Manual

Straights are for fast cars
Turns are for fast drivers
Thank you for choosing

To get the most out of and before using your new CSL Elite Wheel Base, please read this manual for important information regarding your health and how to safely use this product. This manual can also be used as a great tool for future reference.
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WARNING! Photosensitive Seizures

A very small percentage of people may experience a seizure when exposed to certain visual images, including flashing lights or patterns that may appear in video games. Even people who have no history of seizures or epilepsy may have an undiagnosed condition that can cause these “photosensitive epileptic seizures” while watching video games. These seizures may have a variety of symptoms, including light-headedness, altered vision, eye or face twitching, jerking or shaking of arms or legs, disorientation, confusion, or momentary loss of awareness. Seizures may also cause loss of consciousness or convulsions that can lead to injury from falling down or striking nearby objects. Immediately stop playing and consult a doctor if you experience any of these symptoms. Parents should watch for or ask their children about the above symptoms – children and teenagers are more likely than adults to experience these seizures.

The risk of photosensitive epileptic seizures may be reduced by taking the following precautions:

• Sit farther from the TV screen.
• Use a smaller TV screen.
• Play in a well-lit room.
• Do not play when you are drowsy or fatigued.

If you or any of your relatives have a history of seizures or epilepsy, consult a doctor before playing.

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.
ATTENTION

• The device must not be exposed to rain or humidity in order to avoid risk of fire and the danger of electric shock.
• Operating temperature: 15°C – 35°C room temperature
• The recommended operation time of the wheel with continuous force feedback activity is 1 hour. Let the wheel cool down for a few minutes before you continue.
• Long playing may cause health risks. Take a break of 5 minutes every 20 minutes, and do not play 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. Contains small pieces. Danger of swallowing!
• 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 Wheel Base must be connected to an appropriate power source:

• For the used CSL Elite Wheel Base use only the power supply and AC power cord that came with your CSL Elite Wheel Base or that you received from an authorized repair center.
• For the used CSL Elite Wheel Base 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 damaging the CSL Elite Wheel Base:
  Do not expose your CSL Elite Wheel Base to sources of heat.
• When connecting and / or disconnecting any Steering Wheel (e.g. Porsche 918 RSR or Universal Hub) to / from CSL Elite Wheel Base take care of the pins inside the quick release.
• Do not try to use the CSL Elite Wheel Base with other Steering Wheels than Fanatec Steering Wheels.
• Do not try to use the CSL Elite Wheel Base with an external power source different from the power supply packaged with the CSL Elite Wheel Base or received from authorized repair center.
• Unplug the power cord of your CSL Elite Wheel Base during storms or when unused for long periods of time to protect also your CSL Elite Wheel Base.
• If the CSL Elite Wheel Base becomes damaged in any way, stop using it immediately and contact Fanatec Customer Support.
GENERAL NOTES

- Fanatec Steering Wheels like the BMW M3 GT2, the Formula Black and Formula Carbon, the Porsche 918 RSR, the Universal Hub and others which might be mentioned in this manual are not included within the ClubSport Wheel Base package and sold separately.

- Additional peripheral devices like shifters, pedals, LED displays and others which might be mentioned in this manual are not included within the ClubSport Wheel Base package and sold separately.

- This manual explains a lot about assembly, connections and functions related to Fanatec Steering Wheels, other additional peripheral devices and also about PC or console (Xbox One) functionalities but this manual is not a replacement for the manuals corresponding to the products! Read the quick guides or user manuals for the other products as well!

- All specifications in this document are subject to change. Especially the CSL Elite Wheel Base firmware or the PC driver might be changed or updated to implement new features or for general improvements.

- 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 on www.fanatec.com for more details.
You have purchased an innovative product which enables you to use different steering wheels in simracing. The CSL Elite Wheel Base provides high steering accuracy, strong force feedback brushless servo motor, smooth belt drive and 1080° rotation angle built into a high quality Wheel Base with automotive-grade quick release.

Select the Steering Wheel of your choice compatible to your CSL Elite Wheel Base such as the CSL Steering Wheel P1 for Xbox One, BMW M3 GT2, the Formula Black and Formula Carbon, the Porsche 918 RSR and the Universal Hub for Xbox One. Select your Fanatec Steering Wheels from ClubSport series and CSL series according to your personal driving style – it is simply your choice!

