FDU Setup Guide

Quick Start Guide – Please follow instructions below to setup & configure your Castlespeed FDU (Flag Display Unit) with SimHub.

NOTE: You do not need to upload a sketch using SimHubs Arduino Harware setup tool. Your FDU is pre-configured and doesn't require upload of a sketch.

WARNING – Uploading a sketch could cause your FDU to stop working.

FDU Mounting

Go ahead & unbox your FDU & the supplied hardware kit.

The box includes the following items:

- 1x FDU
- 1x High Quality USB type-C cable (1m)
- 1x Ball mount (M6 t-slot nut included)
- 4x M5 Mounting bolts
- 1x 3mm hex key
- 5x Cable tidy clips (4040 profile compatible)
- 1x Free holographic sticker
- 1x Setup instruction card

The ball mount offers ultimate flexibility for positioning on your 4040 series aluminium extrusion-based rig.

Assembling the ball mount to your rig:
Remove the M6 t-slot nut from the supplied hardware bag.
Insert the t-slot nut into the aluminium profile where you want your FDU to be located.
The supplied t-slot nut is a 'drop-in' type, no need to dis-assembly any parts of your rig frame. See images below to guide t-slot nut installation.

Next, locate the ball mount , ball mount washer & the large knurled ball nut from the supplied hardware bag. Insert the ball mount, threaded section first, through the knurled ball nut. (Note: pay attention to nut orientation) The ball should pass partially through the knurled nut as pictured.

Next, take the ball mount washer and slide it over the threaded portion of the ball mount.

Fine-tune the position of the t-slot nut in the extrusion profile. Screw the ball mount assembly (including washer & knurled nut) into the t-slot nut using a 5mm hex key (not provided) . Tighten the ball mount bolt until some resistance is felt. Do not overtighten. Do not use power tools.

Now it's time to assemble the ball mount receiver bracket to the FDU. (It’s recommended to leave the protective film on the FDU during this stage)

Locate the receiver bracket, 4x M5 button head screws & the 3mm hex key from the hardware bag provided.

Offer up the bracket to the rear of the FDU & insert one of the M5 fixings through the bracket & into the threaded brass inserts on the rear of the FDU housing. Tighten half-way and then repeat the process for the remaining 3 fixings.

Once all fixings are loosely assembled, all 4 fixings can be fully tightened using the 3mm hey key. A criss-cross tightening pattern is recommended. Do not overtighten. Do not use power tools.

At this point, the FDU with assembled receiver bracket can be offered up to the ball mount assembled to your rig in the previous steps.
Push the receiver bracket onto the ball mount and hold the FDU in this position. Simultaneously rotate the knurled ball mount nut clockwise to engage the threads. Continue to rotate until some resistance is felt.

Set the FDU in the optimal position and fully tighten the knurled ball nut by hand.

Cable clips can be used to manage cable routing. Push the clips onto the cable, then push the clip into the extrusion slot and rotate 90 degrees to secure the clip into the extrusion.

SimHub Setup

FDU requires the use of SimHub software. If not already installed, please install SimHub on your PC.

SimHub can be downloaded from: https://www.simhubdash.com/

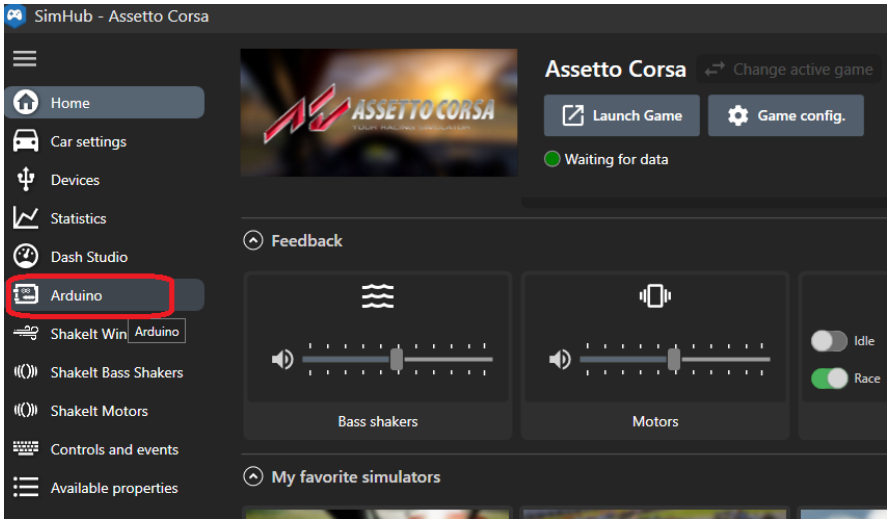
Although not required, it's recommended to purchase a SimHub licence to unlock its full potential. Purchasing a licence helps support the SimHub developer.

