AiM Infotech

Walbro MINJ400 ECU

Release 1.01







This tutorial explains how to connect Walbro MINJ400 to AiM devices.

1

Wiring connection

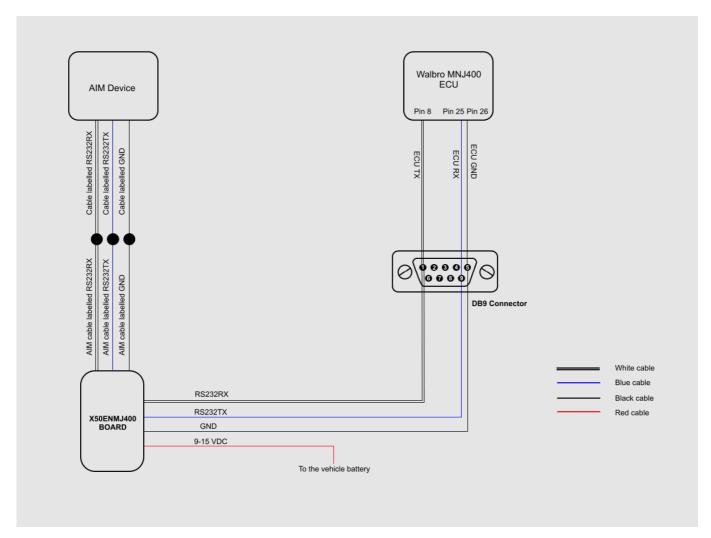
MINJ400 ECU communicates using the serial protocol on the 35 pins front male connector shown here below. The image highlights also the pins to be used whose function is explained in the following table.



35 pins Connector pin	Pin functio
8	RS232RX
28	RS232TX
26	GND



The connection with AiM devices is made using the DB9 connector on the ECU wiring and an AiM interface board whose part number is **X50ENMJ400**. Here below are wiring scheme as well as connection table.



35 pins connector pin	Pin function	DB9 pin	Board cable colour and label	AIM device cable label
8	RS232TX	1	White (RS232RX)	RS232RX
25	RS232RX	9	Blue (RS232TX)	RS232TX
26	GND	5	Black (GND)	GND
			Red (9-15 VDC)	



2

AiM Logger configuration

Once the ECU connected to the logger, this last one is to be configured as connected to that ECU.

Run Race Studio 2 software and follow this path:

- Device Configuration -> Select the device you are using;
- select the configuration or press "New" to create a new one;
- select ECU manufacturer "Walbro" and ECU Model "MINJ400";
- transmit the configuration to the device pressing "Transmit".



3

Available channels

Channels received by AiM devices connected to Walbro MINJ400 protocol are:

ID	CHANNEL NAME	FUNCTION
ECU_1	WALBRO_RPM	RPM
ECU_2	WALBRO_TPS	Throttle position sensor
ECU_3	WALBRO_DTPS	Throttle position derivative
ECU_4	WALBRO_MAP	Manifold Air pressure
ECU_5	WALBRO_AIRT	Intake air temperature
ECU_6	WALBRO_ENGT	Engine temperature
ECU_7	WALBRO_LBDA1	Lambda value 1
ECU_8	WALBRO_ACT_BLK	Immobilizer
ECU_9	WALBRO_INJT1	Injection time 1
ECU_10	WALBRO_INJT2	Injection time 2
ECU_11	WALBRO_INJT3	Injection time 3
ECU_12	WALBRO_INJT4	Injection time 4
ECU_13	WALBRO_SPARK1	Spark advance 1
ECU_14	WALBRO_SPARK2	Spark advance 2
ECU_15	WALBRO_SPARK3	Spark advance 3
ECU_16	WALBRO_SPARK4	Spark advance 4
ECU_17	WALBRO_PHASE	Phase
ECU_18	WALBRO_IDLE_POS	Idle valve
ECU_19	WALBRO_BATT_V	Battery supply
ECU_20	WALBRO_ERCOUNTER	Error counter