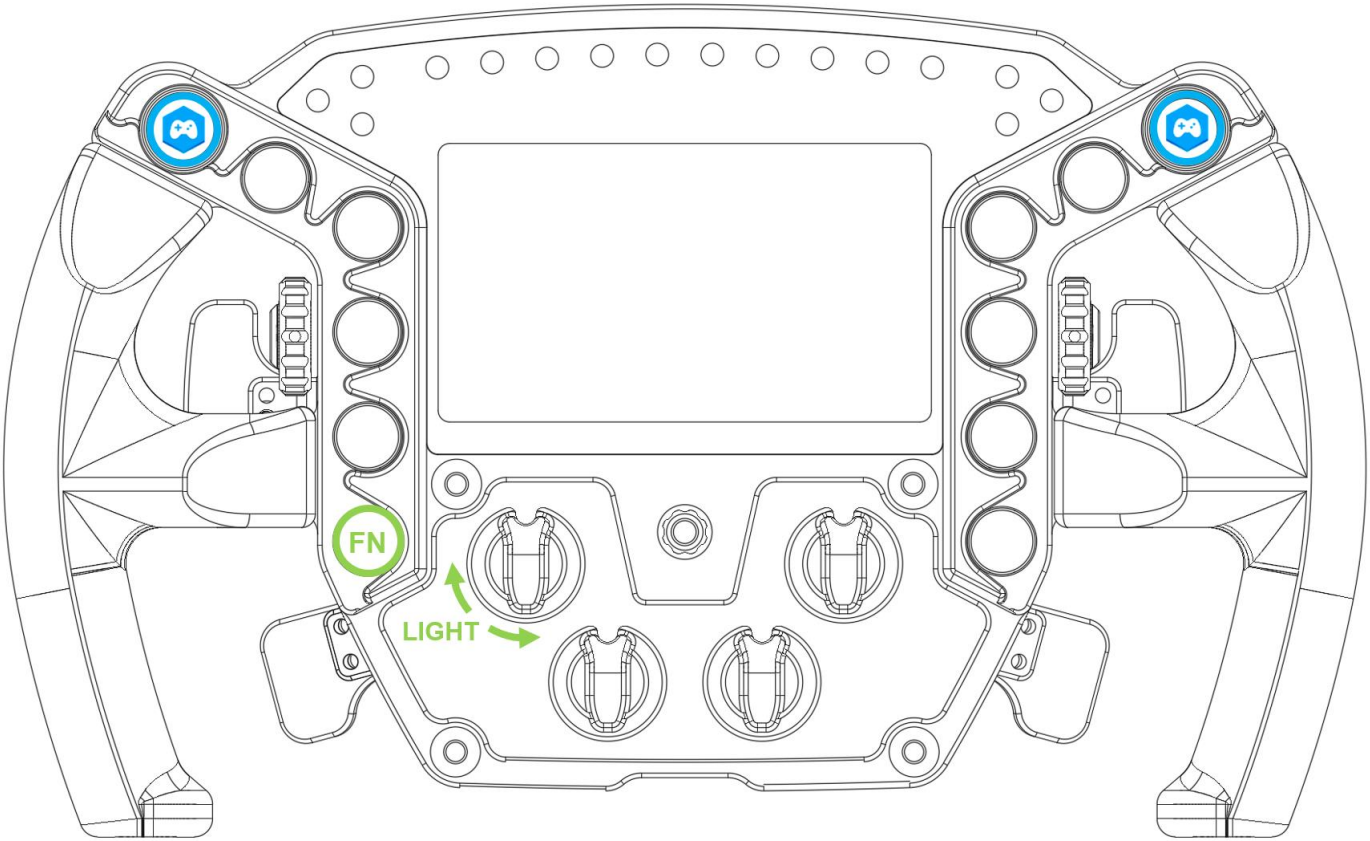
The secondary functions (marked **green**) can be accessed by holding the **FN** button.

BUTTON BRIGHTNESS

The brightness of the buttons can be adjusted with **top-left front rotary** encoder while **pressing and holding** the **FN** button.

The current value is saved when releasing the **FN** button. The wheel always starts with the last saved value.

The upper buttons on each side have telemetry controllable backlight, for further details, check the SIMHUB LEDS section.



