

# ELDOR KUBO

For ASW-NEXT

Short User Manual



January 2022

## 1. What to do first?

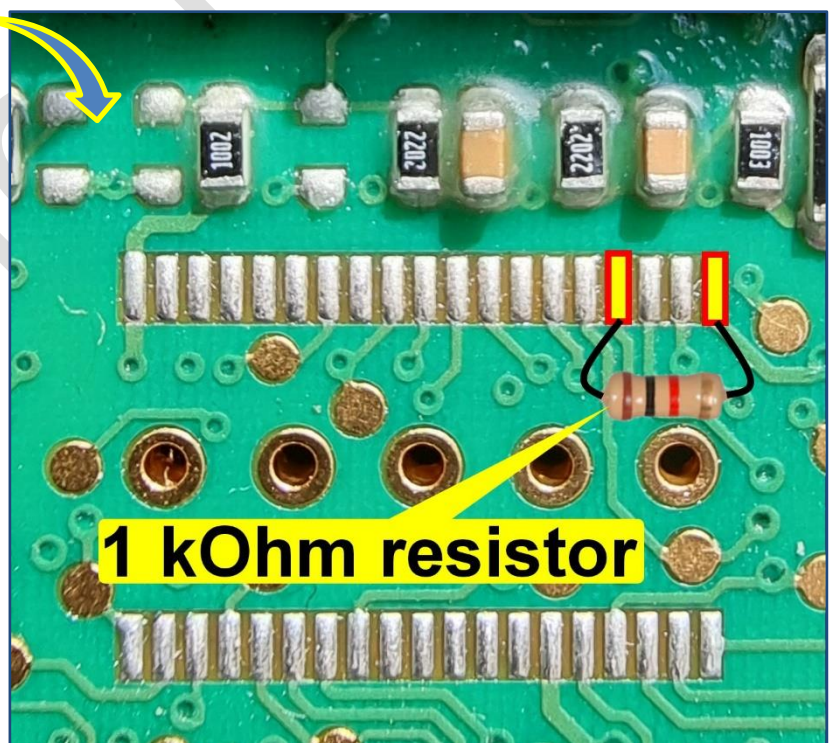


ECU must be set to **BOOT** mode for a Flash memory access by **CAN-BUS**.

First you must to open plastic cover to get access to the PCB. Unclip metal clips and carefully lift-up plastic cover with a screwdriver or knife. It comes out easily.

