

| TECHNCIAL NOTE no.: 46 | |
|------------------------|-----------------------------|
| Product: | ADU project template update |
| Part number: | |
| To: | AUDI RS3 LMS TCR |
| Date: | 25/04/2023 |

Dear customer,

A new version of the ECUMaster project has been released to optimize some functionalities and to solve some bugs that were reported.

We advise to open the desired project to use the "Supervisor Mode" with the password **20CIC20**. Once the project is open, remember to click on "**Make Permanent**" icon to send the project to the display.

The following changes have been implemented on the project:

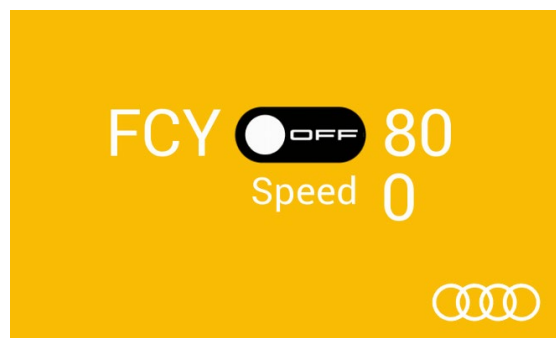
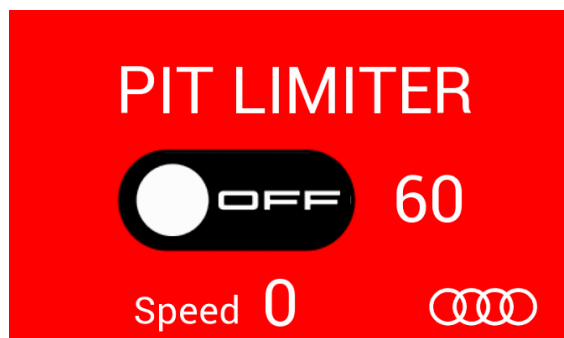
1. SPEED LIMITERS' SETUP

There are different speed limiters that limit the velocity of the car during the different race situations. They consist on:

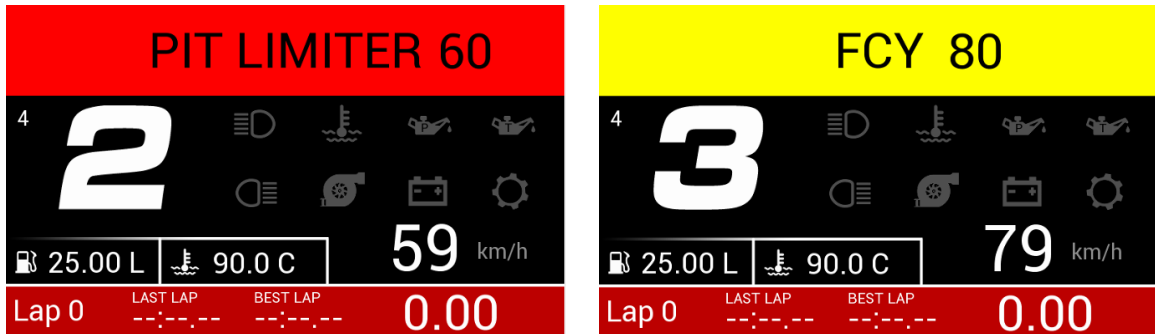
- **Pit Limiter:** to be activated when entering the pit. There are five levels of velocity that will be used depending on the track regulations (**40, 50, 60, 80, 100 km/h**).
- **Full Course Yellow:** to be activated when race conditions demand it. There are five levels of velocity that will be used depending on the track regulations (**50, 60, 80, 100, 120 km/h**)

In order to change the values of the Pit Limiter or FCY, the engine must be stopped and both require just **Main Switch On** (KL-30), without **Ignition** (KL-15). The process will consist on:

- Pressing the button of the function to be changed (Pit Limiter or FCY).
- While pressing the button press level up or down buttons of the steering wheel module, which are the selectors on the left.
- The velocity limiter selected will appear in the display.
- Once the limiter is the right one, wait until the display indicator disappear.



At the Race page, a new flag will be shown, where the driver can see when the limiter is active and the target speed limiter that is selected. With this layout, the driver can quickly check if the car speed is higher than the selected one.

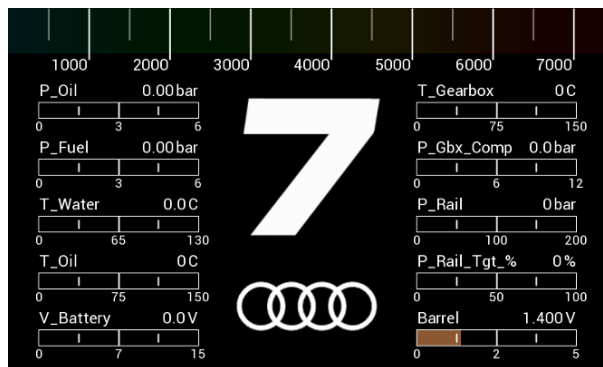


If the car speed is higher than the target limiter speed, check the tyre circumference selected on the ECU clx file (2100 mm as default) that should match with the size of the tyres used on the car.

2. GEAR INDICATOR:

This change on the display project has been implemented to clarify the situation when the voltage measured by the gearbox potentiometer is not matching with the reference one on each gear. This situation could happen when there is a failed gear engagement and the barrel is remaining in between two gears, due to front wheels are lock, due to some dog-to-dog issue or when the gearbox potentiometer is not properly adjusted.

In older layouts, the driver could see the value “3”, what could result in a misunderstanding if the gearbox was not in 3rd gear. In this display project update, the number has been replaced by value “7”, what is easier to understand.



The advice to solve the situation when shifter lock is in between two gears, is to push a little bit the car in front or rear (pit-lane scenario) or driver to release a little bit the clutch (smoothly) and at the same time request shifting through paddles (up or down depending on the case).

3. PREDICTIVE LAP TIME

Note that in the portal you will find two folders with duplicate projects, with the difference that one folder contains project templates without "predictive lap time" layout and the other does. The reason is that although "predictive lap time" is prohibited in the 2023 TCR regulations, there are some championships with a waiver. Choose the one that corresponds to yours.

New cars are delivered without "predictive lap time" project template.