The CSL Elite Wheel Base (CSL E WB) can be used with the CSL Steering Wheel P1 for Xbox One and also with the ClubSport Steering Wheels like the BMW M3 GT2, the Formula Black and Formula Carbon, the Porsche 918 RSR, the ClubSport Universal Hub for Xbox One and other peripheral devices from Fanatec like pedals, shifters and handbrake. Especially look for other products from the Fanatec CSL platform and ClubSport platform!

The CSL Elite Wheel Base can be used on PC and Xbox One (requires a Fanatec Steering Wheel designed for Xbox One; Xbox One Mode to be activated).

⚠️ IMPORTANT: Before first use the CSL Elite Wheel Base must be updated to the latest firmware version which is available on our website www.fanatec.com/support. See chapter ‘Firmware and driver update’ for more details!
4.1 Package contents

- CSL Elite Wheel Base
- Table clamp
- Table clamp screw with handle
- Power supply (different versions for Europe EU, United States of America US, Australia AU and Japan JP)
- USB connection cable with straight plug
- O-Ring (O1)
- Quick Guide
5.1 Plan your configuration

To operate the CSL Elite Wheel Base, a Fanatec Steering Wheel with quick release is required (e.g. the BMW M3 GT2, the Porsche 918 RSR or the Universal Hub). Just plug your steering wheel onto the quick release and get started. Connect the CSL Elite Wheel Base to your PC or PlayStation 3 system by using the USB cable.

⚠️ IMPORTANT: Use only the USB cable with the straight plug which is packed with your CSL Elite Wheel Base to avoid damages on the CSL Elite Wheel Base electronics!

Please check chapter ‘Connections’ to see which kind of peripheral devices must be connected to which socket at the CSL Elite Wheel Base.

Additional peripheral devices like pedals or shifters are not strictly required but will give the user a more similar feeling like driving a race car. We recommend to use shifters and pedals from the Fanatec ClubSport platform like the ClubSport Shifter SQ (CSS SQ), the ClubSport Static Shifter Paddles (CS SSP) or the ClubSport Pedals (CSP) and more. Visit our Webshop at www.fanatec.com for more compatible products.

5.2 Mounting the CSL Elite Wheel Base using the Table Clamp

Insert the threaded rod with handles into the table clamp.
Turn the table clamp with threaded rod into the counterpart in center of CSL Elite Wheel Base bottom side.

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

Tighten the table clamp by turning the threaded rod. While tightening the table clamp please monitor and adjust the clamp feet to be well aligned with the table plate and pressing flat onto the table plate surface.
5.3 Hardmounting the CSL Elite Wheel Base

The CSL Elite Wheel Base offers a three-point hardmount opportunity on the bottom side of the CSL Elite Wheel Base, see marked on the right hand side picture below. To hardmount the Wheel Base first disassemble the two blocks from the bottom side with Allen Key 3 mm (not included), see highlighted on the left hand side picture below:

**IMPORTANT:** Used screws have to be good quality M6 screws. Chose 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 hardmount points to allow a proper and stable fixation and avoid damages!

To hardmount the CSL Elite Wheel Base to a table or rig by screws please find the printable drilling template in the download area of our website www.fanatec.com.
5.4 Attaching a Fanatec CSL Steering Wheel

Use clamp ring screw (M6 x 18mm flat head) and Allen Key from box content

Align wheel base axle, to correct position

Slide steering wheel onto wheel base axle

Turn the steering wheel top side down to see the bottom side of the clamp ring to follow next step below

Push steering wheel until the screw hole matches with hole on wheel base axle
Turn in screw to fix clamp ring mechanism, use only the Allen Key which comes with the steering wheel!

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

5.5 Take off a Fanatec CSL Steering Wheel

Turn out the fixing screw and open clamp ring mechanism, use only the Allen Key which comes with the steering wheel!

