

K.I.T.T. Gas Pedal

Hardware Revision 1.0

Firmware Revision V2

Manual Revision 1.0

Product Overview

The pedal board kit you have in your hands is equipped with the latest components in M.E.M.S. technology (Micro electro mechanical systems); the same components used in smartphones to automatically turn/rotate the screen or navigate flying drones by a gyroscope. Thanks to M.E.M.S. components, the card produces an internal inclinometer which allows it to know how it is oriented in space: it can therefore detect as tilts and consequently illuminate the side LEDs progressively, without it being necessary to connect anything to an external sensor (ex. TPS sensor) or engine Revs/Tach.

Basically ... you ONLY need power connections to make it work!

Wiring

Connect a red wire to the screw terminal marked + 12V.

Connect a black wire to the screw terminal marked GND.

Use these two power wires to power the board by linking them to a lead-acid battery (12V) or at a point when the machine is powered (13.8V).

/!\ **WARNING:** the card is NOT protected against reverse polarity, so pay close attention to respect the Voltage/Wire polarity.

/!\ **ATTENTION:** it is advisable that each load in the car, albeit small, is derived from a power point in the fuse.

Sound function and demo

The Pedal comes equipped with an internal tone generator. The sound is produce by an internal tone generator and is in perfect sync with the action on the pedal for maximum realism. This sound can be turned-off and a 'Demo Mode' activated by two on-board jumpers!

The two on-board jumpers to configure the 'Sound' and 'Demo Mode' are marked JP1 and JP2 on the PCB. The jumpers can be present or absent/removed.

JP1 controls the sound capabilities.

JP1 Present - > Active sounds (With Sound).

JP1 Absent/Removed - > silent operation (No Sound).

JP2 controls the demo feature.

JP2 Present - > Demo Mode activated.

JP2 Absent/Removed - > Normal pedal operation.



Recalibration

It is possible to recalibrate the pedals/inclinometer minimum (initial scale - all LEDs off) and maximum (full scale - all the LEDs on) positions.

To the recalibrate the pedals/inclinometer:

- 1) Remove both jumpers JP1 and JP2. Temporally connect a Normally Open (N.O.) push button between the screw terminals COM and GND. Now apply power to the pedals/inclinometer.
- 2) Press the temporary button to enter recalibration mode. You will hear a low continuous note/sound from the internal buzzer. The pedal is ready to have minimum value set (all LEDs off). With the pedal resting upright, press the button. The second press of the temporary button will store this minimum position.
- 3) You should now hear a different higher continuous note/sound from the unit internal buzzer. The pedal is ready to have maximum value set (all LEDs on). While sitting in the car, using your foot, press AND hold the pedal steady at the position you wish for ALL the LEDs to be lit. Now press the temporary button. The second press of the temporary button will store this maximum position. The recalibration procedure is finished.

Press the pedal a few times to test the minimum and maximum positions. If the response is not satisfactory, repeat the recalibration procedure.

Once satisfied with the results, turn off the power to the pedal and remove the temporary button between GND and COM. Replace the JP1 and JP2 Jumpers to your required position settings.

If you do not have a temporary button, you can may use two wires and touch them together manually. The pedal will interpreted this action has a temporary recalibration button. ENJOY!!



