AiM Infotech

Microtec M172 ECU

Release 1.02

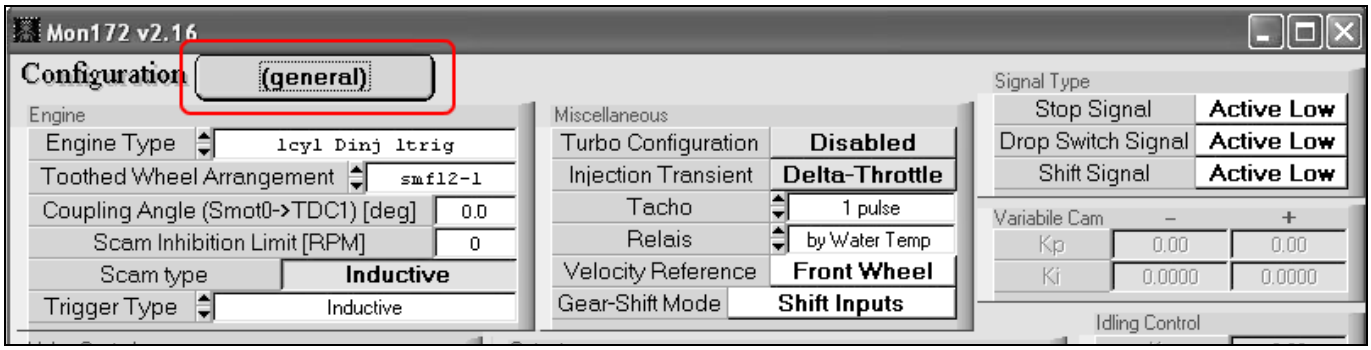
ECU

This tutorial explains how to connect Microtec M172 ECU to AiM devices.

1 Software Setup

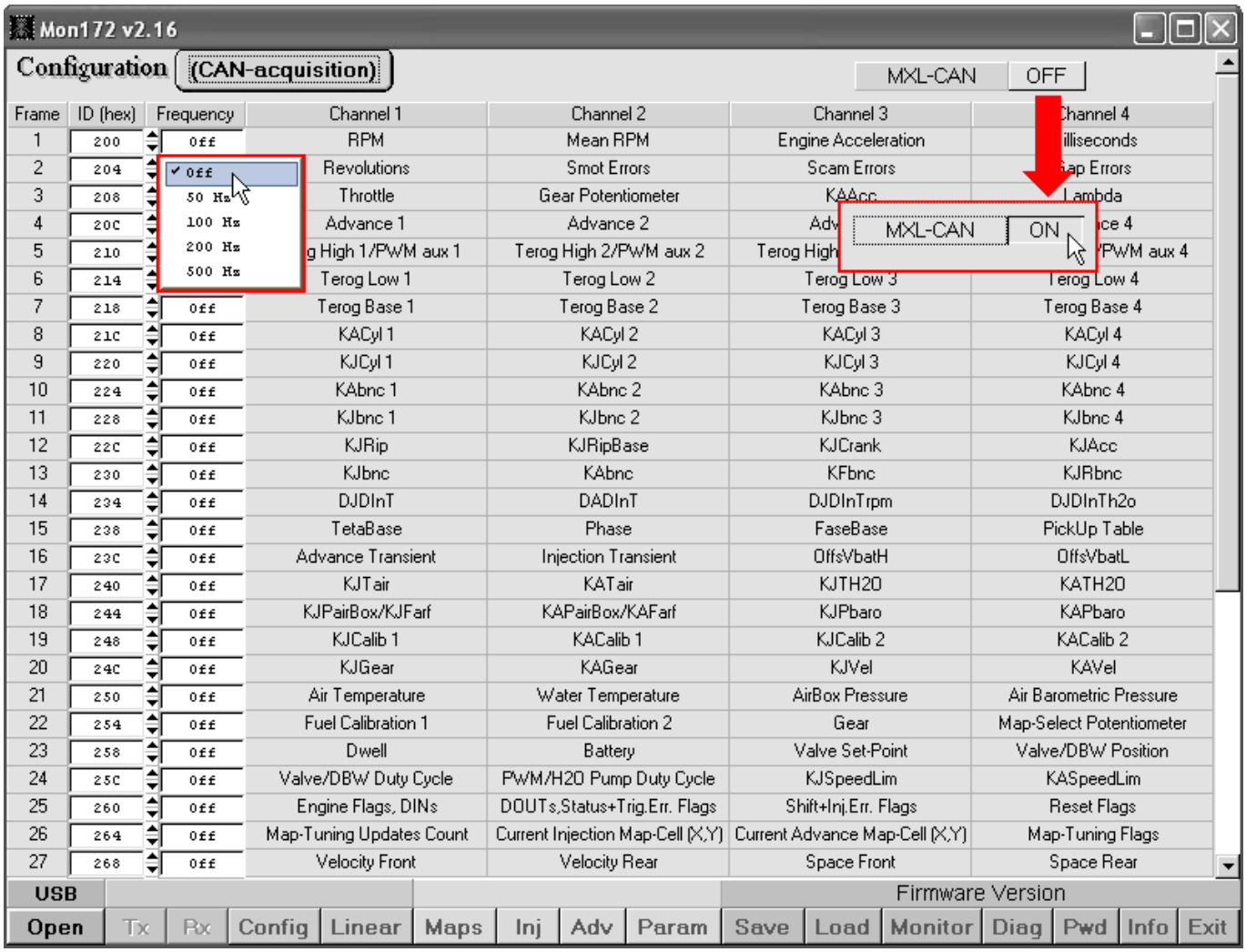
Microtec ECU needs to be set up via MON172 software. Run it and press “Config” on the software bottom keyboard.

