

AiM Infotech

Wolf EMS V550 ECU

Release 1.01



ECU

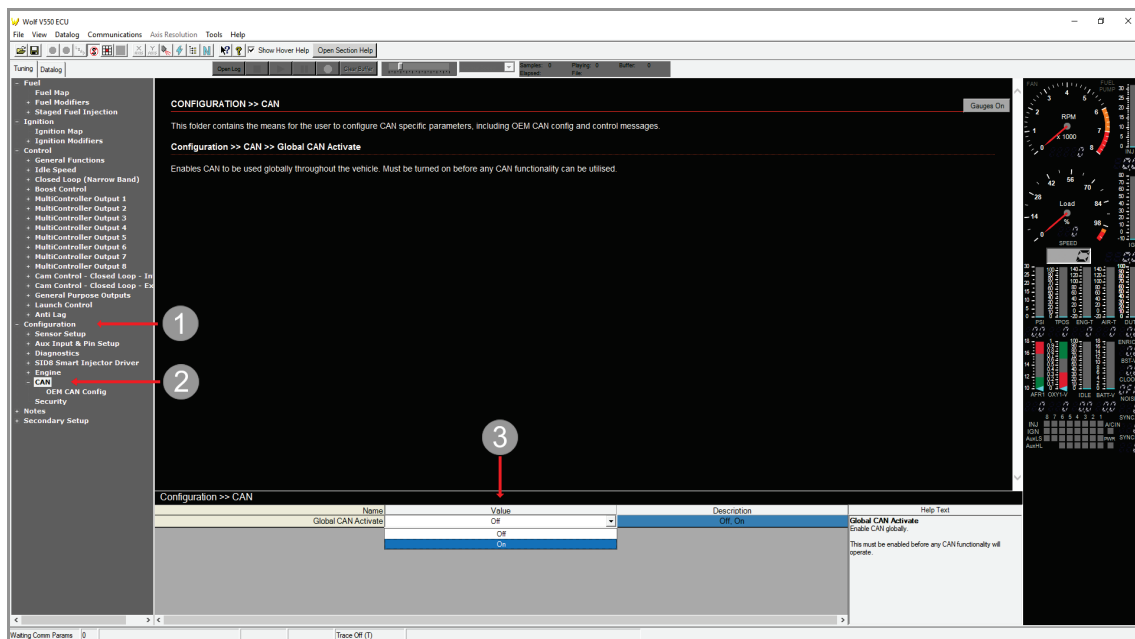


This tutorial explains how to connect AiM devices to Wolf EMS V550 ECU.

1 Software configuration

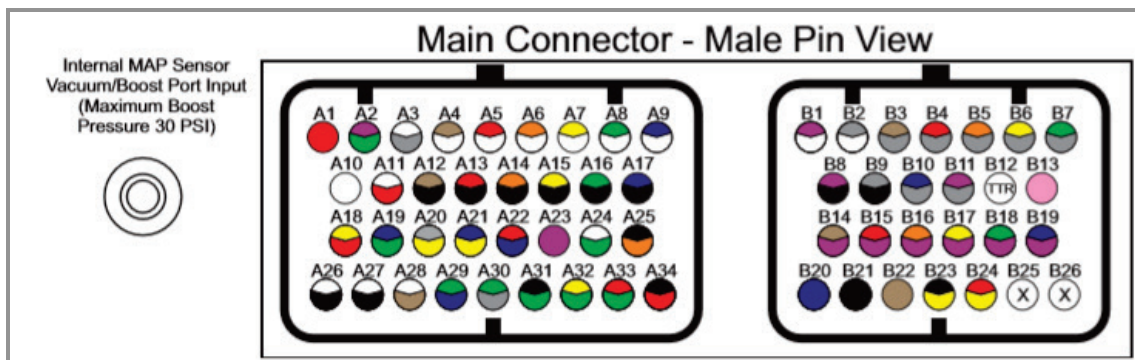
For Wolf EMS V550 ECU to correctly communicate with AiM device it is necessary to set it up using the dedicated Wolf V550 ECU configuration software.

