

XF1 ULTIMATE I MANUAL_{v0.9}

Injection moulded polyurethane replaceable grips

Aluminum alloy rear enclosure and carbon fiber panel

Supports wireless SimHub dashboards

4.3 inches IPS LCD with 800x480 pixels and 60 fps

Aluminum alloy screen frame and non-illuminated coupling LED bar

3+15+3 RGB LED rpm bar and buttons

Optional non-contact hall clutch and optional paddles

Clutch with adjustable bite point

Up to 49 buttons and 2 axes

70mm quick release holes and bolt holes

GX12 threaded USB port



Notes

- This racing wheel has screen components, so it is important to avoid pressing the screen during use and minimize contact with it.
- When connecting the racing wheel to the base, make sure that it is firmly attached before turning off the power.
- Due to the large number of RGB LEDs on the steering wheel, its power consumption is very high. Please ensure that the steering wheel is directly connected to a USB port on the back of the PC via the GX12 cable to meet the power requirements. If you need to extend the USB connection, be sure to use a USB extension cable or USB hub with an external power supply. Another option is to reduce the brightness of the RGB lights or turn them off completely.
- When using the wireless functionality of the steering wheel, it is advisable to place the wireless receiver within approximately 1 meter or closer to the steering wheel. Otherwise, it may result in a decrease in wireless speed. You can check the wireless quality through the steering wheel menu. Green indicates good wireless quality, orange indicates average wireless quality, which may cause steering wheel delay, and red indicates poor wireless quality with noticeable steering wheel delay.
- Any modifications, disassemble, tampering, changes or unauthorized uses of the product will void the warranty.
- The wireless function of the XF1 Ultimate operates on 2.4G frequency, so setting your environment's WiFi to 5G frequency can effectively avoid interference with the XF1 Ultimate. If you can only use 2.4G WiFi, please ensure that the Wireless Kit is at least 3 meters away from the WiFi antenna and try to set the WiFi channel to 1-6 as much as possible.
- For bases that may have noticeable EMI issues, such as the Fanatec DD1/2, the optimal choice is to connect the steering wheel using an externally powered USB hub, along with a USB isolator. Additionally, it is recommended to ensure that the DD1/2 has an additional grounding cable (<https://fanatec.com/us-en/faq/details/id/72>).
- Fanatec compatibility has only been tested with driver and hardware versions prior to May 1st, 2024.
- Leoxz is responsible for revising and explaining this manual, and reserves the right to make changes or corrections to the information and explanation provided without prior notice and without any responsibility.

What's included

- XF1 Ultimate Steering Wheel (QR and Wireless kit are optional) x1
- USB-GX12 Cable x1
- Custom Stickers x1
- Nylon Tweezers x1
- 6mm height paddle spacers/M3x14 bolts (You can choose whether to install it based on the size of your hand, x4 for Shifter Only and Shifter & Clutch versions, x8 for Shifter & Clutch & Option version)
- M3 Allen Key x1

Feature

- 295mm polyurethane grip, produced by high-precision molds, has a special coating on its surface, and its delicate texture satisfies various driving needs.
- The back cover and paddles are processed using CNC technology and coated with black anodizing to achieve optimal appearance and lasting durability.
- The front panel and paddles are made of 3K carbon fiber with high-end textured coating.
- 4.3 inch IPS screen with a resolution of 800x480 pixels and 60fps refresh rate, and its dashboard can be customized through SimHub.
- Aluminum alloy screen surround frame.
- Low latency 2.4G wireless functionality(need to purchase Wireless Kit separately).
- In Fanatec mode, it is compatible with PS4/5 (tested only on DD Pro and GT7 and F1 24 only, need to purchase Wireless Kit separately)
- Supports wireless SimHub dashboards.
- 21+10+3 RGB LEDs that can be customized through SimHub.
- 10 RGB buttons, 2 Multi-directional joystick with integrated encoder and 3 push-button encoders, 6 thumb knob.
- It comes with a standard magnetic silent shifter paddle, and additional clutch paddles and option paddles are available as options.
- The clutch paddles can be set to bite point mode, axis mode.
- All paddles use non-contact Hall sensors for long-lasting durability.
- 70mm diameter QR mounting hole.
- The Fanatec QR produced by Leoxz can be used to unlock the torque of the Fanatec base.
- Fanatec mode for compatibility with PS4/5 on Fanatec bases. Supports access to the Fanatec Tuning Menu for adjusting base settings.
- Equipped with a industrial-grade GX12 threaded USB interface and a USB double-twisted cable with nylon tensile resistance, subjected to 100,000 cycles of cable twisting tests.

