



KTM immobilizer emulator, CAN

ZADI – 1 system, 2008 up

Purpose:

KTM bikes: 690, 990, 1190 with **ZADI type-1** immobox (4D keys), 2008 up. Programming usually is NOT necessary, emulator is Plug & Play.

Installation:

Install emulator anywhere on bike close to CAN network and terminal “15” (hot when IGN ON). It is not mandatory to place it at original place where immobox is usually located.

- First startup – both **JMP must be OPEN** to allow self teaching / configuration mode.
- Self alignment: switch ignition ON/OFF several times (do not start bike!). Check if **GREEN LED** goes on permanently. If it blinks or if **RED LED** goes on, most likely there are communication / compatibility problems with ECU, proceed with manual setup!
- Manual setup: make alignment manually using CAN logger or MScan with configurator software. Must send 3 frames with VIN number in ASCII like below (**VBKVS9402CM988179** = ascii 56 42 4B 56 53 39 34 30 32 43 4D 39 38 38 31 37 39):

```

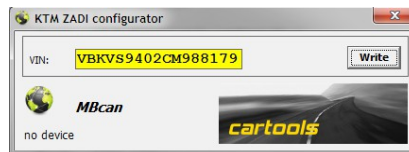
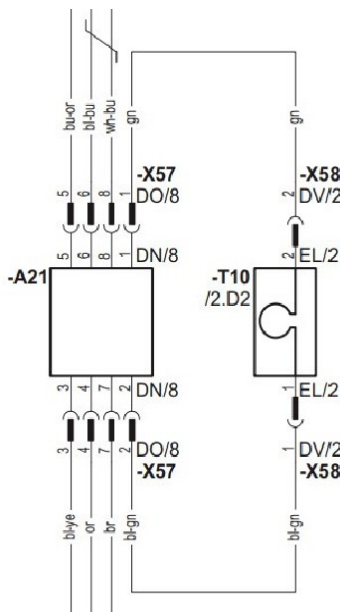
7FE 8 30 31 56 42 4B 56 53 39    01VBKVS9
7FE 8 30 32 34 30 32 43 4D 39    02402CM9
7FE 8 30 33 38 38 31 37 39 00    0388179
  
```

If data accepted, emulator must respond with:

```

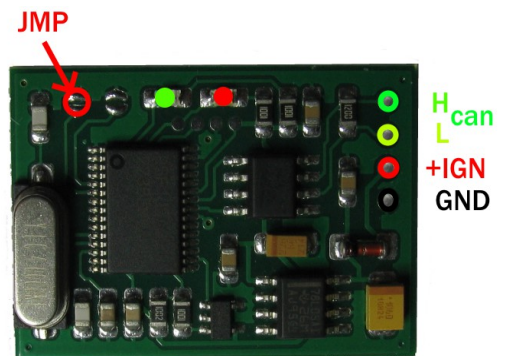
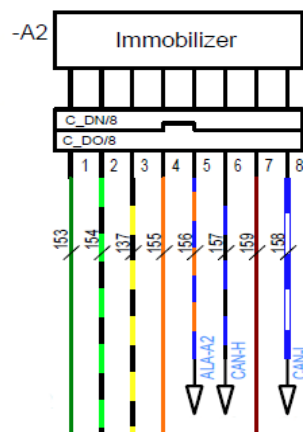
7FF 8 4F 4B 21 2D 2D 2D 2D    OK!-----
  
```

- If everything seems OK, **place solder joint (short JMP)** on emulator board to disable any updates by accident.
- Job done!



Wire colors: bike side, at immo connector:

- pin6: CAN-Hi: **BLU/BLK**
- pin8: CAN-Lo: **BLU/WHIT**
- pin4: +IGN: **ORG**
- pin7: GND: **BRN**



LEDs on emulator board:

- **GRN** blinks – waiting for communication;
- **GRN** on permanently – code sent (ECU authorized);
- **RED** blinks: wrong codes stored, authorization error etc.
- **GRN** and **RED** both switching: emulator locked, no valid data inside.