Slide steering wheel off wheel base axle

Store clamp ring screw and Allen Key safely
5.6 Attaching a Fanatec ClubSport Steering Wheel

Remove storage pin

Align CSL Elite Wheel Base axle, to correct position

Press together or “pinch” and hold quick release mechanism

Slide rim onto CSL Elite Wheel Base axle

Now release the sleeve of the quick release mechanism

⚠️ IMPORTANT: Please mind not to use high force to attach the steering wheel to avoid damages! It is possible to attach the steering wheel on the last 8 mm you need a little force because of the O-ring which avoids shaking steering wheels.
5.7 Take off a Fanatec ClubSport Steering Wheel

Pinch and hold quick release mechanism

Slide rim off CSL Elite Wheel Base axle

Place rim face down on table

Insert storage pin

Now release the sleeve of the quick release mechanism
5.8 ClubSport Static Shifter Paddles (CS SSP)

At the front plate of the CSL Elite Wheel Base there are four holes with gears which are used for mounting the ClubSport Static Shifter Paddles (CS SSP) as shown in the picture below:

⚠️ IMPORTANT: ClubSport Static Shifter Paddles (CS SSP) sold separately and not included within the CSL Elite Wheel Base package content. Mounting screws for ClubSport Static Shifter Paddles included within the package of ClubSport Static Shifter Paddles.

5.9 Connections

To connect additional peripheral devices like shifters, pedals or LED displays to the ClubSport Wheel base there is a row of connector sockets at the lower backside of the CSL Elite Wheel Base:

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

The USB port is used to connect the CSL Elite Wheel Base to the PC or Xbox One.

⚠️ **IMPORTANT:** Use only the USB cable with the straight plug which is packaged with your CSL Elite Wheel Base to avoid damages on the CSL Elite Wheel Base electronics!

5.9.2 SHIFTER1

The SHIFTER1 port is used to connect H-pattern shifters to the CSL Elite Wheel Base, e.g. the ClubSport Shifter (CSS) or the ClubSport Shifter SQ (CSS SQ) in H-pattern mode. Also sequential shifters can be connected to this port and will be detected correctly. Note: Sequential shifters connected to this port can be mapped identically to the shifter paddles at the Fanatec Steering Wheels like the BMW M3 GT2, the Formula Black or Formula Carbon, the Porsche 918 RSR or the Universal Hub with assembled shifter paddle boxes by PC driver settings (see chapter ‘PC driver’ of this user manual).

5.9.3 SHIFTER2

The SHIFTER2 port is used to connect sequential shifters (SQ) to the CSL Elite Wheel Base, e.g. the ClubSport Shifter SQ (CSS SQ) in SQ mode or the ClubSport Static Shifter Paddles (CS SSP). Note: Sequential shifters connected to this port can be mapped identically to the shifter paddles at the Fanatec Steering Wheels like the BMW M3 GT2, the Formula Black or Formula Carbon, the Porsche 918 RSR or the Universal Hub with assembled shifter paddle boxes by PC driver settings (see chapter ‘PC driver’ of this user manual). **Attention:** H-pattern shifters will not work on SHIFTER2 port!

5.9.4 PEDAL

The PEDAL port is used to connect pedals to the CSL Elite Wheel Base, e.g. the ClubSport Pedals (CSP), the CSR Pedals (CSR P) or the CSR Elite Pedals (CSR EP).

5.9.5 HANDBRAKE

The HANDBRAKE port is used to connect the ClubSport Handbrake (CS HB) to the CSL Elite Wheel Base.
5.9.6 POWER

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

⚠️ IMPORTANT: Please use only the power supply and AC power cord that came with your CSL Elite Wheel Base or that you received from an authorized repair center. See ‘Electrical Safety’ in Chapter 1 ‘General’ for more details!

5.10 Drilling Template

⚠️ ATTENTION: Please download and print the drilling template for hard-mounting the CSL Elite Wheel Base from the download area of our website www.fanatec.com.
The CSL Elite Wheel Base has specific firmware handling the device communication to PC or Xbox One as well as to other hardware peripheral devices like shifters and pedals. This firmware provides different functions for the user.

6.1 Firmware and driver update

The firmware and the PC driver can be updated to newer versions by Fanatec for software bug fixing or introduction of new features and compatibilities.

Before first use the CSL Elite Wheel Base has to be updated to the latest firmware version which is available on our website www.fanatec.com/support.

You also have to use the latest PC driver version in order to use the CSL Elite Wheel Base 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.

⚠️ IMPORTANT: The CSL Elite Wheel Base is secured by firmware and by driver so that usually it is not possible to install wrong firmwares on the CSL Elite Wheel Base! Do not try to force installation of any wrong firmware to the CSL Elite Wheel Base to avoid damages.

