

S5000 TECHNICAL BULLETIN

Date	28/11/22
Topic	Push2Pass Motec Configuration Update
Priority	Information Update

UPDATES

Following the introduction of P2P at round 1 of the 2022 Tasman Series, consideration has been given to the implementation of P2P in the future.

Restriction of the amount of P2P available to the driver has been changed from a discrete number of presses to a time allocation, decided by the category prior to each event.

In terms of functionality, the only changes that apply to the driver is the way in which the system can be shut off. The driver can now press the 'scroll' button again to switch off P2P or press the brake pedal, as done previously.

The dash will display a countdown of P2P time remaining in seconds.

These updates will be applied on the Wednesday of Adelaide prior to Round 2 of the Tasman Series.

Below is the complete overview of the system as per Tech Bulletin 23 including the updates.

There are multiple updates to the Motec configurations of the Display, Logger, PDM, Keypad and ECU to allow for the Push to Pass system to operate, referred to as 'P2P'.

The system works by changing throttle pedal maps between limited and unlimited.

There are two modes, Qualifying and Race.

RACE MODE

When the Master Switch is turned on, the car defaults into Race Mode.

When in Race Mode, the number of times the driver can activate the system (presses) is limited and is to be determined by category prior to each round.

When in Race Mode, the ECU is programmed to limit the throttle opening throughout the entire engine speed (rev) range and in all gears. The throttle limit will be tuned track to track to get the desired speed difference when the system is active.

Race Mode is to be used throughout all races, which will be detailed in the Technical Regulations.

ACTIVATING P2P

When the conditions of activation are met, the driver can choose to activate P2P by pressing the 'Scroll' button on the steering wheel. Activating P2P will instantly remove the throttle limiting.

'Scroll' Button – Now to be used to activate P2P in Race Mode



The following conditions must be met to allow the driver to activate P2P while in Race Mode.

- Brake State Off – the driver must wait until they've cleared the brake pedal on corner exit before engaging P2P.
- P2P Time Remaining > 0 - shown on the dash display, the driver has both a bar gauge and a time counter showing the P2P time remaining.
- Pit Speed Limiter Off
- Engine Running

When P2P is active a solid green box will be displayed behind the remaining presses count, the timer will decrease by and the outermost light on the left side of the SLM will light up in green.

When P2P is active the rain light will strobe.

DEACTIVATING P2P

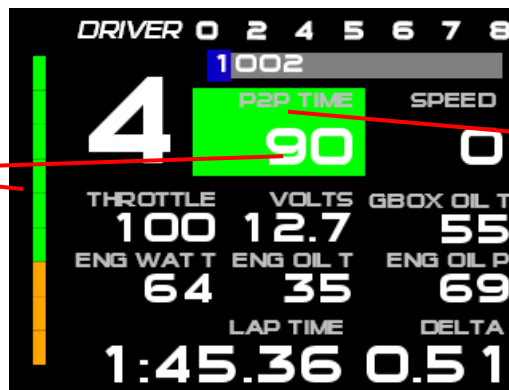
The system will deactivate on the next application of the brakes.

The system will also deactivate if any of the conditions of activation are broken;

- Brake pedal is pressed
- Pit Limiter is turned on
- The engine ignition has been switched off
- The driver presses the 'Scroll' button again

REMAINING P2P TIME

P2P Remaining Timer and Bar Gauge has decreased once the driver activates P2P

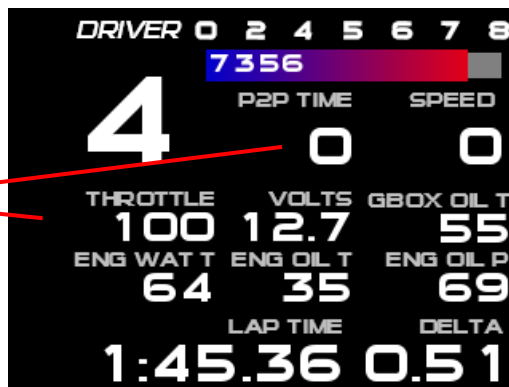


Box is solid green signifying the P2P is activated

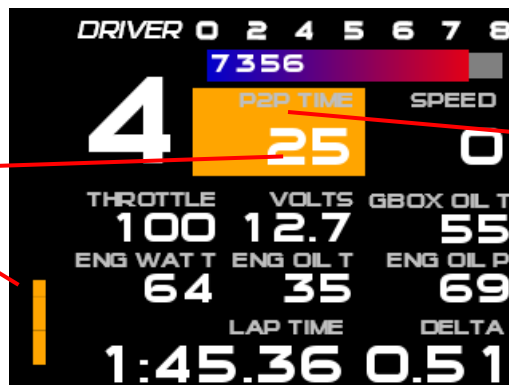
While in Race Mode, once the driver has less than 30 seconds of available P2P remaining, the P2P counter will show the time remaining, surrounded in an orange box and the bar gauge will continue to decrease and will change to an orange colour.