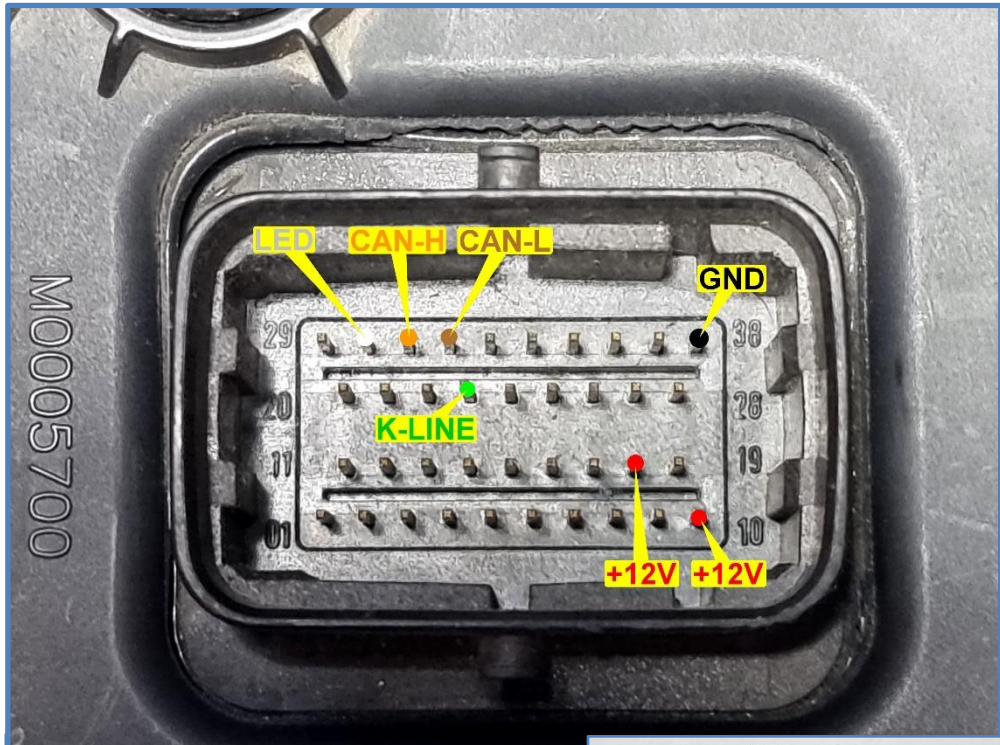


Solder 1 kOhm BOOT resistor as in the picture:

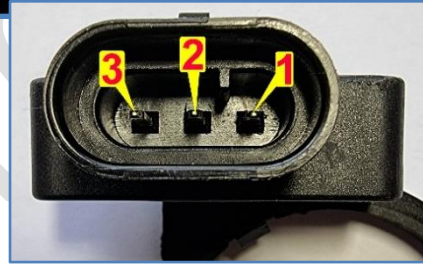


**NOTE:** To avoid MCU damage please make sure the ECU is fully disconnected from power supply when soldering BOOT resistor!!! Do not connect even GND wire!!!

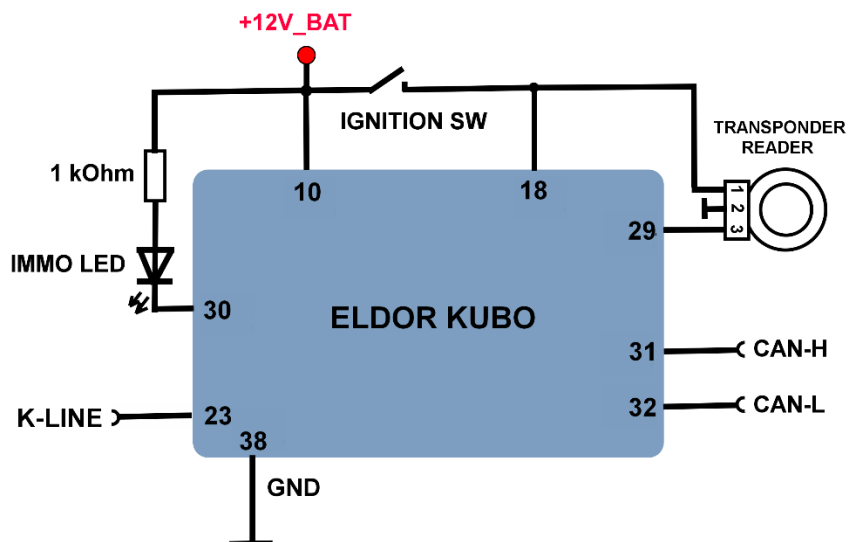
## 2. How to connect?



Antenna on the ignition lock



Transponder Reader (Antenna) pinout



**NOTE:** Transponder reader (antenna) must be mounted on the ignition lock when testing on-the-bench or in the scooter. Transponder cannot be read by ECU without ignition lock being inside the antenna! IMMO LED will blink fault code 2 (KEY NOT DETECTED).

### 3. What's next?

- Make sure the 1kOhm BOOT resistor is soldered properly to PCB
- According to pinout picture connect ASW-NEXT cables to ELDOR KUBO:

CAN-L – to pin 32

CAN-H – to pin 31

GND – to pin 38

+12V red wire – to pin 10

- Run PC software
- Connect USB cable from interface of ASW-NEXT to PC
- Apply +12V power to crocodile clips of ASW-NEXT
- Turn on ignition to ELDOR KUBO by applying +12V supply to pin 18 of ELDOR KUBO

From this point **ECU is waiting unlimited time** for commands from software of ASW-NEXT.

Press <Set BOOT Mode> to activate Flash access functions.

Full Flash image (768 kB) of MCU SPC5533 can be read and reprogrammed.

**NOTE:** For regular diagnostic functions (Read Identification, Erase DTC) use K-LINE and do not connect BOOT resistor to the PCB.

These functions do not work by CAN-BUS.

