AIM Infotech

DTA P8, P8V29 and P8V30 ECUs

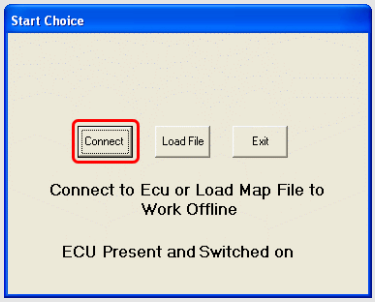
Release 1.00

This tutorial explains how to connect DTA P8, P8_V29 and P8_V30 ECU to AiM devices.

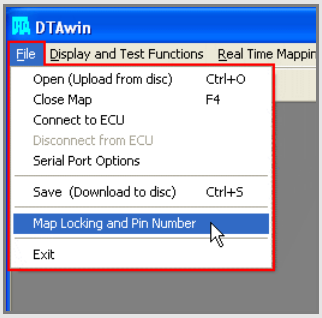
1 Software setting

In order to make your DTA ECU communicate with AiM devices you need to set it through DTAWin software. The configuration has been tested on DTA P8V30 ECU but it should fit DTA P8 and DTA P8V29 ECU too.
DTA ECU comes with DTAWin software. To let it communicate with AIM devices follow these steps.

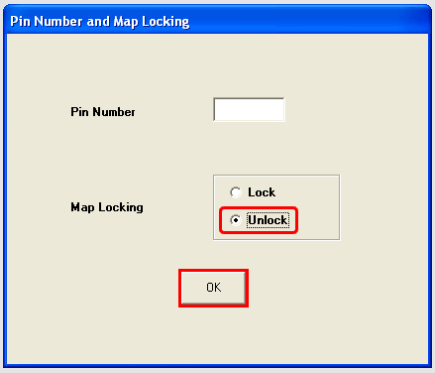
- Run DTAWin software.
- "Start Choice" window appears.
- Click "Connect".
- In case a window saying "No matching file on disc in use save to make one" appears press "OK". "Start Choice" panel appears: press "Connect".



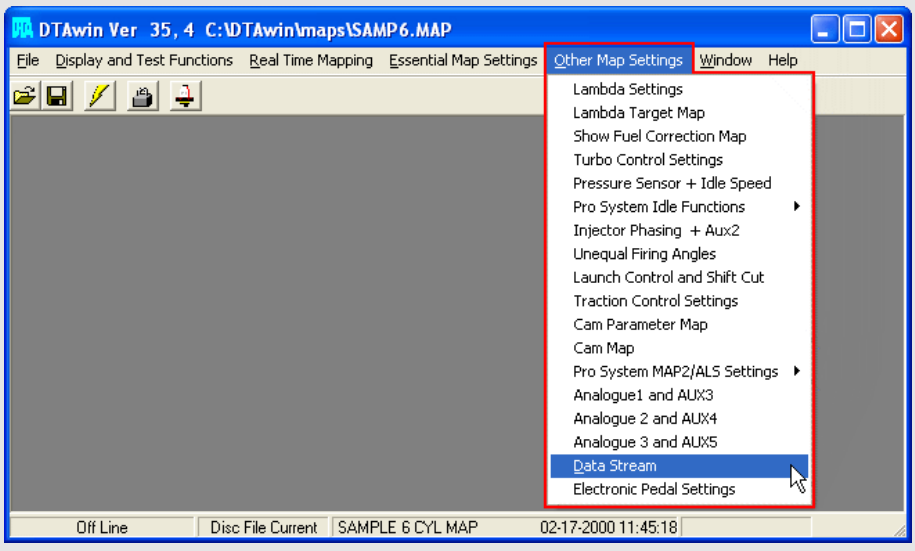
- DTA main window appears: follow the path "File –>Map locking and pin number" as shown below.