To correctly configure your ECU CAN output, from the left column, open the “Configuration” menu (1; following image), then enter the “CAN” tab (2): here, “Global CAN Activate” must be set as “ON” (3).



2 Wiring connection

For Wolf EMS V550 ECU, it is possible to connect to AiM devices through the 26pins Main Connector (B) on the ECU front side. Here below you find the Main Connector pinout and connection table.



Main connector pin	Function	AiM wire label
B25	CAN Hi	CAN+
B26	CAN Lo	CAN-

3 AiM device configuration

Before connecting the AiM device to the ECU, set all functions using AiM software Race Studio. The parameters to select in the AiM device configuration are:

- ECU manufacturer: **Wolf**
- ECU Model: **V550**

4 “Wolf – V550” protocol

Channels received by AiM devices configured with “Wolf – V550” protocol are:

CHANNEL NAME	FUNCTION
RPM	RPM
Vehicle Speed	Vehicle speed
Water Temp	Water temperature
EGT3A	Exhaust gas temperature 3A
EGT1D	Exhaust gas temperature 1D
EGT1C	Exhaust gas temperature 1C
EGT4D	Exhaust gas temperature 4D
EGT2D	Exhaust gas temperature 2D
EGT1B	Exhaust gas temperature 1B
EGT1A	Exhaust gas temperature 1A
EGT4C	Exhaust gas temperature 4C
EGT4B	Exhaust gas temperature 4B
EGT4A	Exhaust gas temperature 4A
EGT3B	Exhaust gas temperature 3B
EGT3C	Exhaust gas temperature 3C
EGT2C	Exhaust gas temperature 2C
EGT2A	Exhaust gas temperature 2A
EGT2B	Exhaust gas temperature 2B
IAT	Intake air temperature
Boost	Boost pressure
BoostCtrl	Boost pressure control



IgnDel	Ignition delay
TPS	Throttle position
Load	Engine load
IntMAP	Internal manifold air pressure
ExternMAP	External manifold air pressure
InjTime	Injection time
VBatt	Battery voltage
Lambda1Volt	Lambda 1 voltage
Lambda2Volt	Lambda 2 voltage
2V5FPGA	
8V	8V aux
5V	5V aux
5VMain	5V main
5VSens	5V sensor
2V6MCU	
Lambda1	Lambda 1
Lambda2	Lambda 2
CAMIn	Intake cam 1
CAMIn2	Intake cam 2
RefPulse	Ref pulse counter
NoiseCnt	Noise counter
EngRun	Engine running
SyncE	Sync early
SyncX	Sync expected
CANOEM	CAN OEM bit flag
CAMOut	Camshaft outlet 1
CAMOut2	



AuxHLL	
AuxHLH	Auxiliary HS input
AuxLS	Auxiliary LS input
L S1	Low side driver (2.2A max)
L S2	Low side driver (2.2A max)
L S3	Low side driver (3A max)
L S4	Low side driver (1A max)
L S5	Low side driver (1A max)
L S6	Low side driver (1A max)
L S7	Low side driver (1A max)
L S8	Low side driver (2.2A max)
HL 1	High side/Low side Driver (1A max)
HL 2	High side/Low side Driver (1A max)
HL 3	High side/Low side Driver (1A max)
HL 4	High side/Low side Driver (1A max)
HL 5	High side/Low side Driver (1A max)
HL 6	High side/Low side Driver (1A max)
EGT3D	Exhaust gas temperature 3D
MCO2	Multicontroller output 2
MCO3	Multicontroller output 3
MCO4	Multicontroller output 4
MCO5	Multicontroller output 5
MCO6	Multicontroller output 6
MCO7	Multicontroller output 7
MCO1	Multicontroller output 1
IdleCtrl	Idle control
AccEnrich	Accelerator enrichment



StepTarg	Stepper target location
StepACT	Stepped current location
IdleTarg	Idle target
InjDuty	Injection duty
MCO8	Multicontroller output 8

Technical note: not all data channels outlined in the ECU template are validated for each manufacturer model or variant; some of the outlined channels are model and year specific, and therefore may not be applicable.