SimHub FDU Configuration

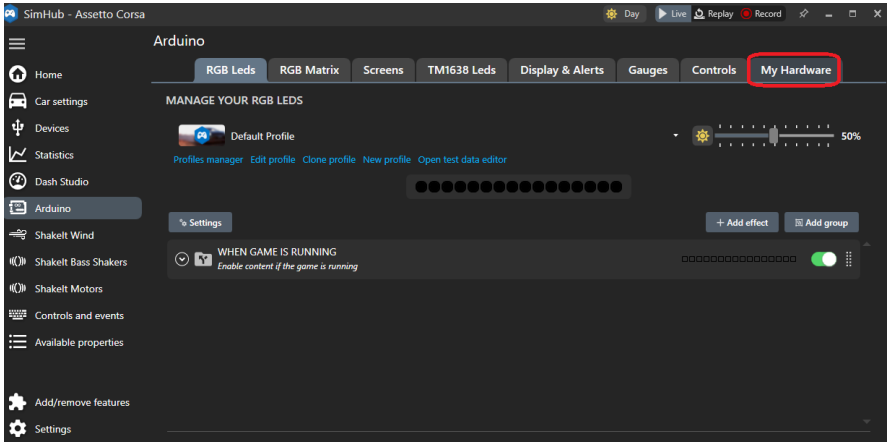
Connecting to SimHub

Launch the SimHub software and connect the FDU to your PC (using the supplied USB-C cable) to a free USB port.

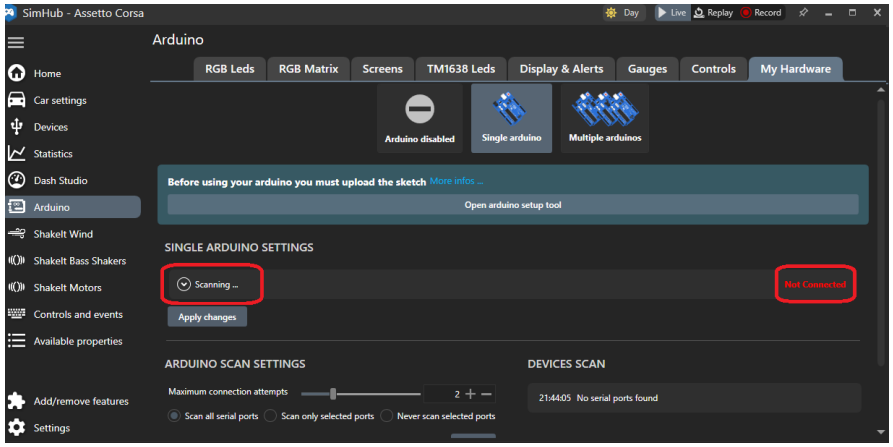
Within SimHub, navigate to the 'Arduino' tab.