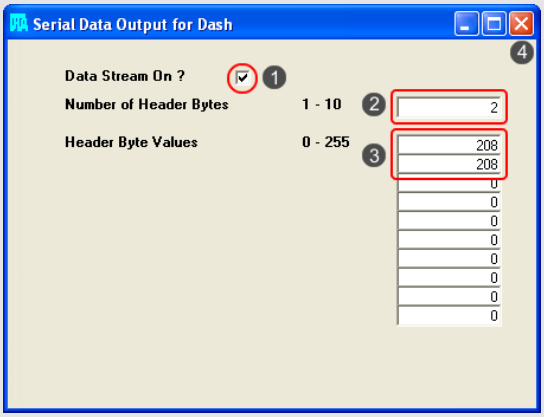
Enable “unlock” option and press “OK”.



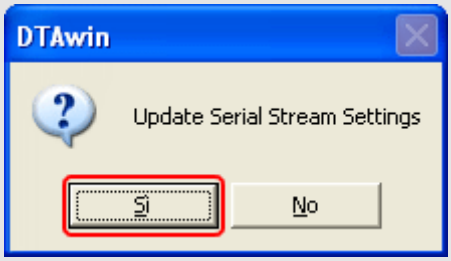
- The software comes back to the main window. Follow the path: “Other Map settings –> Data stream” shown below.



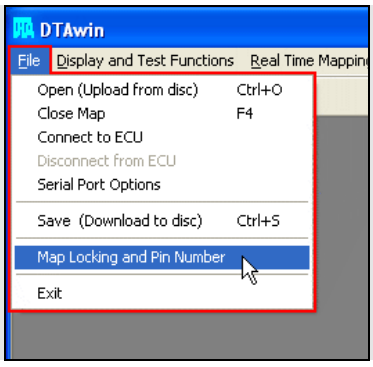
- "Serial Data output for Dash" window appears. Set it this way: enable "Data stream on?" (**1**), set "Number of Header bytes" on 2 (**2**), set the first two rows of "Header Byte Values" on 208 (**3**), click on the red cross top right (**4**) to close the panel.



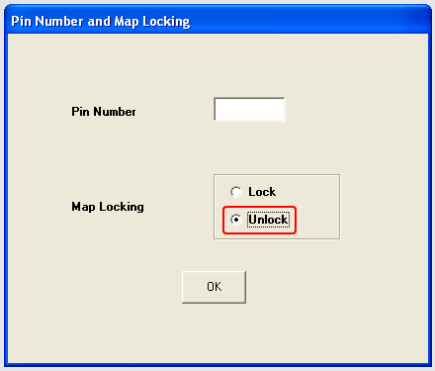
- the software asks for confirmation: press "Yes".



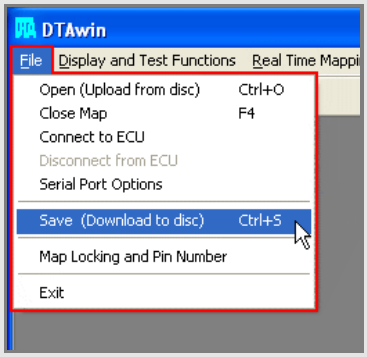
The software comes back to its main window. Follow this path: "File –> Map locking and pin number".



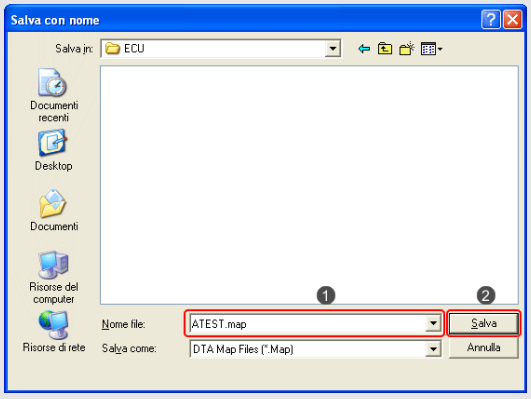
- Enable “unlock” option and press “OK”.



