

Fanatec wheel side conversion kit – Version 3.2 – 3.4 Fitting instructions

Thank you for purchasing our Fanatec conversion kit.

These instructions will help you fit the kit to your wheel. It is recommended that you read through the instructions fully before starting work on your wheel.

Please remember that fitting this kit to your wheel will invalidate any remaining Fanatec warranty.



Included with your conversion kit...



- 1 Conversion kit



- 1 Wheel connection cable



- 3 M5 16mm Counter sunk bolts (Already fitted to kit)



- 6 M5 16mm Cap head bolts (QR mounting)



- 3 M5 16mm Dome bolts (QR mounting)

These fitting instructions are for the following wheels...

1. Formula Black
2. Formula Carbon
3. Formula E-Sports

1. Start by removing the bottom cover. To do this just undo the bottom two bolts (Highlighted in Orange on the pic) from the front of the wheel using a 3mm hex key. The plastic bottom cover will just come off (On newer wheels you will have to remove the little round quality control sticker that Fanatec has started to put on this cover.)



2. It is advisable to remove the shifter plugs at this stage to make it easier when removing the back of the wheel. Just gently ease both the left and right plugs out.



3. Next, Remove the 4 main bolts from the front of the wheel (Highlighted in purple). These use a 3.5mm hex key and they are M4 bolts. When removing these, take great care as it is easy to damage the bolt heads because Fanatec use quite soft metal and too much thread lock. Ensure the Hex key is as deeply inserted into the bolt as possible and very gently start to undo so that you feel the thread lock break. When you remove the bolts metal spacers may fall out, keep these safe... You should have 4 bolts and 4 spacers to set aside.

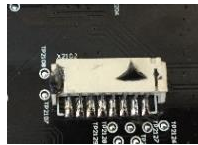
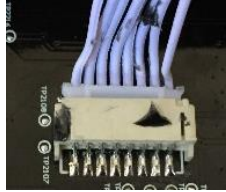
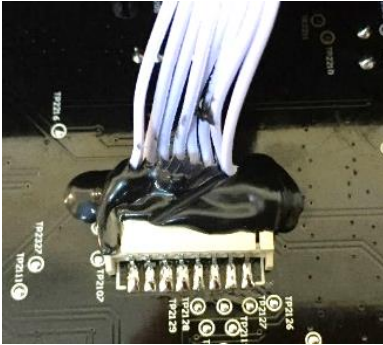
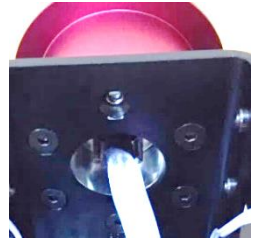


HINT: If you manage to damage one of these bolts this will help. Obtain a Torx driver bit that is just bigger than the Hex bolt bit, so it does not quite fit. Gently hammer this into the bolt so it is secure. You should now be able to undo the bolt successfully.



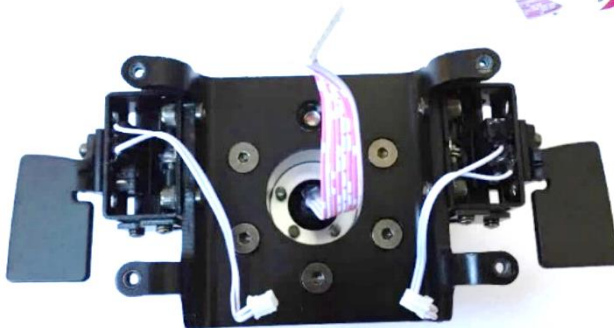
4. Now that the bolts are removed the back plate of the wheel with the shifters and quick release will come away from the main wheel. It is held on by 4 wires, be careful not to let these wires get pulled.
5. Remove the shifter cables from the Fanatec PCB by gently pulling them out of their slots if not already done in step 2.

6. Remove the bolt holding the QR onto the plate that has the black grounding wire attached.
7. Gently remove the black or clear glue holding the flat plug to the Fanatec PCB. A pair of pliers works well. Ensure you

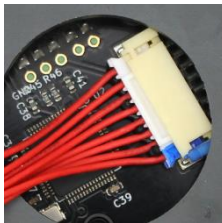


do not pull up otherwise the plug and socket will come away from the PCB and may cause damage to the PCB. Alternatively, you can warm the glue with a hair dryer, but this does tend to get messy.