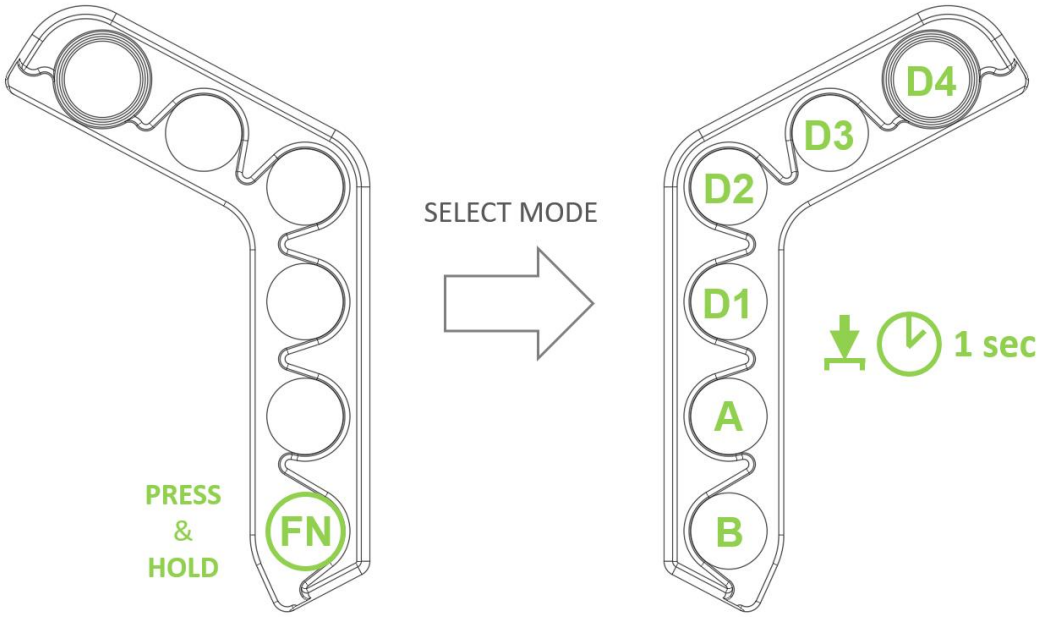
CLUTCH MODES

The analog clutch paddles have 3 different modes:

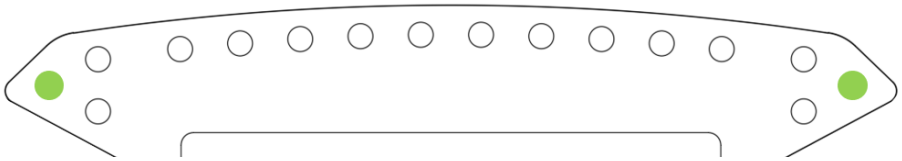
DUAL-CLUTCH	The clutch paddles are working as a single analog axis with bitepoint adjustment. There are 4 different DUAL-CLUTCH modes (D1, D2, D3, D4) that work the same way but can store 4 different bitepoints.
ANALOG	The clutch paddles are working as 2 separate analog inputs.
BUTTON	The clutch paddles are working as momentary buttons.

Modes can be switched **by pressing and holding the FN button** and then **pressing the desired mode** for **1 sec**: **D1**, **D2**, **D3**, **D4** – DUAL-CLUTCH; **A** – ANALOG; **B** – BUTTON.

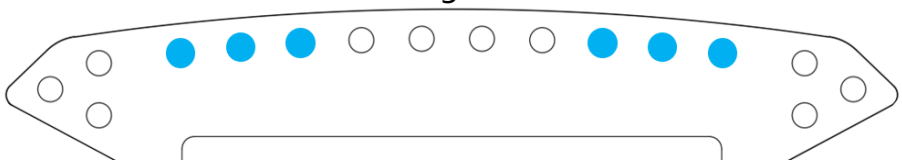
When the mode is successfully changed, the LEDs indicate the newly selected mode with a specific pattern and color, which you can see on the next page.