⚠️ IMPORTANT: After firmware update the center position of the CSL Elite Wheel Base has to be manually calibrated again. This is also indicated by the LED display of the attached steering wheel showing ‘CAL’. This appearance will be gone after manual calibration of the wheel center. See chapter ‘Hotkeys’ ‘Wheel center calibration’ for more details.

⚠️ IMPORTANT: After firmware update the H-pattern shifters connected to the CSL Elite Wheel Base has to be manually calibrated again. See chapter ‘Hotkeys’ ‘Shifter calibration mode’ for more details.
6.1.1 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 Wheel Base.

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 Wheel Base to go ahead and see the complete menu.

The next appearing menu ‘function test’ then is depending on the attached Fanatec Steering Wheel. For the manual there is used the CSL Steering Wheel P1 for Xbox One as an example, see pictures below:

This window shows you a lot of different information and gives possibilities to test the currently used hardware and peripherals:
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 button ‘display test’ 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 button ‘FFB test’ starts a force feedback test and activates the motor of the CSL Elite Wheel Base to check proper functionality.

The button ‘Wheel Base RevLEDs test’ starts a signal flow on the LED bar on the upper frontside of the CSL Elite Wheel Base and activates them to test proper functionality of each single LED.

The button ‘Steering Wheel RevLEDs test’ 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 Rev-LEDs, refer to the product description of the used Steering Wheel.

The button ‘Vibration Test’ 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.

The three indicators ‘Clutch’, ‘Brake’ and ‘Throttle’ 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 Wheel Base.

**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 left or right the FunkySwitch™ (clockwise or counter-clockwise).
The ‘2GS’ indicator shows the activation of the 2GS (two gears shifter, sequential shifter, SQ) by filling the two little squares with blue colour, depending on activated shifting up or shifting down. This can be for example the ClubSport Static Shifter Paddles (CS SSP) or the ClubSport Shifter SQ (CSS 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) by filling the little squares with blue colour, depending on activated shifting position. This can be for example the ClubSport Shifter (CSS) or ClubSport Shifter SQ (CSS 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 of this view. There is shown 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 on the attached Fanatec Steering Wheel and also note that for the Universal Hub all button boxes, the shifter paddles and the FunkySwitch™ are shown even if they are not physically attached. See example picture for the Universal Hub on the right hand below:
If you go to the PC driver page ‘Settings’ you will see this window:

There are two different slider bars in the section ‘Steering wheel’:

The upper bar ‘Wheel angle’ can adjust the maximum turning angle of the CSL Elite Wheel Base, 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 section ‘Pedals’ 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 section ‘Gear shifts’ 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 at the Fanatec Steering Wheels. If you want to change the mapping so that the used inputs for these shifters are identically mapped as for the Fanatec Steering Wheel shifter paddles activate this checkbox. This might be a good option when using the ClubSport Static Shifter Paddles (CS SSP).
If you go to the PC driver page ‘Update’ you will see this window:

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 Wheel Base
- 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 Wheel Base will be started (see more detailed description in chapter ‘Firmware update procedure’ below in this user manual).

6.1.2 Firmware update procedure

To initiate the firmware update the CSL Elite Wheel Base first has to be 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 Elite Wheel Base Firmware’ when the CSL Elite Wheel Base is switched ON, see previous chapter ‘PC driver’
- by pressing the ON/OFF button “○” on the front plate of the CSL Elite Wheel Base for about 8 seconds when the CSL Elite Wheel Base is switched OFF.
When the Bootloader mode is active the fan is OFF and the LED above the ON/OFF button “↻” on the frontplate of the CSL Elite Wheel Base is flashing blue. On the PC screen this window will appear automatically as shown on the right hand side:

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 Wheel Base by pressing the button ‘Connect’.
When the Wheel Base Updater is connected to the CSL Elite Wheel Base 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.

The firmware update is proceeding. You can see the progress bar becoming green as shown on the right hand side:
When the update is done the CSL Elite Wheel Base will restart automatically after firmware update is completely finished as shown on the right hand side:

The CSL Elite Wheel Base 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 Wheel Base restarts and performs the initial calibration run to avoid injuries and/or miscalibration!

⚠️ **IMPORTANT:** The CSL Elite Wheel Base is secured by firmware and by driver so that usually it is not possible to install wrong firmwares on the CSL Elite Wheel Base! Do not try to force installation of any wrong firmware to the CSL Elite Wheel Base to avoid damages.

