

FANATEC[®]

CSL Elite Racing Wheel



Manual

US



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To get the most out of your CSL Elite Racing Wheel, please read this manual before use. It contains important health and safety information and should be retained for future reference.

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 **WARNING!** Musculoskeletal disorders

Use of game controllers, keyboards, mice, or other electronic input devices may be linked to serious injuries or disorders. When playing video games, as with many activities, you may experience occasional discomfort in your hands, arms, shoulders, neck, or other parts of your body. However, if you experience symptoms such as persistent or recurring discomfort, pain, throbbing, aching, tingling, numbness, burning sensation, or stiffness, **DO NOT IGNORE THESE WARNING SIGNS. PROMPTLY SEE A QUALIFIED HEALTH PROFESSIONAL**, even if symptoms occur when you are not playing a video game. Symptoms such as these can be associated with painful and sometimes permanently disabling injuries or disorders of the nerves, muscles, tendons, blood vessels, and other parts of the body. These musculoskeletal disorders (MSDs) include carpal tunnel syndrome, tendonitis, tenosynovitis, vibration syndromes, and other conditions.

While researchers are not yet able to answer many questions about MSDs, there is general agreement that many factors may be linked to their occurrence, including medical and physical conditions, stress and how one copes with it, overall health, and how a person positions and uses their body during work and other activities (including playing a video game). Some studies suggest that the amount of time a person performs an activity may also be a factor. If you have questions about how your own lifestyle, activities, or medical or physical condition may be related to MSDs, see a qualified health professional.

1

GENERAL

 **ATTENTION**

- The device must not be exposed to rain or humidity in order to avoid risk of fire and/or electric shock.
- Operating room temperature: 59°F - 95°F
- The recommended operation time of the wheel with continuous force feedback activity is 1 hour.
- Excessive use may cause health risks. We recommend to take a break of 5 minutes every 20 minutes, and do not drive for more than 2 hours per day.
- We strongly advise you to not drive a vehicle immediately after using a video game.
- Utilization of the vibration and Force Feedback function may cause damage to your health.
- In case of interference with other wireless 2.4 GHz devices, the interfering devices must be removed or switched off.
- Not intended for children under the age of 6 years old. Contains small pieces which pose a choking hazard!
- Do not open the casing of the device.
- This device contains components that cannot be repaired by the user, opening will void the warranty.

 **WARNING!** Electrical Safety

The CSL Elite Racing Wheel must be connected to an appropriate power source:

- Use only the power supply and power cord that came with your CSL Elite Racing Wheel. Replacements may only be issued from an authorized repair center.
- Do not use non-standard power sources, such as generators or inverters, even if the voltage and frequency appear acceptable. Only use AC power provided by a standard wall outlet.
- To avoid damage, do not expose your CSL Elite Racing Wheel to sources of heat.
- When connecting and / or disconnecting any steering wheel to / from CSL Elite Racing Wheel take care of the pins inside the quick release.
- Only use Fanatec® steering wheels with the CSL Elite Racing Wheel base.
- Do not try to use the CSL Elite Racing Wheel with an external power source different from the power supply packaged with the CSL Elite Racing Wheel or received from an authorized repair center.
- Unplug the power cord of your CSL Elite Racing Wheel during storms or when unused for long periods of time.
- If the CSL Elite Racing Wheel becomes damaged in any way, stop using it immediately and contact Fanatec® Customer Support.



GENERAL NOTES

- CSL Elite Racing Wheel is fully usable out-of-box. We always recommend updating to the latest firmware. See chapter 'Firmware and driver update' for more details. A PC is required to update your firmware.
- All specifications in this document are subject to change. The CSL Elite Racing Wheel firmware and/or PC driver may be updated to implement new features or general improvements.
- This product contains the CSL Elite Steering Wheel (PS4™ version), all other Fanatec® steering wheels which might be mentioned in this manual are not included within the CSL Elite Racing Wheel package and sold separately. You can obtain them from the Fanatec webshop: <https://www.fanatec.com/us-en/>
- Additional peripheral devices like shifters, pedals, LED displays and others which might be mentioned in this manual are not included within the CSL Elite Racing Wheel package and are sold separately. You can obtain them from the Fanatec Webshop: <https://www.fanatec.com/us-en/>
- This manual discusses assembly, connections, and functions related to Fanatec® steering wheels and other additional devices (e.g. PlayStation®4 and PC's.) This is not a replacement manual for the other corresponding products! Read the quick guides or user manuals for the other products as well!
- The warranty does not include defects that are due to commercial use of the product. See chapter "Warranty" at the end of this user manual as well as the terms & conditions at www.fanatec.com for more details.
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INTRODUCTION

Thank you for purchasing the CSL Elite Racing Wheel for PlayStation®4. This innovative product offers precise steering, strong force feedback through a brushless servo motor, smooth belt drive, and 1080° rotation built into a solid wheel base using an automotive-grade quick release.

The steering wheel also offers some innovations you've never seen before, such as interchangeable button caps. The original PlayStation®4 button caps can be replaced with the included racing style button caps. The shifter paddles offer a high quality haptic feedback/click. The dark grey leather rim grip with the blue stitching provides a fine finish and comfortable feeling in the driver's hands.

Choose from a wide variety of compatible Fanatec steering wheels, such as the CSL Elite P1, BMW M3 GT2, Formula V2, Porsche 918 RSR, and the Universal Hub for Xbox One. Pick a wheel that best suits the car you're driving - it's up to you!

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COMPATIBILITY

The CSL Elite Racing Wheel (CSL E RW PS4) can be used with a wide range of CSL and ClubSport series steering wheels. Preference will depend on your personal driving style – it is simply your choice! Additional peripheral devices from Fanatec® such as pedals, shifters, and handbrake are fully compatible with the CSL Elite Racing Wheel. You can obtain them from the Fanatec web-shop: <https://www.fanatec.com/us-en/>

The CSL Elite Racing Wheel can be used on PlayStation®4 and PC*.

 **IMPORTANT:** CSL Elite Racing Wheel is fully usable out-of-box. We always recommend updating to the latest firmware. See chapter 'Firmware and driver update' for more details. A PC is required to update your firmware.

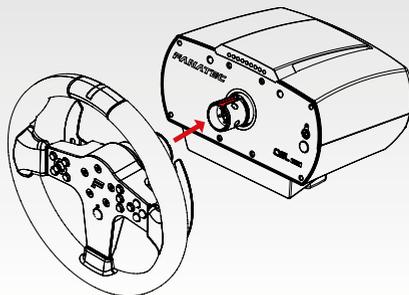
*PC compatibility not tested nor endorsed by Sony Interactive Entertainment LLC.

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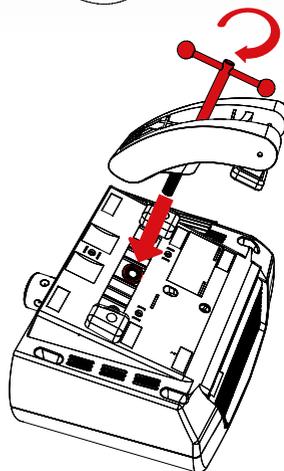
PLUG & PLAY

This chapter shows just a quick plug & play guide and is not a replacement for the chapters afterwards, we recommend to read the later chapters to achieve the best user experience and get your probably upcoming questions answered. Especially refer to chapter 10 'Troubleshooting' to get quick help if needed.

Slide CSL Elite Steering Wheel onto wheel base axle. Turn the steering wheel top side down, insert the fixation screw and tighten the clamp mechanism.

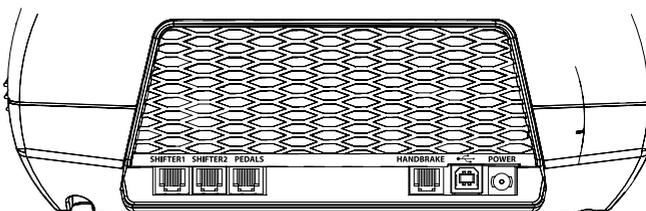


Mount the table clamp to the base bottom side and clamp the CSL Elite Racing Wheel to your table.



