

Information:

These utilities support only interfaces based on **ATmega162** chip. NEC, ARM or others are not supported!

To detect current cable's HW type just run **VAGCOM_HWType.exe** and press the **Read** button. Make sure that the cable is connected to both, computer's USB port and OBD2 port (or 12V power source). It will also show if the bootloader is enabled.

After you know what HW type your cable is, flash the correct version of **firmware** and **EEPROM** from this archive into your interface. Further updates will be possible via USB connection.

If the tool shows that bootloader is enabled, you can flash EEPROM using **VAGCOM_EEWriteLang.exe**. It uses custom firmware and after flashing the firmware must be updated back to original using VCDS (Options->Test and FW upgrade will be offered). Default language is English but you can choose any other available language from the dropdown list in **VAGCOM_EEWriteLang.exe** utility.

If your cable has bootloader disabled then it must be updated using wires and a programmer (search eBay for USBASP).

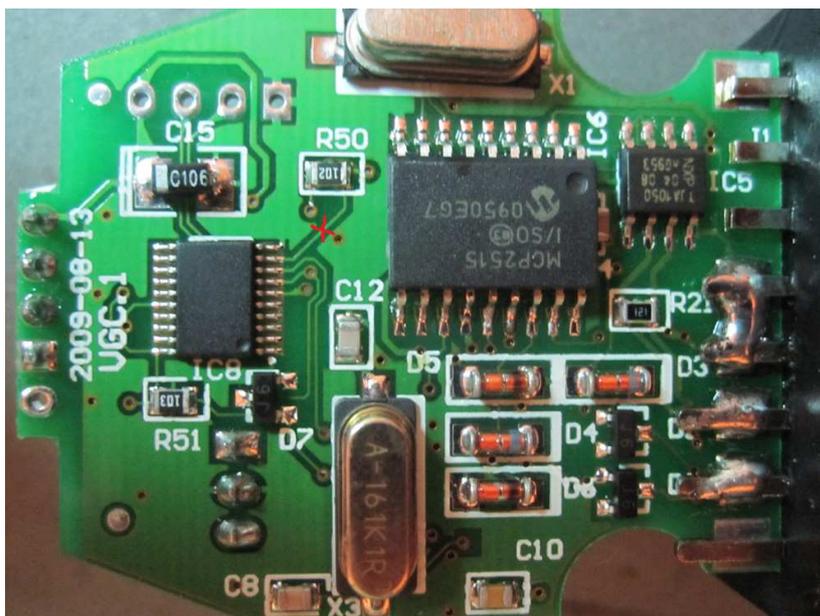
ftdi_ft_prog_*.xml file is for FTDI **FT_Prog** and **ftdi_mprog_*.ept** file is for FTDI **MProg**.

HEX files are Intel HEX formatted files of **BIN** files.

Install official VCDS version 17.8.x, 18.2.x (or later) in the language the interface was flashed for, copy **VCDSLoader.exe** into installed directory, amend the shortcut on Desktop (and Start menu) to start **VCDSLoader.exe** every time instead of original shortcut to VCDS.exe. VCDS.exe will be renamed to VCDS.exe.L. **Internet connection can stay ON.**

Hardware with STC chip

Before programming you need to cut the line between pin 9 of STC chip and the R50 resistor. No need to do more than that or remove the chip.

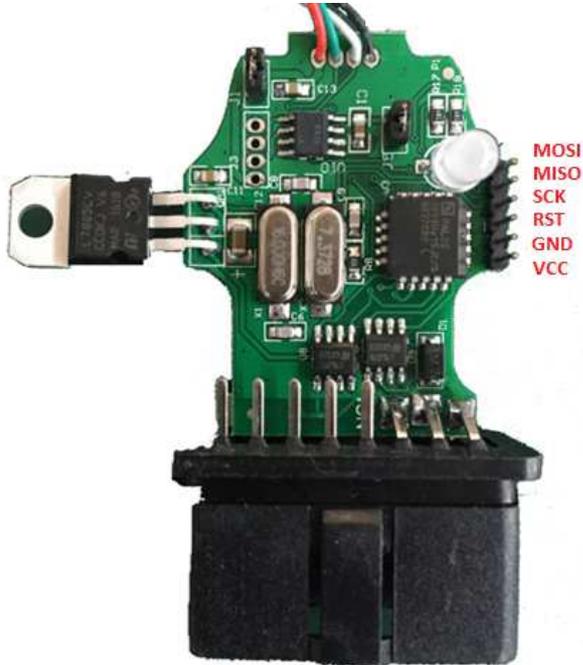


Recommended interface:

From OBD2Cartool.com shop with programming header, protection diode on OBD2 pin 16 and L9637D chipsets instead of transistors for K/L-Line.