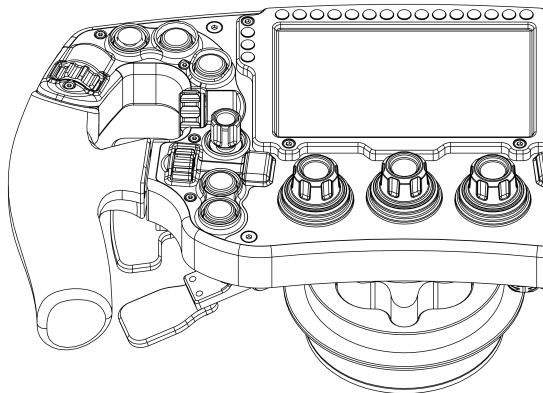
Compatible Hardware

- Simucube SC1, SC2
- Fanatec DD1, DD2, CSL DD, DD Pro, DD+ (To unlock the base torque, you need to use the Fanatec QR produced and sold by Leoxz, as the official Fanatec QR is not compatible with third-party wheels)
- Simagic Alpha Mini, Alpha, Alpha ultimate
- Moza R12 (The V1 base does not support QR power supply. The V2 base supports QR functionality, but Leoxz has only tested it on R12, so the compatibility with other bases cannot be guaranteed. In this case, USB cable can be used for power supply)
- Asetek Direct Drive Wheelbas(Installation of the Invicta Quick Release Adapter is required for the steering wheel)
- If using Simagic, Moza, or Fanatec base, the steering wheel can be powered wirelessly through QR produced and sold by Leoxz.

Interface

21 RGB LED Bar compatible with Simhub
13 RGB LED Buttons compatible with Simhub
800x480 IPS LCD compatible with Simhub

10 Momentary button
6 Thumb rotary encoder
3 Front rotary encoder with push button
2 Multi-directional joystick with integrated encoder
2 non-contact hall shifter paddle
2 Optional non-contact hall clutch paddle
2 Optional non-contact hall option paddle
Optional multiple optional types of QR
Optional wireless kit for wireless connection on PC and updating the dashboard on PlayStation.



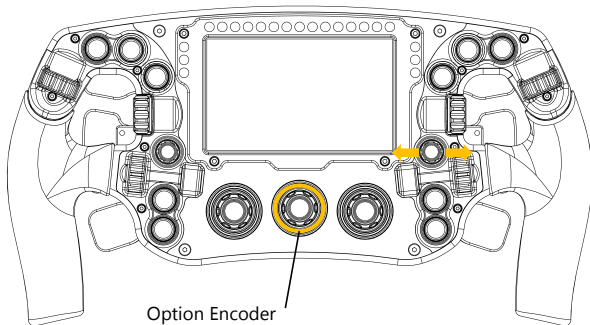
- Keep in mind that on the page for the Windows USB Gaming device, some of the buttons will not show. This is due to the Windows graphic interface's limitation in detecting more than 32 buttons.

Quick Controls

Long-pressing the option encoder allows you to access the quick control menu, enabling you to switch the steering wheel between different modes(USB mode, Wireless mode and Fanatec mode).

After entering the quick control menu, you can use the left and right buttons on the right multi-directional joystick to select different menus. Rotating the multi-directional joystick allows you to choose various parameters.

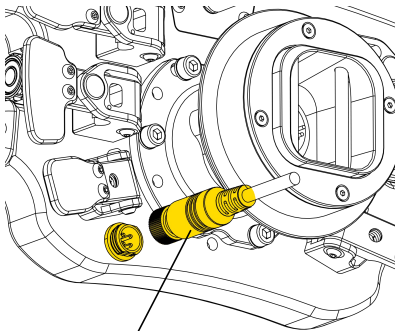
When in the quick control menu, you can exit the menu by pressing the option encoder again.



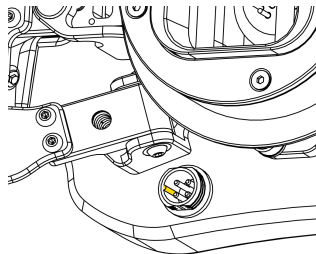
Wheel Mode-USB

XF1 Ultimate can only be connected via USB cable and requires a minimum input power of 5V 1.0A to ensure proper operation. Otherwise, unexpected errors may occur.

The USB-GX12 cable will ensure a stable and reliable connection.



USB-GX12 Cable



Make sure that the USB-GX12 cable is aligned with the raised mark of the GX12 interface, otherwise it will cause permanent damage to the socket if it is inserted forcibly.

Wheel Mode-Wireless

To enter this mode, the steering wheel must have the Wireless Kit installed, and the Wireless Kit Dongle should be plugged into the PC USB port.

Long-press the Wireless Kit Dongle button to enter pairing mode, simultaneously switching the quick control menu to the <Mode> menu. Press and hold down the right Multi-directional joystick to initiate pairing for the steering wheel. Once the pairing is successful, the steering wheel screen will display "Pairing completed". **The steering wheel comes paired from the factory, and under normal circumstances, users do not need to pair it again.**

The wireless mode of the XF1 Ultimate allows the steering wheel to operate without any USB connection. The ultra-low 2.4G latency communication enables the steering wheel to perform almost all wired connection functions, including game controller input and Simhub dashboard.

Recommend placing the Wireless Kit Dongle as close to the steering wheel as possible. In environments with complex electromagnetic interference, it may be necessary to position the Wireless Kit Dongle within 0.5 meters to ensure optimal wireless signal.

The wireless function of the XF1 Ultimate operates on 2.4G frequency, so setting your environment's WiFi to 5G frequency can effectively avoid interference with the XF1 Ultimate. If you can only use 2.4G WiFi, please ensure that the Wireless Kit is at least 3 meters away from the WiFi antenna and try to set the WiFi channel to 1-6 as much as possible.

- * In this mode, you can operate without using a USB cable, but the steering wheel must be powered using a QR with power supply functionality. If the base cannot supply power to the steering wheel through the QR, this mode is not available.
- * When using the wireless functionality of the steering wheel, it is recommended to place the wireless dongle within approximately 0.5 meter or closer to the steering wheel, and there should be no obstruction between the wireless dongle and the steering wheel. Otherwise, it may result in a decrease in wireless speed. You can check the wireless quality through the steering wheel menu. Green indicates good wireless quality, orange indicates average wireless quality, which may cause steering wheel delay, and red indicates poor wireless quality with noticeable steering wheel delay. If your PC is more than 0.5 meter away from the steering wheel, please try using USB hub or USB extension cable to connect the wireless dongle, and place the USB hub or extension cable closer to the steering wheel.
- * The Wireless Kit is not included with the steering wheel and must be purchased separately.

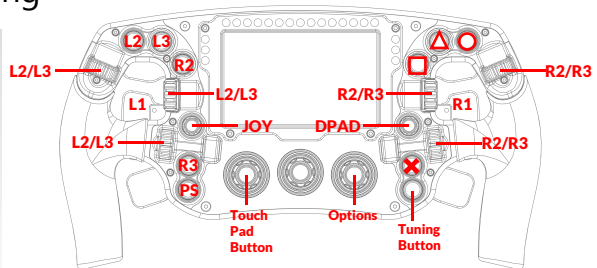
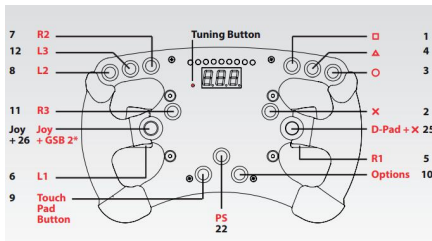


Wireless Kit

Wheel Mode-Fanatec

In this mode, the steering wheel does not require a USB connection, it can communicate directly with the Fanatec base. You can use the steering wheel to access the Fanatec Tuning Menu and configure settings on the Fanatec base.

