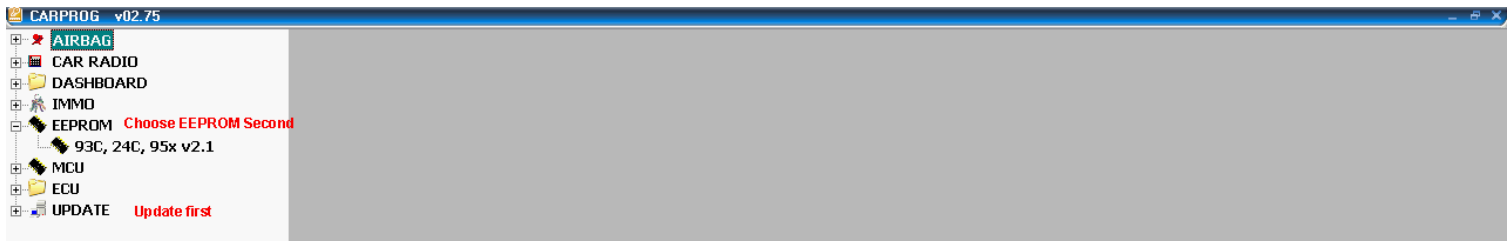


CARPROG

Introduction to reading an EEPROM

Using the CarProg, the user can read an eeprom using various methods. One popular method is on the PCB (Printer Circuit Board) and in most cases, the eeprom can be read. Some examples are the 24C02, 24C04, 24C08, 24C16 and others can be the 83C86 and 95080. In some occasions, the eeprom may not be read and an [oscillator](#) may need to be shorted. In other cases, the eeprom may need to be removed to be read.

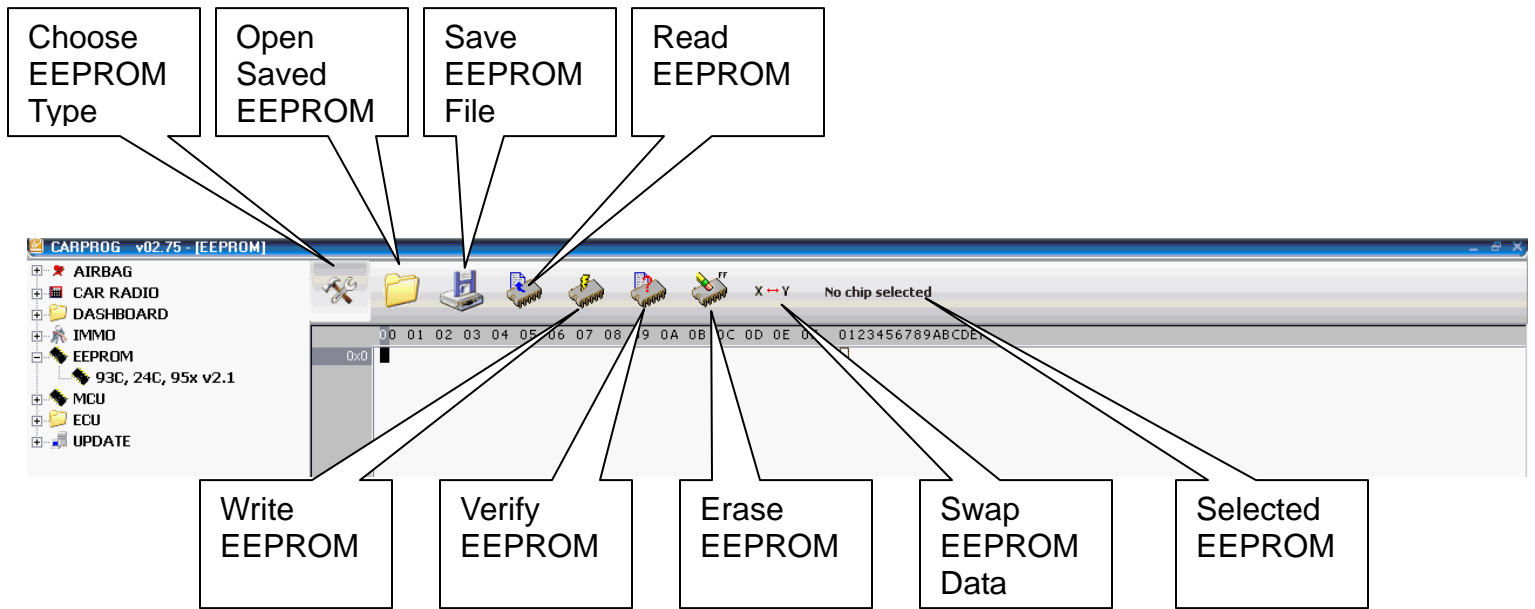
These are generic examples of some eeproms that were read off-board. The first operation is that the Carprog should be updated at least once a week for the latest software revisions.