⚠️ **IMPORTANT:** After firmware update the center position of the CSL Elite Wheel Base has to be manually calibrated again. This is also indicated by the LED display of the steering wheel showing ‘CAL’. This appearance will be gone after manual calibration of the wheel center. See chapter ‘Hotkeys’ ‘Wheel center calibration’ for more details.

⚠️ **IMPORTANT:** After firmware update the H-pattern shifters connected to the CSL Elite Wheel Base has to be manually calibrated again. See chapter ‘Hotkeys’ ‘Shifter calibration mode’ for more details.
6.2 Start-Up procedure

The CSL Elite Wheel Base has an improved and faster start-up procedure:

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

- **Step 1**: Press the ON/OFF button “熄” at the front plate of the CSL Elite Wheel Base, marked in the picture on the right hand side:
- **Step 2**: The fans start working, the LED above the ON/OFF “熄” Button is lit red.
- **Step 3**: The CSL Elite Wheel Base starts turning to the right side (clockwise) until mechanical limit is reached. Then it runs back to the 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 Wheel Base 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)

- **Step 4**: 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:
- **Step 5**: If the wheel center was not yet calibrated ‘CAL’ is blinking on the LED display of the Steering Wheel as shown on the picture on the right hand side:

  Do manual wheel center calibration as described in chapter ‘Hotkeys’ of this manual.

  The CSL Elite Wheel Base is ready to use after manual wheel center calibration.

- **Step 6**: CSL Elite Wheel Base is ready to use. If the wheel center was already calibrated before step 5 can be skipped and the CSL Elite Wheel Base 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’.
6.3 Tuning menu

The tuning menu is shown on the tuning display on the Fanatec Steering Wheels after activating the tuning menu by pressing the tuning menu button (see chapter ‘Hotkeys’ of this user manual). To navigate through the tuning menu press up, down, left and right direction at the FunkySwitch™ of the Fanatec Steering Wheel or turn the FunkySwitch™ clockwise / counter clockwise. Note: At the ClubSport Universal Hub you can also use the D-Pad buttons on top of the Universal Hub so you do not need to attach the separate FunkySwitch™.

6.3.1 S_1 … S_5 (Setups)

Setups range: S_1 ... S_5 Setups default: S_1
The CSL Elite Wheel Base provides five different setups to store your adjusted values independent from each other. To change the used and active setup press up or down direction at the FunkySwitch™ of the Fanatec Steering Wheel or turn the FunkySwitch™ clockwise / counter clockwise.

6.3.2 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) or even some games support this feature (e.g. Codemasters F1). To change the used and active value press up or down direction at the FunkySwitch™ of the Fanatec Steering Wheel or turn the FunkySwitch™ clockwise / counter clockwise. Aut means that our driver and games can change this setting automatically by remote.

6.3.3 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 Wheel Base. If FF is set to OFF, there will be no force feedback effect executed by the CSL Elite Wheel Base 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 used and active value press up or down direction at the FunkySwitch™ of the Fanatec Steering Wheel or turn the FunkySwitch™ clockwise / counter clockwise.
6.3.4 SHO (Shock)

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

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

6.3.5 ABS

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

This feature can give you a direct and feel-able feedback about 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 settin SHO to “0”) AND the vibration motor on a CSP (V2) pedal set if it is connected directly to the wheel - 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 used and active value press up or down direction at the FunkySwitch™ of the Fanatec Steering Wheel or turn the FunkySwitch™ clockwise / counter clockwise.

6.3.6 DRI (Drift mode)

DRI range: OFF → 000 ... 005  
DRI default: OFF

The drift mode reduces the overall resistance of the wheel and let you turn the wheel more easily. It almost works like a power steering. It reduces the basic dampening of the wheel and makes the wheel turn faster. If the values is set too high (or if the games FFB interferes with this feature) you might experience some oscillation. If that happens - reduce the value or turn DRI “OFF” again. To change the used and active value press up or down direction at the FunkySwitch™ of the Fanatec Steering Wheel or turn the FunkySwitch™ clockwise / counter clockwise.

6.3.7 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 into a special direction), spring (pulls the wheel towards the center) 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 CSW you can increase or reduce these different effects individually. To change the used and active value press up or down direction at the FunkySwitch™ of the Fanatec Steering Wheel or turn the FunkySwitch™ clockwise / counter clockwise.

