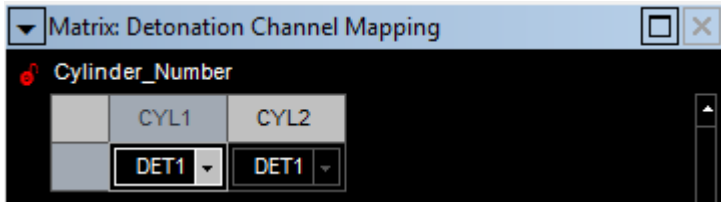


Groups/HARDWARE SETUP/DETONATION/

Knock Feature Enable: **ENABLED**

Detonation Channel Mapping: We only have one knock sensor DET1

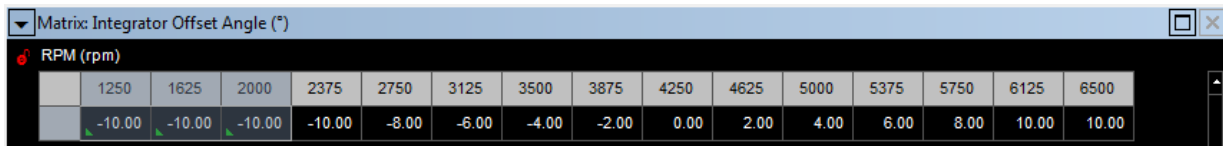


Groups/HARDWARE SETUP/DETONATION/SIGNAL SAMPLING SETUP:

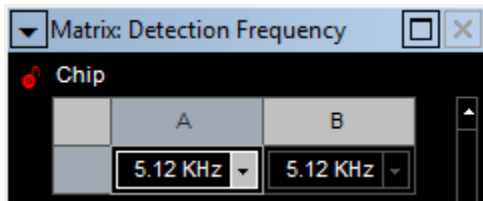
Integrator Start Angle: -20.00 to 50.00 degrees; **-10.00 Degrees**

Integrator Stop Angle: -20.00 to 50.00 degrees; **40.00 Degrees**

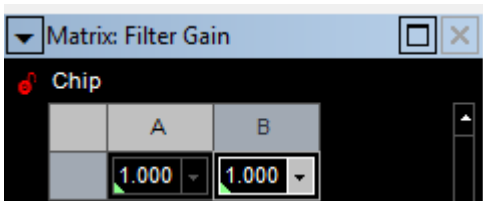
Integrator Offset Angle: -720.00 to 720.00 degrees; Dynamic Windowing v. RPM



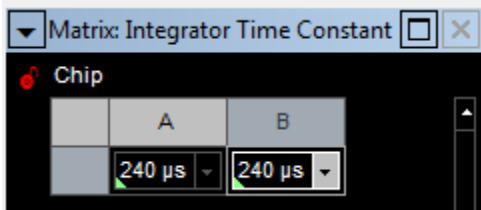
Detection Frequency: 1.22 KHz to 19.98Hz



Filter Gain: 0.111 to 2.000

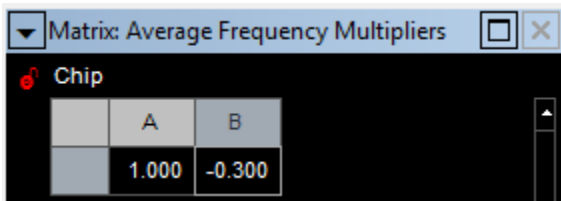


Integrator Time Constant: 40uS to 600uS

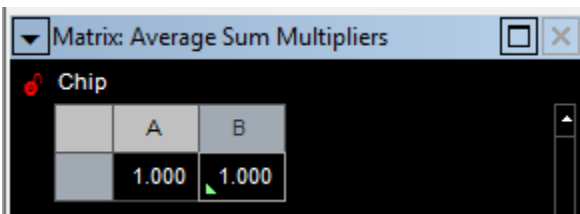


Groups/HARDWARE SETUP/DETONATION/KNOCK DETERMINATION:

