

AiM Infotech

Link G4

Release 1.01



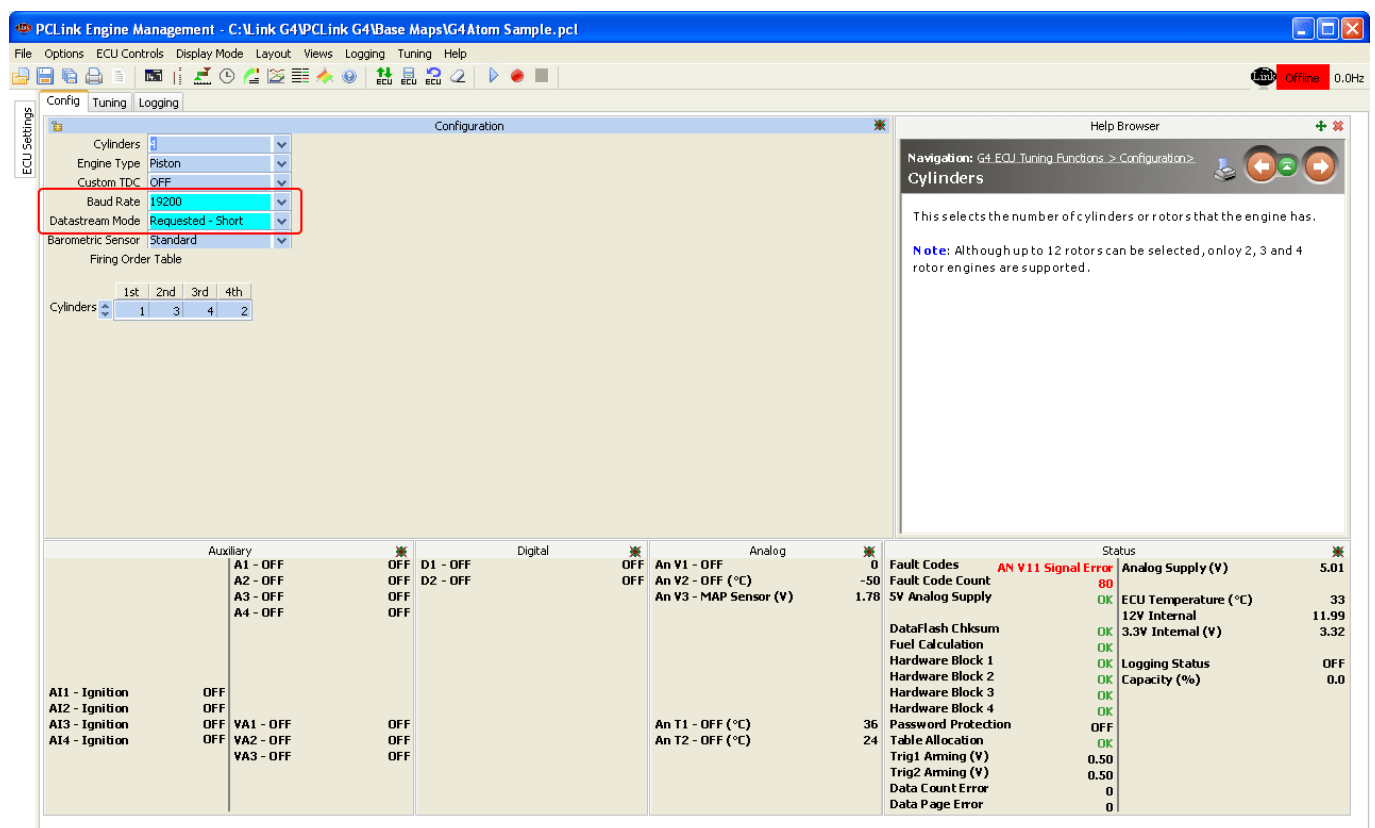
ECU

This tutorial explains how to connect Link G4 ECU to AiM devices.