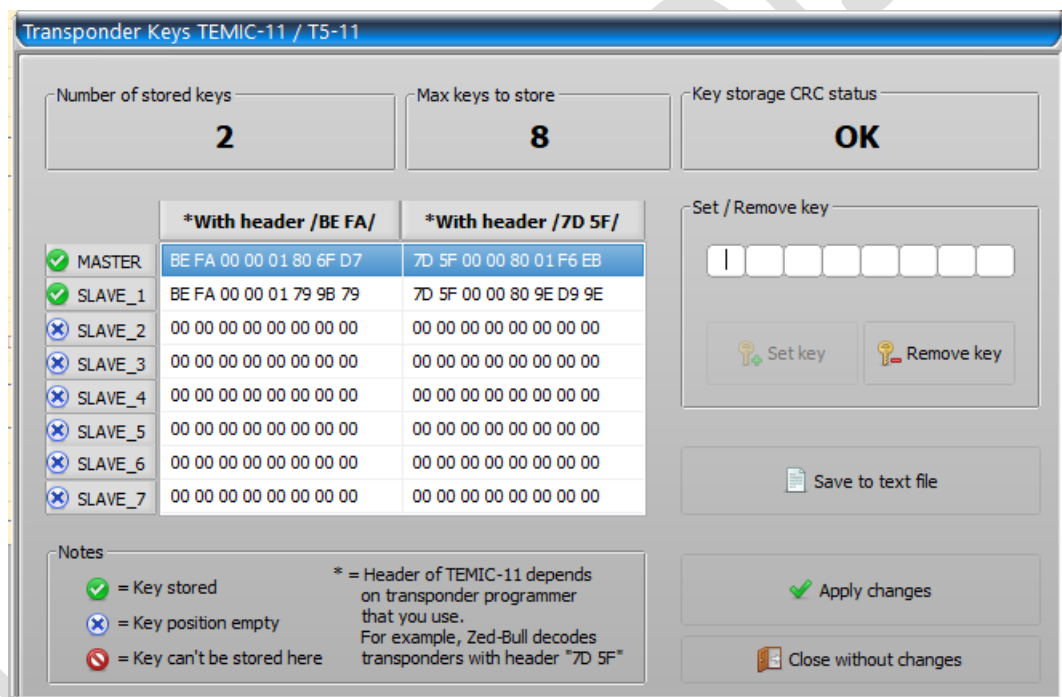


## 4. Key making

Transponder key values can be read and set by CAN-BUS directly from / to **ELDOR CUBO** being set to **BOOT** mode. They also can be extracted and set from / to **SPC5533 FLASH** dump that was previously read and saved.

### ✓ To deal with transponder values by CAN-BUS

- Open plastic cover of **ELDOR CUBO**
- Solder 1 kOhm resistor as in the picture from Chapter 1 to set **BOOT** mode
- Connect ASW-NEXT wires to **CAN-L** , **CAN-H**, **GND** and both **+12V** pins of **ELDOR CUBO** as in the picture from Chapter 2.
- Press „**Set BOOT Mode**“
- Press „**Read / Set Keys**“



Now you can:

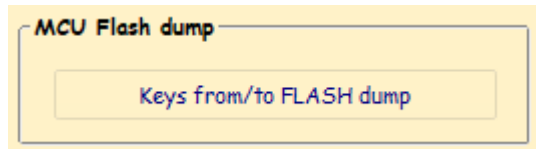
- ✓ Save key values to the text file for further transponder making
- ✓ Edit current values of existing keys
- ✓ Add more keys (up to 8 in total, 1x **MASTER** and 7x **SERVICE**)
- ✓ Remove selected keys
- ✓ Write changes to **ELDOR KUBO** by pressing „**Apply changes**“

✓ **To deal with transponder values by SPC5533 Flash dump**

- Load **Flash** file



- Press button



Same dialog „**Transponder Keys**“ will pop-up.

Now you can:

- ✓ Save key values to the text file for further transponder making
- ✓ Edit current values of existing keys
- ✓ Add more keys (up to 8 in total, 1x **MASTER** and 7x **SERVICE**)
- ✓ Remove selected keys
- ✓ Write changes **to Flash file** by pressing „**Apply changes**“