INSTRUCTION MANUAL

GRID DDU5

VERSION 1.5

Last updated: 20-01-2025

BEFORE YOU START:

Thank you for your purchase. In this manual we will provide you with the means to get started using your new dash!

GRID DDU5

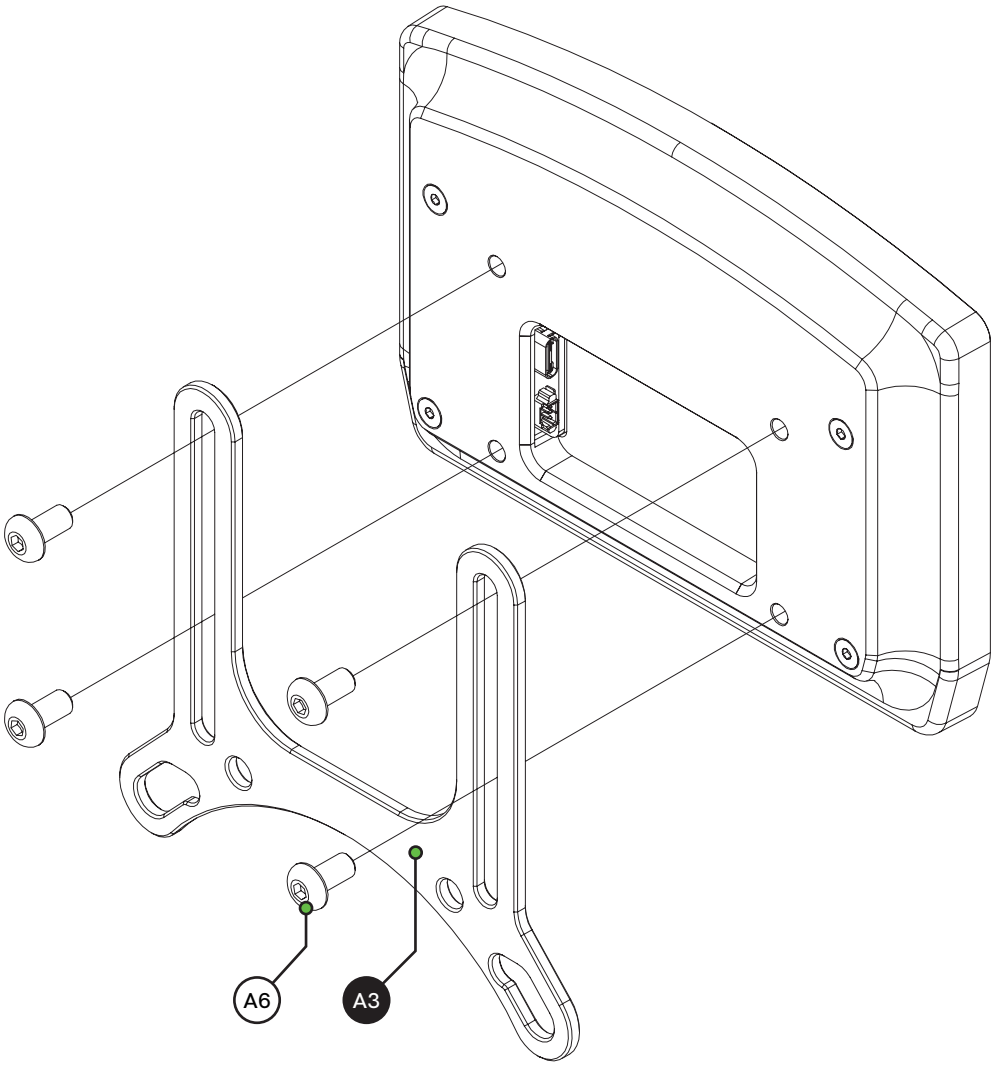
Features:
5” 854x480 Sim-Lab LCD
20 full RGB LEDs
Up to 60 FPS
24 bit Colors
USB-C Powered
Multiple software options
Drivers included

Mounting the dash is very easy thanks to the included mounting brackets. We offer a wide range of support for most popular hardware.