Connect your peripheral devices to the corresponding port at the CSL Elite Racing Wheel back side.

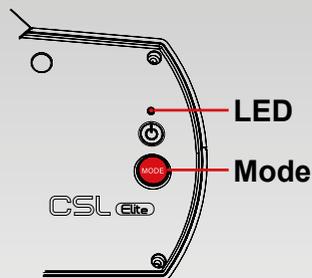
Also connect the PS4™ system or your PC* to the USB port and plug in the power supply.



Power on the CSL Elite Racing Wheel and wait until calibration run is completed.

Switch to the mode you want to use by pressing the mode button:

- Blue indicates „PlayStation®4 mode“
- Red indicates „PC* mode“
- Purple indicates „ClubSport Wheel Base V2 compatibility mode“



For use on PS4™ systems please press the PS button at the beginning to connect the wheel to the active user profile. The PlayStation®4 will display a system notification on your screen.

Your setup is ready to use now. If you have difficulties please check the following chapters of this user manual, there are much more detailed descriptions for each of the above steps.

5

PREPARATION

4.1 Package contents

CSL Elite Wheel Base (PS4™ version)



Table clamp



Table clamp screw with handle



Power supply unit



Power supply



USB connection cable with straight plug



O-Ring (O1) (for mounting ClubSport Static Shifter Paddles)



CSL Elite Steering Wheel (PS4™ version)



Allen key 5 mm



Fixation screw M6 x 18 mm



Black washers (for mounting ClubSport Static Shifter Paddles)



Racing style button caps for
CSL Elite Steering Wheel (PS4™ version)



PS4™ button caps for (optional)
ClubSport steering wheels



Quick Guide

6

ASSEMBLY

6.1 Plan your configuration

To operate the CSL Elite Racing Wheel plug your steering wheel onto the quick release shaft and get started. Connect the CSL Elite Racing Wheel to your PlayStation®4 system or PC* by using the USB cable.

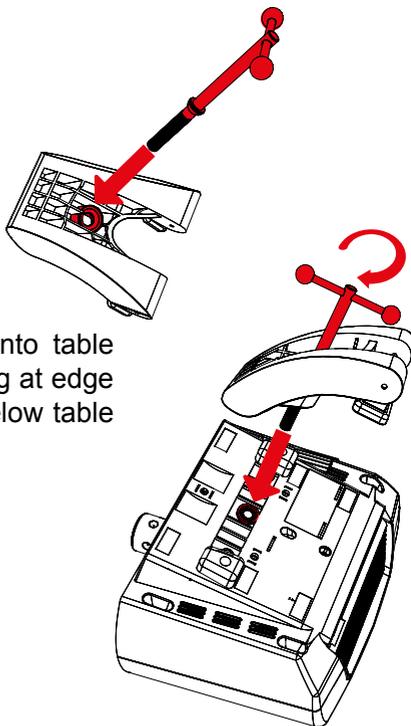
Please check the 'Connections' chapter to see which kind of peripheral devices must be connected to which socket on the CSL Elite Racing Wheel. All devices have to be connected to the CSL Elite Racing Wheel before powering ON to allow proper detection and operation.

*PC compatibility not tested nor endorsed by Sony Interactive Entertainment LLC.

6.2 Mounting the CSL Elite Racing Wheel using the table clamp

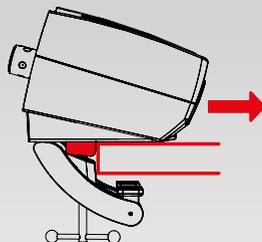
Insert the threaded rod with handles into the table clamp.

Turn the table clamp screw into the bottom center of the CSL Elite Racing Wheel.

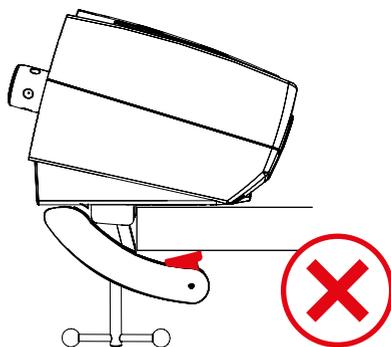
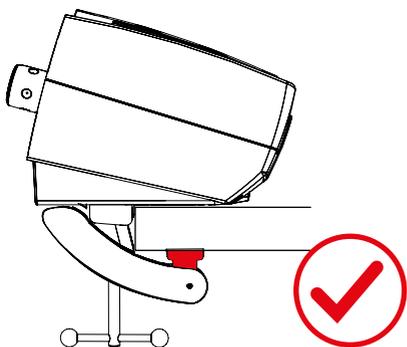
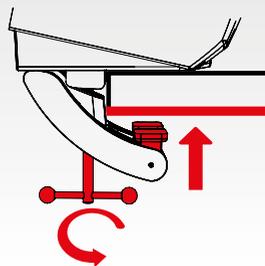


Slide the CSL Elite Racing Wheel onto table plate until the limiter blocks stop sliding at edge of the table. Table clamp has to be below table top.

Slide the CSL Elite Racing Wheel onto the table plate until the limiter blocks are flush with the table edge. The table clamp must be below the table top.

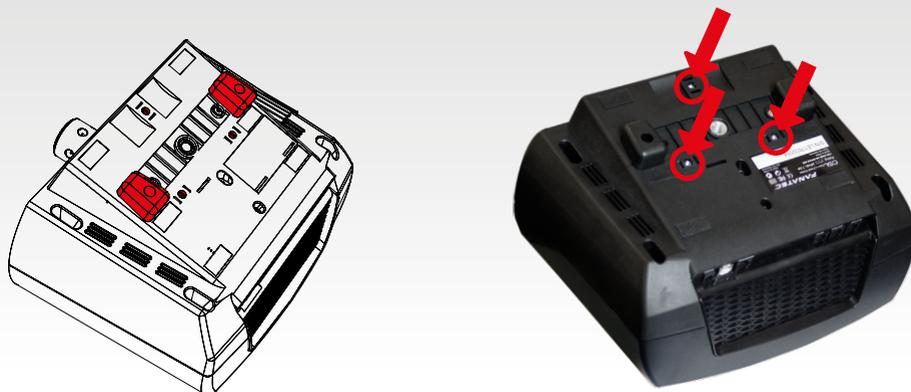


Tighten the table clamp by turning the table clamp bolt. Ensure that the table clamp feet remain well aligned with the underside of the table.

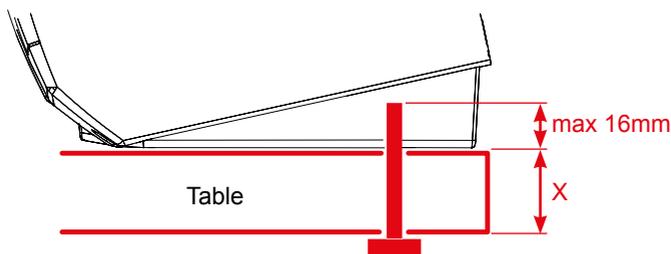


6.3 Hard-mounting the CSL Elite Racing Wheel

The CSL Elite Racing Wheel offers a three-point hard-mount location on the bottom side of the CSL Elite Wheel Base (see the right hand side picture below.) To hard-mount the wheel base, first disassemble the two blocks from the bottom side with a 3mm Allen key (not included), see highlighted on the left hand picture below:



⚠ IMPORTANT: Use only good quality M6 screws. Choose the screw length so that the thread does not reach more than 16 mm into the wheel base. Example: If your table thickness is 20 mm the screw must not exceed a total thread length of 36 mm! Always use all three hard-mount points, this allows a proper and stable installation and avoids damage!