8. Gently remove the final cable from the PCB... Again, do not pull up with the cable just ease it out.
9. You should now have the wheel in 2 parts. The next step is to remove the QR from the plate. Undo the 5 remaining bolts using a 3.5mm Hex key. The QR should then just come away from the plate and can be put aside. Retain the longest bolt to refit the grounding cable later. If you have problems removing these bolts use the Torx trick as shown in step 3.



10. Fit the supplied cable to the back of the conversion kit if not already fitted V3.2 needs the cable fitting the correct way around make sure the blue mark on the cable plug lines up with the mark on the kit plug.



11. Next you can fit the conversion kit to the plate. Your kit is supplied with 3 bolts hand screwed into it. Note the holes that these bolts are in because these are the 3 holes that correspond to the Fanatec plate. The other 3 are different and there to accept a generic 50.8mm quick release.

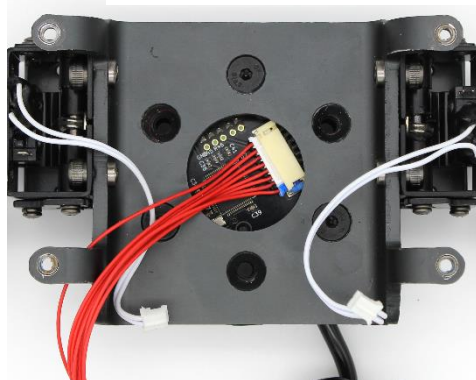
3 bolts have been lightly placed into the kit in the correct holes. Remove these and use them to attach the kit to the wheel plate. You only need 3 bolts.

Fit the kit like this. It is recommended that you use a very small amount of thread lock or superglue on the bolts, this will stop them working loose.



12. Replacement shifters. If you are replacing the gear shifters with our upgrade, now is a good time to fit them.

13. The next step is to connect the red cable from the kit to the wheel PCB. Carefully plug the kit cable into the wheel PCB as shown. You can secure the plug with glue gun glue, but this is not really needed so optional.



14. Now connect the grounding cable from the wheel PCB. Using the longer of the bolts that held the Fanatec QR in place connect the ground cable to the conversion kit using the bottom bolt hole. This hole is not the correct size for the bolt as it's a slightly different



pattern so you will need to force the bolt in, sometimes at a slight angle. Forcing the bolt in ensures a really good connection to the aluminium. Note that V3.2 kit does not need a grounding cable from the kit as grounding goes direct from the PCB to the casing.

15. Next, reconnect the gear shifter cables

Nearly there, we just need to put the wheel back together. The hardest part of this is getting the



spacers in place before you do up the front bolts.

Some people stick them in place with glue, but my preferred method it to put the back plate onto the

wheel without the spacers. Then from the front of the wheel, slide one spacer into place and lightly apply the bolt to about halfway. Then do the others one at a time. Check no wires are caught and that the shifter wires are inside the back plate and then tighten the 4 bolts. Finally replace the bottom cover and go test the wheel 😊



Software

The buttons, shifters and rotaries will work without the need for any software. You do not need Fanatec software or drivers. The wheel will not show up in Fanatec software.

To use the LED's display and rumble you need to install either Fanaleds or SLI-Max pro. Both are free to use.

NOTE: FANATEC SOFTWARE WILL NOT WORK WITH THE WHEEL. You need Fanaleds NOT FANALAB. If you can we recommend removing Fanatec drivers and software from your computer.

Some games try to control the wheel direct and this never works properly, so you may need to turn off game features. This web page is a great resource for this

<http://www.eksimracing.com/slimax-manager-plugins-updates/>

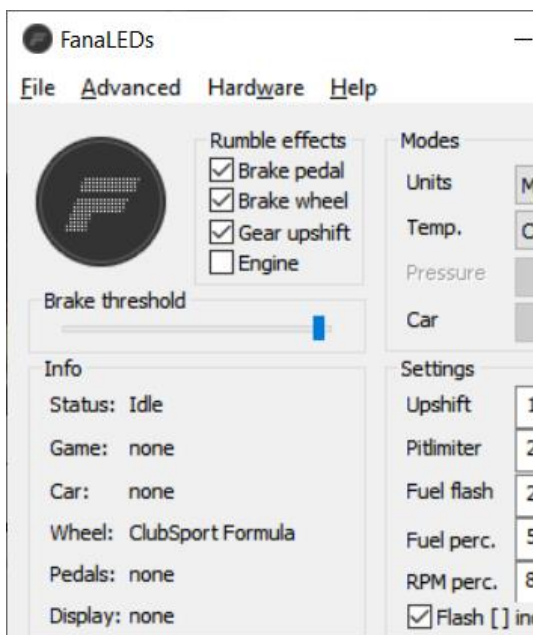
Occasionally, windows update seems to corrupt the game controller settings if Fanatec software is installed. If you have problems, please uninstall fanatec drivers / software. If you need them for pedals or a shifter, reinstall once the wheel is working properly.