From 2025, we also added the capability to connect GRID BROWS V2 straight to the DDU.

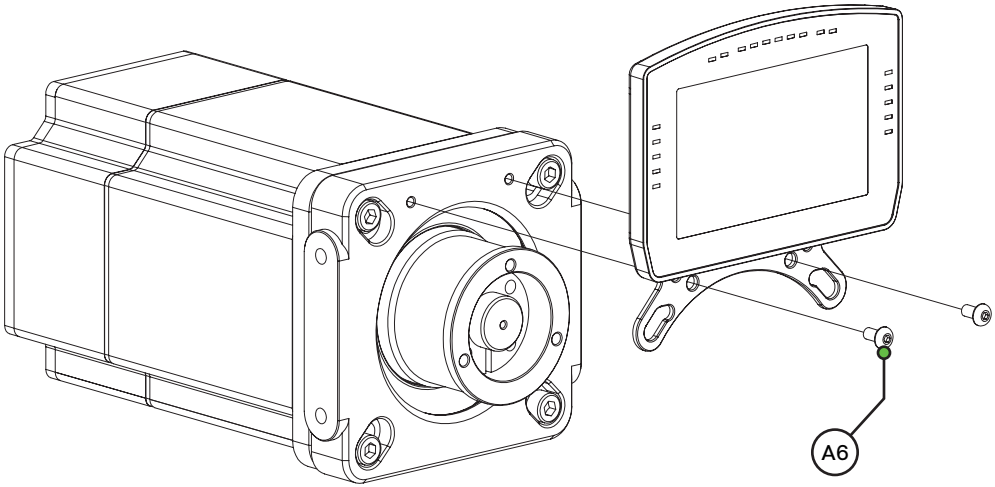
Mounting the dash

To be able to mount the dash on the hardware of your choice, we provide several mounting brackets. Which ones you have received may depend on your purchase and may be different from the following ones we show. However, mounting is all more of the same. With the instructions for the two included brackets, you should be able to mount any specific ones for your hardware.

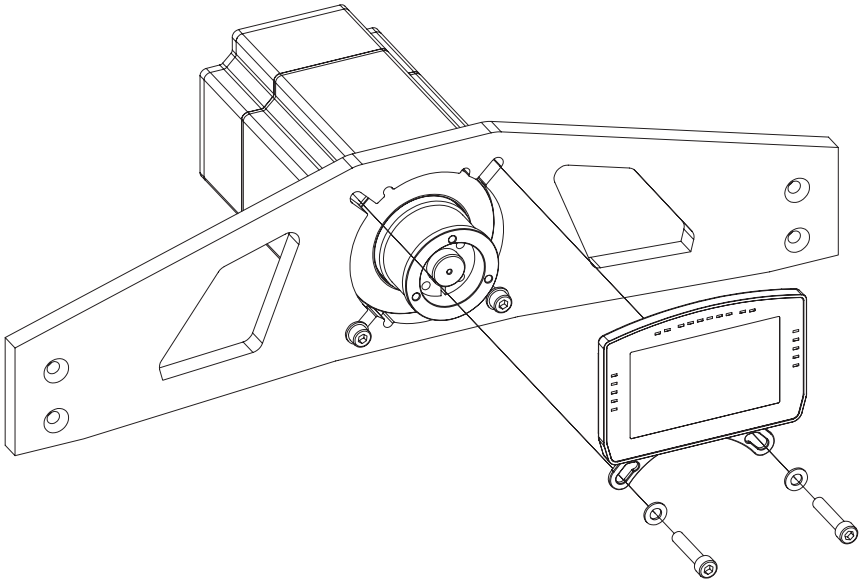


Sim-Lab/Simucube/Simagic/VRS

Using the accessory mounting holes on the Sim-Lab front mount, only two bolts are needed.