1 Software setup

Link G4 ECU needs re-configuration via PC-Link software to correctly communicate with AiM devices. In the software configuration page, shown here below set these parameters:

- Baudrate: 19200
- Datastream Mode: "Requested – short"



Navigation: G4 ECU Tuning Functions > Configuration > Cylinders

This selects the number of cylinders or rotors that the engine has.

Note: Although up to 12 rotors can be selected, only 2, 3 and 4 rotor engines are supported.

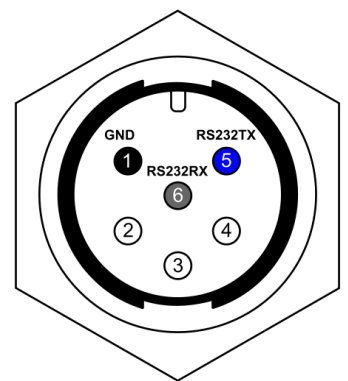
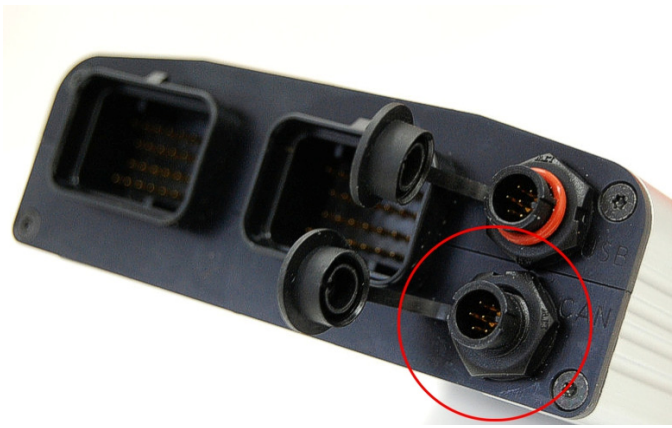
Auxiliary		Digital		Analog		Status	
A1 - OFF	OFF	D1 - OFF	OFF	An V1 - OFF	0	Fault Codes	AN V11 Signal Error
A2 - OFF	OFF	D2 - OFF	OFF	An V2 - OFF (°C)	-50	Fault Code Count	80
A3 - OFF	OFF			An V3 - MAP Sensor (V)	1.78	SV Analog Supply	OK
A4 - OFF	OFF					DataFlash Chksum	OK
						Fuel Calculation	OK
						Hardware Block 1	OK
						Hardware Block 2	OK
						Hardware Block 3	OK
						Hardware Block 4	OK
						Password Protection	OFF
						Table Allocation	OK
						Trig1 Arming (V)	0.50
						Trig2 Arming (V)	0.50
						Data Count Error	0
						Data Page Error	0
						Analog Supply (V)	5.01
						ECU Temperature (°C)	33
						12V Internal	11.99
						3.3V Internal (V)	3.32
						Logging Status	OFF
						Capacity (%)	0.0

Please note: in case the communication between AiM devices and the ECU is missing disconnect the ECU from PC.

2

Wiring connection

Link G4 ECU features a serial communication protocol on the bottom right connector shown here below on the left. On the right is connector pinout and below connection table.



ECU connector pin

6
5
1

Function

RS232RX
RS232TX
GND

AiM cable

RS232TX
RS232RX
GND

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 "Link"
- ECU Model "G4";

4

Available channels

Channels received by AiM loggers connected to "Link" "G4" protocol are:

ID	CHANNEL NAME	FUNCTION
ECU_1	G4_RPM	RPM
ECU_2	G4_MAP	Manifold air pressure
ECU_3	G4_MGP	Manifold gas pressure
ECU_4	G4_BAROMETRIC	Barometric pressure
ECU_5	G4_TPS	Throttle position sensor
ECU_6	G4_DUTY_CYCLE	Duty cycle
ECU_7	G4_DUTY_CYC(S)	Duty cycles
ECU_8	G4_INJ_PW	Injection power
ECU_9	G4_ECT	Engine coolant temperature
ECU_10	G4_IAT	Intake air temperature
ECU_11	G4_BATT_VOLT	Battery supply
ECU_12	G4_MAF	Mass air flow
ECU_13	G4_MAF_CYL	Cylinder mass air flow
ECU_14	G4_GEAR	Engaged gear
ECU_15	G4_ECU_TEMP	ECU Temperature
ECU_16	G4_INJ_ANGLE	Injectin angle

