AiM Infotech

Haltech Elite 2500 and Elite 1500 ECUs

Release 1.02

ECU

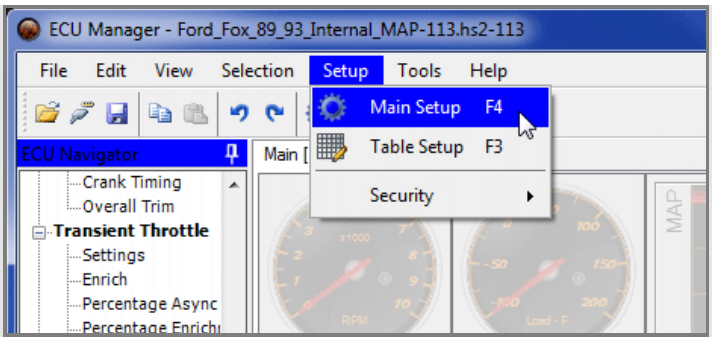
1
Supported models

This tutorial explains how to connect Haltech ECUs to AiM devices. Supported models are:

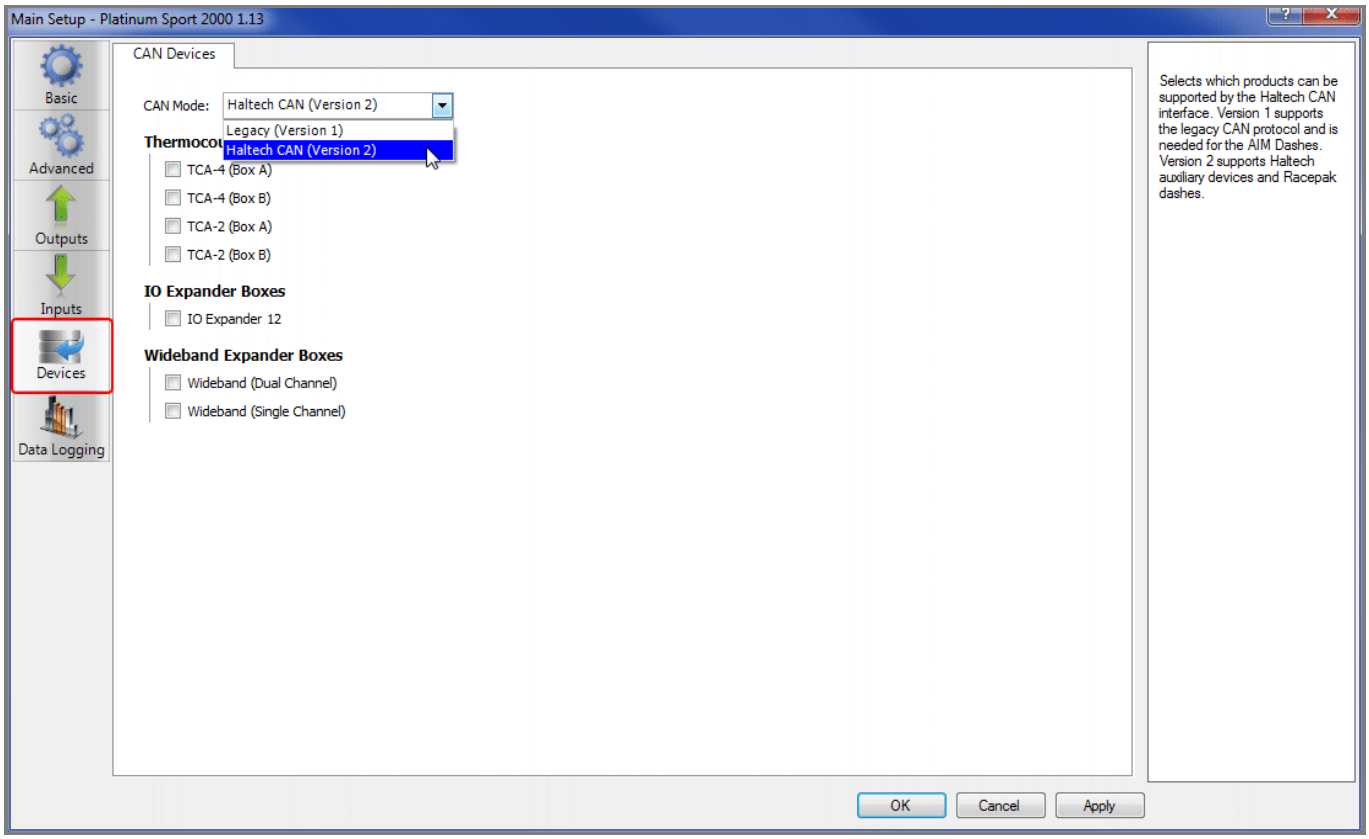
- Elite 1500
- Elite 2500

2
Software setup

Haltech ECUs need a software setting to correctly communicate with AiM devices. Run ECU Manager software and follow this path: Setup –> Main Setup