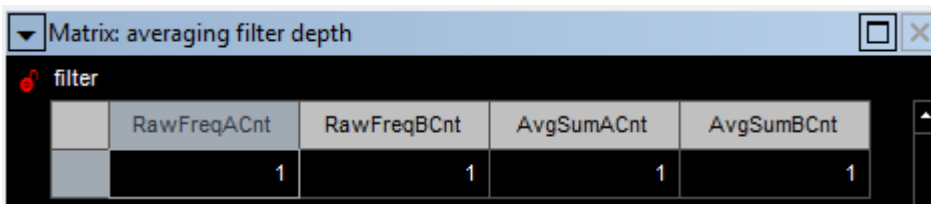
Average Frequency Multipliers:



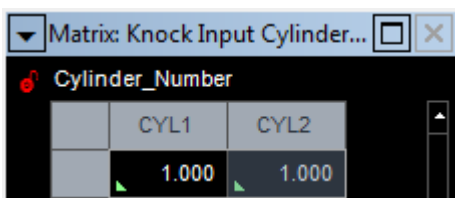
Average Sum Multipliers:



Averaging Filter Depth:



Knock Input Cylinder Scale: 0.000 to 16.000



Knock Limit: 0 to 1020; Subtracted from sumAvg cnt to determine if knock has occurred in last cycle.

Matrix: Knock Limit

RPM (rpm)		875	1250	1625	2000	2375	2750	3125	3500	3875	4250	4625	5000	5375	5750	6125	6500
MAP (mbar)	3000	132	140	144	152	184	236	260	312	336	360	360	360	360	360	360	360
	2820	132	140	144	152	184	236	260	312	336	360	360	360	360	360	360	360
	2640	132	140	144	152	184	236	260	312	336	360	360	360	360	360	360	360
	2460	132	140	144	152	184	236	260	312	336	360	360	360	360	360	360	360
	2280	132	140	144	152	184	236	260	312	336	360	360	360	360	360	360	360
	2100	132	140	144	152	184	236	260	312	336	360	360	360	360	360	360	360
	1920	132	140	144	152	184	236	260	312	336	360	360	360	360	360	360	360
	1740	132	140	144	152	184	236	260	312	336	360	360	360	360	360	360	360
	1560	132	140	144	152	184	236	260	312	336	360	360	360	360	360	360	360
	1380	132	140	144	152	184	236	260	312	336	360	360	360	360	360	360	360
	1200	132	140	144	152	184	236	260	312	336	360	360	360	360	360	360	360
	1020	132	140	144	152	184	236	260	312	336	360	360	360	360	360	360	360
	840	132	140	144	152	184	236	260	312	336	360	360	360	360	360	360	360
	660	132	140	144	152	184	236	260	312	336	360	360	360	360	360	360	360
	480	132	140	144	152	184	236	260	312	336	360	360	360	360	360	360	360
	300	132	140	144	152	184	236	260	312	336	360	360	360	360	360	360	360

Knock Warning Level: 0 to -1032

This is the offset to 'Knock Limit' at which a knock warning occurs.
 A knock warning is issued when the following condition is true:
 $(Total_AvgSum - Knock\ Limit) \geq Knock\ Warning\ Level$

Scalar: Knock Warning Level

Knock Warning Level

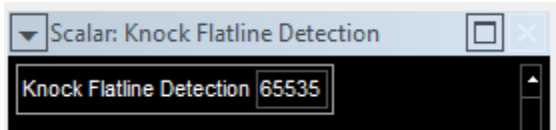
Knock Warning Duration: 0.00 to 30.00 seconds

Scalar: Knock Warning Duration (s)

Knock Warning Duration (s)

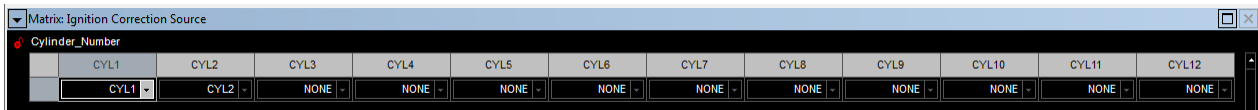
Knock Flatline Determination:

If the knock count for a cylinder is the same for this number of consecutive knock updates (whilst the TPS/RPM conditions for knock detection are met), then a fault is deemed to have occurred with the knock detection and the turbo boost may be overridden if the map 'Knock Boost Override Enabled' is set to ENABLED.
Setting 'Knock Flatline Detection' to a value of 65535 disables this check.