Fanatec Mode Button Mapping



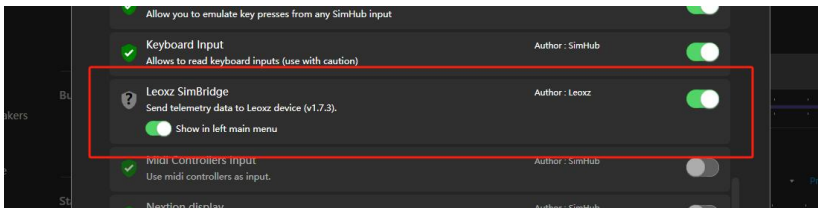
Due to the limitation on the number of Fanatec buttons, only the buttons and encoders marked in the picture above can function in this mode.

* Fanatec compatibility has only been tested with driver and hardware versions prior to May 1st, 2024.

* The wheel must be equipped with a Fanatec QR1 or QR2 manufactured by Leoxz.

SimBridge Plugin For Simhub

XF1 Ultimate will be compatible with simhub through simbridge, enabling dashboard and LEDs customization. To use it, you need to place SimBridge in the Simhub installation directory and restart Simhub for it to take effect.

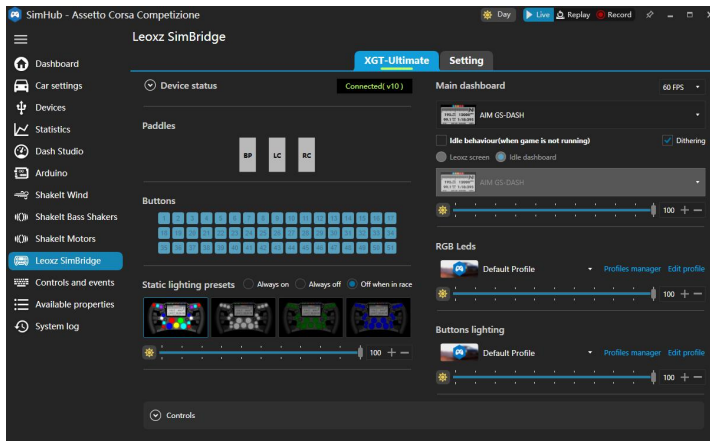


- Download the latest version on the website www.leoxz.com. The latest version of the SimBridge interface may differ slightly from the images in the manual.

Simhub Compatibility

XF1 Ultimate is a plug-and-play device, so you can connect it to SimHub without having to complicatedly install any drivers.

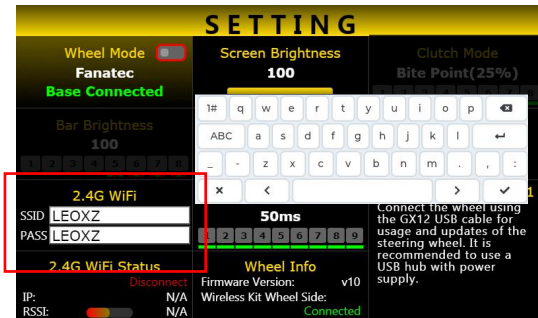
You can display various dashboards on screen and change brightness through SimHub, and you can also achieve various lighting effects by creating different profiles.



Fanatec Mode

The XF1 Ultimate can be switched to Fanatec mode, in which the steering wheel will emulate Fanatec steering wheel and activate the built-in dashboard. This mode is primarily used to allow the steering wheel to work on PS4/5.

Updating the built-in dashboard requires the steering wheel to be connected to a Wi-Fi network. Please ensure that both the PS4/5 and the steering wheel are connected to the same 2.4GHz Wi-Fi network.



Use the right Multi-directional joystick to move the cursor to the <2.4G WiFi> menu. A keyboard will pop up for entering the Wi-Fi name and password. Use the left Multi-directional joystick to control the keyboard, moving the cursor up, down, left, and right, and press to confirm the input.