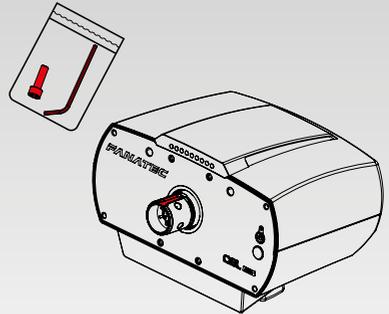


To hard-mount the CSL Elite Racing Wheel to a table or rig by screws please find the printable drilling template in the download area of our website www.fanatec.com.

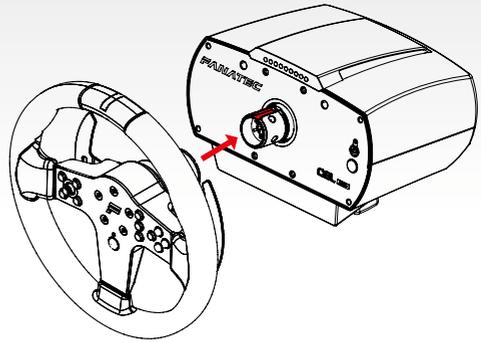
6.4 Attaching the CSL Elite Steering Wheel with Simplified Quick Release

Use clamp ring screw (M6 x 18mm flat head) and Allen key from box contents.

Align CSL Elite Wheel Base.

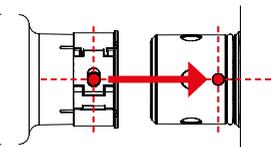


Slide CSL Elite Steering Wheel onto wheel base axle.

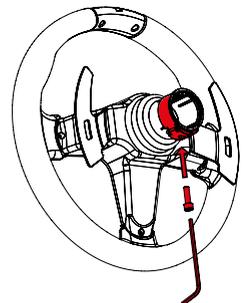


Turn the CSL Elite Steering Wheel top side down to see the bottom side of the clamp ring to follow next step below.

Push CSL Elite Wheel Base until the screw hole matches with hole on CSL Elite Racing Wheel axle.



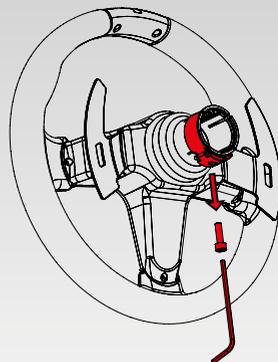
Tighten screw to fix clamp ring mechanism, use only the Allen key which comes with the CSL Elite Racing Wheel!



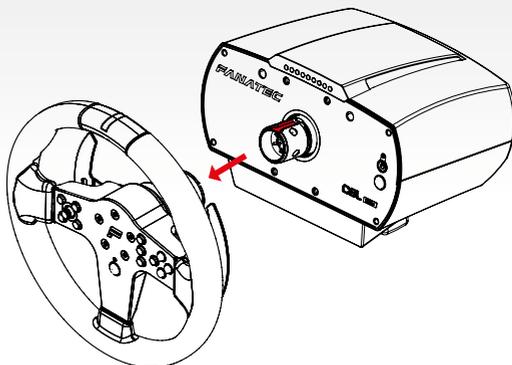
! IMPORTANT: Tighten only by using the short lever of Allen key!

5.5 Detaching the CSL Elite Steering Wheel

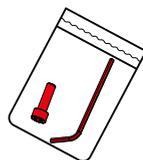
Loosen the fixing screw and open clamp ring mechanism. Use only the Allen key which comes with the CSL Elite Racing Wheel!



Slide CSL Elite Steering Wheel off CSL Elite Wheel Base axle.

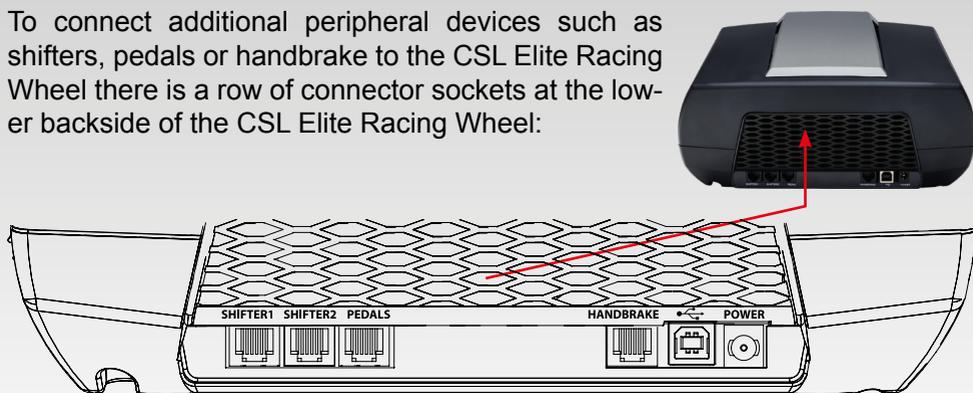


Store clamp ring screw and Allen key safely for later use.



6.5 Connections

To connect additional peripheral devices such as shifters, pedals or handbrake to the CSL Elite Racing Wheel there is a row of connector sockets at the lower backside of the CSL Elite Racing Wheel:



⚠ IMPORTANT: Use only the connection cables which are packaged with the peripheral devices! Peripheral devices are not included and sold separately!

6.5.1 USB

The USB port is used to connect the CSL Elite Racing Wheel to PlayStation®4 or other platforms*.

⚠ IMPORTANT: Use only the USB cable with the straight plug which is packaged with your CSL Elite Racing Wheel to avoid damage to the CSL Elite Racing Wheel or PlayStation®4 electronics!

6.5.2 SHIFTER1

The SHIFTER1 port is used to connect H-pattern shifters to the CSL Elite Racing Wheel (e.g. the ClubSport Shifter or the ClubSport Shifter SQ in H-pattern mode.) Sequential shifters can also be connected to this port. Note: Sequential shifters connected to this port can be mapped identically to the shifter paddles at the CSL Elite Steering Wheel (PS4™ version) or any other Fanatec® steering wheels by PC* driver settings (see chapter 'PC* driver' of this user manual).

*PC compatibility not tested nor endorsed by Sony Interactive Entertainment LLC.

6.5.3 SHIFTER2

The SHIFTER2 port is used to connect sequential shifters to the CSL Elite Racing Wheel (e.g. the ClubSport Shifter SQ in SQ mode or the ClubSport Static Shifter Paddles.) Note: Sequential shifters connected to this port can be mapped identically to the shifter paddles at the CSL Elite Steering Wheel (PS4™ version) or any other Fanatec® steering wheels by PC* driver settings (see chapter 'PC* driver' of this user manual).

Attention: H-pattern shifters will not work on SHIFTER2 port!

6.5.4 PEDAL

The PEDAL port is used to connect pedals to the CSL Elite Racing Wheel (e.g. the CSL Elite Pedals and CSL Elite Pedals LC.)

6.5.5 HANDBRAKE

The HANDBRAKE port is used to connect an analogue handbrake device to the CSL Elite Racing Wheel.

6.5.6 POWER

The POWER connector is used to connect the power supply to the CSL Elite Racing Wheel.

 **IMPORTANT:** Please use only the power supply and power cord that came with your CSL Elite Racing Wheel. Replacements may only be issued from an authorized repair center. See 'Electrical Safety' in Chapter 1 'General' for more details!

6.7 Drilling Template

Please download and print the drilling template for hard-mounting the CSL Elite Racing Wheel from the download area of our website www.fanatec.com.

*PC compatibility not tested nor endorsed by Sony Interactive Entertainment LLC.

The CSL Elite Racing Wheel supports a variety of different CSL and ClubSport series steering wheels and other peripheral devices like shifters, pedals and handbrakes. You can obtain these add-on products from the Fanatec webshop:

<https://www.fanatec.com/us-en/>

Here are some examples:

- ClubSport Steering Wheel Porsche 918 RSR
- ClubSport Steering Wheel Formula Carbon
- ClubSport Steering Wheel Formula Black
- ClubSport Steering Wheel BMW GT2
- CSL Elite Pedals
- CSL Elite Pedals LC
- ClubSport Pedals V3
- ClubSport Pedals V3 inverted
- ClubSport Shifter SQ V1.5
- ClubSport Static Shifter Paddles

Note: The ClubSport Static Shifter Paddles require to put the black washers from the CSL Elite Racing Wheel box contents between wheel base front-plate and the shifter baseplate.