**Note:** If SPR is set to low values or ‘OFF’ the CSL Elite Wheel Base will not be able to move the attached Steering Wheel to correct center position after calibration run. **Force, spring and damper modifiers cannot be used on Xbox One since those separated FFB signals are not used in the XBO force feedback system.**

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**IMPORTANT:** Please do 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 development.

For further information check the FAQ section on our website www.fanatec.com/support.

### 6.3.8 BRF (brake force)

**BRF range:** OFF → 010 … 100  **BRF default:** 050

This brake force modifiers give you the ability to adjust the brake feeling according to your favour: Increasing the BRF to 100 means the user needs to press the brake with minimum force to achieve 100% brake signal. Reducing the BRF to OFF means the user needs to press the brake only with maximum force to achieve 100% brake signal.

You can either check the brake signal level on the PC driver or you can see it on the RevLEDs of the CSL Elite Wheel Base and/or the attached Steering Wheel (depending on Steering Wheel type). To change the used and active value press up or down direction at the FunkySwitch™ of the Fanatec Steering Wheel or turn the FunkySwitch™ clockwise / counter clockwise.

**NOTE:** The parameter BRF availability is depending on the pedals type at the Wheel Base’s PEDAL port, pedals have to support this feature. Please read the description and/or manuals of your pedals to verify the BRF feature is supported. For example the CSL Elite Pedals LC (= CSL Elite Pedals with Loadcell Kit) and the ClubSport Pedals V3 support this feature.
6.4 Revolution Lights (RevLEDs)

The CSL Elite Wheel Base introduces the RevLEDs feature integrated directly into the Wheel Base. This RevLEDs are usually mirrored with the RevLEDs of the Steering Wheel so games supporting the Steering Wheel RevLEDs also by default support the Wheel Base RevLEDs.

Further, if games make use of it, the RevLEDs of the Wheel Base can indicate a different meaning than the Steering Wheel RevLEDs. Example: Wheel Base RevLEDs show the fuel level while the Steering Wheel RevLEDs indicate the revolutions of the virtual car’s engine and push the driver to shift up at the best moment.

Beyond this in-game feature, the RevLEDs also are a helpful indicator in case of any unexpected behaviour: While the CSL Elite Wheel Base calibration run 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.

6.5 Cooling system

To avoid damages to the CSL Elite Wheel Base there is a well-managed cooling system integrated to the hardware and the firmware.

6.5.1 Hardware measures

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

Make sure that there is nothing blocking the air intake at the CSL Elite Wheel Base back side.
6.5.2 Automatic fans adjustment

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

When switching ON the CSL Elite Wheel Base the 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 Wheel Base and could even stop, depending on used firmware version.

The temperature control is subject to change by firmware updates so that the fans behaviour also could be changed.
7 ELECTRICAL OPERATION

7.1 Hotkeys

7.1.1 Tuning menu

To enter the tuning menu use tuning menu button (usually the small black button close to the LED display of the used Fanatec Steering Wheel; see corresponding quick guide of your Fanatec Steering Wheel). The picture just shows the tuning menu button on top of the ClubSport Universal Hub as an example:

7.1.2 Wheel center calibration

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

When you use a regular Fanatec Steering Wheel like the BMW M3 GT2, the Formula Black or Formula Carbon or the Porsche 918 RSR you must press the left and right stick at the same time. Please see corresponding quick guide of the Fanatec Steering Wheel you use at the CSL Elite Wheel Base.

The picture on the right hand side just shows the Fanatec Steering Wheel Porsche 918 RSR as an example:

When you use the ClubSport Universal Hub you have to press + on top side of the Universal Hub at the same time to calibrate the wheel center. On Fanatec Steering Wheels designed for Xbox One the corresponding buttons are. Refer to the Quick Guides of your used Steering Wheel.

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

Initially the CSL Elite Wheel Base is in PC mode if no Fanatec Steering Wheel for Xbox One is attached. For use on Xbox One the CSL Elite Wheel Base has to be attached with a Fanatec Steering Wheel for Xbox One (e.g. Universal Hub for Xbox One, CSL Steering Wheel P1 for Xbox One) and switch to Xbox One mode.