This is **HW type 0x44** – see instructions on previous page on how to reflash firmware and EEPROM on it. This interface already comes with bootloader enabled so it can be reflash using **VAGCOM_EEWriteLang.exe** tool (no need to use USBASP programmer).

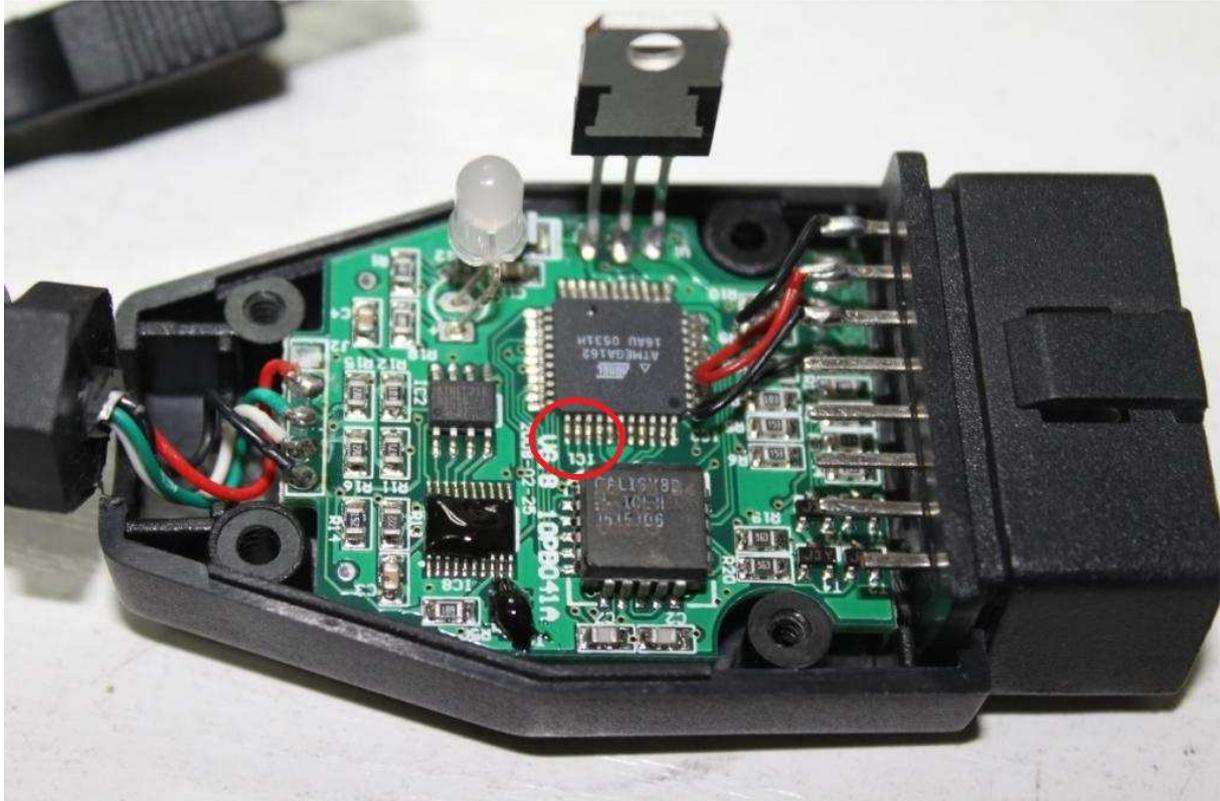
For best results with this interface, ensure that the jumpers J1 and J5 are removed (open).



Hardware Type HW 0x44

Identification: ATmega162 pins 34 and 35 must be connected to GAL chip.

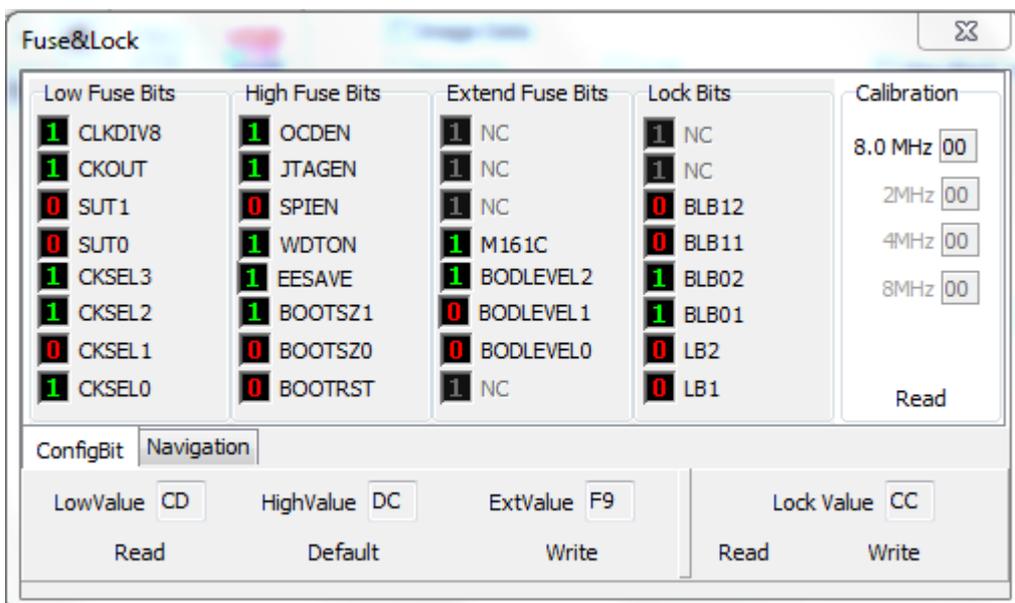
If in doubt, use multimeter to confirm the connectivity.