For detailed information about the assembly of other peripheral devices please read the corresponding user manual and/or Quick Guide.

7 FUNCTIONS & FEATURES

⚠ IMPORTANT: PC is mandatory to perform firmware updates!

The CSL Elite Racing Wheel firmware provides the wheel functionality, defines the compatibility and handles the communication between the device to PlayStation®4 or PC* as well as to other peripheral devices like shifters and pedals.

7.1 Firmware and driver update

The firmware and the PC* driver can be updated to a newer versions and is available in the Downloads section of our website www.fanatec.com

The CSL Elite Racing Wheel is fully workable out-of-box and compatible with existing peripheral devices [per September 2017]. Nevertheless we recommend that you always use the latest firmware as these updates may include bug fixes or introduction of new features and compatibilities.

You also have to use the latest PC* driver version in order to use the CSL Elite Racing Wheel on a PC*.

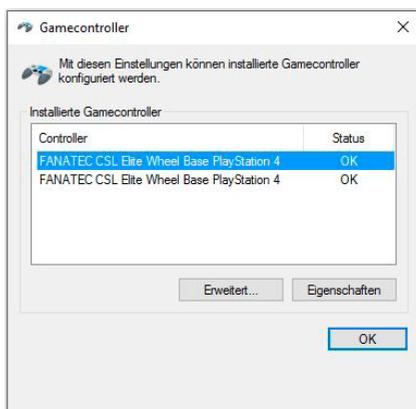
Run the downloaded file(s) and follow the instructions shown on the screen. See more detailed description later in this user manual chapter.

7.1.1 PC* driver

The PC* driver is a very helpful tool as it can assist the user to do functional tests, adjustments and update procedure on the CSL Elite Racing Wheel.

When you start the driver this window as shown on the right hand side will appear and show all connected USB devices:

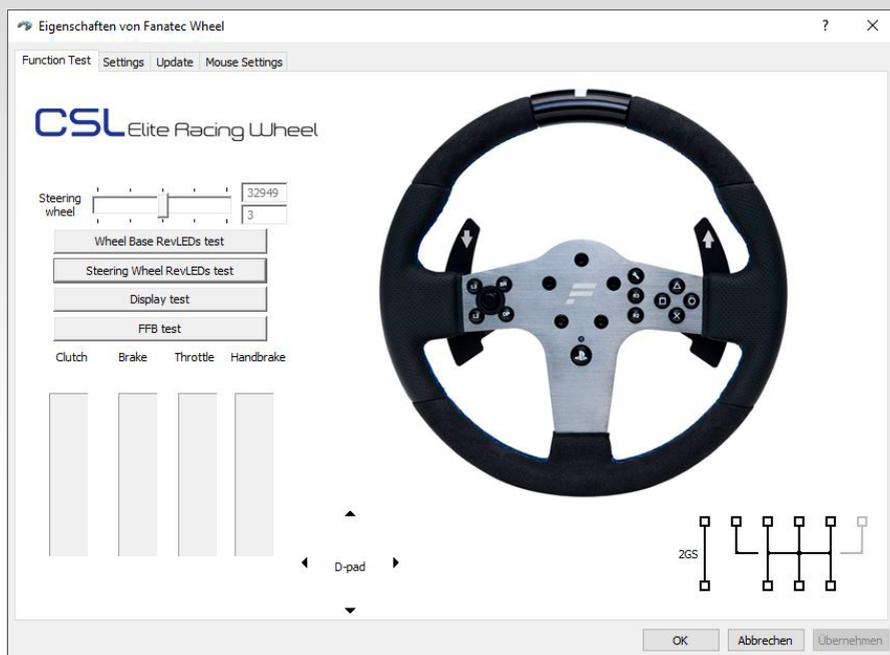
Double-click the CSL Elite Racing Wheel PlayStation®4 to go ahead and see the complete menu.



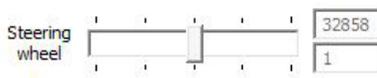
*PC compatibility not tested nor endorsed by Sony Interactive Entertainment LLC.

The 'Function Test' tab will display the attached Fanatec® Steering Wheel. In this example a CSL Elite Steering Wheel (PS4™ version) is shown below:

This window provides a lot of diagnostic information and gives the option to test the hardware and peripherals:



The indicator bar shows the current steering wheel position, the upper box shows the position in digits, the lower box shows the position as an angle (positive and negative angle related to the calibrated wheel center position).



The “**Display test**” button activates a signal flow on the LED display of the attached Fanatec® steering wheel and activates all LED display segments so you can check if all LED display segments work properly.

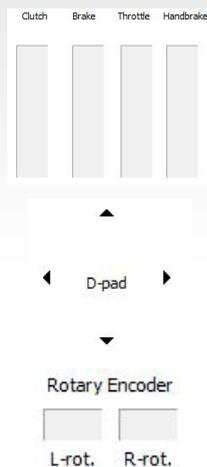
The “**FFB test**” button starts a force feedback test and activates the motor of the CSL Elite Racing Wheel to check proper functionality.

The “**Wheel Base RevLEDs test**” button starts a signal flow on the LED bar on the upper front side of the CSL Elite Wheel Base and activates them to test proper functionality of each single LED.

*PC compatibility not tested nor endorsed by Sony Interactive Entertainment LLC.

The “**Steering Wheel RevLEDs test**” button starts a signal flow on the LED bar on the steering wheel top side and activates them to test proper functionality of each single LED. This is only available for steering wheels which have RevLEDs, refer to the product description of the used steering wheel. The CSL Elite Steering Wheel has RevLEDs integrated in the rim centre stripe.

The “**Vibration test**” button starts a vibration signal to activate the vibration motors inside the Fanatec® steering wheels. This is only available for steering wheels which have vibration motors inside, refer to the product description of the used steering wheel. Not applicable for the CSL Elite Steering Wheel.

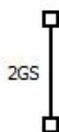


The “**Clutch**”, “**Brake**”, and “**Throttle**” indicators show the current activation and position of these single pedals by a blue bar moving up and down. Therefore the pedals must be connected to the CSL Elite Racing Wheel.

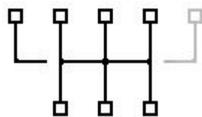
Note: Every pedal lever must be pressed down completely to auto-calibrate the lever movement distance each time when power resumes.

The “**D-pad**” arrows (up, down, left, right) change their colour from black to blue when the corresponding direction is pressed on the attached Fanatec® steering wheel.

The “**Rotary Encoder**” boxes flash blue when turning the FunkySwitch™ left or right. Not applicable for the CSL Elite Steering Wheel.



The “**2GS**” indicator shows the activation of the 2GS (two gears shifter, sequential shifter, SQ) with a blue square, depending on the activated shifting position (up or down). This can be for example the ClubSport Static Shifter Paddles or the ClubSport Shifter SQ in sequential mode if these are not mapped to the steering wheel shifter paddles.