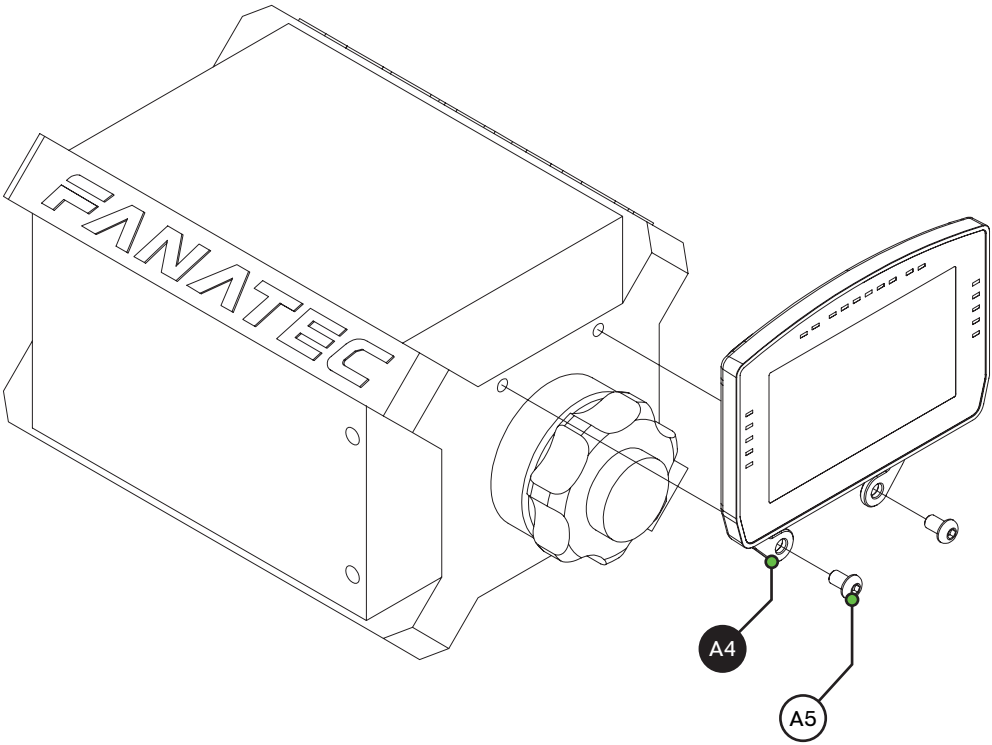


As for mounting directly onto your motor or older style front mount, this is very straightforward. Remove the existing upper bolts which hold the motor in place. Re-use these bolts and washers to fix the mounting bracket to the front mount.



Fanatec DD1/DD2

Locate the accessory mounting holes on your Fanatec hardware and use the two bolts (A5) from our supplied hardware kit.