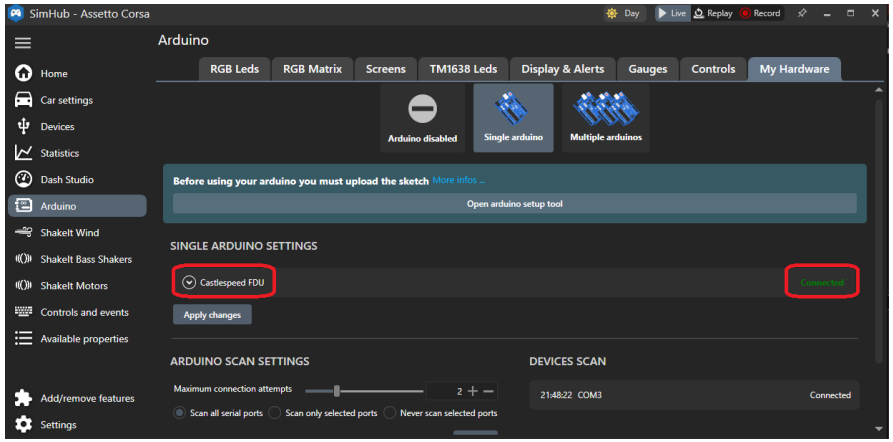
From the banner at the top of the window, select ‘My Hardware’.



Underneath the ‘arduino settings’ section, you will see the SimHub software ‘scanning’ for new devices.



Wait approximately 30 seconds for SimHub to find the FDU device. The scanning status will change from ‘Not Connected’ to ‘Connected’ and show ‘Castlespeed FDU’ as the device name.



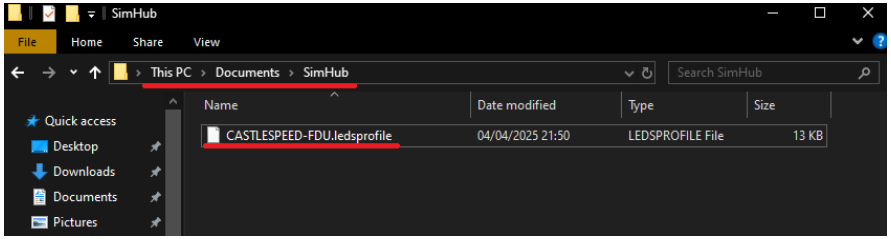
If SimHub doesn’t connect to the FDU, please try another USB port on your PC.

Configure FDU LED Profile

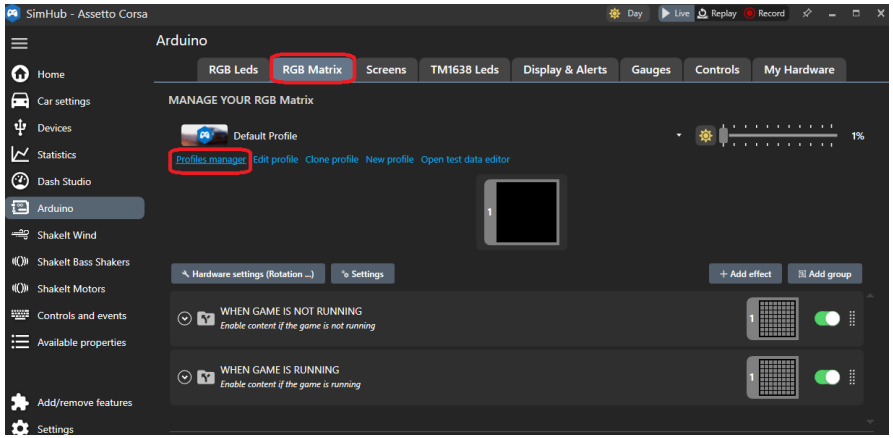
Once connected, the LED profile for the FDU needs to be imported into SimHub.