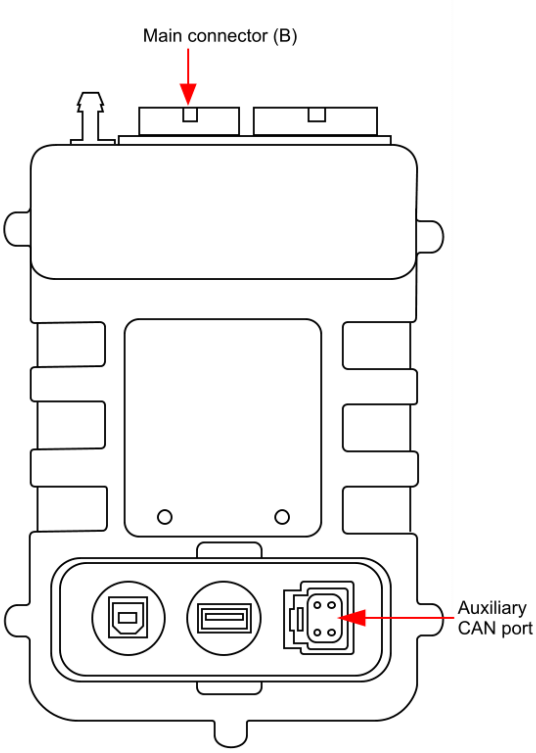


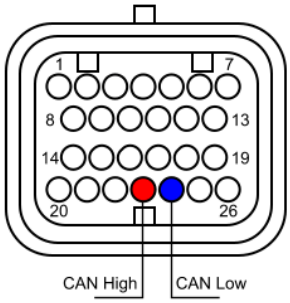
In "Main setup" panel –> select "CAN Devices" Layer –> Activate "CAN mode" drop down menu and select "Haltech CAN (Version 2)" option –> press "OK".

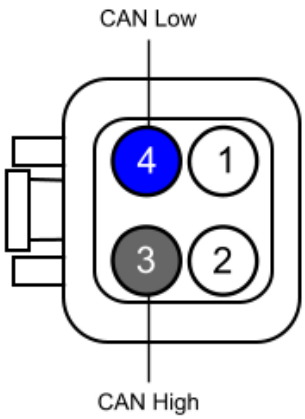


3
Wiring connection

Haltech Elite ECUs feature a bus communication protocol based on CAN that can be reached in two ways: through "B" main connector or through the auxiliary CAN port that is under a plastic cover on top of the ECU. Below you see the ECU on the left with the two connectors highlighted and their pinout on the right: main "B" connector on top and auxiliary CAN port on bottom. Below the drawings is connection table.







B connector Pin	**Pin function**	**AiM cable label**
23	CAN High	CAN+
24	CAN Low	CAN-
Auxiliary CAN port connector pin	**Pin function**	**AiM cable label**
3	CAN High	CAN+
4	CAN Low	CAN-

4 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 “Haltech”
- ECU Model "CAN_V2"

5 Available channels

Channels received by AiM devices connected to "Haltech" "CAN_V2" protocol are:

ID	CHANNEL NAME	FUNCTION
ECU_1	H_RPM	RPM
ECU_2	H_VEH_SPEED	Vehicle speed
ECU_3	H_WHEEL_FL	Front left wheel speed
ECU_4	H_WHEEL_FR	Front right wheel speed
ECU_5	H_WHEEL_RL	Rear left wheel speed
ECU_6	H_WHEEL_RR	Rear right wheel speed
ECU_7	H_THROTTLE	Throttle position sensor
ECU_8	H_BOOST_OUTPUT	Boost output
ECU_9	H_MANIF_PR	Manifold air pressure
ECU_10	H_DECEL_CUT	Deceleration cut
ECU_11	H_FUEL_PR	Fuel pressure
ECU_12	H_OIL_PR	Oil pressure
ECU_13	H_CLUTCH	Clutch
ECU_14	H_LAMBDA1	Lambda value 1
ECU_15	H_LAMBDA2	Lambda value 2
ECU_16	H_TIMED_DUTY_1	Timed duty cycle 1