Connect the CarProg and open the program. Choose “UPDATE” and wait until the updates are completed.

Choose the EEPROM tab and follow the menu descriptions below.

Always use an anti-static pad when working with sensitive electronic devices

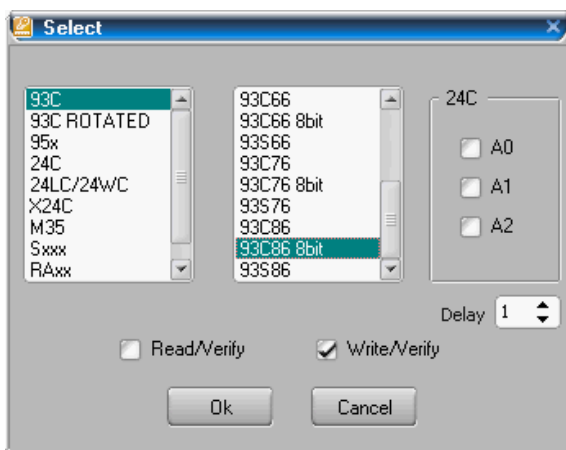


Inspect the EEPROM that needs to be read. There will be a series of numbers to inspect in order to correctly identify and connect the eeprom to the clip. It is advised that users be familiar with the eeprom types and connections. Searches can be done to find the correct data sheets for the eeprom.

This is an example of an eeprom search page.

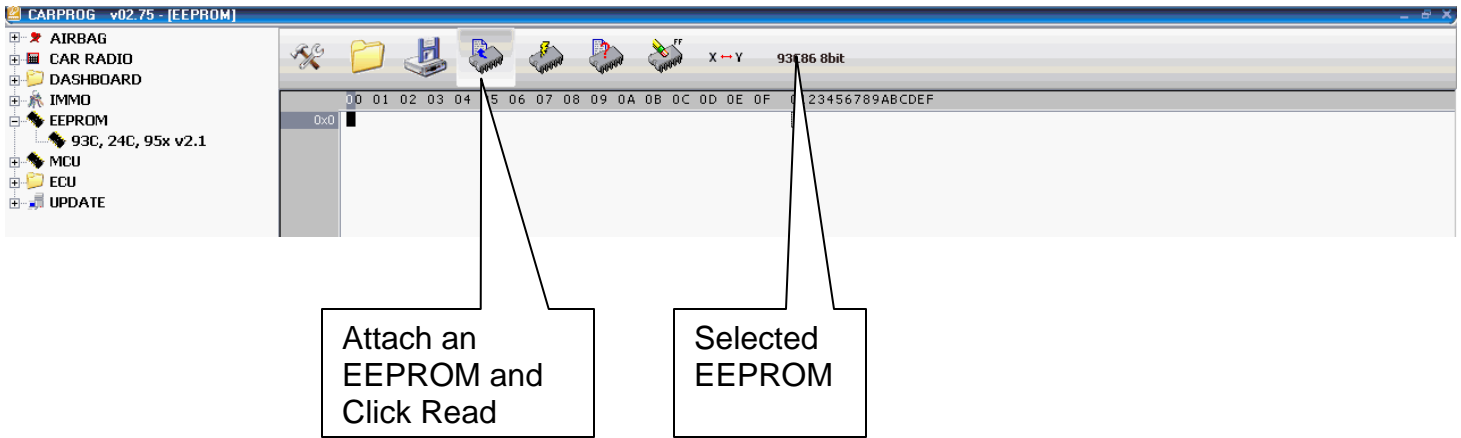
http://www.datasheetcatalog.com/datasheets_pdf/9/3/C/8/93C86.shtml

This example is the 93C86 EEPROM that was found in the menu [Choose EEPROM Type]