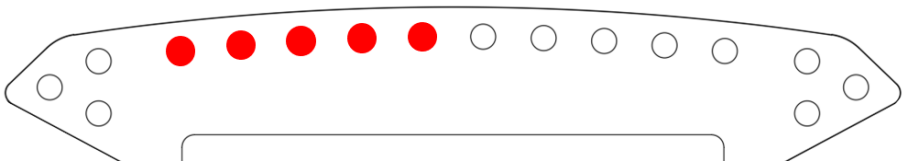
Button Mode



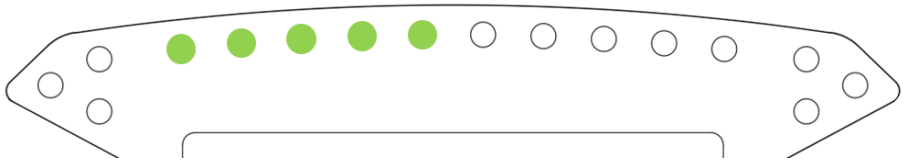
Analog Mode



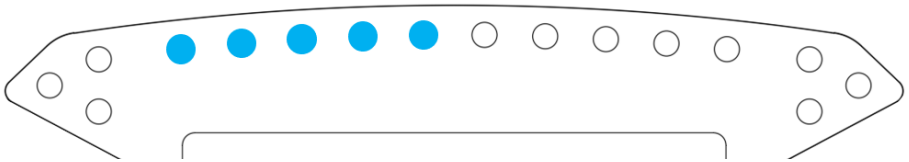
Dual Clutch Mode 1



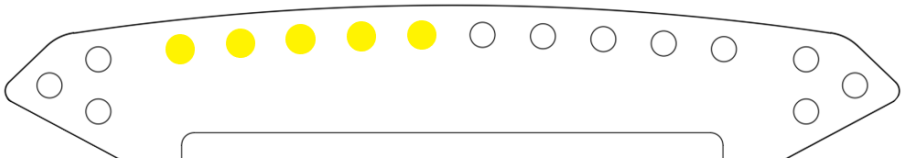
Dual Clutch Mode 2



Dual Clutch Mode 3



Dual Clutch Mode 4



The number of LEDs in DUAL-CLUTCH modes indicates the current bitepoint value in the selected preset.

BITEPOINT ADJUSTMENT

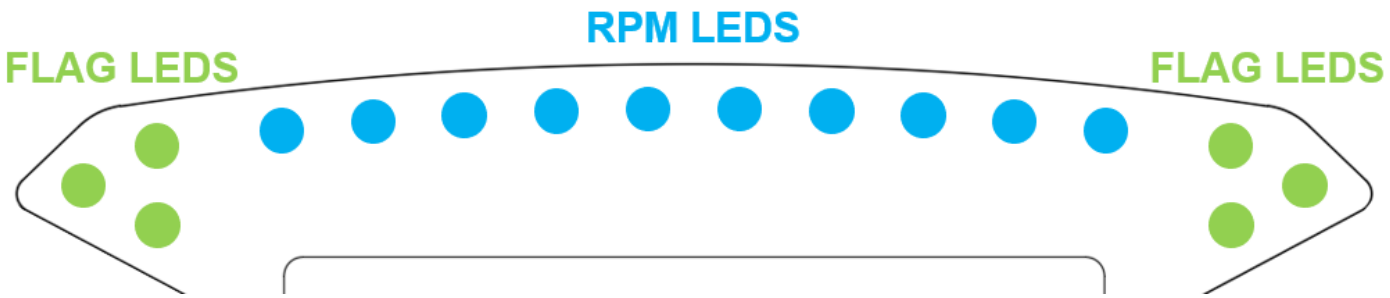
The bitepoint can only be adjusted in the DUAL-CLUTCH modes. Each DUAL-CLUTCH mode can store separate bitepoint values. This feature can be useful when switching often cars, so you can quickly switch between presets.

The bitepoint can be adjusted with the **COARSE** (bottom-left), **FINE** (bottom-right), and **ULTRA-FINE** (top-right) front rotary encoders while **pressing and holding** the **FN** button.

- COARSE – 10% (3 flag LEDs flash once)
- FINE – 1% (2 flag LEDs flash once)
- ULTRA-FINE – 0.1% (1 flag LED flashes once)

When adjusting the bitepoint, the current value (10% per LED) is shown on the middle 10 RPM LEDs. The visual feedback helps to know where the bitepoint roughly is.

For further help, the FLAG LEDs show each adjustment click: when increasing the bitepoint, the right-side FLAG LEDs flash once, when decreasing the bitepoint value, the left-side FLAG LEDs flash once each click.



CLUTCH CALIBRATION

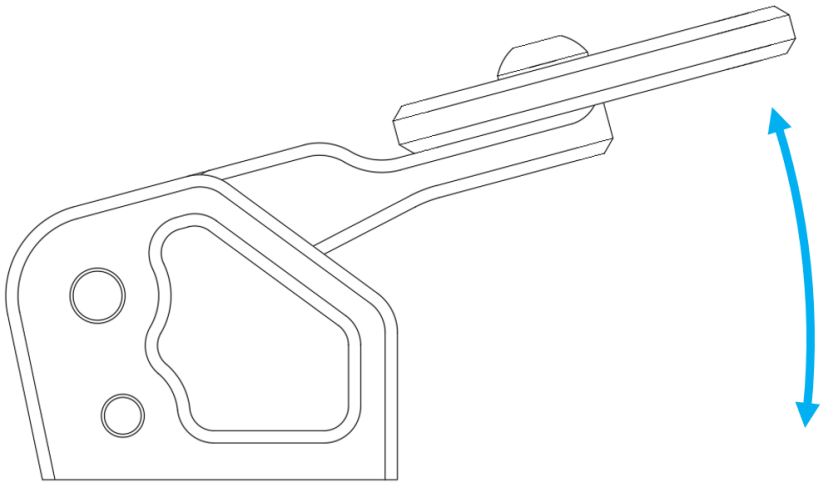
Before using the analog clutch paddles, calibration might be required. The clutch paddles are factory calibrated, but in case the values don't represent the position of the clutch paddles correctly, they need calibration.