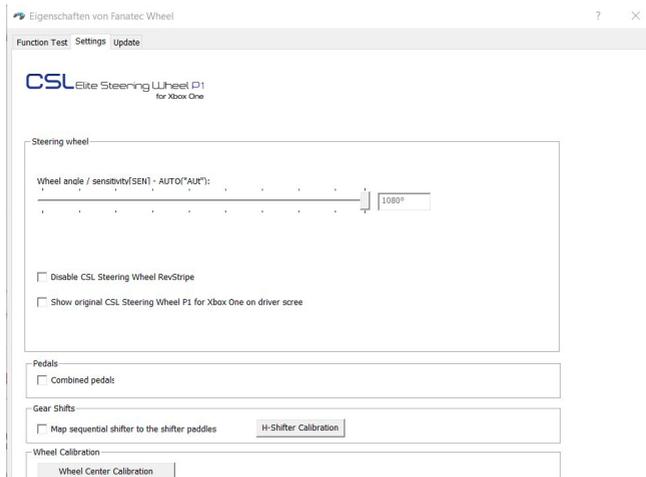
The “**H-pattern**” indicator shows the activation of the 6GS, 7GS or 8GS (six gears shifter, seven gears shifter or eight gears shifter) with a blue square, depending on the activated shifting position. This can be for example the ClubSport Shifter or ClubSport Shifter SQ. Therefore, the H-pattern

shifter must be calibrated. See chapter ‘Hotkeys’ → ‘Shifter calibration mode’ for more details

The biggest area in this window is the upper right section, showing a scheme of the attached Fanatec® steering wheel with all buttons. If you press one of the buttons on the attached steering wheel the corresponding button will be highlighted with a blue spot as long as the button is physically activated. Please note that this view is depending by the attached Fanatec® steering wheel. See example picture for the CSL Elite Steering Wheel (PS4™ version) on the right hand below:



If you go to the PC* driver **Settings** page, you will see this window:



*PC compatibility not tested nor endorsed by Sony Interactive Entertainment LLC.

There are two different slider bars in the section “**Steering Wheel**”:

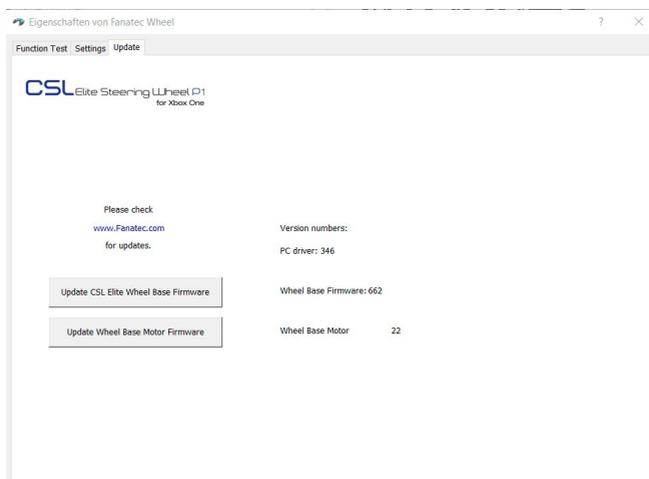
The “**Wheel angle / sensitivity**” can adjust the maximum turning angle of the CSL Elite Racing Wheel, so the functionality is identical with the option ‘SEN’ in Tuning Menu (see chapter ‘Tuning Menu’ of this manual for more detailed information). Please note that in Tuning Menu the value for ‘SEN’ must be set to ‘OFF/Aut’ to allow the PC* driver to take the control. If in Tuning Menu ‘SEN’ is set to any other value than ‘OFF/Aut’ the value set in Tuning Menu is applied and valid and the PC* driver has no influence.

The lower bar ‘Dampering strength’ is an additional fine tuning possibility for the Tuning Menu option ‘DPR’ (see chapter ‘Tuning Menu’ of this manual for more detailed information).

In the “**Pedals**” section there is only the one checkbox called ‘Combined pedals’. Activate this checkbox if the game or software uses only one input (I/O) for brake and throttle pedal signals (negative signal for brake, positive signal for throttle). This might solve problems especially with older games.

In the “**Gear shifts**” section there is only one checkbox called ‘Map sequential shifter to the shifter paddles’. Usually shifters connected to the SHIFTER2 port are mapped to different inputs (I/Os) than the shifter paddles on Fanatec® steering wheels. If you want to change the mapping so that the inputs for these shifters are mapped identically to the Fanatec® steering wheel shifter paddles, activate this checkbox.

If you go to the PC* driver page ‘Update’ you will see this window:



*PC compatibility not tested nor endorsed by Sony Interactive Entertainment LLC.

In this window you can see the following informations:

- Currently installed and used PC* driver version
- Currently installed and used firmware version on the CSL Elite Racing Wheel
- Quick link to the Fanatec® homepage www.fanatec.com

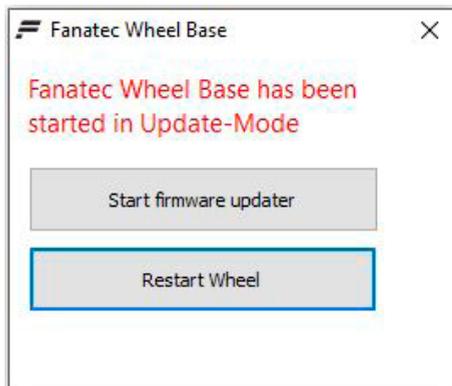
Below the shown information there is the button **“Update CSL Elite Wheel Base Firmware”**. When pressing this button the firmware update process for the CSL Elite Racing Wheel will start (see more detailed description in chapter “Firmware update procedure” below in this user manual).

7.1.2 Firmware update procedure

To initiate the firmware update, the CSL Elite Racing Wheel first has to be connected to the PC* by USB cable and then it has to be switched to Bootloader mode. You can switch to Bootloader mode in two different ways:

- by PC* driver, on page ‘Update’ press the button ‘Update CSL E WB PS4 Firmware’ when the CSL Elite Racing Wheel is switched ON, see previous chapter ‘PC* driver’
- by pressing the ON/OFF button “” on the front plate of the CSL Elite Racing Wheel for about 8 seconds when the CSL Elite Racing Wheel is switched OFF.

When the Bootloader mode is active the LED above the ON/OFF button “” will be flashing blue. The cooling fan will also switch off. On the PC* screen this window will appear automatically as shown on the right hand side:

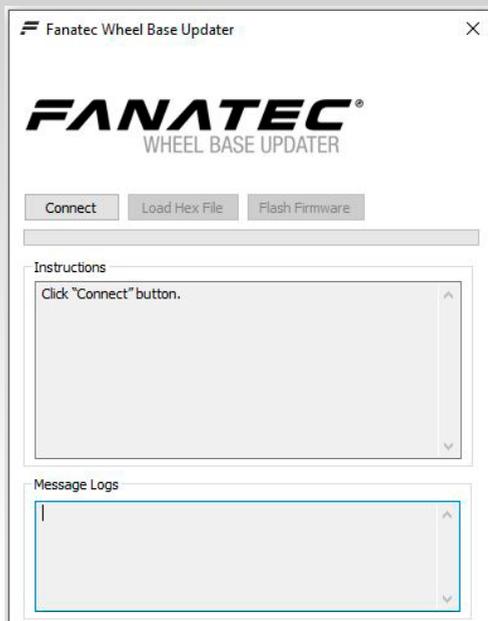


*PC compatibility not tested nor endorsed by Sony Interactive Entertainment LLC.

Click on the upper button 'Start firmware updater'.

Then a new window will appear as shown on the right hand side:

Connect to your CSL Elite Racing Wheel by pressing the button 'Connect'.



When the Wheel Base Updater is connected to the CSL Elite Racing Wheel the buttons 'Load Hex File' and 'Flash Firmware' are available as shown on the right hand side:

Use button 'Load Hex File' to browse and select the wanted firmware file (.hex). Usually the latest available firmware found is already pre-selected and this step can be skipped.

When the pre-selected firmware file (.hex) is ok or the wanted firmware file (.hex) is chosen press button 'Flash Firmware' to execute the firmware update.



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The firmware update is proceeding. You can see the progress bar becoming green as shown on the right:



When the update is done the CSL Elite Racing Wheel will restart automatically after firmware update is completely finished as shown on the right hand side:

The CSL Elite Racing Wheel switches off and automatically on again and then will execute the calibration run.

⚠ IMPORTANT: Do not touch the attached steering wheel while the CSL Elite Racing Wheel restarts and performs the initial calibration run to avoid injuries and/or miscalibration!