While in Race Mode, once the driver has used all the available P2P time, the P2P counter will show 0 and the bar gauge will completely disappear.

P2P Remaining Presses Counter shows 0 and Bar Gauge has disappeared due to the driver using all their P2P allocation



P2P Remaining Timer and Bar Gauge has decreased once the driver activates P2P



Box is solid orange signifying the P2P is activated but less than 30 sec remaining

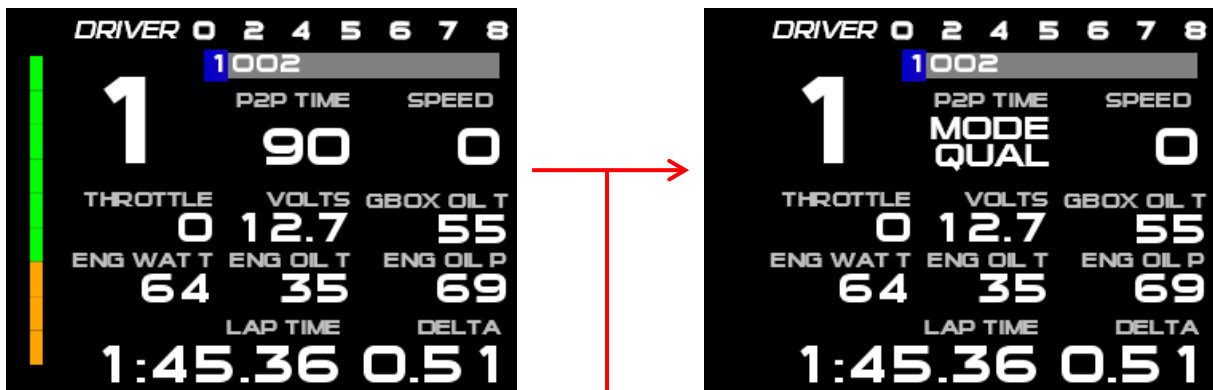
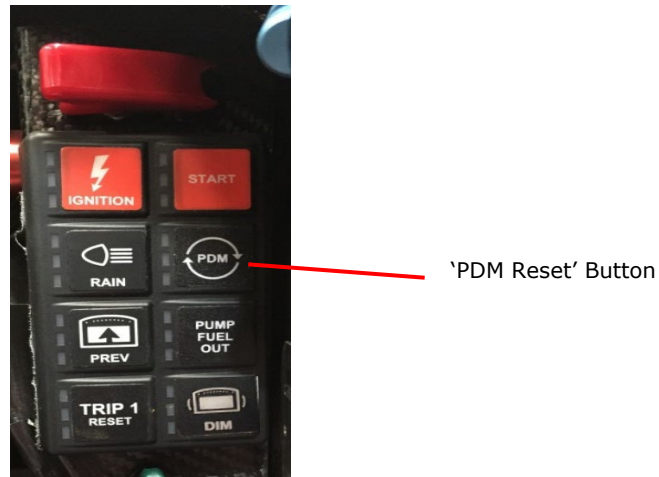
QUALIFYING MODE

When in Qualifying Mode, the ECU is programmed for unlimited throttle, equivalent to how the cars have been previously and when P2P is active in Race Mode.

Qualifying Mode is the mode that all drivers should use during any given practice or qualifying session to achieve the most performance from the engine (unless teams would like to test Race Mode P2P activation in Practice).

ENTERING QUALIFYING MODE

To enter Qualifying Mode, the driver must press and hold the 'PDM Reset' button on the keypad for 3 seconds. This must be done every time the Master Switch is turned on. The dash will change to Qualifying Mode and show multiple changes:



Shows the changes on screen when the driver holds 'PDM Reset' button for 3 seconds to activate MODE QUAL.

To return to Race Mode from Qualifying Mode, the driver can either:

- Press and hold the 'PDM Reset' button for 2 seconds
- Turn the Master Switch for the car off and then on again. Effectively returning the car to the default start up (Race Mode).

DASH PAGE BUTTON CHANGE

The procedure to change the page displayed on the dash has now changed to accommodate P2P use.

Originally, the 'Scroll' button on the steering wheel was used to change through dash pages but drivers & mechanics will now use the 'PREV' button on the keypad to change dash pages.

Dash Page Button



Any questions please contact s5000@grmotorsport.com.au