ECU_17	H_TIMED_DUTY2	Timed duty cycle 2
ECU_18	H_COOLANT_T	Engine coolant temperature
ECU_19	H_AIR_T1	Air temperature 1
ECU_20	H_FUEL_T	Fuel temperature
ECU_21	H_OIL_T	Oil temperature
ECU_22	H_GEAR	Engaged gear
ECU_23	H_EGT1	Exhaust gas temperature 1
ECU_24	H_EGT2	Exhaust gas temperature 2
ECU_25	H_EGT3	Exhaust gas temperature 3
ECU_26	H_EGT4	Exhaust gas temperature 4
ECU_27	H_EGT5	Exhaust gas temperature 5
ECU_28	H_EGT6	Exhaust gas temperature 6
ECU_29	H_EGT7	Exhaust gas temperature 7
ECU_30	H_EGT8	Exhaust gas temperature 8
ECU_31	H_TRIGGER_CNT	Trigger counter
ECU_32	H_HOME_CNT	Home counter
ECU_33	H_MISS_CNT	Missing counter
ECU_34	H_TRIGGER_LAST	Trigger last
ECU_35	H_TRASM_T	Transmission temperature
ECU_36	H_DIFF_T	Differential temperature
ECU_37	H_INJ_DUTY_1	Injection duty cycle 1
ECU_38	H_INJ_DUTY_2	Injection duty cycle 2
ECU_39	H_IGN_ANG_LE	Ignition angle lead
ECU_40	H_IGN_ANG_TR	ignition angle thrystor
ECU_41	H_IN_CAM_ANG_1	internal camshaft angle 1
ECU_42	H_IN_CAM_ANG_2	internal camshaft angle 2
ECU_43	H_EX_CAM_ANG_1	external camshaft angle 1
ECU_44	H_EX_CAM_ANG_2	external camshaft angle 2
ECU_45	H_WHEEL_SLIP	Wheel slip
ECU_46	H_FUEL_COMPOS	Fuel composition
ECU_47	H_BRAKE_PR	Brake pressure
ECU_48	H_NOS_PR	NOS Pressure

ECU_49	H_BARO_PR	Barometric pressure
ECU_50	H_FUEL_CONSUMP	Fuel consumption
ECU_51	H_BOOST_TARGET	Boost target
ECU_52	H_AIR_T2	Air temperature 2
ECU_53	H_BATT_VOLT	Battery supply
ECU_54	H_KNOCK_RET_B1	Knock retard B1
ECU_55	H_KNOCK_LEVEL	Knock level
ECU_56	H_L_ANTILAG_ON	Left Antilag on
ECU_57	H_L_ANTILAG_SW	Left Antilag switch
ECU_58	H_REV_LIMITER	Revolution limiter (speed limiter)
ECU_59	H_R_ANTILAG_SW	Right Antilag switch
ECU_60	H_NOS_SW	NOS switch
ECU_61	H_NOS_ACT	NOS actual
ECU_62	H_MIL_CHK_ENG	Malfunctioning indicator lamp for engine check
ECU_63	H_TURBO_SPEED	Turbo speed
ECU_64	H_FUEL_CUT	Fuel cut
ECU_65	H_FUEL_FLOW	Fuel flow
ECU_66	H_FUEL_FLOW_R	Fuel flow return
ECU_67	H_FTRIMSHORTB1	Fuel trim short term bank 1
ECU_68	H_FTRIMSHORTB2	Fuel trim short term bank 2
ECU_69	H_FTRIMLONGB1	Fuel trim long term bank 1
ECU_70	H_FTRIMLONGB2	Fuel trim long term bank 2
ECU_71	H_GEAR_SHIFT	Engaged gear
ECU_72	H_FLAT_SHIFT	Neutral signal
ECU_73	H_BATT_CHRG	Battery supply
ECU_74	H_LIMP_MODE	LIMP mode active
ECU_75	H_AVE_FUEL_ECO	Average fuel economy