⚠ IMPORTANT: Software measures protect the product from installation of wrong firmwares on the device! Do not try to force installation of any wrong firmware to the product to avoid damages.

⚠ IMPORTANT: After a firmware update, the center position of the CSL Elite Racing Wheel has to be manually calibrated again. This is also indicated by the LED display of the steering wheel showing 'CAL'. This warning will stop after manual calibration of the wheel center. See chapter 'Hotkeys' 🖱 'Wheel center calibration' for more details.

⚠ IMPORTANT: After a firmware update, the H-pattern shifters connected to the CSL Elite Racing Wheel has to be manually calibrated again. See chapter 'Hotkeys' 🖱 'Shifter calibration mode' for more details.

7.2 Start-Up procedure

⚠ ATTENTION: When initialization and auto calibration of the CSL Elite Racing Wheel is in progress never touch the attached steering wheel in order to avoid injuries or incorrect calibration!

- **Step1:** Press the ON/OFF button “🔌” at the front plate of the CSL Elite Racing Wheel, marked in the picture to the right:
- **Step2:** The fans start working, the LED above the ON/OFF Button “🔌” is lit red.
- **Step3:** The CSL Elite Racing Wheel starts turning to the right side (clockwise) until mechanical limit is reached. Then it runs back to the left side (counter clockwise) and stops.
 - at the center position (0°) if wheel center was manually calibrated before. **Note:** If SPR is set to low values or '000' the CSL Elite Racing Wheel will stop in a different position after calibration run.
 - at about -60° on the left hand side if wheel center was not yet calibrated (e.g. after firmware update; see description above in this chapter).



- **Step4:** The currently installed firmware version is shown on the LED display of the Fanatec® steering wheel for a moment as shown on the picture on the right hand side:
- **Step5:** If the wheel center was not yet calibrated 'CAL' will blink on the LED display of the steering wheel as shown on the picture on the right hand side:
 - Proceed with a manual wheel center calibration as described in chapter 'Hotkeys' of this manual.
 - The CSL Elite Racing Wheel is ready to use after manual wheel center calibration.
- **Step6:** Your CSL Elite Racing Wheel is ready to use. If the wheel center was previously calibrated, step 5 can be skipped and the CSL Elite Racing Wheel is ready to use immediately. If you use a H-pattern shifter the wheel base firmware will request to calibrate the gears automatically now. Refer to chapter 'Shifter calibration mode later in this user manual'.



7.3 Tuning Menu

Activate the Tuning Menu by pressing the Tuning Menu button  (see the 'Hotkeys' chapter of this user manual). The menu will be shown on the tuning display of the Fanatec® steering wheel. To navigate through the Tuning Menu, use the directional stick of the Fanatec® steering wheel.

Note: Tuning functions are subject to change and may be altered in future firmware versions.

7.3.1 S_1 ... S_5 (Setups)

Setups range: S_1 ... S_5

Setups default: S_1

The CSL Elite Racing Wheel provides five different setups to store your adjusted values independently from each other. To change which setup is active, move the directional stick of the Fanatec® steering wheel up or down.

7.3.2 SEN (Sensitivity)

SEN range: 009 ... 108 → Aut

SEN default: Aut

The sensitivity defines the steering angle. If SEN is set to 009 the steering wheel can only be turned 90° (45° to left and 45° to right side direction from calibrated center position). If SEN is set to 108 the steering wheel can be turned the mechanical maximum way of 1080° (540° to left and 540° to right side direction from calibrated center position). If SEN is set to OFF/Aut the sensitivity

is controlled by the PC* driver (see chapter PC* driver for more details). Some games support this feature. To change the active value, move the directional stick of the Fanatec® steering wheel up or down.

7.3.3 FF (Force Feedback)

FF range: OFF → 001 ... 100 **FF default: 100**

The Force Feedback defines the maximum strength of the motor when force feedback effects from software / games are sent to the CSL Elite Racing Wheel. If FF is set to OFF, there will be no force feedback effect executed by the CSL Elite Racing Wheel motor. If FF is set to 001, the motor will execute only 1% of the maximum motor power. If FF is set to 100, the motor will execute 100% of the maximum motor power. To change the active value, move the directional stick of the Fanatec® steering wheel up or down. It is recommended to leave this setting at 100 and reduce the strength using the in-game setting to avoid force feedback signal clipping.

7.3.4 SHO (Shock)

SHO range: OFF → 010 ... 100 **SHO default: 100**

The strength of the shock / vibration motors inside some Fanatec steering wheels can be adjusted from 100% to 0%. These vibration motors can be used by a game directly (Fanatec® SDK) or by the ABS function.

Note: The CSL Elite Steering Wheel has no vibration motors.

7.3.5 ABS

ABS range: 000 ... 100 → OFF **ABS default: OFF**

This feature gives you a direct feedback based on your brake inputs. If you set the value to 100 the vibration will start as soon as you give 100% brake input to the game. If you set it to 95% the vibration will start if you push the brake to 95% or more. The ABS feature uses the vibration within your wheel rim (can be turned off by setting SHO to "0") AND the vibration motor on a CSP (V2 or V3) pedal set if it is connected directly to the wheel base, not individually by USB. ABS can also be simulated dynamically by the game if the developer makes use of the Fanatec® SDK. To change the active value, move the directional stick of the Fanatec® steering wheel up or down.

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7.3.6 DRI (Drift mode)

DRI range: -05 ... -01 → OFF → 001 ... 005 **DRI default: -05**

The drift mode reduces overall resistance of the wheel and lets you turn the wheel more easily. It almost works like power steering. It reduces the basic dampening of the wheel in the range of -05 to -01 and makes the wheel turn faster in the range of 001 to 005. If the value is set to values beyond -05 (or if the games FFB interferes with this feature) you might experience some oscillation. If that happens - reduce the value or turn DRI “-05”.

To change the active value, move the directional stick of the Fanatec® steering wheel in the up or down direction. “-05” to “-01” is a damper effect (natural damper), “OFF” is without damper effect and “001” or higher values are with motor assistance to accelerate the steering wheel.

7.3.7 FOR (force), SPR (spring), DPR (damper)

FOR range: OFF → 010 ... 120 **FOR default: 100 (%)**

SPR range: OFF → 010 ... 120 **SPR default: 100 (%)**

DPR range: OFF → 010 ... 120 **DPR default: 100 (%)**

These force feedback modifiers give you the ability to change the force feedback signals of a game (only applicable if game uses these effects). In theory there are three types of signals which a game can send: Force (pushes the wheel in a specific direction), spring (pulls the wheel towards the dynamic centre) and damper (creates friction). Not every game uses all types of effects and some games even use only one type to create all different feelings. Using your Tuning Menu in the CSL Elite Racing Wheel you can increase or reduce these different effects individually. To change the active value, move the directional stick of the Fanatec® steering wheel up or down.

Note: If SPR is set to low values or ‘OFF’ the CSL Elite Racing Wheel will not be able to move the attached steering wheel to the correct center position after calibration run.

 **IMPORTANT:** Only set these values higher than 100% if the force feedback effects are clearly not strong enough and weaker in comparison to other games. When the game sends full effects and the wheel is set to 100% then the device will work on its power limit. Pushing up one value to a very high number or even raising multiple values will result in higher load on the motor and increased heat generation.

For further information check the FAQ section on our website

www.fanatec.com/support.

7.3.8 FEI (Force Effect Intensity)

FEI range: OFF ... 100

FEI default: 050

This parameter adjusts the intensity of force effects and can make effects more smooth: OFF is very smooth and low noise while 100 is very sharp and direct. Tuning this parameter can improve the feeling of the wheel depending on the game. This can be helpful to reduce the noise level especially for bases assembled to tables or rigs.

7.3.9 BRF (brake force)

BRF range: Lo/Min → Hi/Max

BRF default: 050

Increasing BRF value to Hi/Max means the user needs to press the brake pedal with maximum force to achieve 100% brake input. Reducing the BRF value to Lo/Min means the user needs to press the brake with minimum force to achieve 100% brake input.