Before starting calibration, it's recommended to switch to (separate) ANALOG mode by pressing and holding the **FN** button and pressing the **A** button. To check the analog values of the wheel, open the Windows Game Controller panel, select the wheel, and click "Properties". Here you can check the analog values after calibration.

Enter Calibration Mode by **pressing and holding the FN and the CAL button** at the same time for **5 sec**. LEDs will start flashing blue when entering Calibration Mode. Buttons can now be released.

Press and release both analog paddles fully 3-5 times.

After that, press and hold the FN button and press the CAL button once again to exit Calibration Mode. By exiting Calibration Mode, LEDs will stop flashing and the new calibration values will be saved.



WHEEL MOUNTING

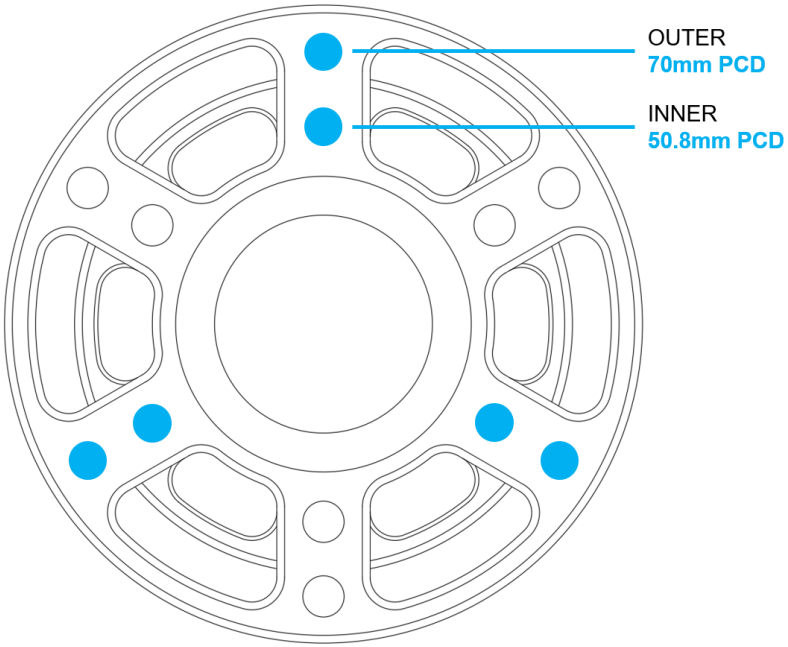
The steering wheel HUB supports **70mm** and **50.8mm** PCD mounting which allows installing of any standard Quick-Release or mounting directly to an FFB base.

The holes marked with blue are M5x0.8 threaded holes. The rest is a through hole with 5.3mm diameter (without thread).

If your Quick-Release has through holes without threads, the bolts should be inserted from the Quick-Release side and the threaded holes on the steering wheel HUB should be used.

If you use a Quick-Release with threaded holes, the bolts have to be inserted from the wheel side into the holes without threads of the HUB.

The package includes multiple sizes of M5 screws, the size must be chosen according to your QR/base.

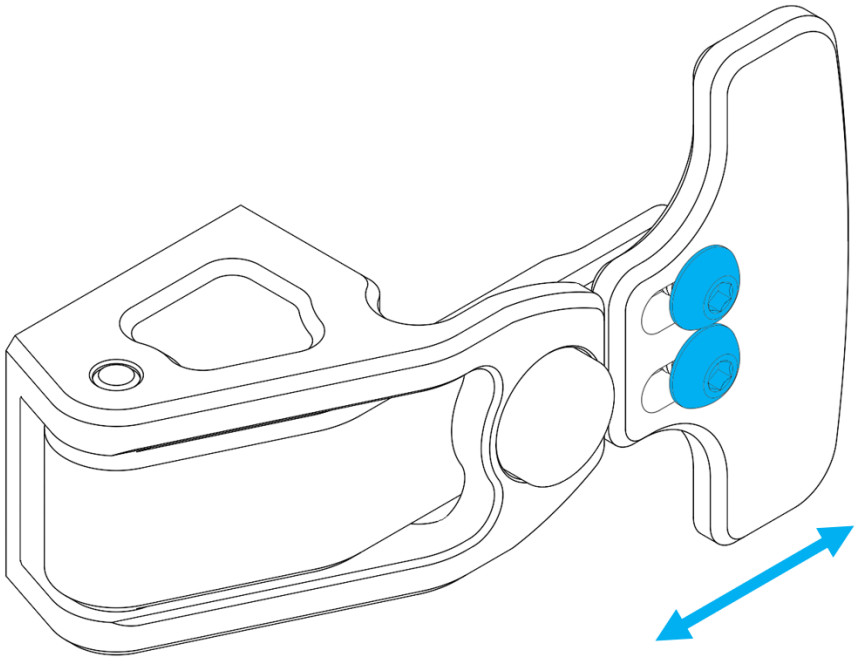


For further information refer to the manual/specification of your QR or base manufacturer.