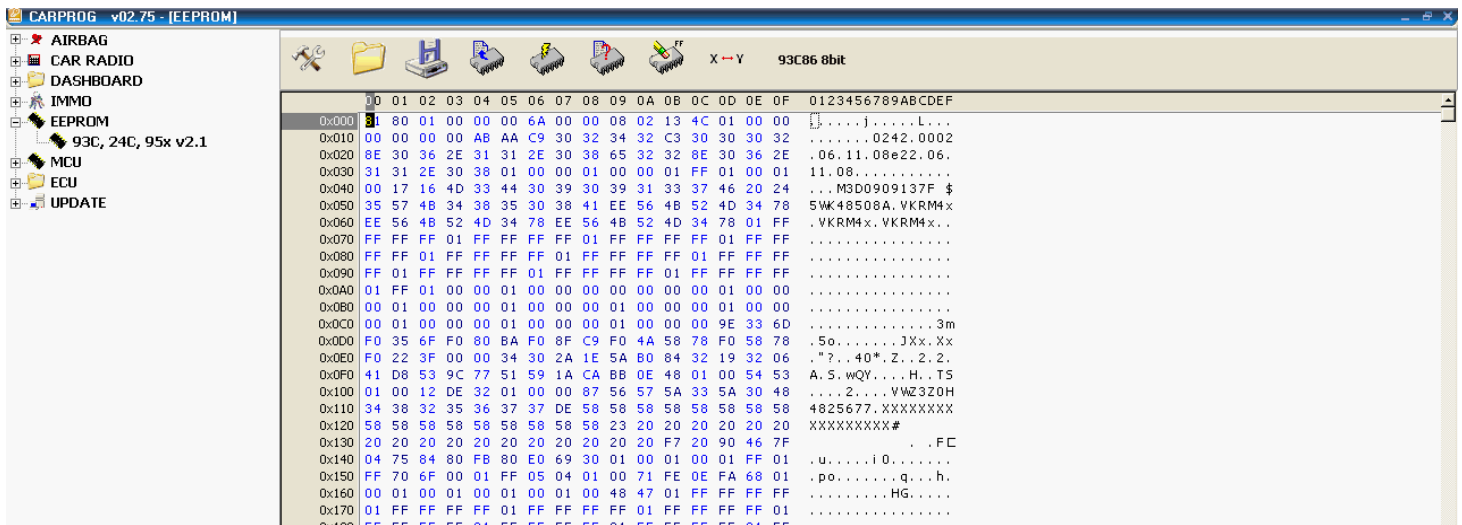


Once the correct EEPROM is found in the list, the EEPROM type is illustrated in the image below.

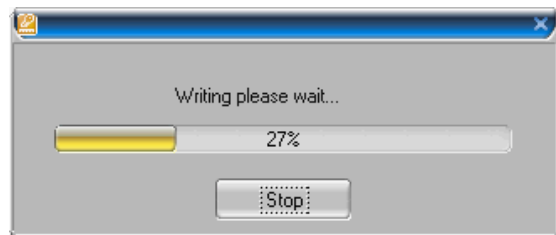
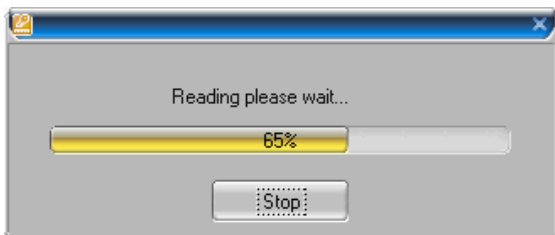
Click OK.



