



PERRO

User guide

Before you start please read the manual carefully before you use the steering wheel.

Any modifications, tampering, changes or unauthorized uses of the product will void the warranty.

The steering wheel has no waterproof feature, please keep it away from water, rain, moisture and other items containing liquid such as vape, cups etc.

This wheel is designed for simulation purposes only.

Disconnect the USB cable from both sides if you will not use the product for a long time.





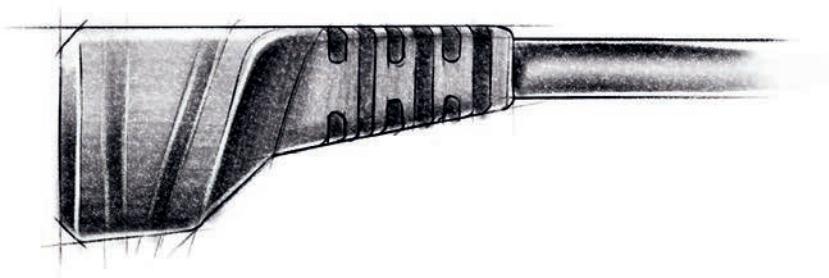
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1. USB/BLE connection and battery charging

The F-PRO introduces two new main features:

- ✔ A dual-mode that allows you to use the steering wheel via USB connection or through direct Bluetooth connection to the PC.
- ✔ The Q-CONN, the magnet connector for a fast and easy connection.



To connect the device via USB using the Q-CONN magnetic connector:

- ✔ Simply plug the Q-CONN connector to the mating connector on the back of the steering wheel. Make sure the USB-A end is connected to your pc.
- ✔ Turn the steering wheel on via the dedicated button.
- ✔ Start-up animation will be shown on the steering wheel, and the PC should immediately recognize the USB device.

To connect the device via BLE:

- ✔ Make sure the coiled cable is disconnected from the steering wheel.
- ✔ Turn on the steering wheel via the dedicated button.
- ✔ Start-up animation will be shown on the steering wheel, and BLE status led should flash. This means the wheel is in discovery mode or waiting to connect.
- ✔ Open the Bluetooth devices on your PC and click “add device”.
- ✔ Click on the “Bluetooth” option and wait for the device to show up in the device list.
- ✔ Select the F-PRO and wait for the pairing to end.

Once paired, each time the device is turned on it will automatically connect to the PC. Operating range is usually around 10 meters but it will be reduced if obstructions are present

between device and PC.

A dedicated bluetooth device with an external antenna is recommended. Standard miniature dongles might cause poor connection due to the small integrated antenna.



2. Battery charging

As soon as the Q-CONN cable is connected, the device will automatically start the battery charging process if needed.

Battery status led legend:

- Green means the battery is fully charged.
- Yellow means the battery is being charged.
- Flashing red means the battery is at 5% capacity or less and needs charging.

Charging on the fly while in BLE mode is possible and the connection will be used only to charge the battery without affecting the BLE communication. This is useful if the battery is low during a race.

A full battery charge should take around 2 to 4 hours depending on the connection used. USB 3.0 ports or powered hubs are recommended as they allow the device to draw more current to charge the battery.

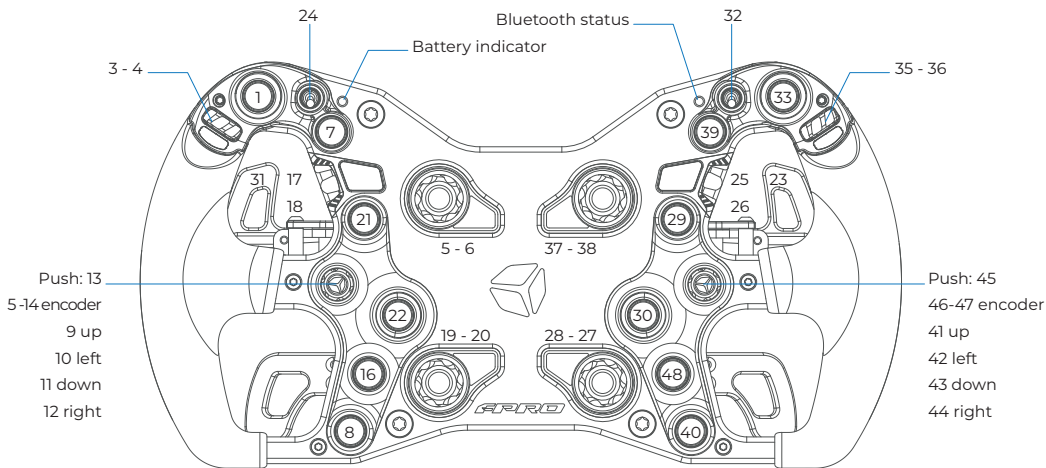
Battery life depends mostly on the LEDs setting used. With the LEDs all off, the battery will last approximately 50/60h. In case of LEDs all on to high brightness setting, the battery will last approximately 10h.

Battery level in % is also available from the Bluetooth connected device list in the Windows “Bluetooth and other devices” page.