PADDLE ADJUSTMENT

For adjusting the paddle positions, use the **2.5mm (smaller) HEX Allen key** included in the package.

Slightly loosen the screws marked with blue. If you are happy with the position of the paddles, tighten the screw.

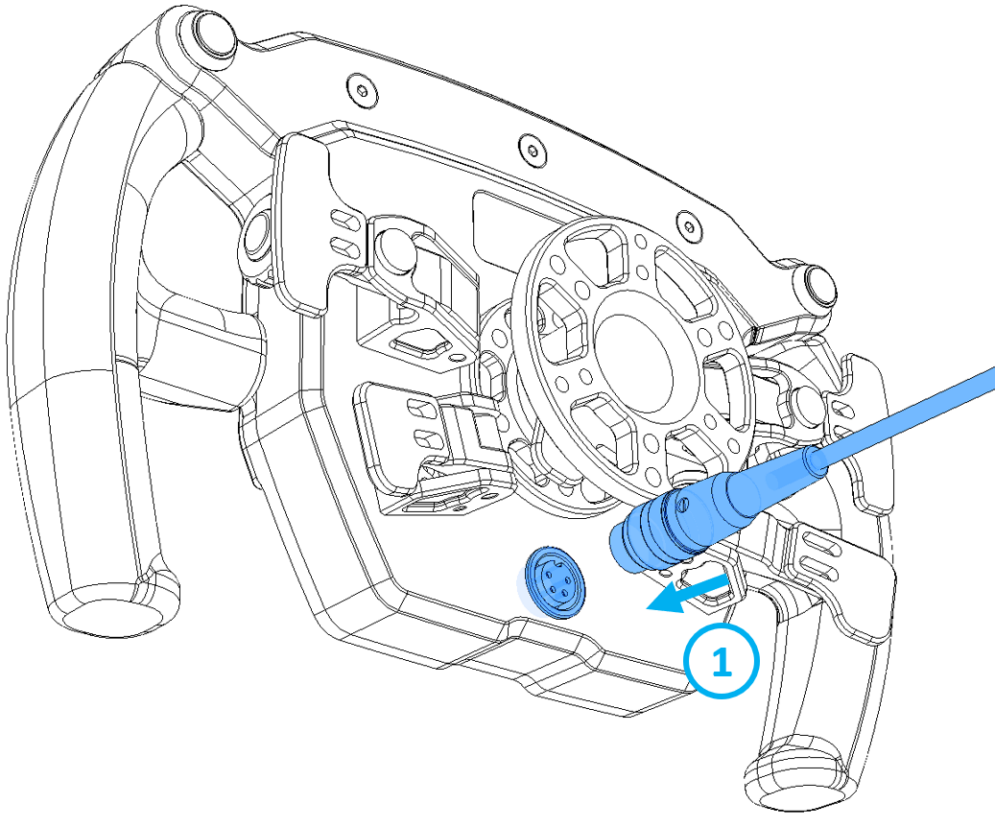


Do not overtighten the screws!
Overtightening the screws may damage the threads.

CONNECTING THE WHEEL

Always use the provided cables only.

Connect the coiled USB cable to your wheel, ensuring the correct orientation of the connector. Make sure the keying on the female and male sides match.



Ensure that the screw joint of the connector is tightly secured!
Loose connector can potentially cause damage to the product.

Connect the **coiled USB cable** to an active USB port, such as powered USB HUB, directly to the PC or PE Secure-Conn Box.

Extra tips:

- Connect wheel via a powered USB hub (e.g., TP-LINK UH720)
- Avoid excessively long USB extension cables to prevent data degradation.
- Try different USB ports if one is not performing as expected.
- Update AMD systems with known USB performance issues to AGESA BIOS 1.2.0.2 or higher (check motherboard manufacturer's website).
- Use a dedicated PCIE USB card with NEC chipset for optimal performance.

DISCONNECTING THE WHEEL

The wheel should be disconnected in the reverse order of how it was connected in the previous section. Always disconnect the USB-A plug first.

Disconnect the USB cables if you will not use this product for a long time.

