

## E8 – E11V2 ECUs – How to restore the original firmware



## Introduction

This tutorial explains how to restore original Haltech firmware to an E8 or E11V2 ECU that currently communicate to AIM loggers through a special Haltech RS232 firmware version.

It is strongly suggested to change data transmission to CAN-BUS communication, because, from “build 32” firmware version onward, CAN communication protocol is supported.

CAN BUS communication allows a more precise and fast data transmission, please refer to this manual to restore original firmware and improve the quality of the data acquired.

**Warning: before attempting this procedure disconnect any igniters or power supply to ignition coils**

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



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## Chapter 1 – How to install Halwin software

Before firmware restoring it is necessary to install Halwin software:

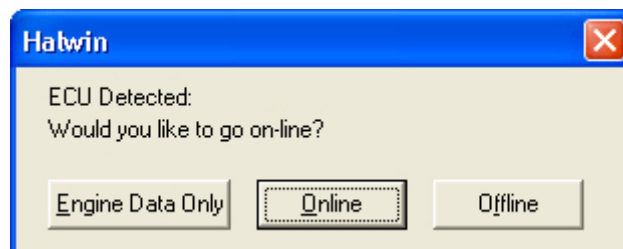
- visit [www.haltech.com](http://www.haltech.com);
- select “Downloads”;
- select “Previous product”;
- select “E11” or “E8” (depending on the ECU models);
- select the appropriate firmware version;
- follow the installation wizard.

## Chapter 2 – How to erase the current firmware

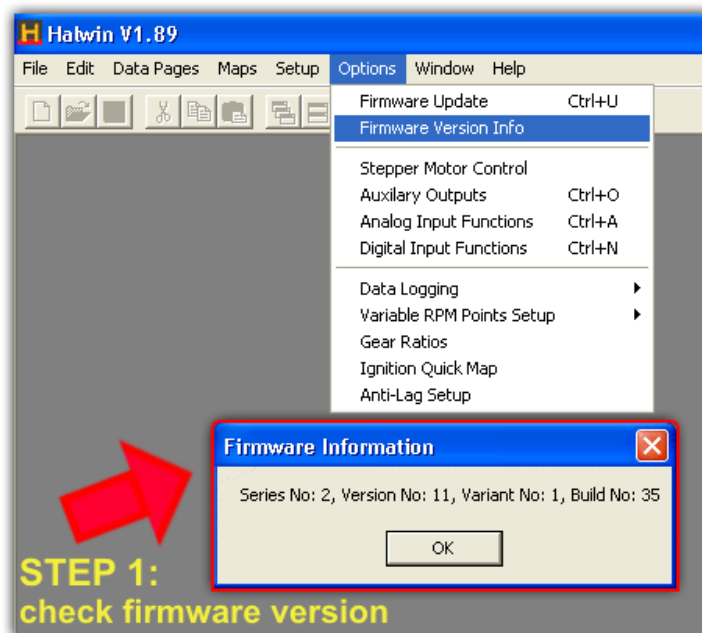
The first step to restore the original firmware is to erase the current one:

**Warning: ensure that the ECU is turned on, but the engine is not running. The outputs from the ECU should change to a non-connected safe state. However, it is good practice to unplug the 34 pin connector on your ECU before beginning firmware restore operation.**

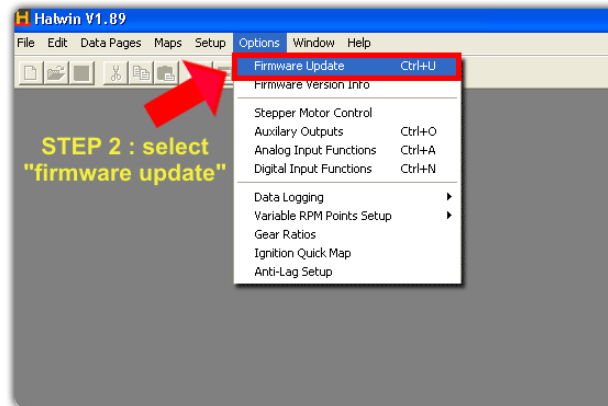
- turn on the ECU, but do not start your engine. Start the laptop with Halwin software and go “online”;



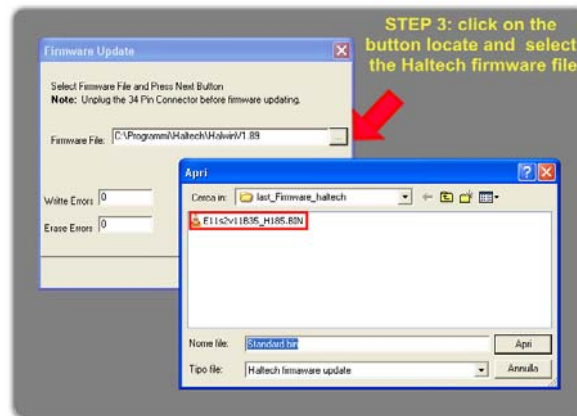
- take note of your firmware version (see image below);