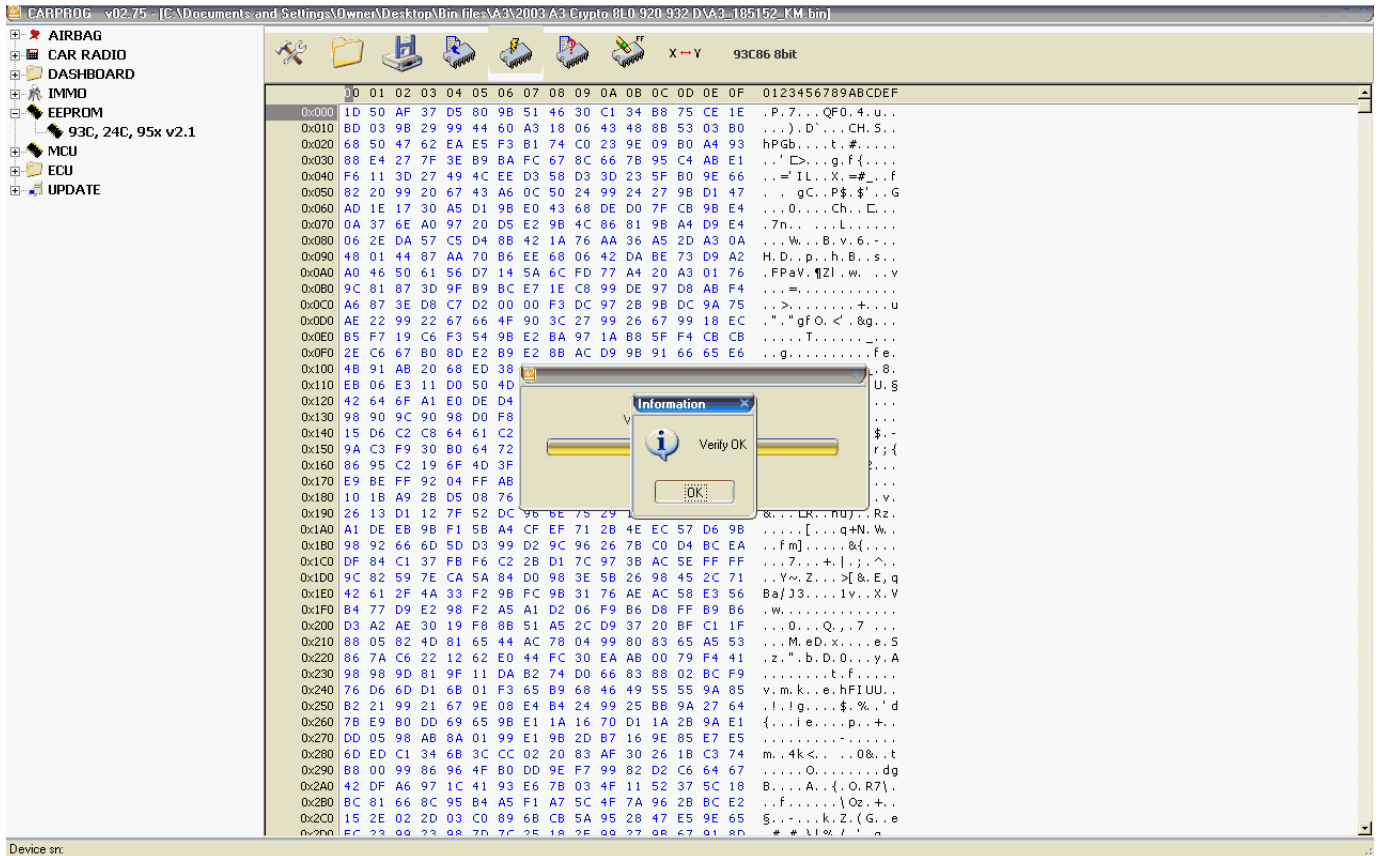
This is a partial example of a 93C86 EEPROM read into the window.



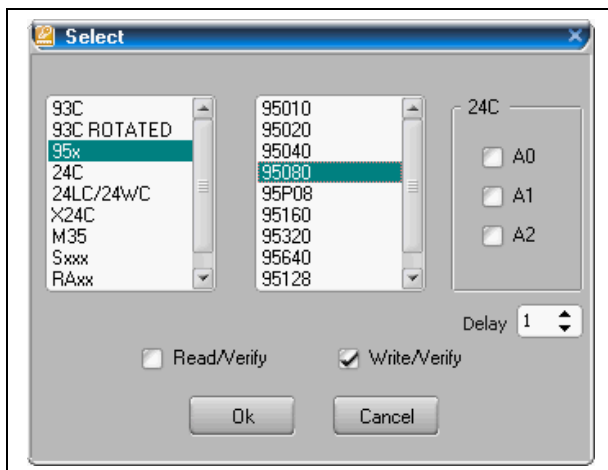
Reading and writing an EEPROM will bring up separate windows. These windows will inform the user of the functions that are being performed. The images below are an example of what the user should see.



Sometimes the user will need to write data to the EEPROM from a saved file or a new – edited file to an EEPROM. When the process is complete, the lower image will inform the user that it is verified.