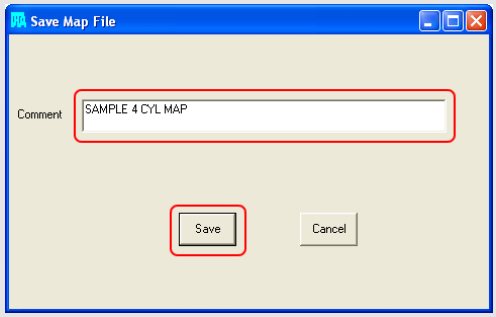
- The software comes back to its main window. Follow this path: “File –> Save (Download to disc)”.



- “Save as” window appears: insert file name (**1**) and press “Save” (**2**).



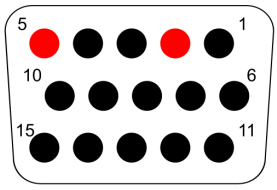
- "Save Map file" window appears. Insert Map comment and press "Save".



For any further information concerning ECU firmware/software settings and/or upgrading it is always recommended to address to the ECU dealer.

2 Wiring connection

DTA ECU features a serial communication protocol on the ECU DB9 female connector used to communicate with AiM devices. Here follows DB9 connector pinout as well as connection table.



DB9 connector pin	Pin function	AiM cable
2	RS232TX	RS232RX
5	GND	GND

Please note: ECU RS232RX is not to be connected.

3 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 “DTA” and, according to the ECU you are using, ECU Model
  - “P8” or “P8_V29” or
  - “P8_V30”;
- transmit the configuration to the device pressing “Transmit”.

4 Available channels

Channels received by AiM devices connected to DTA ECU changes according to the selected protocol.

4.1 "DTA" "P8" protocol

Channels received by AiM devices connected to "DTA" "P8" protocol are:

ID	CHANNEL NAME	FUNCTION
ECU_1	DTA_RPM	RPM
ECU_2	DTA_WHEELSPD	Wheel speed
ECU_3	DTA_WATERTEMP	Engine cooling temperature
ECU_4	DTA_AIRTEMP	Intake air temperature
ECU_5	DTA_MANIFPRESS	Manifold pressure
ECU_6	DTA_THROTANG	Throttle position sensor
ECU_7	DTA_LAMBDA	Lambda value
ECU_8	DTA_BATTV	Battery voltage

4.2 "DTA" "P8_V29" protocol

Channels received by AiM devices connected to "DTA" "P8_V29" protocol are:

ID	CHANNEL NAME	FUNCTION
ECU_1	DTA_RPM	RPM
ECU_2	DTA_THROTANG	Throttle position sensor
ECU_3	DTA_WATERTEMP	Engine cooling temperature
ECU_4	DTA_AIRTEMP	Intake air temperature
ECU_5	DTA_MANIFPRESS	Manifold pressure
ECU_6	DTA_LAMBDA	Lambda value
ECU_7	DTA_BATTV	Battery voltage
ECU_8	DTA_WHEELSPD	Wheel speed

4.3 "DTA" "P8_V30" protocol

Channels received by AiM devices connected to "DTA" "P8_V30" protocol are:

ID	CHANNEL NAME	FUNCTION
ECU_1	DTA_RPM	RPM
ECU_2	DTA_THROTANG	Throttle position sensor
ECU_3	DTA_WATERTEMP	Engine cooling temperature
ECU_4	DTA_AIRTEMP	Intake air temperature
ECU_5	DTA_MANIFPRESS	Manifold pressure
ECU_6	DTA_LAMBDA	Lambda value
ECU_7	DTA_BATTV	Battery voltage
ECU_8	DTA_WHEELSPD	Wheel speed

ECU_9	DTA_ANA1	Analog channel 1
ECU_10	DTA_ANA2	Analog channel 2
ECU_11	DTA_ANA3	Analog channel 3