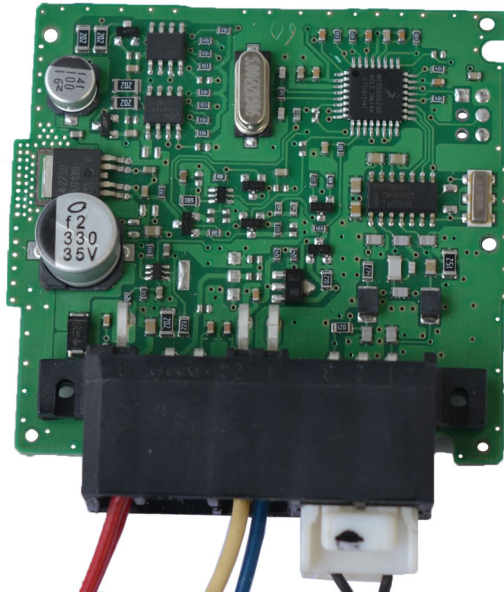


# ORANGE5

## Immobilizer Fiat (IMM 009.10)

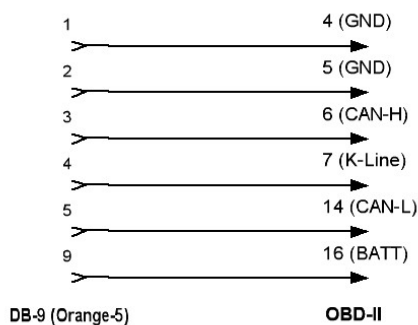


### Overview:

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:

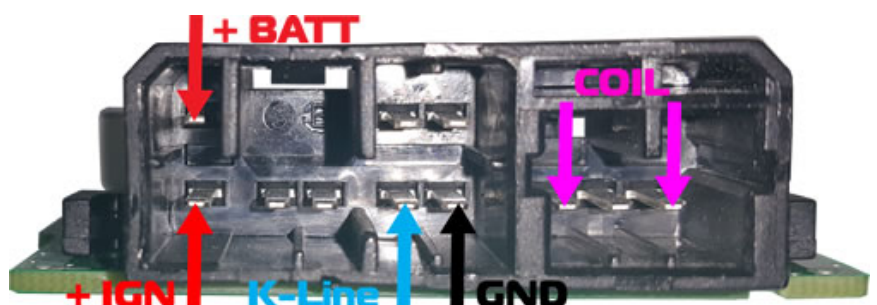
It is possible to work directly in the car using its diagnostic port. To do so you will need to connect Orange-5 with mounted K-line/CAN adapter to the vehicle through a transitive cable :



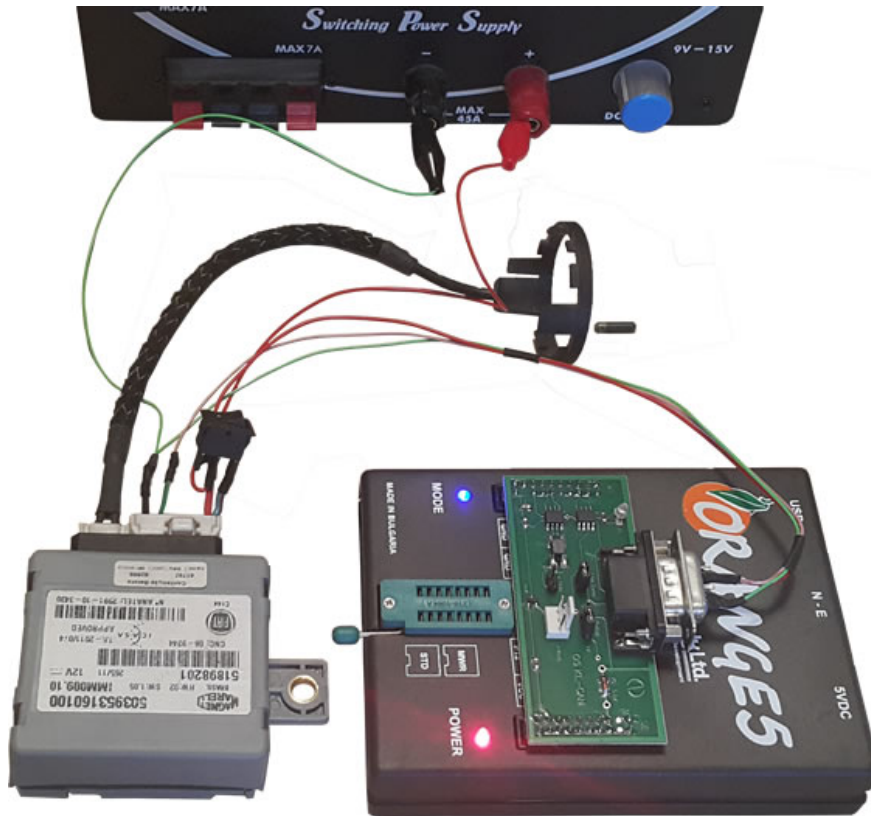
Work can be performed directly with the immobilizer drawn-out of the car using the following wiring diagram:

- 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

NewFile.bin - Orange5

File Buffer Device Tools Options Type Recent Help

Check Key Read Immo Write Immo

	00	01	02	03	04	05	06	07	08	09	0A	0B	0C	0D	0E	0F	0123456789ABCDEF
00000	01	AB	C0	F9	DF	5A	2E	C3	FD	AA	33	E7	36	8F	50	91	.AL+-Z.+*k346PPC
00010	B1	4D	D5	07	86	FF	FF	FF	03	11	19	D7	78	11	16	03	-M-.Ж.....+x...
00020	3F	60	E6	6E	65	00	00	00	00	00	00	00	00	00	00	00	?`цne.....
00030	00	00	00	00	00	00	00	00	00	FF	FF	FF	FF	FF	FF	FF	.....
00040	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	.....
00050	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	.....
00060	00	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	898201
00070	20	20	20	35	30	36	3										0002.0
00080	30	30	30	30	30	7F	8										MMBRHE
00090	4F	4C	30	31	20	11	1										.....
000A0	00	00	00	00	00	00	00										.....
000B0	00	00	00	00	00	00	00										01234
000C0	35	36	37	38	20	20	0										.....
000D0	FF	FF	FF	FF	FF	FF	FF										.....
000E0	FF	FF	FF	FF	FF	FF	FF										.....
000F0	FF	FF	FF	FF	FF	FF	FF										.....
00100	FF	FF	FF	FF	FF	FF	FF										.....
00110	FF	FF	FF	FF	FF	FF	FF										.....
00120	FF	FF	FF	FF	FF	FF	FF										.....
00130	FF	FF	FF	FF	FF	FF	FF										.....
00140	FF	FF	FF	FF	FF	FF	FF										.....

Type: Fiat IMM 009.10 (K-Line) Fiat IMM 009\_10 (512 x 8) vcc 5.00V

Ready BOOT 000000 NUM

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).

