ORANGE5

PCF 7941 Reset Extended
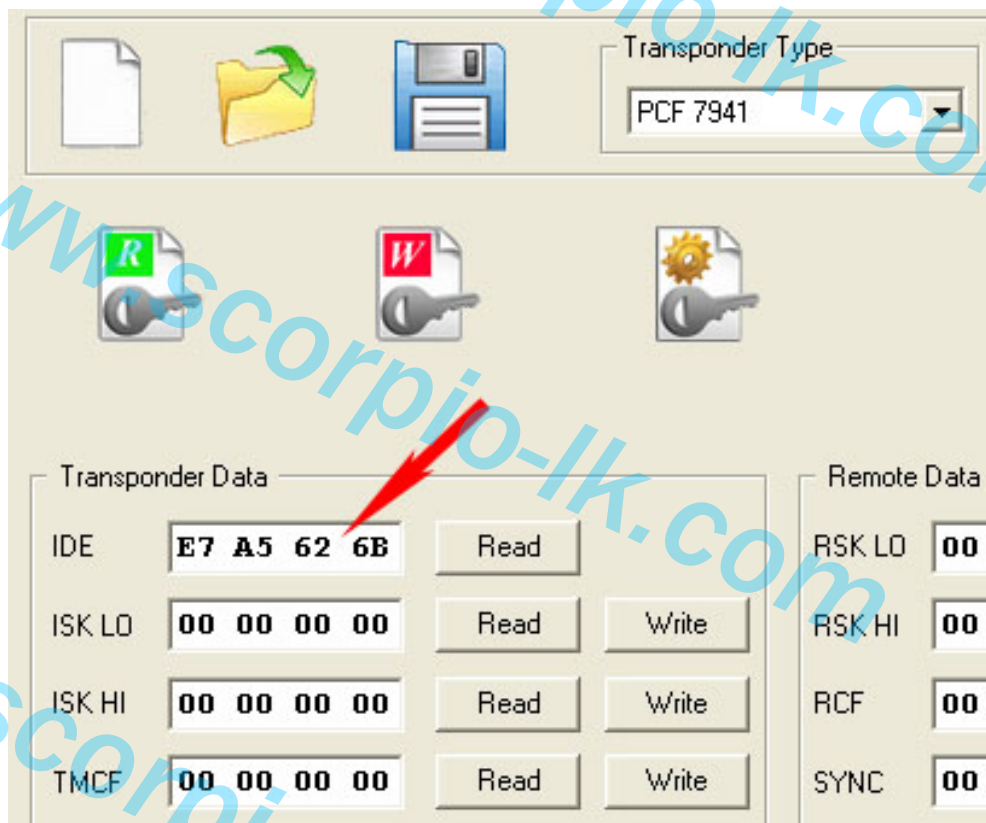
Contents:

I. Introduction

This ImmoHPX module for Orange-5 (O5) programmer is intended to restore factory settings in transponders PCF7941 used in several types of remote keys. The used remote keys are locked with unknown password and are useless for the further using. The module restores the default password and a key can be used as a new one.

The transponder functions (to start engine) are the same on all brands, thus it is possible to restore it on any PCF7941 of any brand.