- The steering wheel can only connect to the 2.4GHz WiFi signal of the router. Please make sure that your router is capable of broadcasting a 2.4GHz frequency WiFi signal, or else the steering wheel will be unable to connect to the network.
- The maximum length for both the WiFi SSID and password input is 30 characters. Any SSID or password exceeding 30 characters will not be supported.

SimHub Controls

By binding any controller or keyboard input, you can quickly control the XF1 Ultimate dashboards switching, screen and LEDs brightness, clutch paddles and bite point value.

The image shows two overlapping windows from the SimHub application. The background window is the 'Controls' menu, which lists various actions with 'Click to configure' links. The foreground window is a 'Pick a control' dialog box titled 'Waiting for input'. It features a dropdown menu for 'Press type' set to 'ShortAndLongPress', 'SAVE' and 'Cancel' buttons, and a list of available input plugins with their status.

Controls

- Cycle next dash template [Click to configure](#)
- Cycle previous dash template [Click to configure](#)
- Cycle only through favorites dash
- Show next dash screen [Click to configure](#)
- Show previous dash screen [Click to configure](#)
- Show first dash screen (for the current in game or idle mode) [Click to configure](#)
- Trigger dash action A [Click to configure](#)
- Trigger dash action B [Click to configure](#)
- Trigger dash action C [Click to configure](#)
- Trigger dash action D [Click to configure](#)
- Screen brightness + [Click to configure](#)
- Screen brightness - [Click to configure](#)
- Brightness change steps 1 + -
- Leds brightness + [Click to configure](#)
- Leds brightness - [Click to configure](#)
- Brightness change steps 1 + -

Pick a control

Waiting for input

Press type: ShortAndLongPress

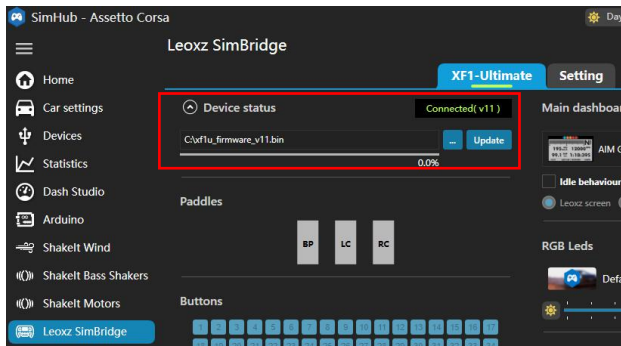
[SAVE](#) [Cancel](#)

Available input plugins (You can manage them from simhub settings)

Controllers input	Enabled
Keyboard Input	Enabled
Midi Controllers Input	Disabled
Control mapper	Disabled

Firmware Update

Through the “Setting” menu of Simbridge, you can check the current firmware version of XF1 Ultimate and update the latest firmware. Once the update is completed, XF1 Ultimate will automatically restart.

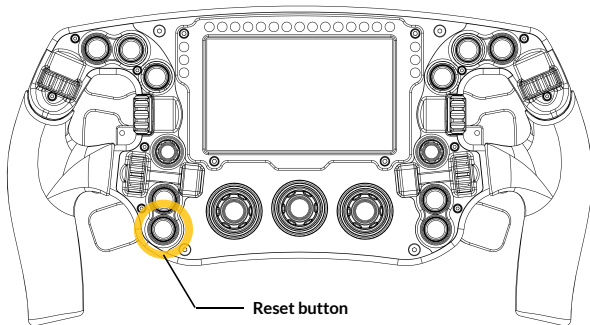


- You can download the latest firmware on the website www.leoxz.com. Do not operate the steering wheel during the update process, as it may cause unexpected errors.

Hardware Reset

If the firmware update fails and the steering wheel cannot start normally, please try hardware reset to force the steering wheel to enter Bootload mode and update the firmware again.

1. Disconnect the power to the steering wheel to keep the steering wheel in a power-off state.
2. Press the Reset button.
3. While holding down the Reset button, insert the USB cable to start the steering wheel. If the button is still pressed when starting, the steering wheel will be forced into Bootload mode.
4. Try updating the firmware again.



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www.leoxz.com

support@leoxz.com

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