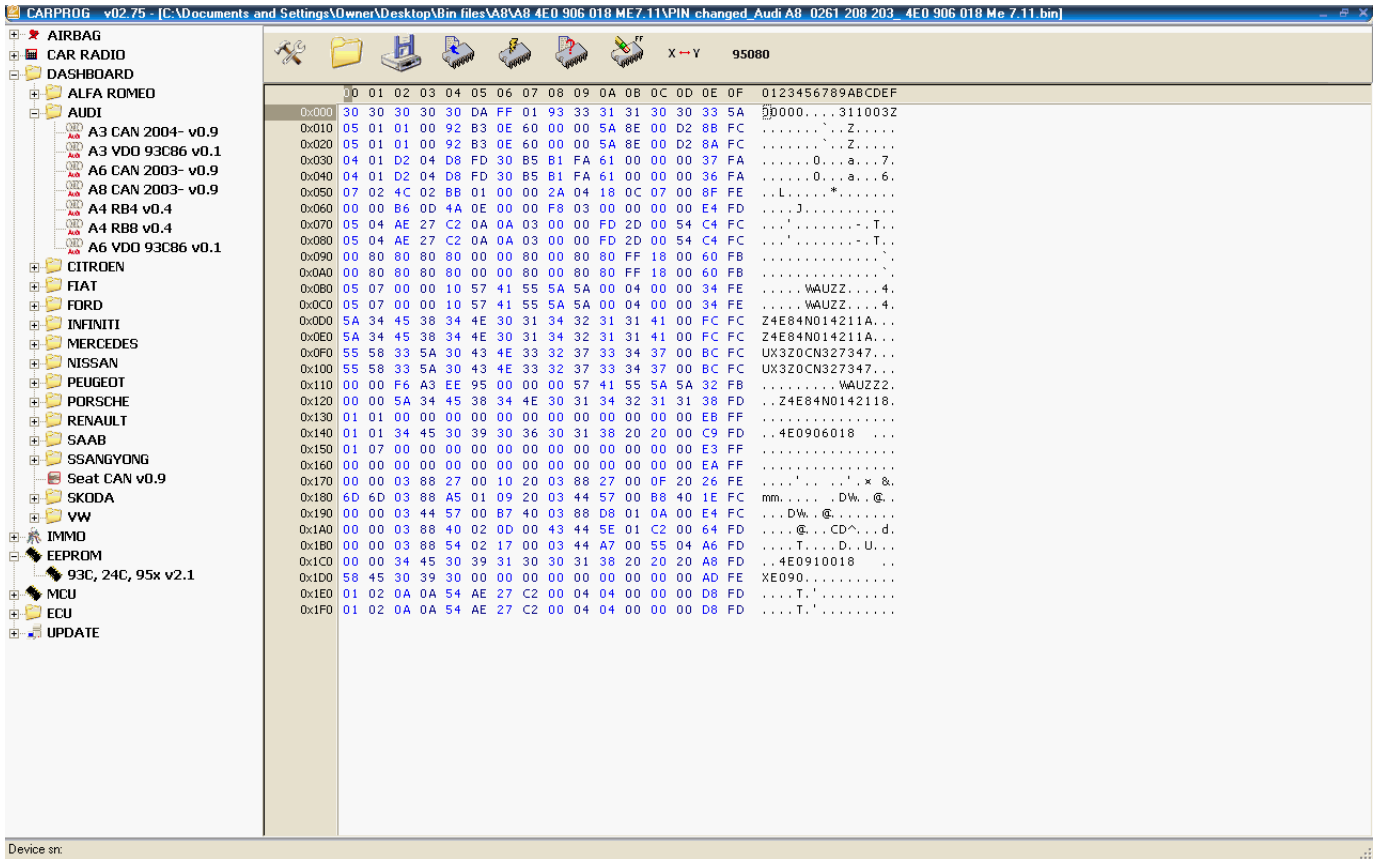
The next image is of a different EEPROM that was read on-board. The 95080 was chosen and read into the window. Remember to [Choose EEPROM Type]



Once the correct EEPROM is found in the list, the EEPROM type is illustrated in the image below.

Click OK.

This next image will give the user the choices of editing and or saving the file that was read from an EEPROM. The user can open a saved file and get the same results and write to an EEPROM.



Follow this advice to gain practice and save future mistakes.

1. Inspect the EEPROM clearly
2. Find the correct EEPROM data sheet
3. Read the EEPROM using the correct EEPROM type
4. Save the EEPROM data to a folder and file name
5. Save all edited EEPROM tests with new file names
6. Practice using older or new EEPROMS
7. If required, use a perfectly clean power supply to all controllers and the CarPog device.
8. Update the CarProg weekly
9. Remember that static electricity will harm electronic devices