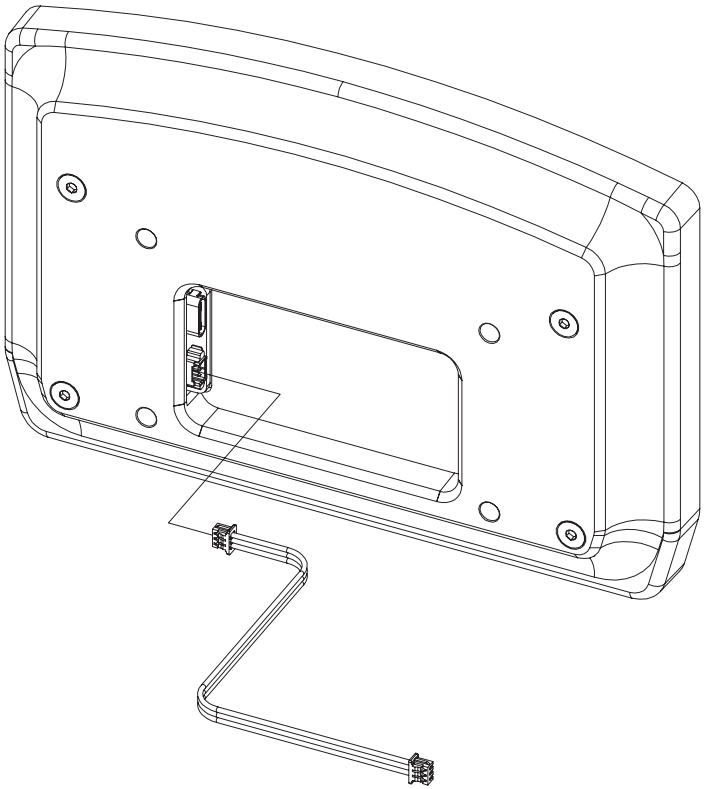
Connecting GRID Brows V2

From 2025, the DDU5 also adds the ability to connect the GRID Brows V2. Using the built-in connector and using the supplied cable, connect straight to from your brows to the DDU5. The advantage? The DDU will take over as control box for the brows. This mean you save on one USB cable going to your PC.

You can connect up to four brows to the DDU5, just as you can using them on their own.

Here is where you plug in the cable. The other end of the cable will connect straight to the 'IN' connection on the first brow in the chain. Again, the Brows V2 control box, is not to be used, when they are connected through the DDU5.

For more information on the GRID Brows V2, please refer to its own product manual.

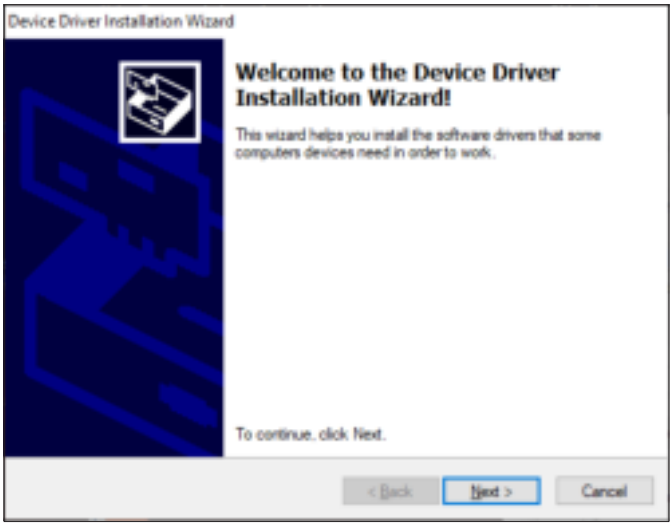


Installing drivers

Display drivers
To enable the display of the DDU5, a specific driver is needed. This can be downloaded through the URL and/or QR code. When updating to the latest RaceDirector (see page 9), the LCD driver is part of the installation process.

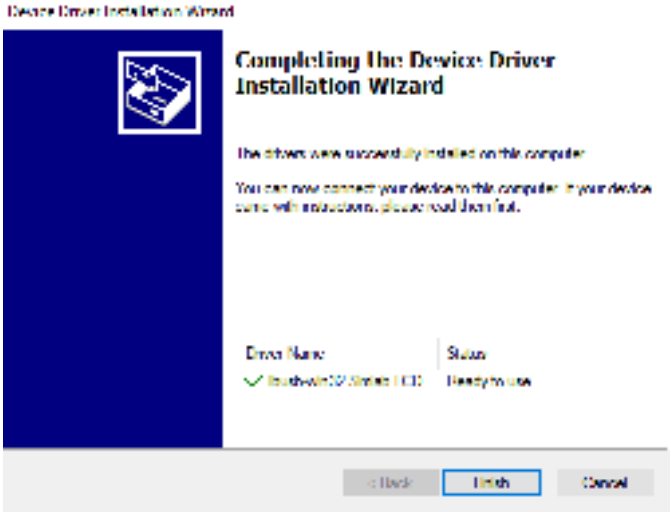
Sim-Lab LCD driver download:

Installation
To install the display driver, unzip the downloaded folder and run 'SimLab_LCD_driver_installer':



Press 'Next >'.

The drivers will install now.



Press ‘Finish’.