On both connection methods, the device is seen by Windows as the same interface.

This means that re-mapping of controls in-game is not needed when using it via BLE or wired USB.

3. Interface introduction



4. Interface notes

The POV switches/funky switches/joysticks (up, down, left, right) are meant to work only if a “clicky” sound feedback occurs. Therefore there’s no risk to press the direction and accidentally enable the center click button.

Toggles 24 and 32 works this way: once the toggle has been activated the respective led will turn on, when the toggle has been flipped off it turns the led off. In the ON status the respective button is not seen as always pressed, it only activates the button for a few ms when flipped on or off.

Toggles are useful for on/off features like headlights, wipers, ABS/TC etc.

Make sure the toggle leds are synced correctly: e.g. if you activate one option without being in the sim, it will work in reverse once you are into the simulator.

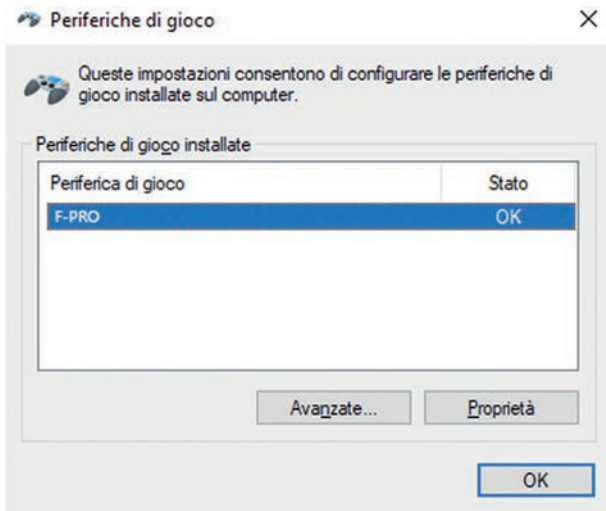
All buttons, dials and label LEDs are RGB. With the Cubesettings software you can easily customize the color and intensity of them, and even turn them completely off.

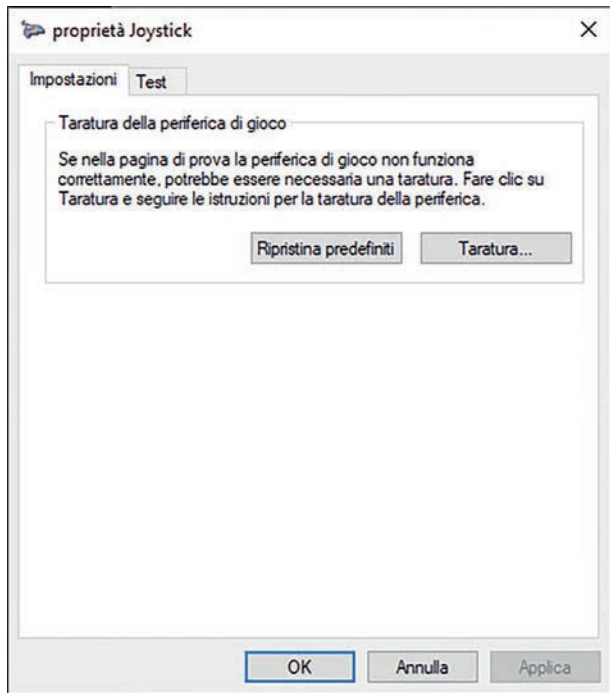
Paddle shifters now are auto-calibrating and no user input is required on this process.

5. Clutch calibration

Before using the analog clutch paddles it is necessary to calibrate them from the Windows game devices section. This ensures that the full travel is used.

Some simulators might read directly the device RAW data, but it is not always the case.





6. Launch control settings

By default the maximum value of the left clutch paddle can be adjusted with the respective slider in the Cubesettings app. Therefore, if the clutch slider is set in the middle of its travel, when fully depressing the left clutch paddle, its value will go from the minimum to the value set by the clutch slider, which is middle in this example.

The right paddle always works in a range from min to max travel, no matter how the clutch slider is set. This system allows the user to mimic the launch control system used in F1 cars until 2015, where it was possible to set the clutch bite point.

Finding the correct clutch bite point setting

In a practice session, set the clutch slider at around 50% of its travel, fully depress both clutch paddles, engage first gear, reach the optimal engine RPM, release the right clutch paddle. As the car starts gaining speed, release the left clutch paddle and shift gears as normal. If you notice that the clutch starts slipping too much, you will need to decrease the left clutch paddle max value. If you notice that the engine drops quickly in RPM, then you will need to increase the clutch slippage by increasing the slider value.

