

Spitronics ECU Simulator instructions

Thank you for purchasing the Spitronics ECU simulator, this diagnostic tool is designed to help you troubleshoot and solve problems with the Spitronics Engine Control Unit. Please read through the following sheet to make sure you follow the correct setup requirements.

Setup:

***The ECU is automatically grounded through the 12 way connector, do not apply a separate ground to the ECU, unless testing an old EMU (e.g. not a TITAN)**

*The positive red connector of the ECU simulator should be connected to 12V positive. +12V is signified by a red circle on the connector.

*Make sure the red power (PWR) LED comes on when power is applied.

Led Indicators:

1 – Coil 2 output

2 – Coil4/Inj3 output

3 - Injector 1 output

4 – Fuel Relay

5 – General Purpose output 1

6 – Coil 1 output

7 – Coil3/Inj4 output

8 - Injector 2 output

9 - Trigger output

10 - General Purpose output 2

Map Man/Map Auto

Use this switch to select whether the Map input comes from the externally connected map bar sensor (auto) or from the potentiometer (turning knob) on the simulator (manual)

RPM High/RPM Low

Select between high RPM range and low RPM range signal generated. Changes will only occur once power has been reset on the ECU simulator.

RPM signal:

The ECU simulator is capable of simulating 27 different triggers; the specific trigger is selected with the push button located on the side of the simulator.

Changing Modes:

Note: When programming the ECU simulator, a few rapid flashes signifies a zero.

-Hold the button in while applying power to enter programming mode

-Release the button and press once, the green trigger LED will now flash back in which mode it is.

-Enter the new mode: press the button on the side of the simulator unit to enter a mode (**press the button 4 times in succession to enter a zero**) for example to enter a mode 04 to simulate a 36-1 trigger, enter a zero by pressing the button 4 times, when the simulator has confirmed a zero by flashing back a few times, enter a 4 by pressing the button 4 times, the simulator is now in mode 04.

-Remove and re-apply power

Table of different RPM triggers:

<u>ECU Mode</u>	<u>Trigger</u>
mode 01	Standard ; 24+tdc
mode 02	60-2 gear
mode 03	36-2 gear
mode 04	36-1 gear
mode 05	Spitronics optic 4 slots
mode 06	12 tooth crank
mode 07	Colt

mode 08	Nissan 4 slots
mode 09	Nissan 6 slots
mode 10	Spitronics Butterfly
mode 11	Spitronics 6 cyl 2 large
mode 12	Spitronics 6 cyl 1 large
mode 13	Hyundai 4 cyl
mode 14	Nissan V8 4 slots
mode 15	30-2 gear
mode 16	Spitronics 4 cyl
mode 17	Spitronics 16-2 gear
mode 18	Mazda 4 cyl
mode 19	Alfa 4 cyl
mode 20	Subaru 4 cyl
mode 21	Ford slots 8cyl
mode 22	Spitronics 8-1 gear
mode 23	Spitronics butterfly uneven
mode 24	12-1 gear
mode 25	18-1 gear
mode 26	Subaru 36-2-2-2 gear
mode 27	Daewoo Matiz