

AiM Infotech

Link G4 with Vi-Pec adaptor

Release 1.01



ECU

Devices



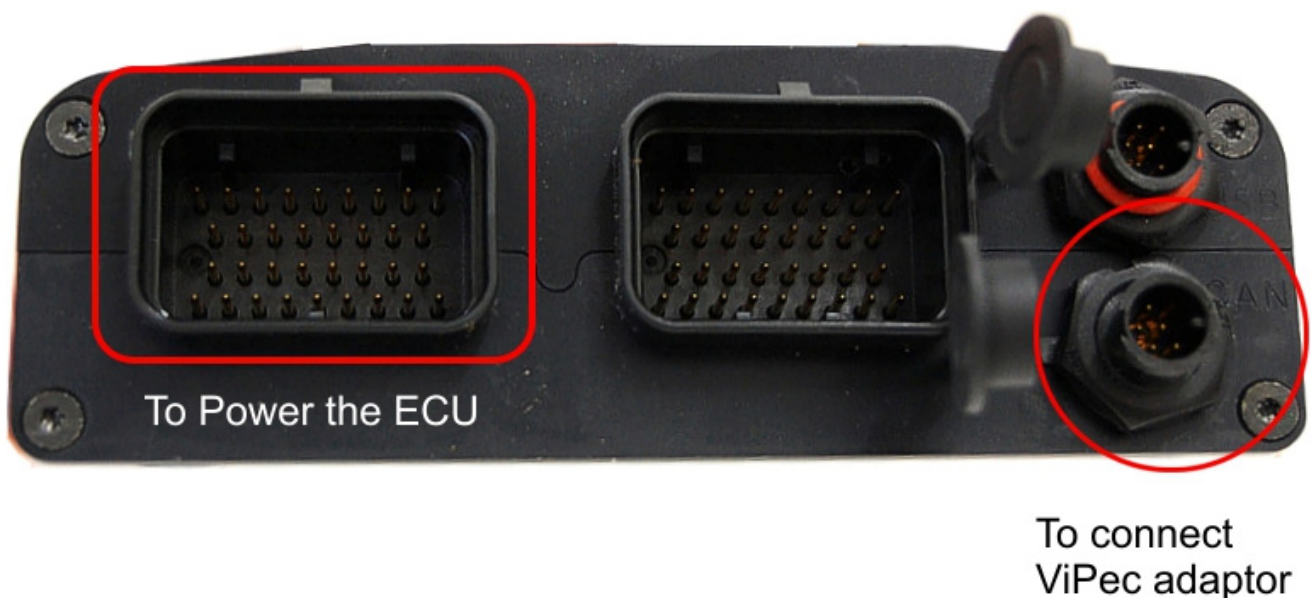
This tutorial explains how to connect Link G4 ECU with Vi-Pec adaptor to AiM devices.

1

Software setup

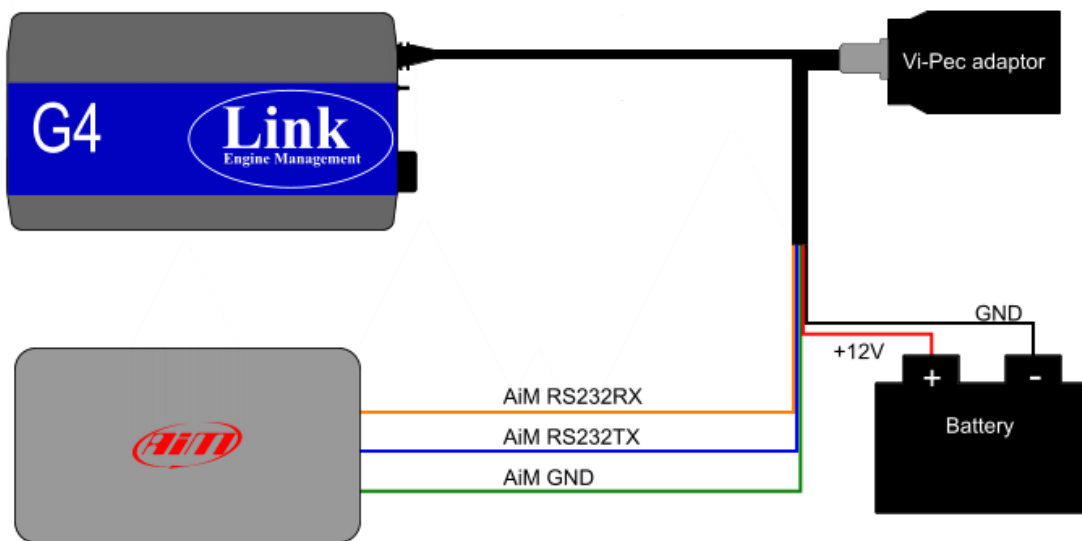
Link G4 ECU comes with a Vi-Pec adaptor that takes its bit rate from 57600 to 19200 . Please pay attention to the following instructions for a proper communication:

- disconnect the ECU from the PC
- remember that AiM device and ECU software cannot be online at the same time
- power the ECU through the front left connector shown below
- connect ViPec adaptor to the bottom right connector labelled "CAN" shown below
- set Link software datastream "OFF"
- AiM device requests data
- baud rate setting is 57600



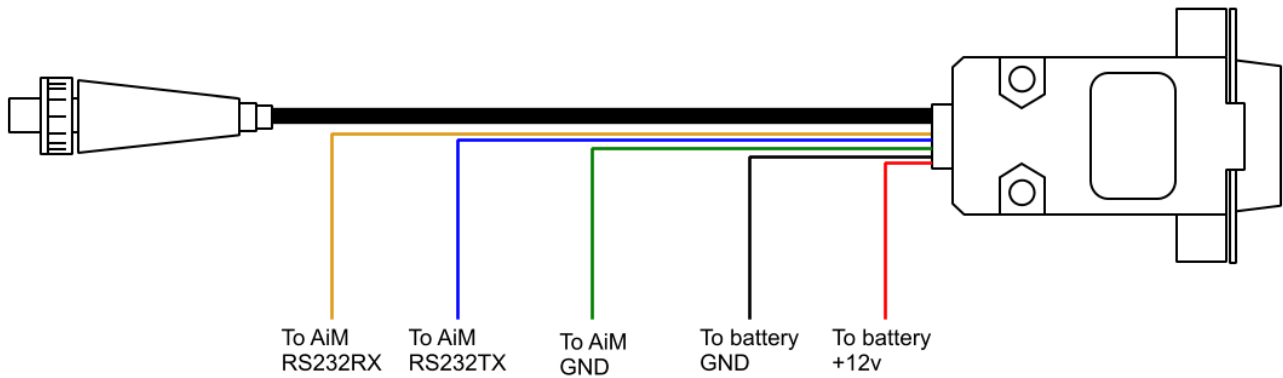
2 Wiring connection

The images here below show Vi-Pec adaptor on the left and its interface cable on the right. Below are connection scheme and connection table.



ViPec adaptor cable	Cable/Wire colour	Function	Cable target
Terminated cable	Black	ECU connection	To ECU "CAN" connector
Not terminated cable	Yellow	RS232TX	To RS232RX pin of AiM device
Not terminated cable	Blue	RS232RX	To RS232TX pin of AiM device
Not terminated cable	Green	GND	To GND pin of AiM device
Not terminated cable	Red	+12V	To battery positive pole
Not terminated cable	Black	GND	To battery negative pole

Here below is shown Vi-Pec interface cable constructive drawing



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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";

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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