

# IVECO immo emulator

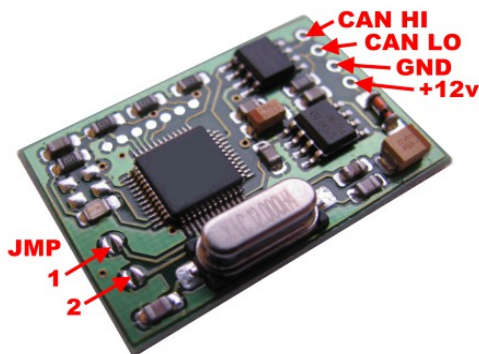
**VIM210 immobox  
CAN BUS, 250kB**

## Purpose:

Designed to replace Bosch VIM210 immobox used on IVECO cars.

## Installation:

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



## Jumpers (JMP):

**both open:** configuration mode, it is possible to read or store SYNC into emulator using CAN logger or MBcan;

**any or both shorted:** normal working mode, SYNC update is not allowed.

## Possible alignment methods:

1. Read SYNC from ECU, store it into emulator. Short any or both jumpers. Done.
2. Read SYNC from matched immobox (note – it is crypted, must decrypt dump first!). Store. Set jumpers.
3. Store default SYNC value into ECU (emulator is delivered with SYNC **5EECD175ADA3** stored inside). Or try to make ECU virgin.

## How to write SYNC into emulator using CAN logger:

- emulator must be in configuration mode (JMP 1 and JMP 2 both open), CAN speed must be set to 250kB.
- Request actually stored SYNC - send **770 8 DD 00 00 00 00 00 00**, emulator must respond with **771 8 EE 00 xx xx xx xx xx xx**, where xx is actual SYNC.
- Store SYNC into emulator - **770 8 CC 00 xx xx xx xx xx xx**, emulator must respond as previously, with 6 bytes actual SYNC: **771 8 EE 00 xx xx xx xx xx xx** - response must match the request. If it doesn't match – SYNC is not stored correctly, must repeat procedure.

## Configurator (using MBcan adapter):



Read or Write emulator: if success, background will change color to green. If no success it goes red (must repeat procedure or verify jumper settings). Emulator must be in configuration mode (both jumpers open).

In addition it is possible to load SYNC value from ECU or IMMO dump (MBcan must be attached to PC!).

## LED on emulator board:

- one short blink at startup: emulator ready;
- long blink: ECU authorized (or SYNC stored – config mode);
- eight short blinks: ECU not authorized, error (possibly wrong SYNC).

## Notes about 24v system:

Try to avoid direct connection to 24v, if possible use 12v instead. Another option – install emulator inside ECU and power it from internal 5v source (remove stabilizer from emulator board and power emulator mcu directly from 5v).

If any of above is not possible due to technical limitations, use additional voltage suppressors, protecting diodes and any other common overvoltage protection methods.

## VIM210 immobox pinout:



### Connector A:

- A1: coil
- A2: coil
- A3: not used

### Connector B:

- B1: CAN Low
- B2: Line K (to diagnostic connector)
- B3: negative output – immo failure warning lamp
- B4: CAN High
- B5: not used
- B6: GND (terminal “31”)
- B7: PWR (terminal “15”, key operated)
- B8: not used