FuseBits: E:F9, H:DC, L:CD

Programming:

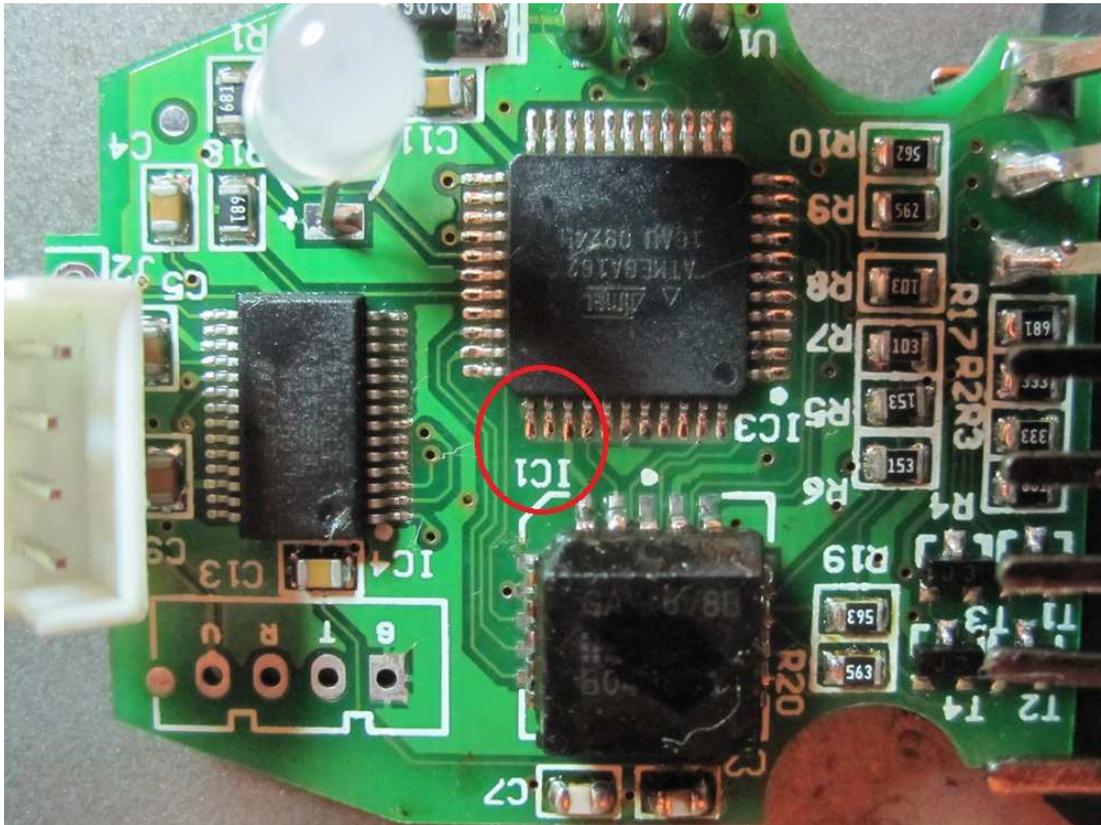
```
avrdude.exe -p m162 -c usbasp -e -U lock:w:0x3f:m  
-U efuse:w:0xf9:m  
-U hfuse:w:0xdc:m  
-U lfuse:w:0xcd:m  
-U flash:w:Flash1.96_HW_0x44.bin:r  
-U eeprom:w:eepromavr.bin:r
```



Hardware Type HW 0x46:

Identification: no connection from ATmega162 pins 34 and 35 to GAL chip.

If in doubt, use multimeter to check the connectivity.



FuseBits: E:F9, H:DA, L:CD

Programming:

```
avrdude.exe -p m162 -c usbasp -e -U lock:w:0x3f:m  
-U efuse:w:0xf9:m  
-U hfuse:w:0xda:m  
-U lfuse:w:0xcd:m  
-U flash:w:Flash1.96_HW_0x46.bin:r  
-U eeprom:w:eepromavr.bin:r
```

