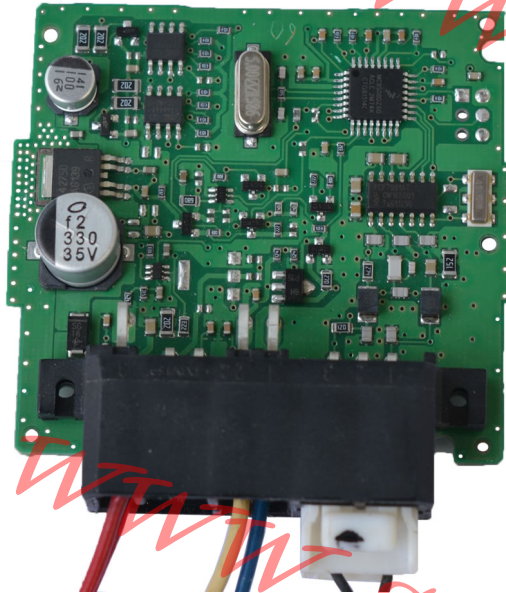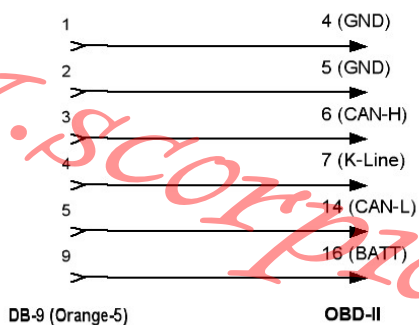# Immobilizer Fiat (IMM 009.10)



## Overview:

Currently there are no programmers on the market that can read the EEPROM found in this type of immobilizer. The software solution for programmer Orange-5 which is described in this document was developed in order to allow reading through K-line interface the data needed to prepare keys in association with Tango programmer and then write back the newly generated EEPROM data.
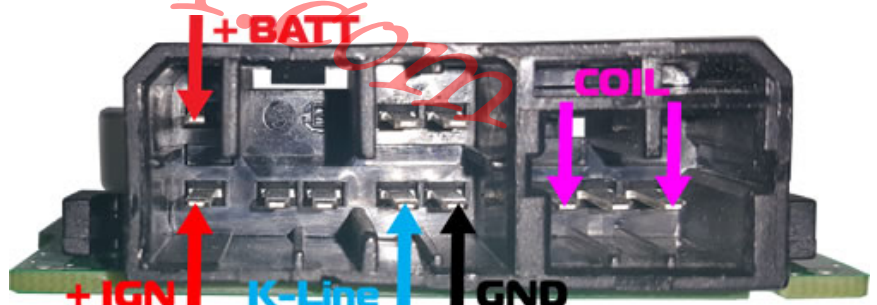
## Wiring:

It is possible to work directly in the car using its diagnostic port. To do so you will need to connect Orange-5 with mounted K-line/CAN adapter to the vehicle through a transitive cable :



Work can be performed directly with the immobilizer drawn-out of the car using the following wiring diagram:

    *Red (upper):* **+BATT**
    *Red (lower):* **+IGN**
    *Blue:* **K-Line**
    *Black:* **GND**

*Additional functionality marked with purple*: Immobilizer coil. It is possible to do without if no check of the keys is needed.

Setup Example:



Software layout:

The software allows to read (**Read Immo**) and write (**Write Immo**) EEPROM

After successful read and save of the dump data file a new transponder can be created through the function built in Tango programmer. After that write back to the immobilizer the file generated by Tango programmer.

**NOTE:** It is possible to get the following error message if the immobilizer has not yet initialized during read/write attempt or if the wiring is incorrect. Just retry the operation if error appears again check wiring/power supply.

## Additional functionality:

It is possible to check existing or newly created transponders using the vehicle's ignition coil or a connected coil if work is done outside the vehicle.
Below are example screens of the results that appear. First screen(left) displays  if the function is used without coil or no transponder placed. In this case only the number of existing in the immobilizer keys is shown. The second screen (right) displays case when transponder present in the immobilizer is present in the coil electromagnetic field. It shows the key position and ID. In order to get proper read it is necessary to turn off then turn on ignition after several seconds (3-4).