You can either check the brake signal level on the PC* driver or you can see it on the RevLEDs of the CSL Elite Racing Wheel and/or the attached steering wheel (depending on steering wheel type).

⚠ NOTE: The BRF parameter is only available when a supported pedal set is connected to the PEDAL port of the CSL Elite Racing Wheel. Please read the description and/or manuals of your pedals to verify if the BRF feature is supported. For reference, the CSL Elite Pedals LC (i.e. CSL Elite Pedals with Loadcell Kit) support this feature.

7.4 Revolution Lights (RevLEDs)

The CSL Elite Racing Wheel offers the RevLEDs feature integrated directly into the wheel base. This RevLEDs are usually mirrored with the RevLEDs of the steering wheel. Games supporting the steering wheel RevLEDs by default will also support the wheel base RevLEDs.



Further, if games make use of it, the RevLEDs of the wheel base can indicate a different function than the Steering Wheel RevLEDs. Example: Wheel Base RevLEDs show the fuel level while the steering wheel RevLEDs indicate engine RPM and help the driver shift up at the best moment.

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Beyond this in-game feature, the RevLEDs are also a helpful indicator in case of any unexpected behaviour: While the wheel calibration runs after power ON is proceeding, the RevLEDs of the wheel base show the current status. For example, if no steering wheel is attached or is attached but cannot be detected and identified, the three blue RevLEDs will not be lit.

After calibration run is completed the RevLEDs turn off automatically and the game or software takes control.

7.5 Cooling system

To avoid damage to the CSL Elite Racing Wheel there is an effective cooling system integrated to the hardware, controlled by firmware.



7.5.1 Hardware measures

The CSL Elite Racing Wheel has a fan inside which carries out the hot air from the inside of the CSL Elite Racing Wheel.

Make sure that there is nothing blocking the air intake at the back of the wheel base.

7.5.2 Automatic fan adjustment

The firmware provides different stages of fan control which are clearly defined after intensive testing in a R&D lab.

When switching ON, the CSL Elite Racing Wheel fan operates at maximum speed until calibration run is completed.

The operation speed of the fan is adjusted according to the currently detected temperature of the motor inside the CSL Elite Racing Wheel and could even stop, depending on your firmware version.

The temperature control and fan behaviour is subject to change by firmware updates.

8 ELECTRICAL OPERATION

8.1 Hotkeys

8.1.1 Tuning Menu

To enter the Tuning Menu, use the Tuning Menu button (usually the button with the wrench symbol or the small black button close to the LED display of your Fanatec® steering wheel; see corresponding Quick Guide of your Fanatec® steering wheel). The picture shows the Tuning Menu button of the CSL Elite Steering Wheel (PS4™ version) as an example:



8.1.2 Restore original Tuning Menu settings

To restore the original Tuning Menu settings, open the Tuning Menu. S_1 will be shown on the tuning display. Then press and hold the Tuning Menu button for about five seconds until 'rSt' is displayed.

8.1.3 Wheel center calibration

If a center calibration is needed (e.g. after updating the firmware of the CSL Elite Racing Wheel) first you need to enter the Tuning Menu as described above.

When you use the CSL Elite Steering Wheel (PS4™ version) you must press the buttons **OP** + **X** at the same time.



When you use a Fanatec® steering wheel from the ClubSport Series you must press the left and right stick at the same time. Please see the corresponding quick guide of the Fanatec® steering wheel you decide to use with the CSL Elite Racing Wheel (PS4™ version).

⚠ ATTENTION: When initialization and auto calibration of the CSL Elite Racing Wheel is in progress never touch the attached steering wheel in order to avoid injuries or incorrect calibration!

8.1.4 Switching modes

The CSL Elite Racing Wheel will start in “PlayStation®4 Mode” by default. To switch to other modes press the ‘Mode’ button once. The LED above the “⏻” button will indicate the current operation mode (more colors can be shown with other compatible platforms):

- Blue indicates “PlayStation®4 mode“
- Red indicates “PC* mode“
- Purple indicates “ClubSport Wheel Base V2 compatibility mode“



⚠ NOTE: Once the mode was changed manually the CSL Elite Racing Wheel will remember the last active mode and will boot in the same mode next time. Exception: After firmware update was done.

8.1.5 Shifter calibration mode

To enter the H-pattern shifter calibration mode press buttons **OP** + **⚙** of the CSL Elite Steering Wheel (PS4™ version) at the same time while H-pattern shifter is connected, see picture on the right:

For other Fanatec® steering wheels please refer to the corresponding Quick Guide for more detailed information.

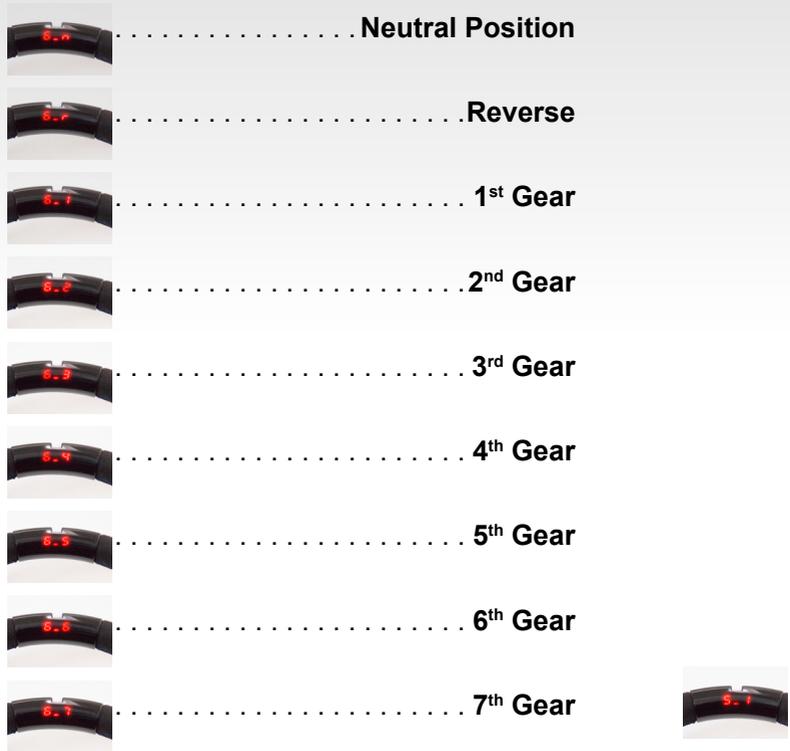


⚠ NOTE: After firmware update the CSL Elite Racing Wheel will request the shifter calibration automatically as soon as a non-calibrated H-pattern shifter is connected and detected. The menu will guide you through the calibration steps as described next below.

*PC compatibility not tested nor endorsed by Sony Interactive Entertainment LLC.

Put the H-pattern shifter lever into the position shown on the LED display and acknowledge each single position by pressing **OP** / **START (10)** to proceed to the next step.

The following pictures show the instructions on the LED display of the CSL Elite Steering Wheel (PS4™ version) but are similar on other Fanatec® steering wheels:



If your shifter has no 7th gear, acknowledge it by pressing **OP** / **START (10)** when the shifter lever is physically in the 6th gear position. After all gears are calibrated the LED display shows S_1 and the shifter is ready for use.

⚠ NOTE: If you did not intend to enter the shifter calibration mode simply complete the calibration process either without a connected shifter or without moving the shifter lever. You may then leave the shifter calibration mode at the end of the process. This has no impact on the CSL Elite Racing Wheel original calibration itself and you can continue without a shifter.

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CLEANING

Clean only with a dry or slightly damp cloth. Using cleaning solutions may damage your CSL Elite Racing Wheel.