SIMHUB CONFIGURATION

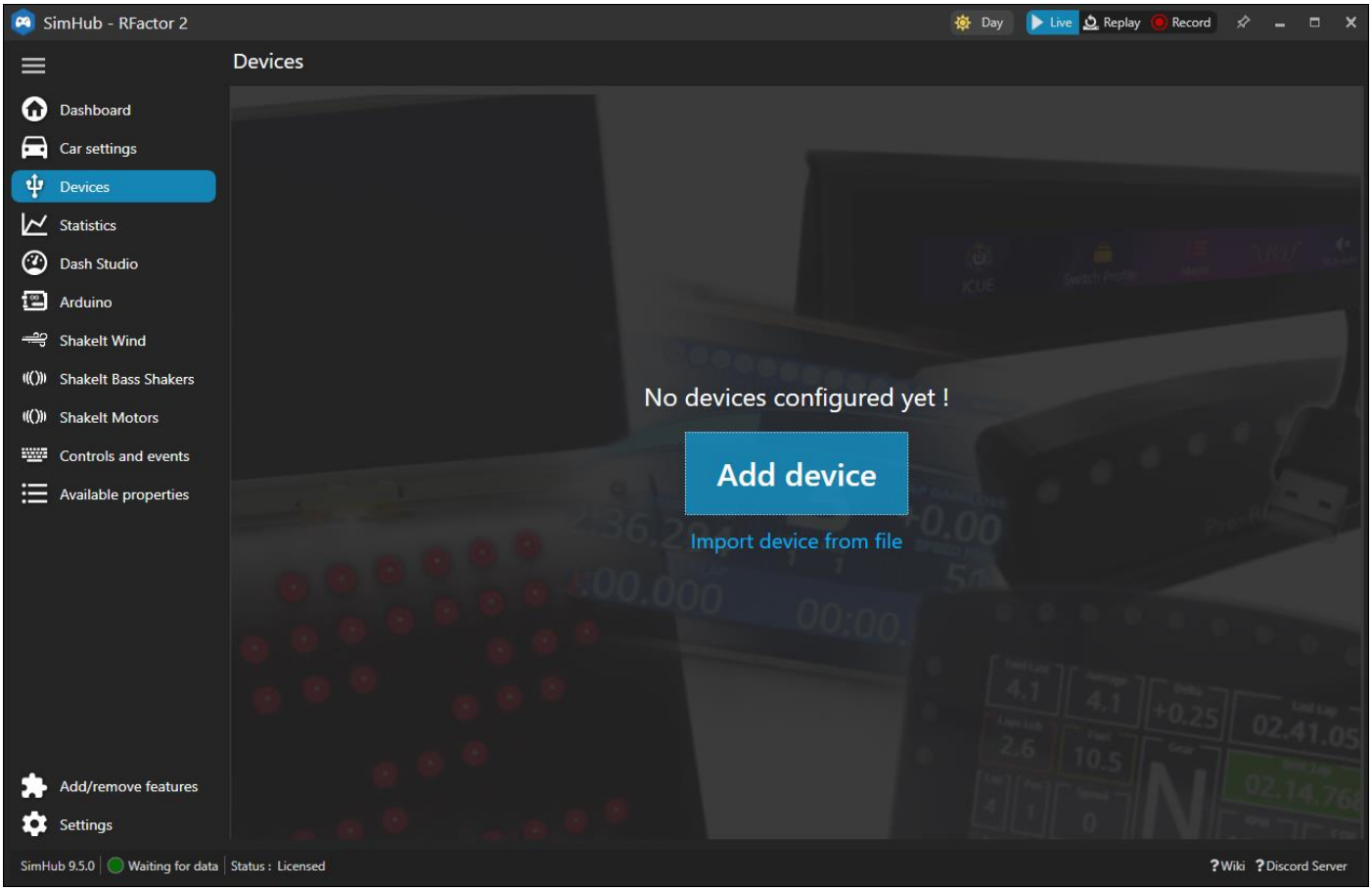
The LEDs and the display can be driven by **SimHub**.

Download and install the latest SimHub version from: https://www.simhubdash.com/

It's recommended to buy a SimHub license to unlock the display and LED FPS limit.