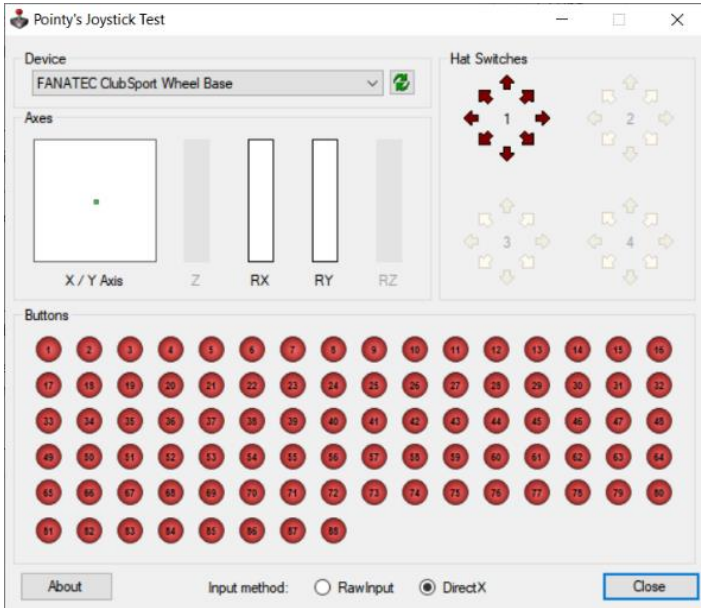
Testing

You can test the wheel / kit at any time throughout the conversion. If you plug in the USB cable before attaching it to a wheel it will show up in windows and Fanaleds but say No Rim.

It is a good idea to re-attach the front of the wheel leaving the bolts slightly loose and then test by connecting the USB cable with the wheel not attached to a force feedback base. Once you have tested that everything works in windows you can tighten the bolts fully.

To test the wheel in windows we recommend using Fanaleds and Joystick test (Available on our downloads page in the help section). Firstly, check that the wheel is reported correctly in Fanaleds. Then test all buttons in Joystick test or the standard windows game controller.





Firmware

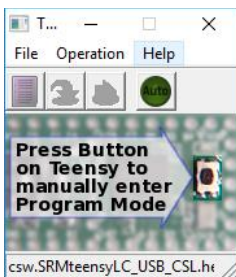
Your conversion kit is supplied with the latest firmware already installed. You do not need to flash it unless we release an update.

Version 3.1 of the conversions kit uses a brand new custom designed PCB which is based on the Teensy 3.2. Earlier kits use the teensy LC, an entry level board. Please ensure that you only flash the kit with firmware for version 3.1 kits.

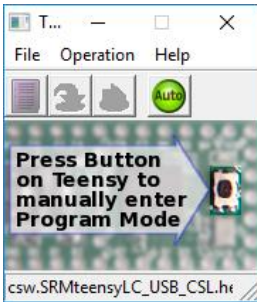
If you need to flash the firmware on the kit at any time you can download the latest file from our software page in the help section of the web shop. The zip file will include instructions, the flash file (.hex) and the teensy flashing tool program.

To get to the flashing button on the PCB you will need to remove your quick release first.

1. Download the firmware package



2. Run the teensy.exe flash program
3. Load the firmware file – File > Open HEX File – Navigate to the downloaded, .hex file
4. Click on the AUTO green button



5. Ensure the conversion kit is connected to the PC via the USB cable
6. With V3.2 onwards the kit can be flashed from outside the kit by pressing the red button through the hole in the side of the kit case. Just use a small object to go through the hole and press the red button gently.
7. You should hear a beep and the software will say reprogramming.
8. The kit should then reboot.
9. That should be it. Now have the new firmware on your conversion kit and it is ready to use.



We hope you enjoy your converted wheel. If you need any help or have any questions, please feel free to make contact sales@simracingmachines.com