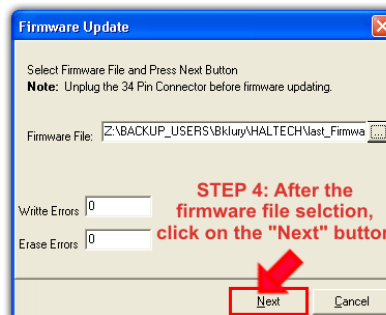
- select “Firmware Update” option



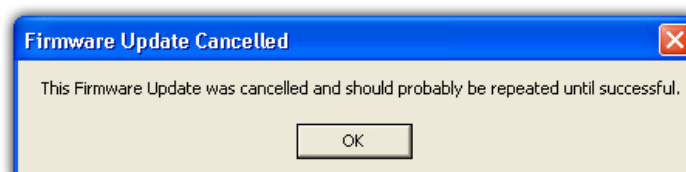
- select the BIN file from Firmware\_Haltech folder (see image below)



- click “Next”;



- click “Cancel”;

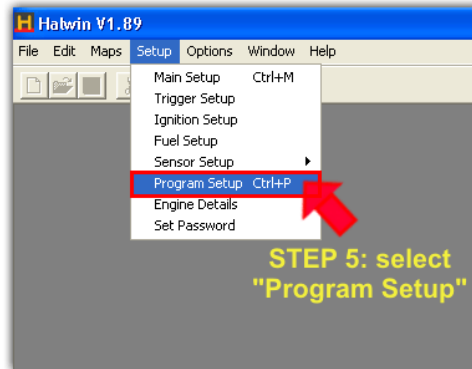


- press “OK”.

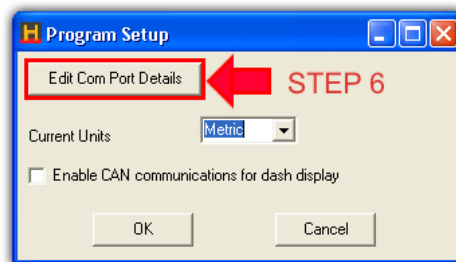
## Chapter 3 – How to set new baud rate value

Second step is to set baud rate parameter. Please follow these instructions:

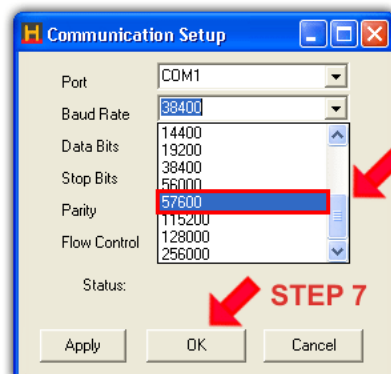
- go to “Setup” menu;



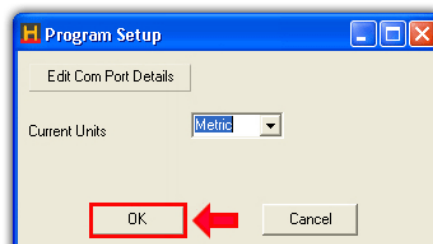
- select “Program Setup”;
- click on “Edit Com Port details”;



- change the baud rate from 38400 to 57600, then click “OK”;



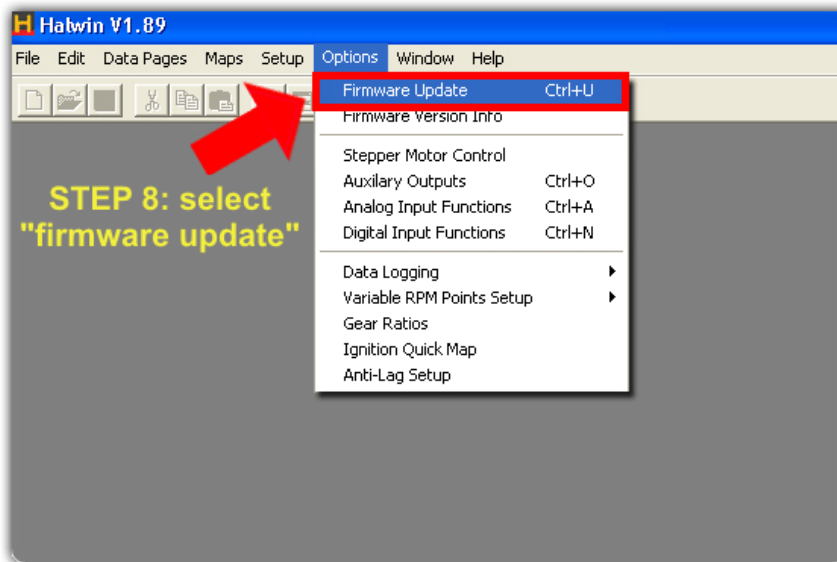
- press “OK”.