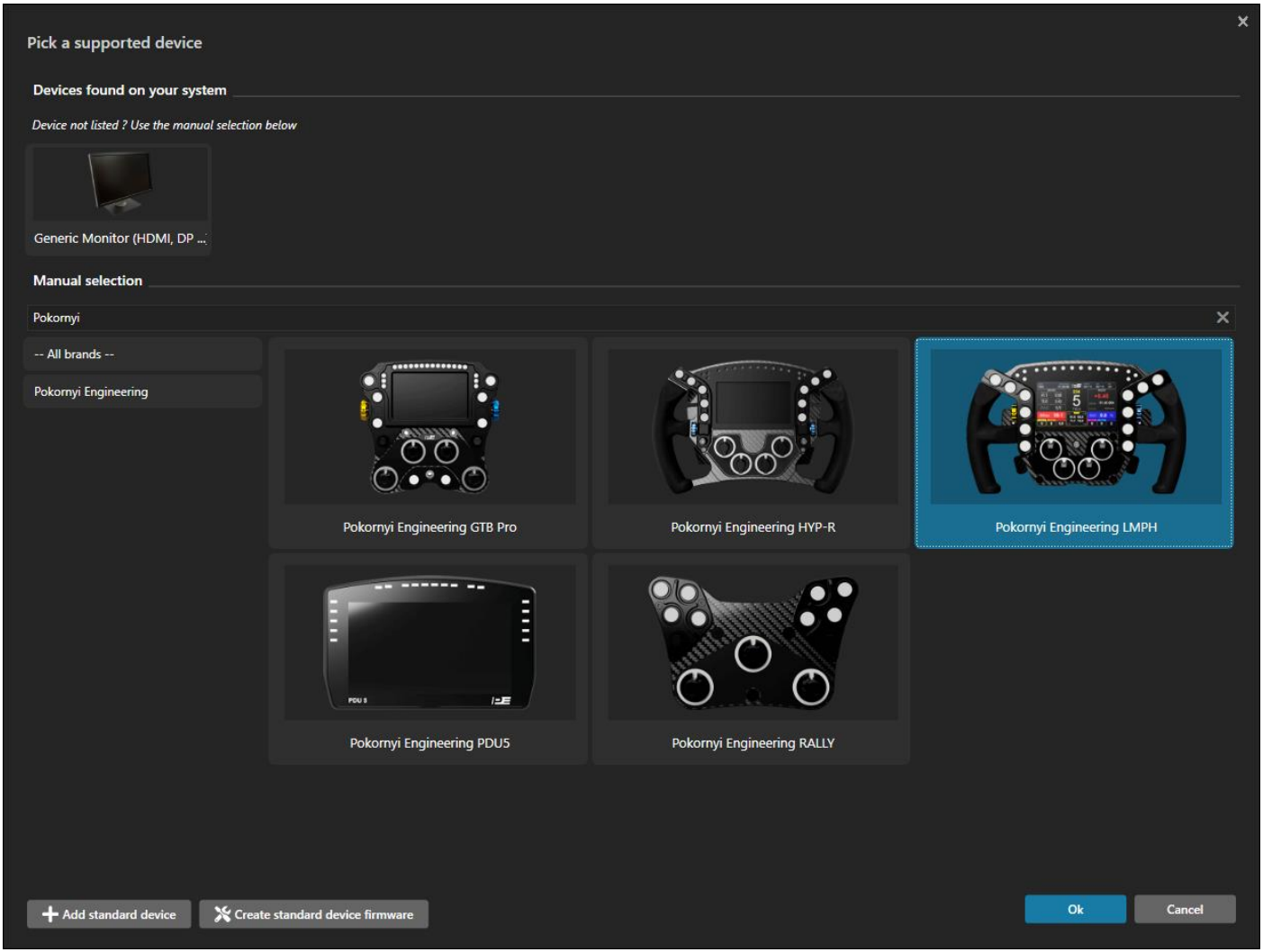
Make sure you use the latest SimHub version!
The LMPH is supported since v9.4.10.

Open SimHub and go to "**Devices"** page and click "**Add device**" button.



Select the ***Pokornyi Engineering LMPH*** from the list.

If the wheel is already connected, it will be listed in the first row.