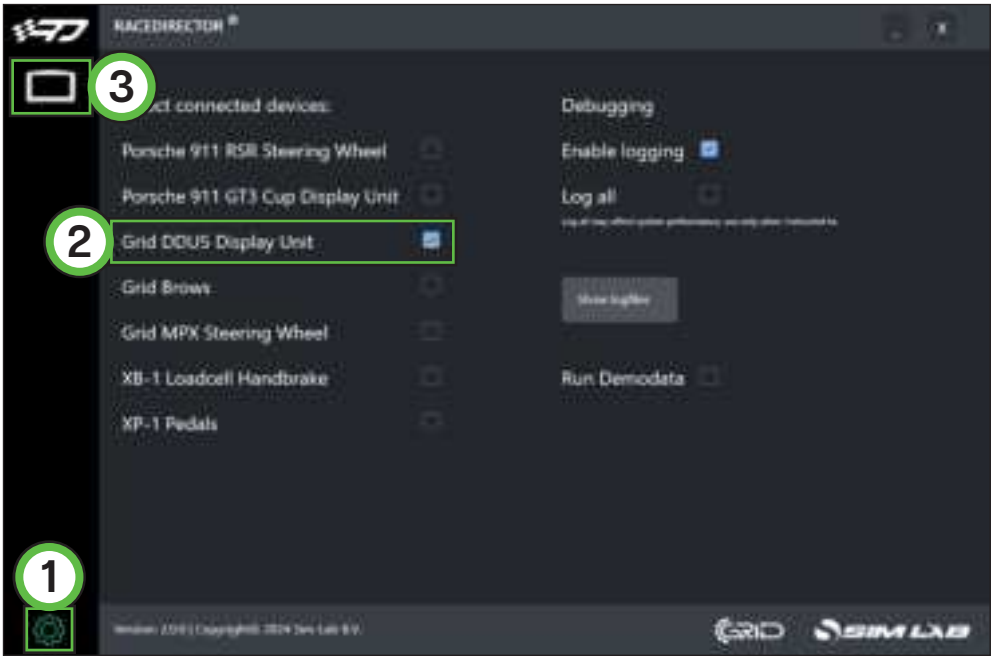
RaceDirector

Download and install the lastest version of RaceDirector from
www.sim-lab.eu/srd-setup

For explanation on how to install and use RaceDirector, please read the manual.
This can be found here: *www.sim-lab.eu/srd-manual*

We will now go over the very basics to get going using RaceDirector to get you on track asap. We really urge you to go through the manual for a more in depth explanation of the possiblities RaceDirector has to offer.

First we need to activate the product, this is done on the 'Settings' (1) page.



Tick the 'Activate' tickbox next to 'Grid DDU5 Display Unit' (2) and its icon (3) should appear on the left side of the screen. Selecting the icon (3) will take us to its device pages.

Device pages

DISPLAY (A)

Almost all of the options found here speak for themselves, though for the sake of being complete, we will go over them on by one.

- 'Current Dash' (1)

  This allows you to select a dash for a given car. We do not support all cars in every sim. In case a caution symbol ⚠ is shown, the selected dash requires installation of a font. Click the icon and a window with instructions will pop up. Follow these to manually install the fonts required. After restarting RaceDirector, you are good to go.

- 'Adjust dash preferences >' (2)

  A new window will allow you to adjust some dash preferences. (See next page)

- 'Display configuration' (3)

  This will make sure the chosen dash is rendered on the intended display. When you are not sure which display to select, press 'Identify screens >' (4) to help identifying which display is which. If a single vocore screen has been connected, this will be automatically selected.

- ‘Next dash page’ (5)
  Cycle to the next page of the loaded dash. Select the appropriate button you want to use and press ‘Confirm’.

- ‘Previous dash page’ (5)
  Cycle to the previous page of the loaded dash, works like described above.

Note: when the page controls are configured, they won’t affect a dash *unless* a sim is running *or* the ‘Run Demodata’ option is ticked in the RaceDirector settings.

Dash Preferences
These are common settings shared among dashes.

We do expect these to slowly expand, depending on requests from the community and new cars added to our favorite sims.

- 'Low fuel warning' (1)
  This number (in liters) will be used for the dash to know when to acticate the 'Low Fuel' alarm or warning.

- 'Average fuel laps' (2)
  This value determines how many laps are used to calculate average fuel usage. The average is reset every time you enter the pits to keep the average a fair number.