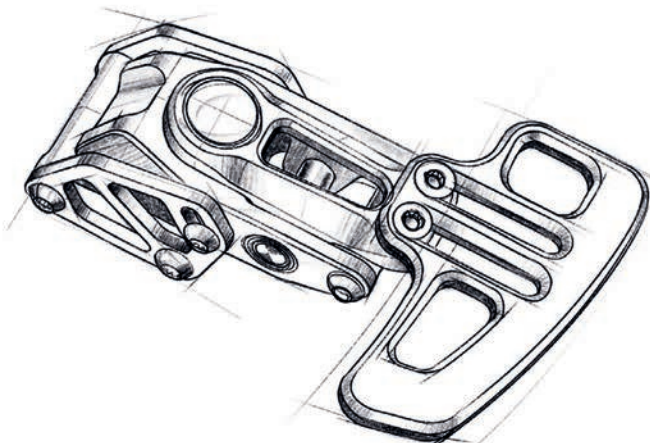
After each value modification, the “SAVE SETTINGS” button must be pressed.

This value is typically different for each car and different track conditions.

Default master clutch is the right one. This means that it is not affected by the slider value and it will always operate from min to max value.

It is possible to swap the master clutch analog paddle with the left one in the config page of the Cubesettings app.

Via the Cubesettings app it is also possible to set the analog paddles to separate instead of combined. This way the launch control is no longer available, but it is an useful feature especially for users with leg disabilities since it allows to set throttle and brake directly on the steering wheel.

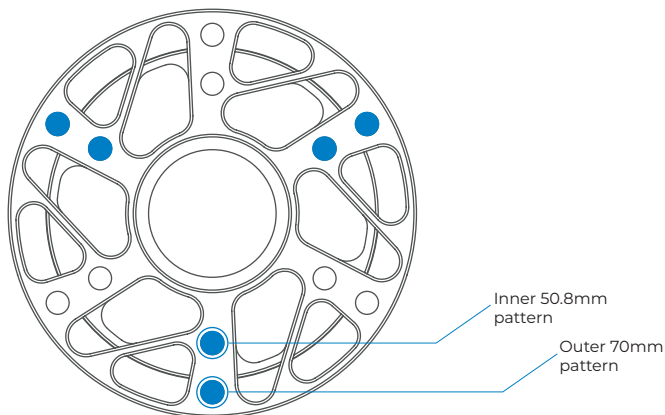


7. Wheel installation

Our universal hub on the back of the wheel body allows the user to install various adapter, or even connect it directly to your FFB base.

Highlighted in blue the M5x0.8 metric holes. In gray, 5,5mm through holes. Both of them are available in 70mm or 50.8mm bolt pattern.

Through holes are rotated by 180°, so flipping your adapter to match the wheel hub may be needed. Please refer to your adapter or motor manufacturer to ensure compatibility.



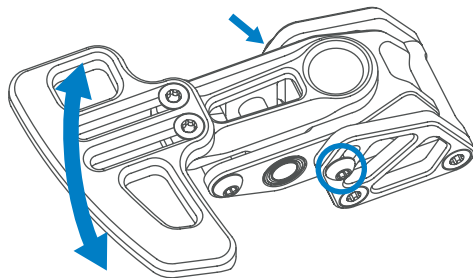
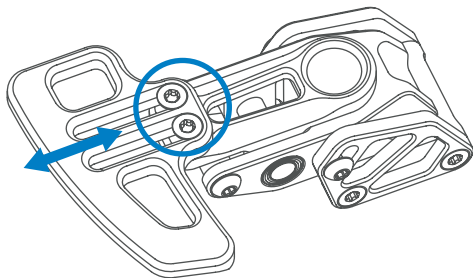
8. Paddles adjustment

Shift paddles can be easily adjusted to better suit your hand size and driving preferences.

T10 drive needed.

Length can be adjusted by slightly loosening the two screws highlighted in the right picture, and sliding forward/backwards the carbon paddle.

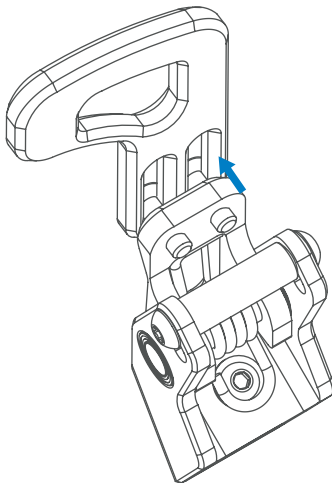
Reach can be adjusted by slightly loosening the two screws highlighted as the right picture and the two on the opposite side of the shifter as pointed by the small arrows, then rotating the lever body upwards/downwards. You may need to apply a bit of force.



9. Clutch paddles adjustment

The travel of the clutch paddles can be adjusted in the same way as the shifters.

Spring resistance can be adjusted by turning the screw by using the provided small L-shaped key as indicated in the pictured below:



10. Useful tips

Each wheel comes with a full sheet of stickers and a set of plastic tweezers useful to install them to your liking. Before applying the sticker make sure the surface it's clean.

Try to install the USB coiled cable by wrapping it loosely on your FFB motor shaft/adaptor in such a way that it will not suffer any strain even when doing full opposite steering rotations.

Make sure your rig is grounded correctly.

Each wheel comes with an auxiliary USB connector that comes out from the main hub.

This will be used with our Cube Controls QRX quick release kit.

Note



www.cubecontrols.com

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation.

If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

The device has been evaluated to meet general RF exposure requirement. The device can be used in portable exposure condition without restriction

FCC ID: 2A4EZ-V14