

VAG

immo emulator, for

**WFS3 (immo3)
system**

Description:

Designed for VW / Audi / Seat / Skoda cars equipped with WFS3 system (immo 3). Works via CAN network at 500 kb.

Installation:

Connect device directly to CAN, attach ground wire and power supply (terminal "15", hot when ignition switched on).

Adaptation:

Use VCDS or any diagnostic tool. You must know ECU PIN code. Both jumpers on emulator board leave untouched (both open).

```
[Select]
[01 - Engine]

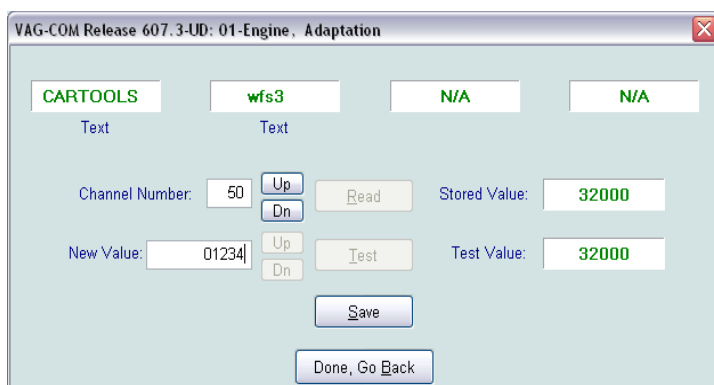
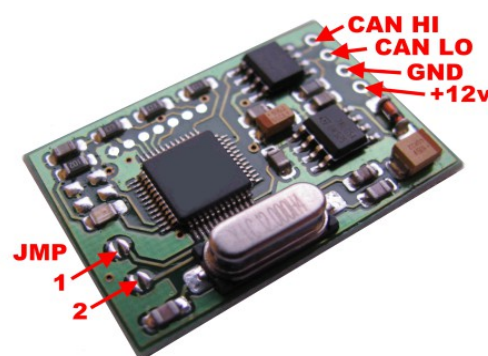
[Login 11]
For the following procedure, use ECU PIN code.

[Do it!]

[Adaptation - 10]
Enter 050 in "Channel Number".
[Read]
Enter EMULATOR PIN code. By default PIN is 1234,
enter 01234.

[Test]

[Save]
[Done, Go Back]
[Close Controller, Go Back - 06]
```



That's all to do.

You must note that ECU PIN code will change to 1234 (one stored into emulator) – because ECU accepted immo data from emulator.



For Experts:

It is possible to change emulator PIN code and CS using simple CAN logger:

- emulator must be in configuration mode - JMP 1 and JMP2 both shorted.
- Update CS by sending **7FE 8, 01 cs cs cs cs cs cs cs**, where **cs** is your necessary CS. There is no response from emulator at this step, nothing actually stored into EEPROM now.
- Update PIN by sending **7FE 8, 02 pp pp 00 00 00 00 00**, where **pp** is your PIN code. PIN code must be in HEX, low byte first. Example: 1234 dec = 4D2 hex, necessary bytes are D2 04.
- If success, emulator responds with **7FF 8, cs cs cs cs cs cs pp pp**. Note that only first 6 bytes of CS returned. Emulator EEPROM is updated at this step.
- Remove one solder joint – one JMP must be open, another JMP shorted. No matter which one. This will prevent EEPROM update by accident.
- Emulator will work with customized data now, adaptation via channel 50 is possible too.

Alternative method - use configurator instead of logger, **MBcan** hardware necessary:



Some additional notes:

- If both jumpers are open, emulator is always running default settings –
 - PIN: 1234 (dec),
 - CS: 17 86 70 E9 5E 9A BF
- If original IMMO unit and EMULATOR both are connected to ECU and their CS bytes match, no collisions occur. Anyway, emulator answers first – it works much faster than original immo.

LED on emulator:

- One short blink – on power-up,
- Four short blinks – ECU communicates, no authorization (wrong data? Not adapted?),
- One long blink – ECU communicates, authorized.