- 'Fuel per lap target' (3)
  This value (in liters) allows you to set a target fuel comsumption (per lap), great to use in endurance racing.

- 'Unit settings' (4)
  At the moment this setting only applies to the speed variable.

- 'Special screen duration' (5)
  Special screens are overlays which are triggered when adjusting certain functions. Think brake balance, traction control etc. This number (in seconds), changes the duration of the overlay. A value of 0 is turning the feature off entirely.

When happy with your settings, press 'Save preferences' (6) to return to the main RaceDirector window.

LEDS (B)
This will be explained in two parts, first we will go over the main options.

- 'Default' (1)
  This selection menu is how you select an existing profile and load it, or create a brand new one. In this case, the 'default' LED profile is loaded. You can create and store as many as you like.

- 'Save changes to profile' (2)
  Use this button to save changes made to a profile, or use it to save a new profile. This button also warns you have when a change was made to an existing profile, turning orange as a warning.

- LED Brightness' (3)
  This slider changes the brightness for all LEDs on the device.

- 'RPM redline flash %' (4)
  This is the value in % where your redline flash or shift warning will be listening to. This does require your revlights to have the 'RPM redline flash' behavior enabled. This is a global setting per device.

- ‘Blinking speed ms’ (5)

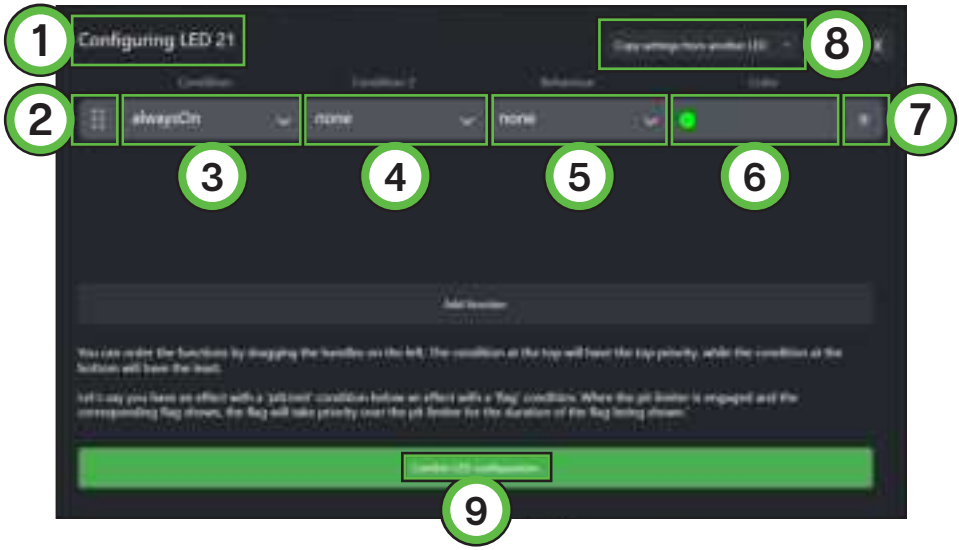
  This determines how slow or fast your LEDs will be blinking in milliseconds. This is a global setting per device and requires the ‘Blinking’ or ‘RPM redline flash’ behavior to be activated. Warning: please take care with low settings when you are sensitive to seizures. We recommend to start too slow (high ms) and tweak from there.

- ‘Test all LEDs >’ (6)

  This opens up a pop-up window where you use test input to see what the LEDs do using the currently loaded profile.

One thing which is quickly apparent from switching to this page, is the addition of colored LEDs. The loaded LED profile is visually represented on the device, which can be adjusted very easily. Every LED can be clicked on and adjusted inside the LED setup window.

Clicking on any LED/color brings up the LED setup window. This shows the LED number (1) and the functions which can be configured. Each LED can behave differently and can contain up to 3 functions (rows) at a time. An overview; ‘Condition (3), ‘Condition 2’ (4), ‘Behaviour’ (5) and ‘Color’ (6). There is also the possibility to ‘Copy settings from another LED’ (8). There is also a ‘Sorting’ (2) and a ‘Remove’ (7) function.



