AIM Infotech

KMS MA25 and MP25ECUs

Release 1.07

ECU

1
Supported models

This document explains how to connect AiM devices to the Engine Control Unit (ECU) datastream. Supported models are:

- MA25
- MP25
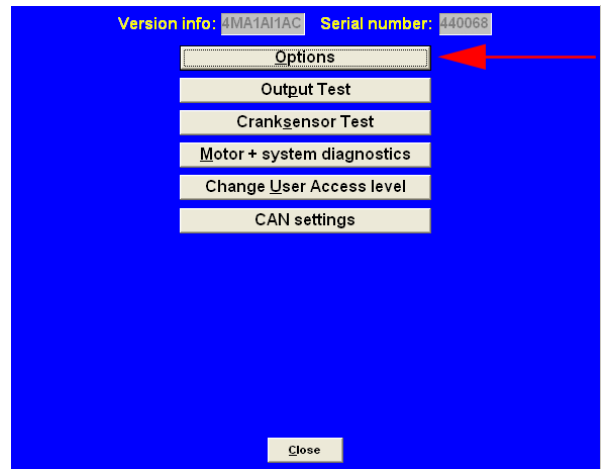
2
Software configuration

KMS MP25 and MA25 ECUs come with KMS dedicated software. To ensure a correct communication between the ECUs and AiM devices set up the ECUs as follows:
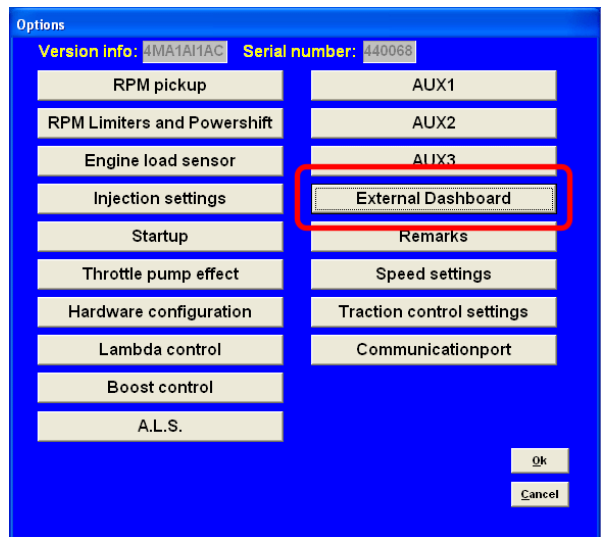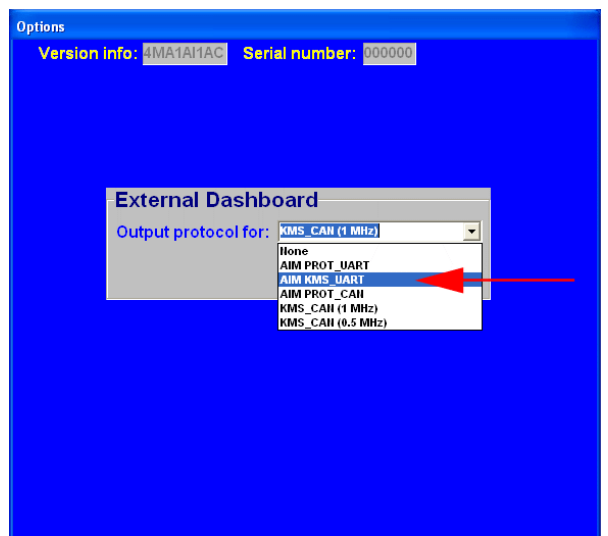
Run the software and press "Options" icon.
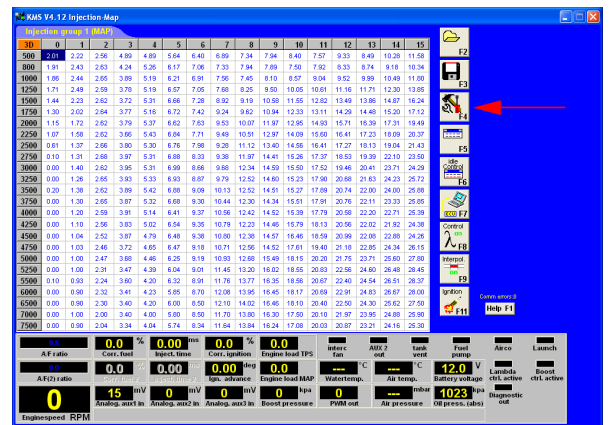
Press "Options".
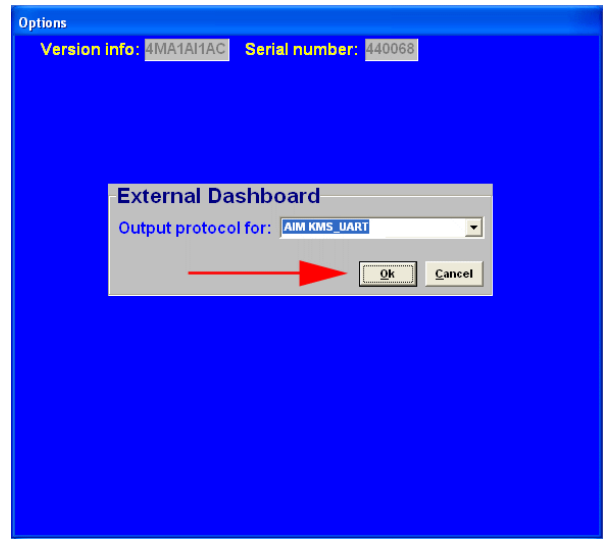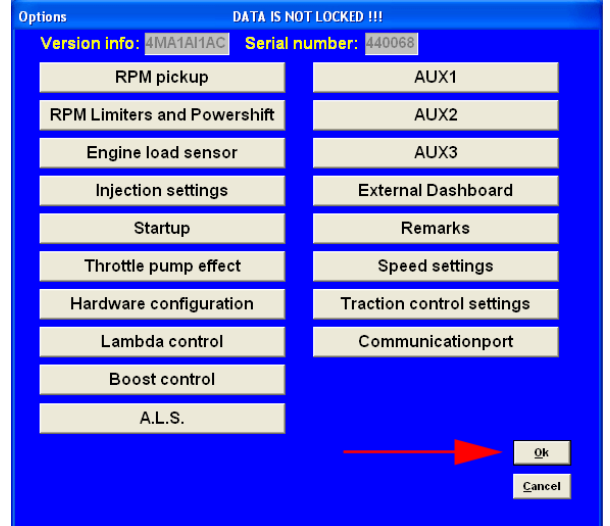