Press “General” on top of the page.



In the page that appears ensure that:

- all channels frequency in the left table are “OFF”
- “MXL-CAN” button top right of the page is “ON”.



2
Wiring connection

Microtec M172 ECU is equipped with a CAN communication protocol on the ECU front connector. As shown below the connector is divided in two parts but pins are numbered in a single sequence from 1 to 56. Below you find connection table.

Connector pin	Pin function	AiM cable
38	CAN High	CAN+
37	CAN Low	CAN-

3
AiM device configuration

Before connecting the ECU to AiM device, set this up using AiM Race studio software. The parameters to select in the device configuration are:

- ECU manufacturer “Microtec”
- ECU Model “M172_M205”

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Available channels

Channels received by AiM devices connected to "Microtec" "M172_M205" protocol are.

ID	CHANNEL NAME	FUNCTION
ECU_1	MT_RPM_IST	Instantaneous RPM
ECU_2	MT_RPM	Average RPM
ECU_3	MT_SPD_FRONT	Front speed
ECU_4	MT_SPD_REAR	Rear speed
ECU_5	MT_SMOT_E	Smot errors
ECU_6	MT_SCAM_E	Scam errors
ECU_7	MT_TPS	Throttle position sensor
ECU_8	MT_LAM1	Lambda value 1
ECU_9	MT_BATTVOLT	Battery supply
ECU_10	MT_MILLISECONDS	Milliseconds counter
ECU_11	MT_GEAR_POT	Gear potentiometer
ECU_12	MT_GEAR	Engaged gear
ECU_13	MT_AIRBOX_P	Air box pressure
ECU_14	MT_BARO_P	Barometric pressure
ECU_15	MT_ADVANCE1	Cycle advance 1
ECU_16	MT_ADVANCE2	Cycle advance 2
ECU_17	MT_ADVANCE3	Cycle advance 3
ECU_18	MT_ADVANCE4	Cycle advance 4
ECU_19	MT_TEROG_H1	High injector erogation time cylinder 1
ECU_20	MT_TEROG_H2	High injector erogation time cylinder 2
ECU_21	MT_TEROG_H3	High injector erogation time cylinder 3
ECU_22	MT_TEROG_H4	High injector erogation time cylinder 4
ECU_23	MT_TEROG_L1	Low injector erogation time cylinder 1
ECU_24	MT_TEROG_L2	Low injector erogation time cylinder 2
ECU_25	MT_TEROG_L3	Low injector erogation time cylinder 3