When happy with your settings, there is the obligatory ‘Confirm LED configuration’ (9) button. This confirms your LED settings and returns you to the main RaceDirector window.

There should be enough info in the provided default LED profiles to be able to adjust LED settings to your liking. To start building your own profile, we suggest to copy an existing one and change where needed. The advantage is you always have a backup of the default profile to fall back to.

We do recommend to read the RaceDirector manual for detailed information on functions, settings and basic rules for the LED settings and the LED setup window.

SUPPORT (C)
If you run into trouble with your hardware, here are a few options to help you in finding a solution.

FIRMWARE (D)
On this page you can see the current firmware loaded on the device. If your firmware is out of date, we recommend to update it using our tool.

RaceDirector keeps tabs on current firmware versions. When it detects a difference, a notification ● will let you know more recent firmware has been detected.

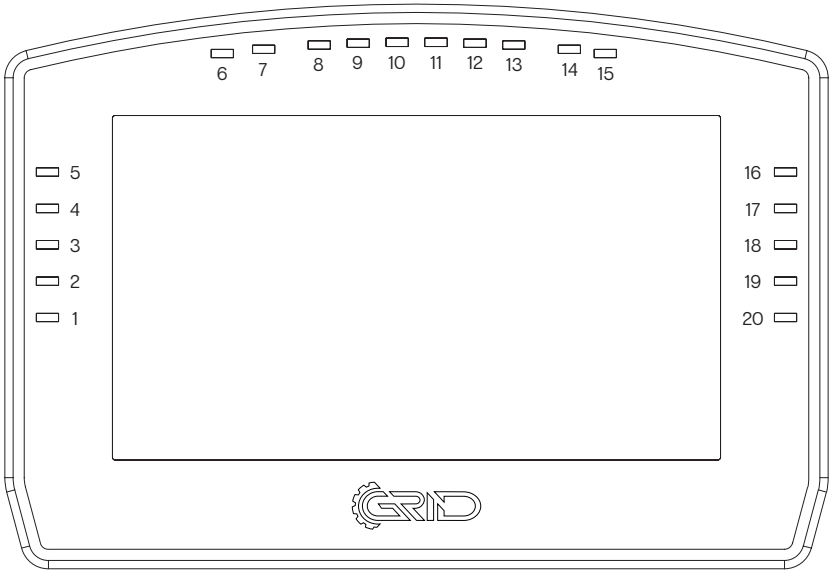
Press 'Firmware update tool' (1) to download the tool.

For more information on how to use the tool, please see its documentation:
sim-lab.eu/firmware-updater-manual

Simhub Support

For advanced users, we do still support people who prefer using Simhub. When adding a device, choose the 'GRID DDU5'.

Changing the LEDs' functions.
To change the LED effects you need to know their numbering to identify them on the device. The following schematic shows the LED numbering for reference.



There should be enough info in the provided default LED profiles to be able to adjust LED settings to your liking. To start building your own profile, we suggest to copy an existing one and change where needed. The advantage is you always have a backup of the default profile to fall back to.

Note: for issues/troubleshooting your Simhub profiles, please refer to Simhub documentation or Simhub support.

Bill of materials

IN THE BOX			
#	**Part**	**QTY**	**Note**
A1	Dash DDU5	1	
A2	USB-C cable	1	
A3	Bracket Sim-Lab/SC1/VRS	1	
A4	Bracket Fanatec	1	
A5	Bolt M6 X 12 DIN 912	2	Used with Fanatec.
A6	Bolt M5 X 10 DIN 7380	6	To fit mounting bracket to dash.
A7	Washer M6 DIN 125-A	4	
A8	Washer M5 DIN 125-A	4	
Disclaimer: for some entries on this list, we supply more than required as spare materials. Don't worry if you have some leftovers, this is intentional.			

More information

If you still have some questions regarding assembly of this product or about the manual itself, please refer to our support department. They can be reached at:

support@sim-lab.eu

Alternatively, we now have Discord servers where you can hang out or ask for help.

www.grid-engineering.com/discord

Product page on the GRID Engineering website: