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This is currently EXCLUSIVE to ExtraEFI

This is an extra board that plugs into the main board, under the MS2 daughter board. This makes the MS ECU 3 layers high:

- 1: Main board (V3.0 or V3.57)
- 2: MS2X Expansion Board
- 3: MS2 Daughter Board



This option is only available for the **MS2-Extra ECU** and it gives you the following inputs and outputs:

2 x Injector Bank Drivers - These are capable of driving high impedance injectors (NOT lo-impedance) This gives the MS2 ECU 4 banks of injectors, so a 4cy can run sequential fuel, or a V8 semi-seq.

1 x EGT input - Allows an Exhaust Temp Sensor to be connected to the ECU for monitoring/logging purposes.

2 x Logic Level Inputs - They can be used to control options like Launch, N2O, switch maps, etc. (12V in to switch feature)

1 x Medium Current Output - For controlling relays (e.g. cooling fan, NOS, etc) tacho, warning light, etc.

1 x High Current Output - This can control relays, as well as directly connect to an Idle valves, Boost valves, up to 3A.

1 x Spare ADC inputs - 0-5V inputs for second O2, etc.

1 x VR sensor input - This gives the ECU a total of 2 trigger inputs, e.g. one for the cam and one for the crank.

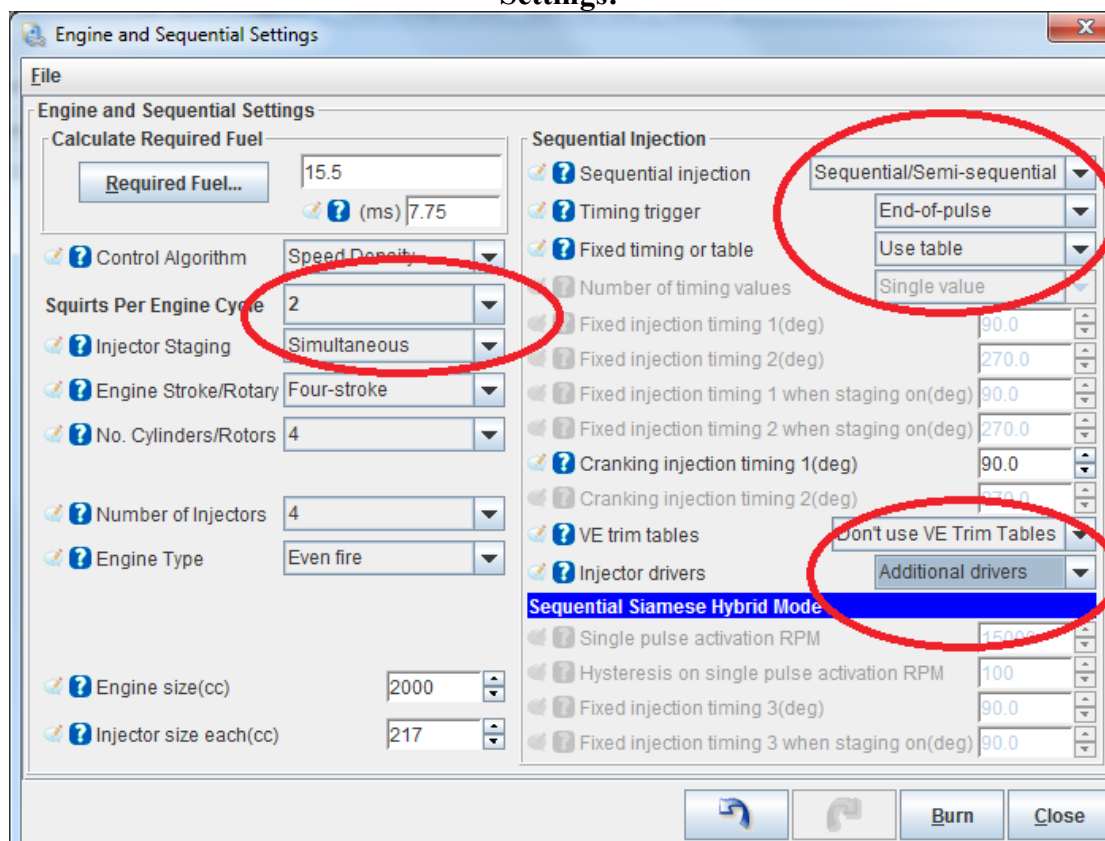
1 x Hall sensor input - This gives the ECU a total of 2 trigger inputs, e.g. one for the cam and one for the crank.

4 x Spark Drivers - When used with the **Spark Driver Board**, this can fire 4 coils directly.

Please Note:

There are limits to the amount of I/O that the MS2 ECU can have connected. So not all the above can be used together in some cases.

Settings:



It is very important that you ensure your settings have "**Additional Drivers**" selected here when there are 3 or 4 injector drivers (MS2X card)

To run **Batch** fuel set **Sequential Injection** to "**Untimed**" this will fire Bank1 and Bank2 Injectors in a batch fuel system, 2 banks of fuel outputs. (2 on the main board)

To run **Semi or Sequential Fuel** set "**Sequential Injection to Sequential / Semi-Sequential**" This will fire 3 (6cy) or 4 (4 or 8cy) injector banks. (2 on main board and the others on the MS2X card)

4 cy Sequential setting:

Standard Injection

Calculate Required Fuel

Required Fuel... 13.2

(ms) 13.20

Control Algorithm Speed Density

Squirts Per Engine Cycle 1

Injector Staging Simultaneous

Engine Stroke Four-stroke

Number of Cylinders 4

Injector Port Type Port Injection

Number of Injectors 4

Engine Type Even fire

Burn Close

6cy Semi-Sequential Setting:

Standard Injection

Calculate Required Fuel

Required Fuel... 13.2

(ms) 6.60

Control Algorithm Speed Density

Squirts Per Engine Cycle 2

Injector Staging Simultaneous

Engine Stroke Four-stroke

Number of Cylinders 6

Injector Port Type Port Injection

Number of Injectors 6

Engine Type Even fire

Burn Close

8cy Semi-Sequential Setting:

Standard Injection

Calculate Required Fuel

Required Fuel... 13.2

(ms) 6.60

Control Algorithm Speed Density

Squirts Per Engine Cycle 2

Injector Staging Simultaneous

Engine Stroke Four-stroke

Number of Cylinders 8

Injector Port Type Port Injection

Number of Injectors 8

Engine Type Even fire

Back Cancel Burn Close