ECU_26	MT_TEROG_L4	Low injector erogation time cylinder 4
ECU_27	MT_TEROG_B1	Base injector erogation time cylinder 1
ECU_28	MT_TEROG_B2	Base injector erogation time cylinder 2
ECU_29	MT_TEROG_B3	Base injector erogation time cylinder 3
ECU_30	MT_TEROG_B4	Base injector erogation time cylinder 4
ECU_31	MT_KACYL1	Injection advance correction for cylinder 1
ECU_32	MT_KACYL2	Injection advance correction for cylinder 2
ECU_33	MT_KACYL3	Injection advance correction for cylinder 3
ECU_34	MT_KACYL4	Injection advance correction for cylinder 4
ECU_35	MT_KJCYL1	Injection time correction for cylinder 1
ECU_36	MT_KJCYL2	Injection time correction for cylinder 2
ECU_37	MT_KJCYL3	Injection time correction for cylinder 3
ECU_38	MT_KJCYL4	Injection time correction for cylinder 4
ECU_39	MT_DADINT	Advance offset from ignition transient
ECU_40	MT_DJDINT	Total injection offset from transient
ECU_41	MT_DJDINTRPM	Injection offset from RPM transient
ECU_42	MT_DJDINTH20	Injection offset from engine coolant temperature
ECU_43	MT_TETABASE	Ignition base advance
ECU_44	MT_PHASE	Injection phase
ECU_45	MT_FASEBASE	Injection phase base
ECU_46	MT_MAP_SEL	Map selection potentiometer
ECU_47	MT_ADV_TRANS	Ignition transient (from RPM variation)
ECU_48	MT_INJ_TRANS	Injection transient
ECU_49	MT_VALVE_POS	Valve position
ECU_50	MT_DWELL_T	Dwell time
ECU_51	MT_KJTAIR	Injection time correction from air temperature
ECU_52	MT_KJTH20	Injection time correction from water temperature
ECU_53	MT_KJPAIRBOX	Injection time correction from air box pressure
ECU_54	MT_KJPBARO	Injection time correction from barometric air pressure
ECU_55	MT_KATAIR	Offset advance from air temperature
ECU_56	MT_KATH20	Offset advance from water temperature
ECU_57	MT_KAPAIRBOX	Offset advance from air box pressure

ECU_58	MT_KAPBARO	Offset advance from barometric air pressure
ECU_59	MT_KJGEAR	Injection time correction from engaged gear
ECU_60	MT_KAGEAR	Offset advance from engaged gear
ECU_61	MT_AIRT	Intake air temperature
ECU_62	MT_ECT	Engine coolant temperature
ECU_63	MT_FUEL_CAL1	Fuel calibration 1
ECU_64	MT_FUEL_CAL2	Fuel calibration 2
ECU_65	MT_OFFSVBATH	High injectors V battery offset time
ECU_66	MT_OFFSVBATL	Low injectors V battery offset time
ECU_67	MT_FLAG_MOTORE	Engine flag
ECU_68	MT_SEGNALI_IN	Input signal
ECU_69	MT_SEGNALI_OUT	Output signal
ECU_70	MT_FLAG_STATO	Status flag
ECU_71	MT_FLAG_CAMBIATA	Engine shift flag
ECU_72	MT_INJ_ERR	Injection error
ECU_73	MT_FLAG_RESET	Reset flag
ECU_74	MT_SPACE_FRONT	Front run space
ECU_75	MT_SPACE_REAR	Rear run space