ECU_17	G4_IGN_ANGLE	Ignition angle
ECU_18	G4_CAM_INL_LH	Left camshaft inlet position
ECU_19	G4_CAM_INL_RH	Right camshaft inlet position
ECU_20	G4_CAM_EXH_LH	Left camshaft exhaust position
ECU_21	G4_CAM_EXH_RH	Right camshaft exhaust position
ECU_22	G4_GPTemp_AN1	Generic temperature channel 1
ECU_23	G4_GPTemp_AN2	Generic temperature channel 2
ECU_24	G4_GPTemp_AN3	Generic temperature channel 3
ECU_25	G4_GPTemp_AN4	Generic temperature channel 4
ECU_26	G4_GPPress_AN1	Generic pressure channel 1
ECU_27	G4_GPPress_AN2	Generic pressure channel 2
ECU_28	G4_GPPress_AN3	Generic pressure channel 3
ECU_29	G4_GPPress_AN4	Generic pressure channel 4
ECU_30	G4_GPPress_AN5	Generic pressure channel 5
ECU_31	G4_GPPress_AN6	Generic pressure channel 6
ECU_32	G4_GPPress_AN7	Generic pressure channel 7
ECU_33	G4_GPPress_AN8	Generic pressure channel 8
ECU_34	G4_GPPress_AN9	Generic pressure channel 9
ECU_35	G4_GPPress_AN10	Generic pressure channel 10
ECU_36	G4_GPPress_AN11	Generic pressure channel 11
ECU_37	G4_DI_SPEED1	Generic speed channel 1
ECU_38	G4_DI_SPEED2	Generic speed channel 2
ECU_39	G4_DI_SPEED3	Generic speed channel 3
ECU_40	G4_DI_SPEED4	Generic speed channel 4
ECU_41	G4_DI_SPEED5	Generic speed channel 5
ECU_42	G4_DI_SPEED6	Generic speed channel 6
ECU_43	G4_DI_FREQ1	Generic frequency channel 1
ECU_44	G4_DI_FREQ2	Generic frequency channel 2
ECU_45	G4_DI_FREQ3	Generic frequency channel 3
ECU_46	G4_DI_FREQ4	Generic frequency channel 4
ECU_47	G4_DI_FREQ5	Generic frequency channel 5
ECU_48	G4_DI_FREQ6	Generic frequency channel 6



ECU_49	G4_KNOCK_LEVEL	Knock level
ECU_50	G4_KNOCK_COUNT	Knock counter
ECU_51	G4_KNOCK_TARGET	Knock target
ECU_52	G4_DWELL_TIME	Coil dwell time
ECU_53	G4_OV_VOLT_LIM	Over voltage limiter*
ECU_54	G4_OV_FUEL_LIM	Over run fuel cut*
ECU_55	G4_VOLTAGE_LIM	Voltage limiter*
ECU_57	G4_MAX_IGN_LIM	Max ignition limiter*
ECU_58	G4_SPEED_LIM	Speed limiter*
ECU_59	G4_MAP_LIM	Manifold air pressure limiter*
ECU_60	G4_RPM_LIM	RPM limiter*
ECU_65	G4_AN_LIM	Generic limiter*
ECU_66	G4_WAKEUP_STATUS	Wake up status*
ECU_67	G4_LCH_RPM_LIM	Launch RPM limiter*
ECU_68	G4_UN_VOLT_LIM	Under voltage limiter 1 *
ECU_69	G4_TG1_ERR_CNT	Trig 1 error counter
ECU_70	G4_TG2_ERR_CNT	Trig 2 error counter
ECU_76	G4_ECCS_WIDESLOT_ERR	ECCS Widest slot error**
ECU_77	G4_TRIG2_ERR	Trig 2 error signal**
ECU_78	G4_TRIG1_ERR	Trig 1 error signal**

* 1 = Active
2 = Not active

** 1=Yes
0=Not