Download the FDU LED profile from: www.castlespeed.co.uk/fdu-setup

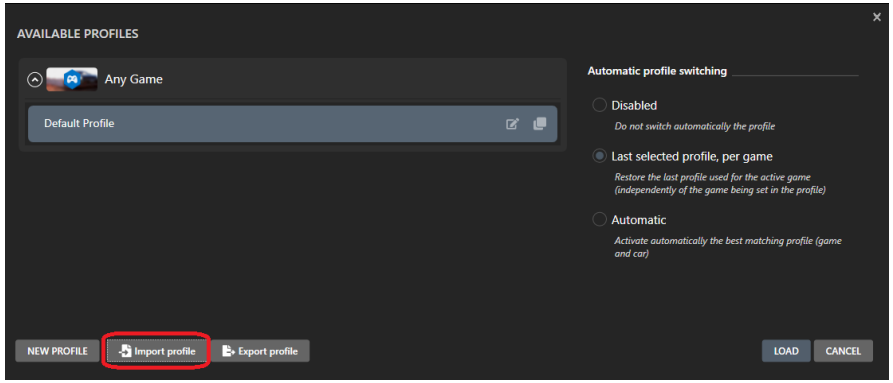
Un-zip & save the '.ledsprofile' file to your 'Documents/SimHub' folder.



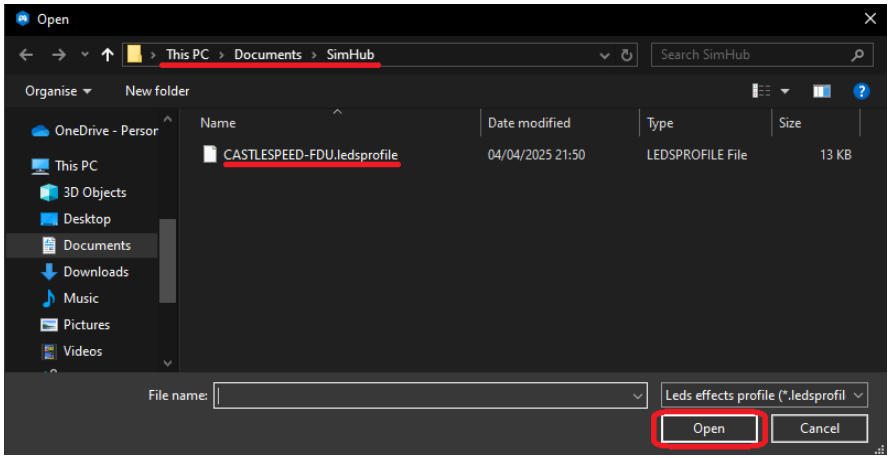
Within the SimHub software, navigate to the 'Arduino' tab and then select 'RGB Matrix' from the banner at the top of the window.



Click on 'Profile Manager', followed by the 'Import Profile' button.



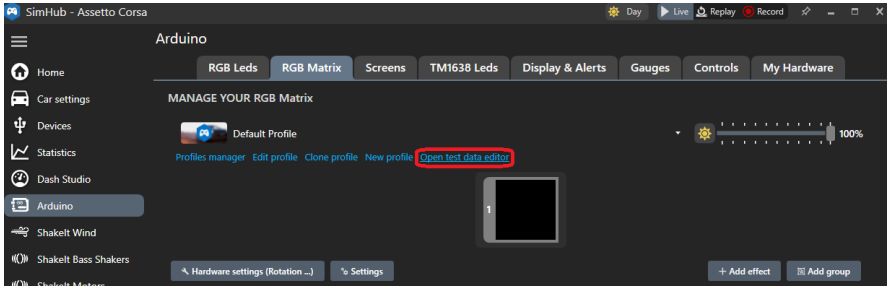
Then select the 'CASTLESPEED-FDU.ledsprofile' from your 'Documents/SimHub folder', followed by 'Open'



LED Testing

You should be all set at this point! You can test out your FDU before entering a game using SimHubs ‘test data editor’.

From the ‘RGB Matrix’ screen, click ‘Open test data editor’. Use the sliders and checkboxes in this window to test out the FDU functions.



If no LEDs illuminate, please try restating SimHub.

Go Race!

That’s it, go enjoy a race with your freshly installed FDU.

If you encounter any issues along the way, feel free to reach out to us via email using ‘FDU Support’ in the subject line.

info@castlespeed.co.uk