Press "External Dashboard"

Select "AIM KMS_UART"

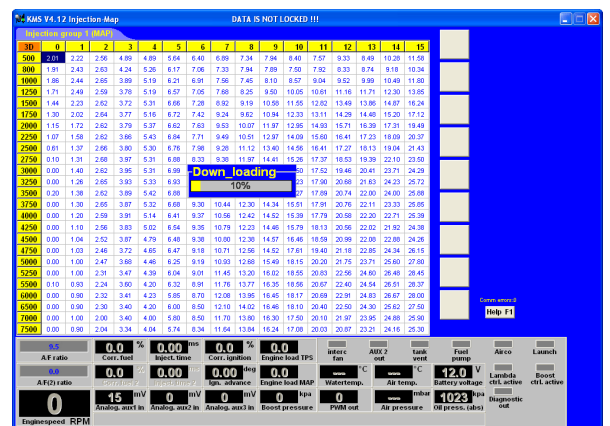Press "OK"
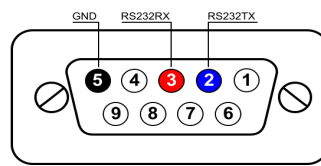

Press "OK" again

Data download starts automatically

3

Wiring connection

KMS MA25 and MP25 ECUs feature a serial communication protocol that can be reached using the DB9 female connector on the ECU harness. Here below are connector pinout and connection table.

DB9 Pin	Pin function	AiM cable label
2	RS232TX	RS232RX/ECU RS232TX
3	RS232RX	RS232TX/ECU RS232RX
5	GND	GND

Please note:
AiM wiring harnesses supplied after September 2018 have the following labels:
ECU RS232TX (white) to be connected to **ECU TX** pin
ECU RS232RX (blue) to be connected to **ECU RX** pin (if indicated in the connection table above)

AiM wiring harnesses supplied before September 2018 have the following labels:
RS232RX (white) to be connected to **ECU TX** pin
RS232TX (blue) to be connected to **ECU RX** pin (if indicated in the connection table above)

4

Race Studio configuration

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

- ECU manufacturer: **KMS**
- ECU Model: **RS232**

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"KMS – RS232" protocol

Channels received by AiM devices configured with "KMS – RS232" protocol are:

CHANNEL NAME	FUNCTION
KMS_RPM	RPM
KMS_TPS_RAW	Throttle position sensor raw value
KMS_ECT	Engine coolant temperature
KMS_IAT	Intake air temperature
KMS_MAP	Manifold air pressure
KMS_OILP	Oil pressure
KMS_AFR	Air Fuel ratio
KMS_IGN_ADV	Ignition advance
KMS_INJ_TIME	Injection time
KMS_GEAR	Engaged gear
KMS_TPS_LOADST	Throttle position sensor load site
KMS_MAP_LOADST	Manifold air pressure load site
KMS_LAUNCH_SW	Launch switch
KMS_LAMBDA_CT	Lambda traction control
KMS_FUEL_INJ_C	Fuel injection correction
KMS_IGNI_CORR	Ignition correction
KMS_ECU_BATT	Battery supply
KMS_THROTTLE	Throttle percentage