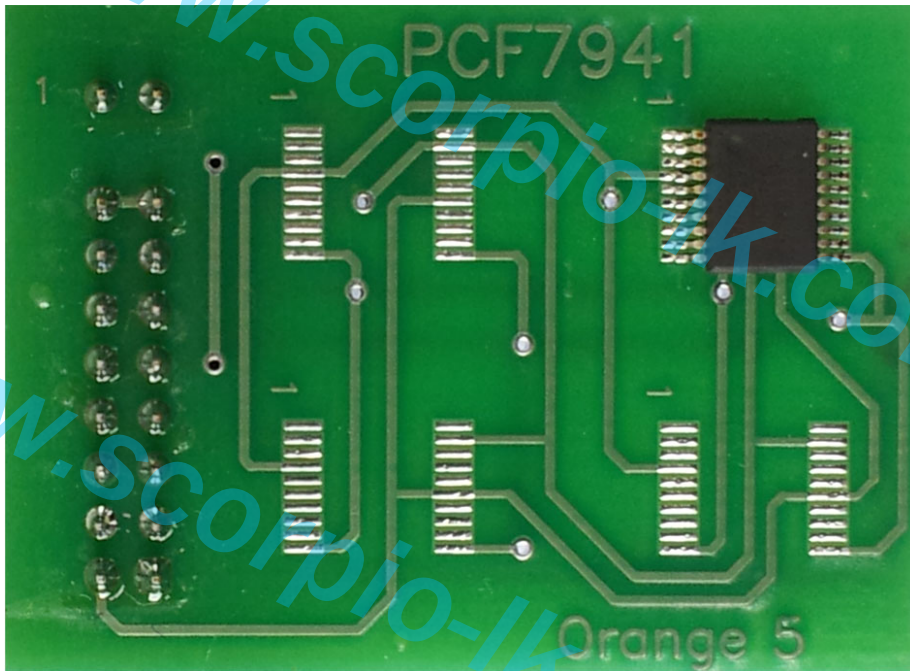The module provides two functions: RESET and Write ID.
The **RESET** function restores default settings.
The **Write ID** function allows to change the serial number of a transponder that is the Page0 :
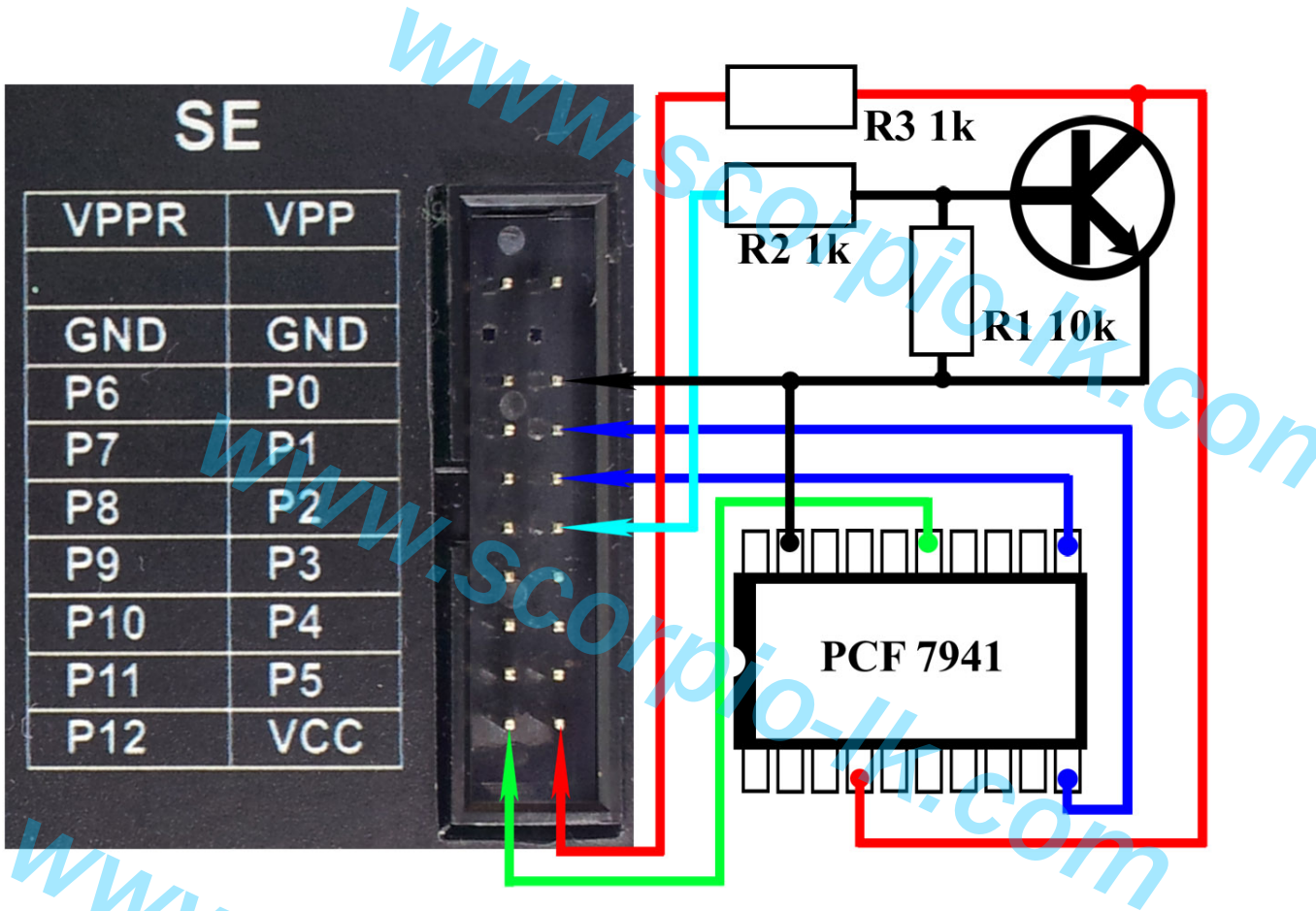