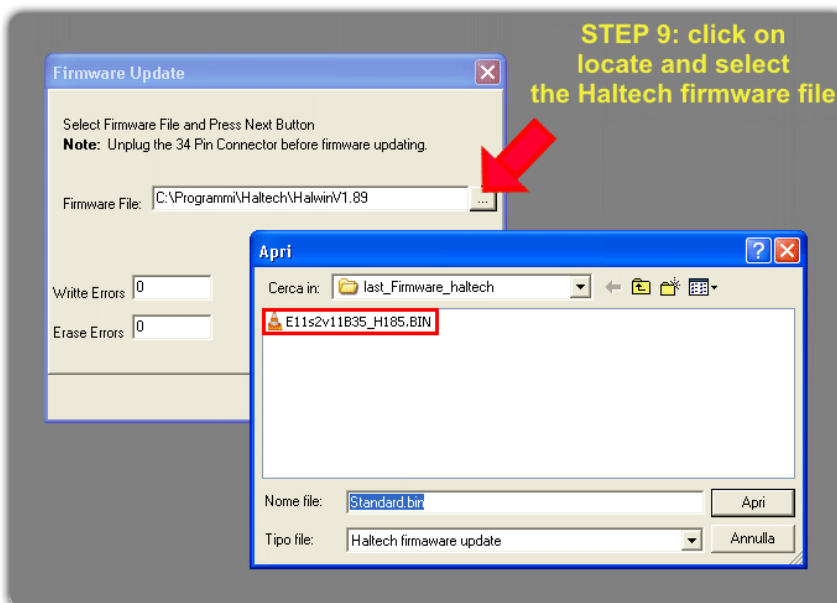
## Chapter 4 – How to load the new firmware

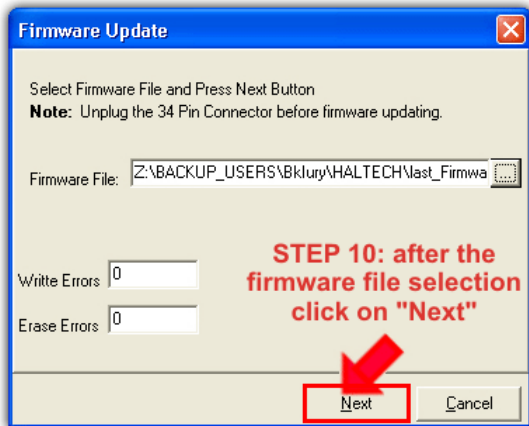
Finally the last step to do to restore the original firmware is to update it on your ECU. Turn the ignition key “Off” and then “On” again to reset the ECU. Then:

- select “Firmware Update”;



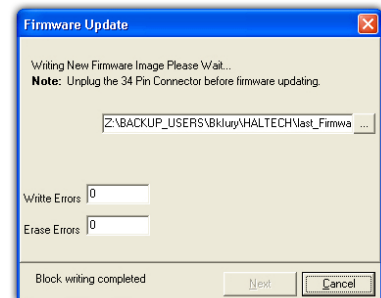
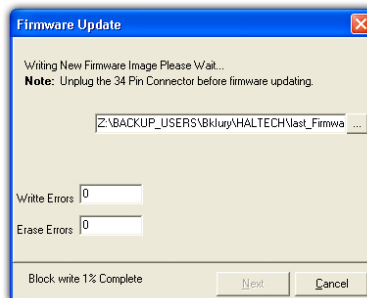
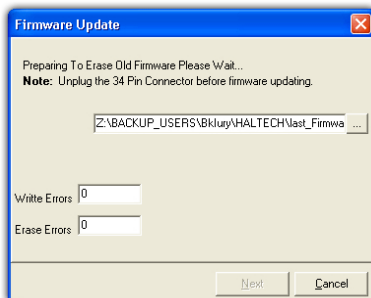
- select again the BIN file from Firmware\_Haltech folder (below image).



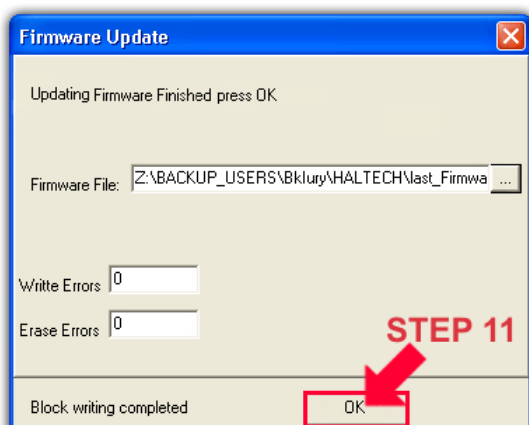


- Click “Next”.

- The following screens show the new firmware loading operation.



When the firmware restoring is completed with success, the screen below appears.



- Click “OK”.

Finally turn the ignition key “Off” and then “On” again to reset the ECU.  
 The firmware restore operation is completed.