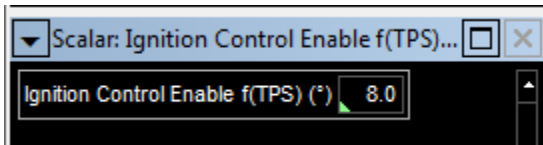


Groups/HARDWARE SETUP/DETONATION/IGNITION CONTROL:

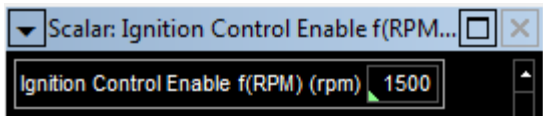
Ignition Correction Source:



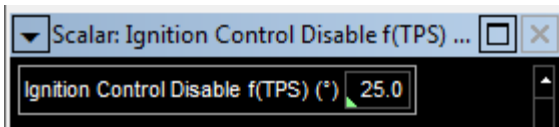
Ignition Control Enable f(TPS):



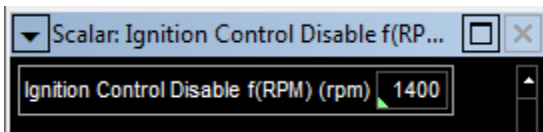
Ignition Control Enable f(RPM): 0-20,000



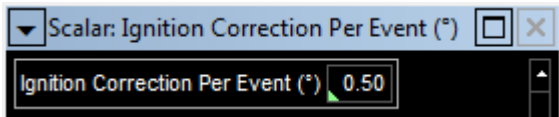
Ignition Control Disable f(TPS):



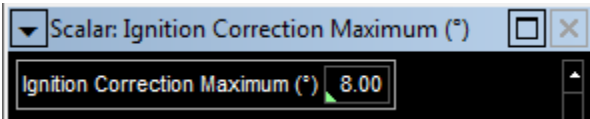
Ignition Control Disable f(RPM):



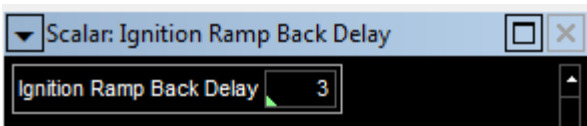
Ignition Correction Per Event:



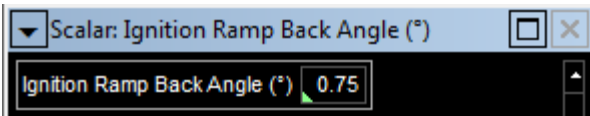
Ignition Correction Maximum: 0.00 to 20.00 degrees



Ignition Ramp Back Delay: 0 to 65535



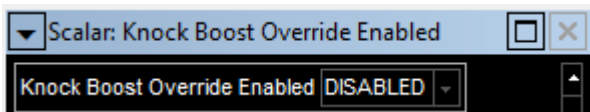
Ignition Ramp Back Angle: 0.00 to 20.00 degrees



Groups/HARDWARE SETUP/DETONATION/BOOST DISABLE:

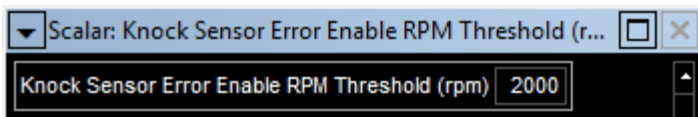
Knock Boost Override Enabled: **DISABLED**

This map determines whether turbo boost may be overridden when knock is detected. This is achieved by overriding the wastegate valve duty to zero.

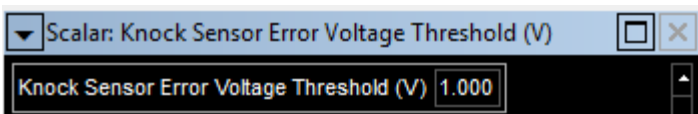


Groups/HARDWARE SETUP/DETONATION/KNOCK SENSOR SETUP:

Knock Sensor Error Enable RPM Threshold:



Knock Sensor Error Voltage Threshold: 0.000 to 5.000 Volts; Below this sensor is considered failed



Knock Sensor Error Time:

