



AiM Infotech

Marelli SRA

Release 1.01



SRA-EDL8

ECU



VISIT SUPPORT CENTER

SOFTWARE DOWNLOADS

FIRMWARE UPDATES

PRODUCT DOCUMENTATION



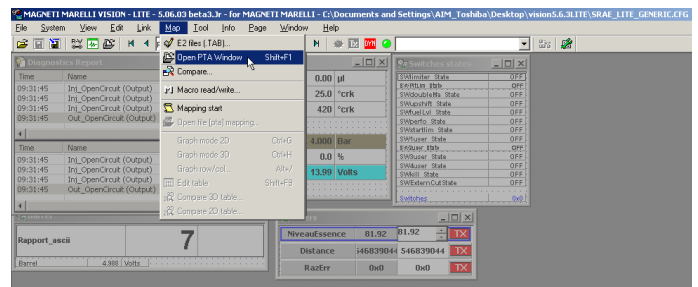
This tutorial explains how to connect Marelli SRA EDL8 ECU to AiM devices.

1 Software setting

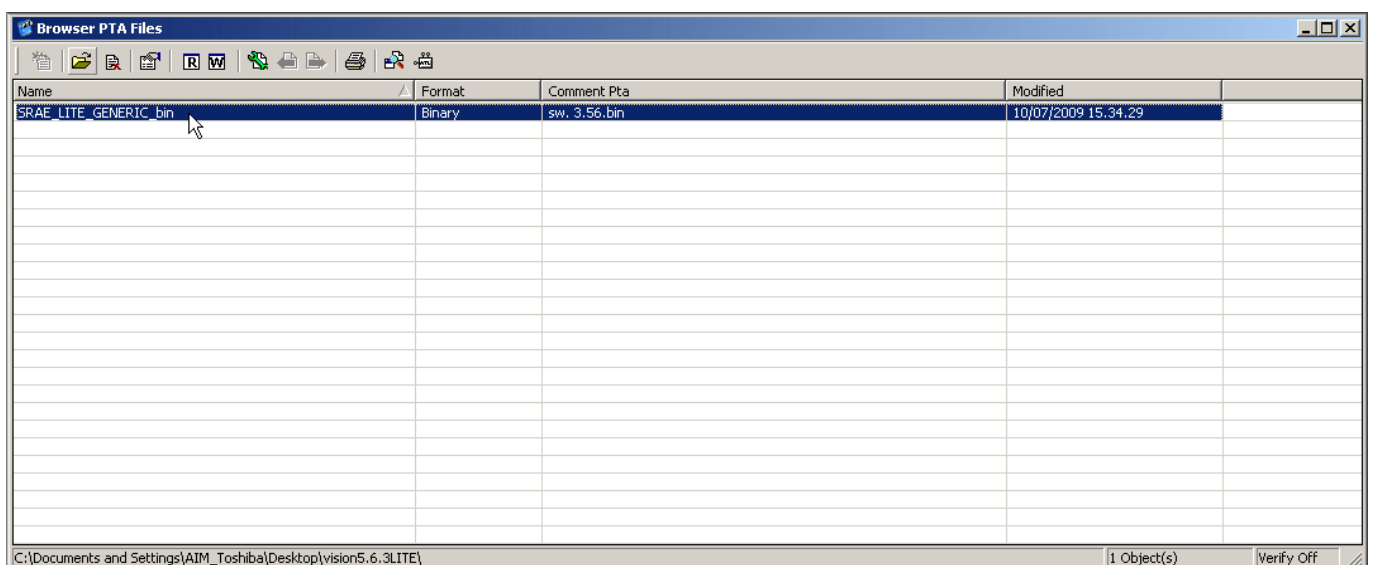
Marelli SRA ECU needs a software setting to correctly communicate with AiM devices. To perform it use Marelli "Vision" software and follow these instruction.

Run the software and follow this path:

- Map→ Open PTA Window



- A MAP file is normally available in the PTA files browser. If not browse the PC and double click on it.





- Scroll "PTA Table" window and double click "Dashboard"

The screenshot shows the 'MAGNETI MARELLI VISION - LITE' software interface. The title bar indicates the file path: 'C:\Documents and Settings\AIM_Toshiba\Desktop\vision5.6.3LITE\SRAE_LITE...'. The main window displays a table of components for 'sw. 3.56.bin'. The 'DASHBOARD' row is highlighted. The status bar at the bottom shows 'Ready' and 'Comm: Prot. works...'. A 'CONN ON' button is visible in the bottom right corner.

Title	Reference	*	Size
TRANSIENTS & CUTOFF			[33]
INJECTION PHASE			[6]
KNOCK CONFIGURATION			[4]
KNOCK			[49]
TURBO			[112]
UPSHIFT			[22]
ALARMS			[3]
STRATEGIES PWM 1 & 2			[4]
USER STRATEGIES			[48]
ANALOG LAMBDA CONTROL			[41]
LAMBDA ON/OFF REGULATION			[15]
ENGINE SUPERVISION			[41]
DASHBOARD			[7]
GDU			[17]
DDU			[18]
MISCELLANEOUS			[11]
DIAGNOSTIC ON BOARD			[3]
SDU			[47]
GCU Megaline			[4]
TRACTION CONTROL			[68]

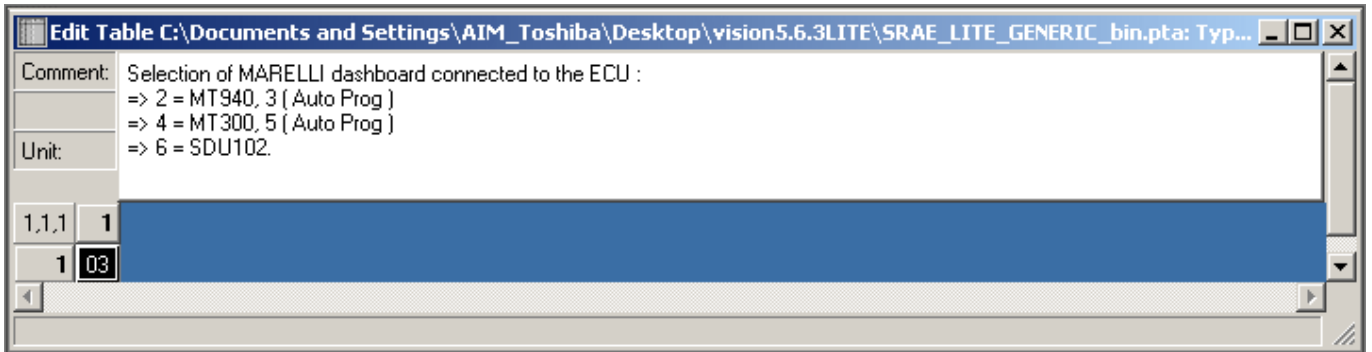
- Double click "Type of Dash Board"

The screenshot shows the 'PTA table' window in the software. The title bar indicates the file path: 'C:\Documents and Settings\AIM_Toshiba\Desktop\vision5.6.3LITE\SRAE_LITE_GENERIC_bin.pta'. The main window displays a table of dashboard-related items for 'sw. 3.56.bin'. The 'Type of Dash Board' row is highlighted. The status bar at the bottom shows 'DASHBOARD' and '7 Object(s)'. A 'Verify Off' button is visible in the bottom right corner.

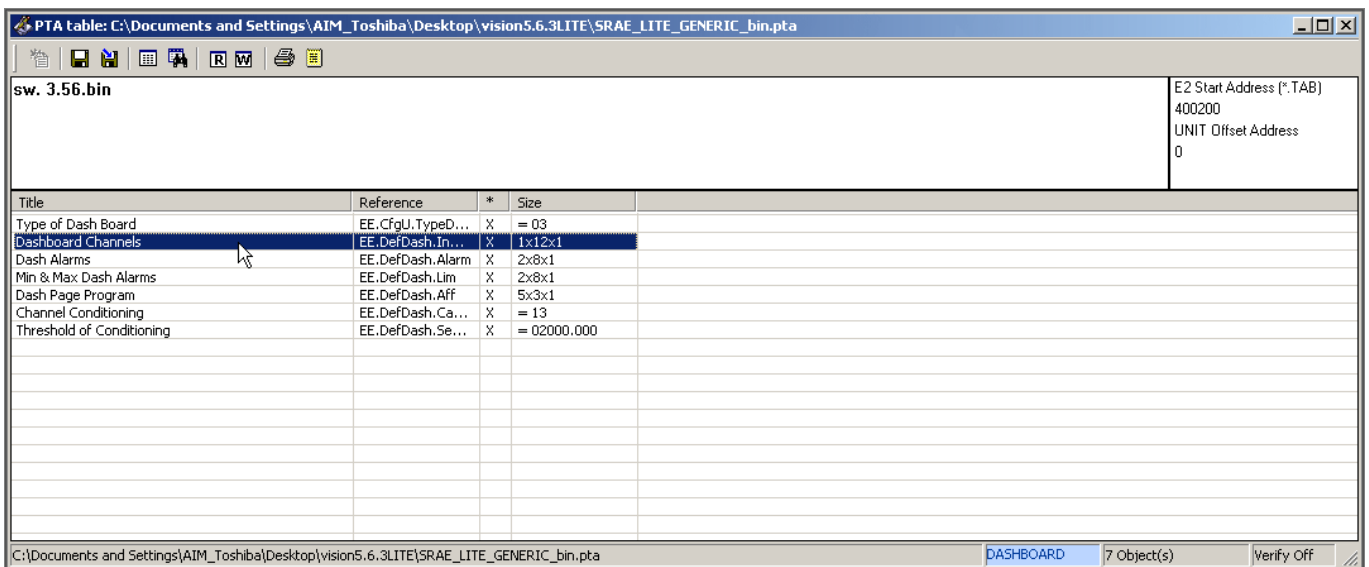
Title	Reference	*	Size
Type of Dash Board	EE.CfgU.TypeD...	X	= 03
Dashboard Channels	EE.DefDash.In...	X	1x12x1
Dash Alarms	EE.DefDash.Alarm	X	2x8x1
Min & Max Dash Alarms	EE.DefDash.Lim	X	2x8x1
Dash Page Program	EE.DefDash.Aff	X	5x3x1
Channel Conditioning	EE.DefDash.Ca...	X	= 13
Threshold of Conditioning	EE.DefDash.Se...	X	= 02000,000