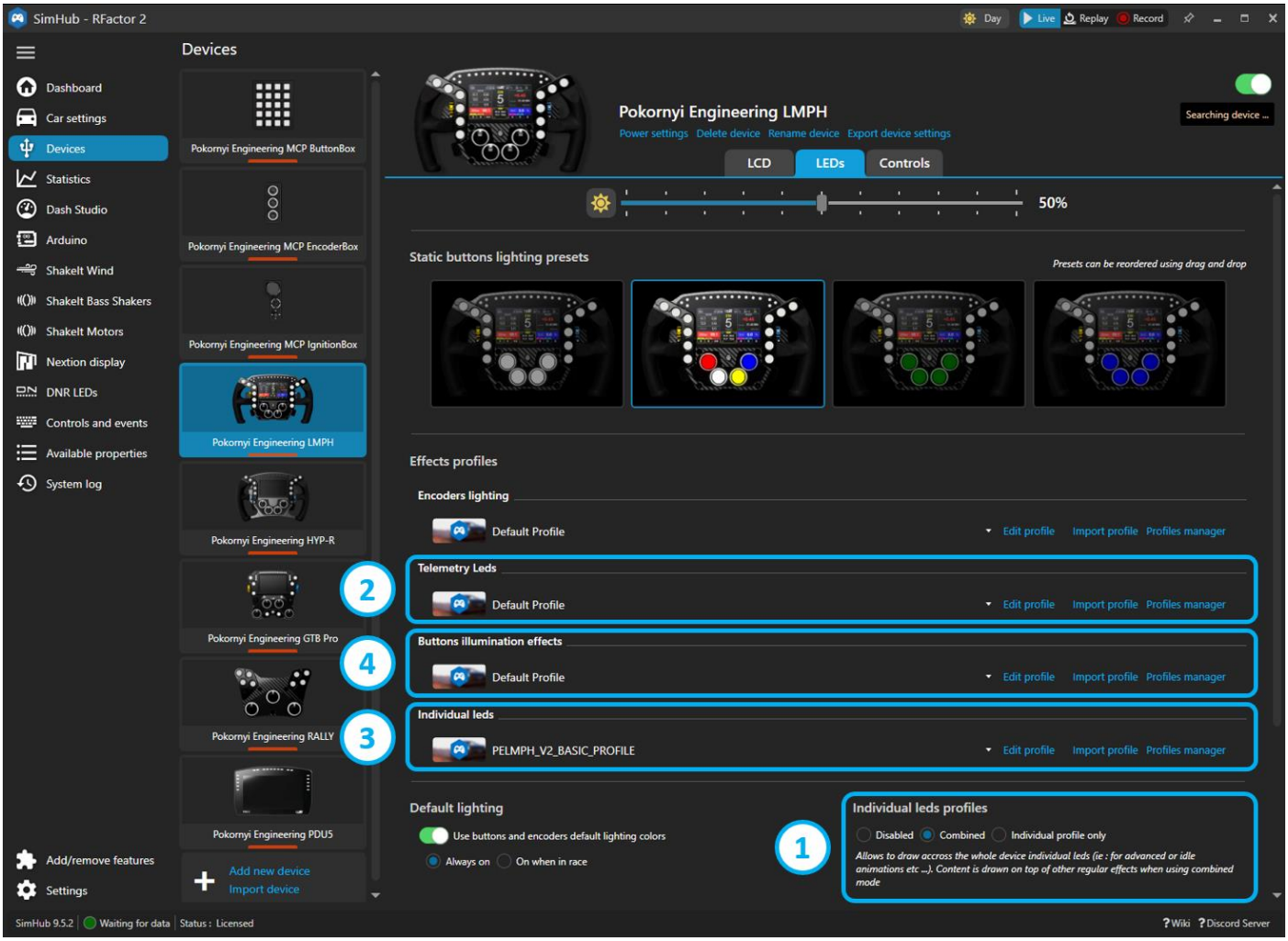
Once the device is added, feel free to play around with the settings.

The dash can be configured on the LCD, the LED profiles on the LEDs tab.

Our dash template: pokornyiengineering.com/downloads/PE-LMPH-DASH

The easiest is to configure the rotary backlight colors under the **Static buttons lighting presets.**

We recommend the selecting "**Individual leds profile**" **(1),** so you can load telemetry, individual leds, and buttons illumination effect separately.



(2) Download the telemetry LED profile: pokornyiengineering.com/downloads/PE-LMPH-LED Click import profile at the "**Telemetry leds**" and load the downloaded profile.

(3) Download the Rotary lighting profile: pokornyiengineering.com/downloads/PE-LMPH-IndividualEffect

Click import profile at the "**Individual leds**" and load the downloaded profile.

(4) Download the Buttons illumination effect profile: pokornyiengineering.com/downloads/PE-LMPH-ButtonsEffect

Click import profile at the "**Buttons illumination effects**" and load the downloaded profile.

The LEDs in this profile have 2 states: active or inactive. If a LED or group is active, the illumination of the button will be toggled. So, if the backlight is turned on, and an effect is active the backlight will be toggled of, if the backlight is turned off on the wheel, the backlight will turn on and vice-versa.

This feature can be used to flash the top buttons or turn off all the LEDs (e.g. simulation ignition on/off).

The VoCore Screen requires driver to be installed.
Drivers are automatically installed in the latest SimHub versions.

SERIAL NUMBER

Before contacting the Customer Support please note the serial number of your product.

Pokornyi Engineering LMPH S/N: .....

You can find the serial number (S/N) on the back side of the product. The serial number of the Button Box V2 starts with letters 'PE-LMPH-' and has additional 6 numbers, for example: **PE-LMPH-234101.**

ECOLOGY ADVICE

In the European Union: At the end of its working life, this product should not be disposed of with standard household waste, but rather dropped off at a collection point for the disposal of Waste Electrical and Electronic Equipment (WEEE) for recycling.

Depending on their characteristics, the materials may be recycled. Through recycling and other forms of processing Waste Electrical and Electronic Equipment, you can make a significant contribution towards helping to protect the environment.

Please contact your local authorities for information on the collection point nearest you. For all other countries: Please adhere to local recycling laws for electrical and electronic equipment.

Retain this information. Colors and decorations may vary.

This manual may be updated without notice.

Due to continuous improvement, the actual product may differ from the manual.

This manual is for reference only. For further information or support contact us at info@pokornyiengineering.com

www.pokornyiengineering.com