When the wheel base is booted with attached Fanatec Steering Wheel for Xbox One the wheel base is initially already in Xbox One mode, indicated by the green LED above the “○” button, see photo on the right hand side:

In case the CSL Elite Wheel Base is in PC mode with attached Fanatec Steering Wheel for Xbox One you have to connect the wheel base to the Xbox One console via USB cable and then press the buttons + or use the ‘MODE’ button instead at the same time after auto calibration of the CSL Elite Wheel Base is completed.

Both ways allow to toggle between PC and Xbox One mode when a Fanatec Steering Wheel for Xbox One is attached, with other Fanatec Steering Wheels the CSL Elite Wheel Base works on PC only.

PC Mode is indicated by red lit LED above the “○” button

Please see corresponding quick guide of the Fanatec Steering Wheel you use at the CSL Elite Wheel Base. Please see user manual of the Universal Hub for Xbox One as well.
7.1.5 Shifter calibration mode

To enter the H-pattern shifter calibration mode on regular Fanatec Steering Wheels press START (10) + tuning menu button at the same time. The START button is usually the black button on the lower right center of the Steering Wheel, the picture on the right hand side shows the Porsche 918 RSR as an example:

To enter the H-pattern shifter calibration mode on the Universal Hub press **START (10) + tuning menu button** at the same time:

Put the H-pattern shifter’s lever into the position shown on the LED display and acknowledge each single position by pressing **START (10)** to get to the next one.

On Fanatec Steering Wheels designed for Xbox One the corresponding buttons are Tuning menu + MENU button.

Please refer to the Quick Guides of your Fanatec Steering Wheel for more detailed information.

⚠️ **NOTE:** After firmware update the CSL Elite Wheel Base 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.

Put the H-pattern shifter’s lever into the position shown on the LED display and
acknowledge each single position by pressing START (10) / MENU to get to the next one.

The following pictures show the instructions on the LED display of the Universal Hub but are similar on the other Fanatec Steering Wheels:

- neutral position
- rear
- 1st gear
- 2nd gear
- 3rd gear
- 4th gear
- 5th gear
- 6th gear
- 7th gear

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

⚠️ NOTE: If you did not intend entering the shifter calibration mode please simply complete the calibration process without connected shift-er and moving shifter lever, then leave the shifter calibration mode at the end of the process. This has no impact on the CSL Elite Wheel Base original calibration itself and you can go ahead without shifter.
Clean only with a dry or slightly damp cloth. Using cleaning solutions may damage your CSL Elite Wheel Base.

### Troubleshooting

The CSL Elite Wheel Base 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 Wheel Base, please use the following guide for elimination of errors. On the website www.fanatec.com/support you will find further details and contact data.

If the CSL Elite Wheel Base is not working properly:

<table>
<thead>
<tr>
<th>Problem description</th>
<th>Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>After firmware update of the CSL Elite Wheel Base the steering wheel is not properly centered.</td>
<td>After doing a firmware update on the CSL Elite Wheel Base the wheel center position must be manually calibrated. See chapter ‘CSL Elite Wheel Base Functions’ → ‘Firmware and driver update’ of this manual for more details.</td>
</tr>
<tr>
<td>After firmware update of the CSL Elite Wheel Base the H-pattern shifter is not working properly.</td>
<td>After doing a firmware update on the CSL Elite Wheel Base the H-pattern shifter must be manually calibrated. See chapter ‘CSL Elite Wheel Base Functions’ → ‘Firmware and driver update’ of this manual for more details.</td>
</tr>
<tr>
<td>The driver window does not show the attached Steering Wheel.</td>
<td>Make sure that you have updated your CSL Elite Wheel Base to the latest firmware version which can be downloaded from <a href="http://www.fanatec.com/support">www.fanatec.com/support</a>. 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 Wheel Base might be damaged.</td>
</tr>
<tr>
<td>Problem description</td>
<td>Solution</td>
</tr>
<tr>
<td>------------------------------------------------------------------------------------</td>
<td>------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>The tuning display does not show anything or is not working partially.</td>
<td>Try to use another Steering Wheel. If this is also not working properly the CSL Elite Wheel Base might be damaged.</td>
</tr>
<tr>
<td>Center calibration with Universal Hub is not working because of missing d-pad / sticks.</td>
<td>For the CSL Steering Wheel P1 for Xbox One, for Universal Hub and for Universal Hub for Xbox One there is a different button combination than for other Fanatec Steering Wheels. See description in chapter ‘Hot- keys’ of this user manual as well as the user manual for the Universal Hub.</td>
</tr>
<tr>
<td>After switching on the CSL Elite Wheel Base the auto calibration is not working properly.</td>
<td>Make sure that you have updated your CSL Elite Wheel Base to the latest firmware version which can be downloaded from <a href="http://www.fanatec.com/support">www.fanatec.com/support</a>.</td>
</tr>
<tr>
<td>After playing a while the CSL Elite Wheel Base seems to become weaker or is fading.</td>
<td>When the motor temperature is close to upper limit the tuning menu values will be overwritten to regular maximum values (not higher than 100 %). 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 to calm down. Let your CSL Elite Wheel Base calm down before continue using it.</td>
</tr>
<tr>
<td>After playing a while the CSL Elite Wheel Base motor has switched OFF.</td>
<td>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). Let your CSL Elite Wheel Base calm down before continue using it. Contact our customer support if this happens consecutively.</td>
</tr>
<tr>
<td>Fans are always working in full speed even if ClubSport Wheel Base just was switched ON and cannot have higher temperatures.</td>
<td>In case of malfunctioning temperature sensor the fans are working at maximum speed to protect the hardware from overheat. Please contact our customer support.</td>
</tr>
<tr>
<td>After calibration run at startup of CSL Elite Wheel Base the attached steering wheel doesn’t go to correct center position.</td>
<td>Please check your tuning menu settings, the value for SPR (spring) must be higher than ‘000’ as this effect is required to make correct centering. Default value is ‘100’.</td>
</tr>
<tr>
<td>Some of the tuning menu settings are not available on Xbox One and cannot adjust.</td>
<td>As the Xbox One uses a different FFB effect system the parameters SPR, FOR and DPR cannot be adjusted separately within this system. The only option is the adjustment of the overall FFB strength by parameter FF.</td>
</tr>
</tbody>
</table>
Before contacting the Fanatec Customer Support please note the serial number of your CSL Elite Wheel Base: ……………………………………………………………

You can find the serial number on a sticker on the bottom side of you CSL Elite Wheel Base or on stickers on one of the packaging boxes. The serial number starts with letters ‘LE’ and has additional 8 numbers, for example: **LE62407001**.

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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. Colours and decorations may vary.

In the European Union: The packaging materials can be depolluted for recycling according to the legal regulations depending on the country responsible for the corresponding law.

For all other countries: Please adhere to local recycling laws for packaging materials.
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.

This device complies with the European product regulations according to CE regulations.

The CE regulations contain basic requirements for safe usage of technical products.
Please check the FAQ database at www.fanatec.com/support to see if your problem can be solved there. Normally, the warranty period is one year. However, this may differ depending on the respective state.

1) Endor® AG grants for the hardware product – as extension of shorter national warranty regulations, if applicable a one-year warranty for material and manufacturing defects. The warranty does not include defects that are due to commercial use of the product and/or normal wear and tear and/or damaging by third parties and/or improper utilization or treatment and/or utilization of the product contrary to the operating and maintenance instructions and/or not intended installation and/or non-compliance with the local safety standards and/or the results of an intervention by a third party or a not authorized opening of the device including any measures for modification, adjustment and/or adaptation measures (also in case of professional execution). Warranty applies as of the date of purchase when the final customer purchased the product, and is exclusively limited to the rights as of 2), as far as this does not limit any further legal warranty claims on the basis of various national laws. Warranty is subject to return of the defective product with carriage paid, within the warranty period, including the original receipt that must include date of purchase as well as the company stamp/company print of the first dealer.

2) The warranty covers – at the choice of Endor® AG – either gratis repair or replacement of the device or components of the device. With defects that are not covered by the warranty and/or that are excluded from warranty (see above), possibilities for repair are to be requested with the local customer service or the local dealer. As far as permitted by law, any further liability - with the exception of intent and gross negligence – is excluded for any indirect or direct damages and consequential damages, regardless of whatsoever basis of claim.

This applies in particular to damages with other property, damages to persons, data losses as well as financial losses like loss of profit as well as transport damages in connection with returns to Endor® AG. As far as liability limitations are not legally allowed or effective in certain states or certain regions, the limitations are to be effective to such extent that exclusions of liability. This gaming device is designed to withstand approximately one hour of use per day during the course of the warranty period of one year.