- Double click the only settable cell and fill in "3" (Auto Prog)



- Double click "Dashboard Channels"





- Fill "Dashboard channels" table with the following values:

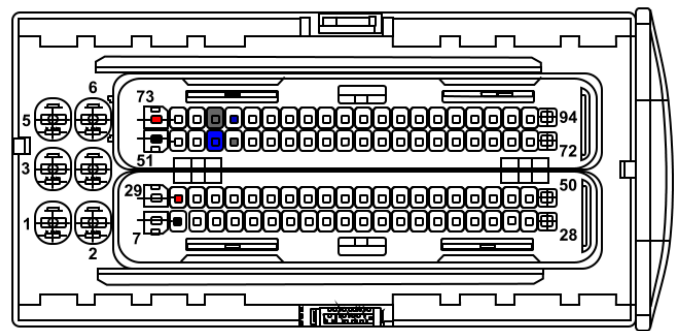
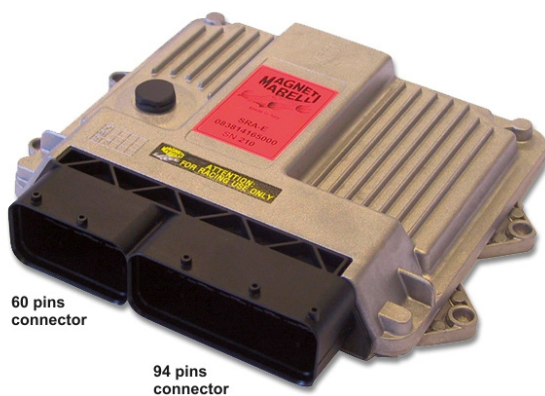
- 0000
- 0001
- 0005
- 0006
- 0004
- 0009
- 000B
- 0026
- 001E
- 0002
- 0007
- 0017

The screenshot shows a window titled "Edit Table C:\Documents and Settings\AIM_Toshiba\Desktop\vision5.6.3LITE\SRAE_LITE_GENERIC_bin.pta: Das...". The window contains a table with a comment and a list of channel numbers. The comment reads: "List of 12 dashboard channels. (See documentation for the channel numbers) Warning :HEXADECIMAL FORMAT". The table has a header row with "1,1,1" and "1". The data rows are numbered 13 to 24, with the following channel numbers: 0000, 0001, 0005, 0006, 0004, 0009, 000B, 0026, 001E, 0002, 0007, and 0017.

1,1,1	1
13	0000
14	0001
15	0005
16	0006
17	0004
18	0009
19	000B
20	0026
21	001E
22	0002
23	0007
24	0017

2 Connection to AiM devices

Magneti Marelli SRA EDL8 ECU features a bus communication protocol based on CAN on the 94 pins front right connector. Here below it is indicated on the left; on the right is connector pinout in detail.



Here below is connection table. The ECU has two CAN lines: CAN0 and CAN1; AiM suggests to use CAN1.

Please note: be sure to **never** cross CAN High and CAN low of different CAN lines.

94 Pins connector pin	Pin function	AiM cable
76	CAN0 High	CAN+
54	CAN0 Low	CAN-
55	CAN1 High	CAN+
77	CAN2 Low	CAN-
8 or 51	Ground	GND
73 or 30	Battery Positive Pole	9-15 VDC

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 "MARELLI"
- ECU Model "SRA_EDL8 "

4

Available channels

Channels received by AiM devices connected to "MARELLI" "SRA_SRAE_SRT" protocol are:

ID	CHANNEL NAME	FUNCTION
ECU_1	EDL8_RPM	RPM
ECU_2	EDL8_TPS	Throttle position sensor
ECU_3	EDL8_ECT	Engine coolant temperature
ECU_4	EDL8_OILT	Oil temperature
ECU_5	EDL8_OILP	Oil pressure
ECU_6	EDL8_FUELP	Fuel pressure
ECU_7	EDL8_BATTV	Battery supply
ECU_8	EDL8_GEAR	Engaged gear
ECU_9	EDL8_LAMBDA	Lambda value
ECU_10	EDL8_SPEED	Vehicle speed
ECU_11	EDL8_MAP	Manifold air pressure
ECU_12	EDL8_AIR_T	Intake air temperature