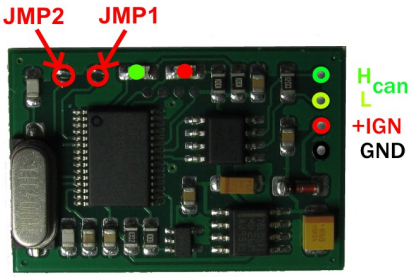


PSA 3x

Peugeot / Citroen immo emulator

250 / 500 kB CAN speed, ECU, TCU, BMS



Features:

- designed for PSA cars, 2000-up,
- supports 250kB and 500kb CAN speeds,
- ECU, TCU, BMS authorization, any or all using individual PIN codes.
- not self-teaching, must configure first!

Configuration:

- **JMP1**: short for 250kB, open for 500kB CAN speed, set desired using solder joint,
- **JMP2**: short for configuration mode, open for normal working mode. Place solder joint for configuration,
- power emulator from 12v power supply, attach MBcan or any suitable CAN logger,
- using MBcan: enter PIN, convert to ascii, write, read or clear each channel (ECU, TCU, BMS accordingly).
- Using CAN logger: send CAN frames according to communication protocol provided below, observe results.
  - to enable channel must store desired valid PIN code (4 upper case letters or numbers),
  - to disable channel must store 00000000 (hex).
- Observe feedback – **GREEN** and **RED** LEDs must blink alternately if command accepted.
- **IMPORTANT**: configure all channels! If channel is not necessary store DATA 00000000 to disable it.
- Finally remove solder joint from JMP2 to disable configuration.

CAN logger - communication protocol:

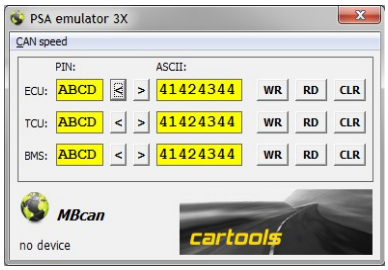
- to communicate with emulator must send frames with standard ID 0x7FE, data field length is 5 bytes: command and 4x DATA bytes. Commands (HEX representation):
  - **`00, 01, 02`**: request ECU / TCU / BMS PIN codes accordingly, DATA must be 00000000,
  - **`55, 56, 57`**: store ECU / TCU / BMS PIN codes accordingly, DATA is PIN code in hex.
- Emulator will respond with ID 0x7FF and 4 DATA bytes.
- **Example**:
  - send **`0x7FE (5) 56 41 42 43 44`** – store pin **ABCD** (hex **41424344**) for **TCU** authorization,
  - must get **`0x7FF (4) 41 42 43 44`** as confirmation from emulator.

Installation:

Connect device directly to PT-CAN, attach ground wire and power supply (terminal ”15”, IGN_ON). If you are using device for testing purposes you may plug it into OBD socket (CANHi: 6 CANLo: 14 +BAT: 16 GND: 4,5)

LEDs - configuration mode:

- **RED** and **GRN** blinks alternately: confirmation, data / request received,
- otherwise three blinks and longer pause showing ECU/TCU/BMS channel status accordingly. If individual blink is:
  - **RED** : channel is disabled,
  - **GRN** : channel configured, enabled, valid PIN stored
  - example: **RED**_**GRN**_**GRN**_____ means ECU authorization using emulator is disabled, TCU and BMS both enabled.



LEDs - normal mode:

- three blinks and longer pause showing ECU/TCU/BMS channel status accordingly. If INDIVIDUAL blink is:
  - **RED** : authorization failed,
  - **GRN** : authorized – NOTE: even if channel is not configured to authorize, it is monitored!
  - **RED** and **GRN** both – no authorization request / response received (status is unknown).
- example: **RED**_**GRN**_**GRN**/**RED**_____ means ECU authorization failed, TCU authorized, BMS authorization is not performed (no BMS or no requests for authorization).

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