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TROUBLESHOOTING

The CSL Elite Racing Wheel must not be modified differently than described in this manual. Endor® AG expressly prohibits analysis and utilization of the electronics, hardware, software, and firmware contained in the controller. In case difficulties occur in connection with utilization of the CSL Elite Racing Wheel, please use the following guide for elimination of errors which is available in the Downloads tab of the product page on www.fanatec.com.

If the CSL Elite Racing Wheel is not working properly:

Problem description	Solution
After firmware update of the CSL Elite Racing Wheel the steering wheel is not properly centred.	After performing a firmware update on the CSL Elite Racing Wheel the wheel centre position must be manually calibrated. See chapter 'CSL Racing Wheel Functions' → 'Firmware and driver update' of this manual for more details.
After firmware update of the CSL Elite Racing Wheel the H-pattern shifter is not working properly.	After performing a firmware update on the CSL Elite Racing Wheel the H-pattern shifter must be manually calibrated. See chapter 'CSL Elite Racing Wheel Functions' → 'Firmware and driver update' of this manual for more details.
The driver window does not show the attached steering wheel.	Make sure that you have updated your CSL Elite Racing Wheel to the latest firmware version which can be downloaded from the Downloads section of the Fanatec website www.fanatec.com .
	Check the pins inside the quick release of the steering wheel, these must not be bent or damaged.
	Try to use another steering wheel. If this is also not detected the CSL Elite Racing Wheel might be damaged.

Problem description	Solution
<p>The tuning display does not show anything or is not working properly.</p>	<p>Try to use another steering wheel. If this is also not working properly the CSL Elite Racing Wheel might be damaged.</p> <p>Check the pins inside the quick release of the steering wheel, these must not be bent or damaged.</p>
<p>After switching on the CSL Elite Racing Wheel the auto calibration is not working properly.</p>	<p>Make sure that you have updated your CSL Elite Racing Wheel to the latest firmware version which can be downloaded from the Downloads section of the Fanatec website www.fanatec.com.</p>
<p>After playing a while the CSL Elite Racing Wheel seems to become weaker or is fading.</p>	<p>When the motor temperature is close to the upper limit the Tuning Menu values will be overwritten to regular maximum values (not higher than 100%).</p> <p>Additionally, the motor power level is controlled by firmware so that the FFB strength may fade in this high temperature range but the motor will not be damaged. This allows extending the duration of driving before the motor has to completely stop operating.</p> <p>Let your CSL Elite Racing Wheel cool down before continuing use.</p>
<p>After playing a while the CSL Elite Racing Wheel motor has switched OFF.</p>	<p>When the temperature is exceeding the upper limit the motor will be deactivated for a while until the temperature is low enough (to protect the hardware from damages).</p> <p>Let your CSL Elite Racing Wheel cool down before continuing use. Contact our customer support if this happens consecutively.</p>
<p>Fan is always working in full speed even though the CSL Elite Racing Wheel was just powered ON and did not heat up due to driving yet.</p>	<p>In case of malfunctioning temperature sensor the fans will work at maximum speed to protect the hardware from overheating. Please contact our customer support. Note: The room temperature should be above 20°C.</p>
<p>After calibration run at startup of CSL Elite Racing Wheel the attached steering wheel doesn't go to correct centre position.</p>	<p>Please check your Tuning Menu settings, the value for SPR (spring) must be higher than '000' as this effect is required to make correct centring. De- fault value is '100'.</p>

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SERIAL NUMBER

Before contacting the Fanatec® Customer Support please note the serial number of your CSL Elite Racing Wheel:

- CSL Elite Wheel Base (PS4™ version):
- CSL Elite Steering Wheel (PS4™ version):

You can find the serial number on a sticker on the bottom side of your CSL Elite Wheel Base (PS4™ version) and of your CSL Elite Steering Wheel (PS4™ version) on sticker on the backside of the lower stroke of the steering wheel.

The serial number of the CSL Elite Wheel Base (PS4™ version) starts with letters **‘PV’** and has additional 8 numbers, for example: **PV12704023**.

The serial number of the CSL Elite Steering Wheel (PS4™ version) starts with letters **‘NG’** and has additional 8 numbers, for example: **NG10703012**

This product is under warranty of Endor AG, E.ON-Allee 3, 84036 Landshut, Germany, US/CAN Support Telephone: +1 (424) 343-8129, Email: info.webshop@fanatec.com.

Refer also to the terms & conditions of Endor AG on <https://www.fanatec.com/us-en/terms-and-conditions-us.html>.

Please send Fanatec product returns to this address:

**Fanatec Service Center
c/o Ronay McClay
14221 Artesia Blvd
La Mirada, CA 90638
USA**

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END OF LIFE PRODUCT RECYCLING

Please follow your local regulations when disposing of this product as e-waste.

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FCC COMPLIANCE

This device complies with part 15 of the FCC rules. The operation of this device is subject to the following two conditions:

- This device may not cause harmful interference, and must accept any interference received, including interference that may cause undesired operation.
- This device was not modified different than described explicitly in this user manual.



Note: This device was tested and approved to the limitations for class B of digital devices according to part 15 of the FCC rules. This limitations should ensure an adequate protection against harming interferences in residential areas. However, a warranty for not-occurring of interferences is not assumed.

Do not modify the device different than described explicitly in this user manual. Nevertheless, if you do modifications different from the described in this manual you can be determined to stop the operation of the device.

Endor® AG („Endor“) warrants to the original purchaser that the Fanatec® product, which includes components contained in the retail box with this product will be free from material defects in material and workmanship for a period of one year from the original date of purchase (the “Warranty Period”). This warranty is valid in the country where the product was purchased. **If this product is determined to be materially defective during the warranty period, your sole remedy and Endor’s sole and exclusive liability is limited to the repair or replacement of this product with a factory-recertified product, at Endor’s option.** For purposes of this Limited Hardware Warranty and Liability, “factory recertified” means a product that has been returned to its original specifications.

This warranty does not apply if this product

- a) is used with products that are not expressly declared in the product descriptions as compatible with this product;**
- b) is used with peripherals Endor does not license, expressly approve or sell. This includes non-licensed hardware enhancement devices, controllers, adaptors, and power supply devices (“non-licensed/non-approved peripherals”);**
- c) is used for any commercial purpose, including rental or arcade purposes;**
- d) is modified or tampered with contrary to the operating and maintenance instructions;**
- e) is damaged by the acts of God (natural disasters), misuse abuse, negligence, accident, wear and tear, unreasonable use, or by causes unrelated to defective materials or workmanship;**
- f) has the serial number altered, defaced or removed (where applicable);**
- g) or has the warranty seal altered, defaced or removed (where applicable).**

This warranty does not cover consumables (such as batteries) or products sold and clearly marked “AS IS” or with faults. Endor may void this warranty if:

- 1) Endor reasonably believes that the product has been used in a manner that violates the terms of a separate end user agreement for firmware, system software or game software;**
- 2) or the product is used with non-licensed/non-approved peripherals. Consumer assume all risks and liabilities associated with use of third-party products.**

This warranty is provided to you in lieu of all other express or implied warranties. This includes warranties of merchantability and fitness for a particular purpose for this product, which Endor disclaims under these terms. However, if applicable law requires any of these warranties, then they are limited in duration to the warranty period.

Except as expressly stated above, Endor excludes all liability for loss of data, loss of profit, or any loss or damage suffered by you or any third party, whether those damages are direct, indirect, consequential, special, or incidental and however arising under any theory of law, as a result of using this product. Some states or provinces do not allow limitations on how long an implied warranty lasts and some states do not allow the exclusion or limitations of consequential or incidental damages, so these limitations or exclusions may not apply to you. This warranty gives you specific legal rights. You may also have other rights which vary from state to state or province to province. The warranty offered by Endor on this product is the same whether or not you register your product.

This warranty does not apply to any system software / firmware that is pre-installed in the purchased product, or is subsequently provided via update or upgrade releases. In case of issues apparently related to system software / firmware as well as any other product related issues, Endor recommends checking the FAQ database at www.fanatec.com to see if your problem can be solved there.



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