The special adapter "PCF7941" should be used. The layout of the adapter provides the four soldering places, using only one slot at a time, this allows using of the adapter for a long time.
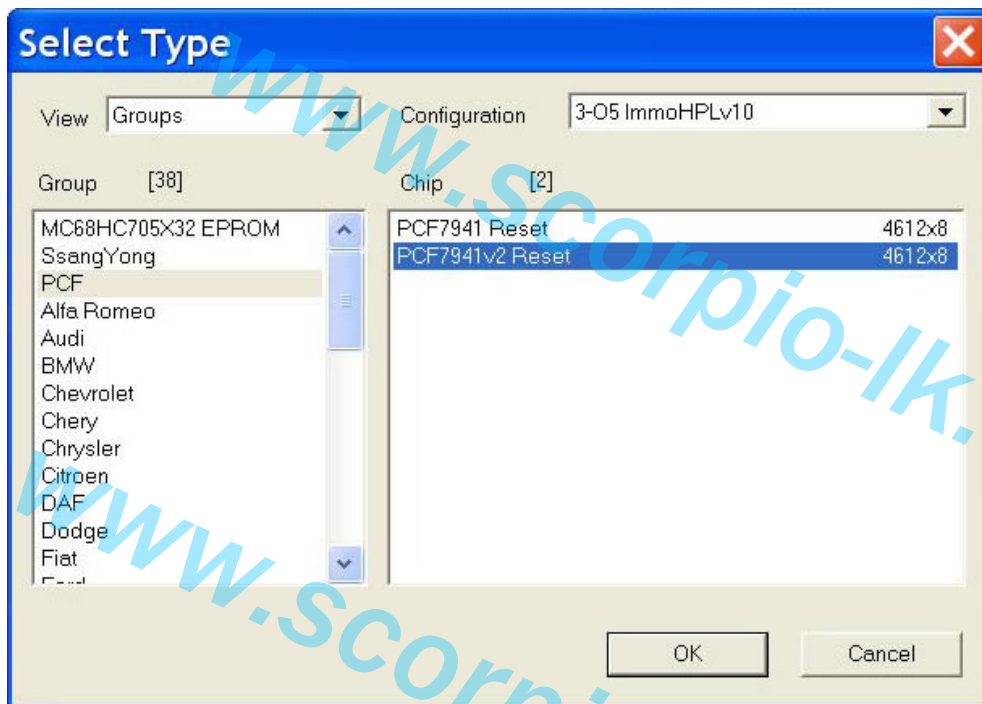
II. Adapter and Pin out

In case of missing the adapter it is possible to make connections manually according to the following scheme:

SE

VPPR	VPP
GND	GND
P6	P0
P7	P1
P8	P2
P9	P3
P10	P4
P11	P5
P12	VCC

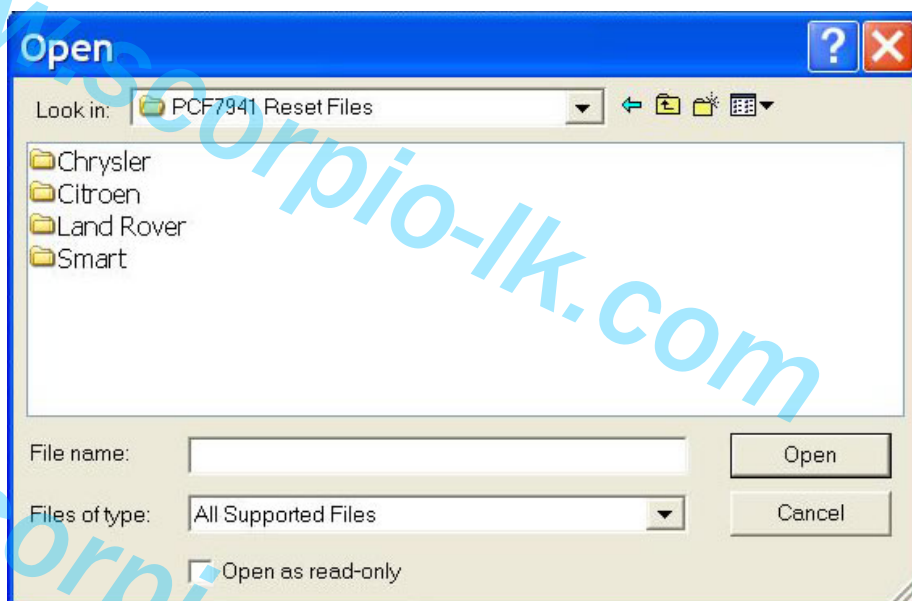R3 1k

R2 1k

R1 10k

PCF 7941

III. RESET

This feature resets PCF7941 and stores several different types of remote functions. It means that it is possible to make compatible transponder from any PCF7941.
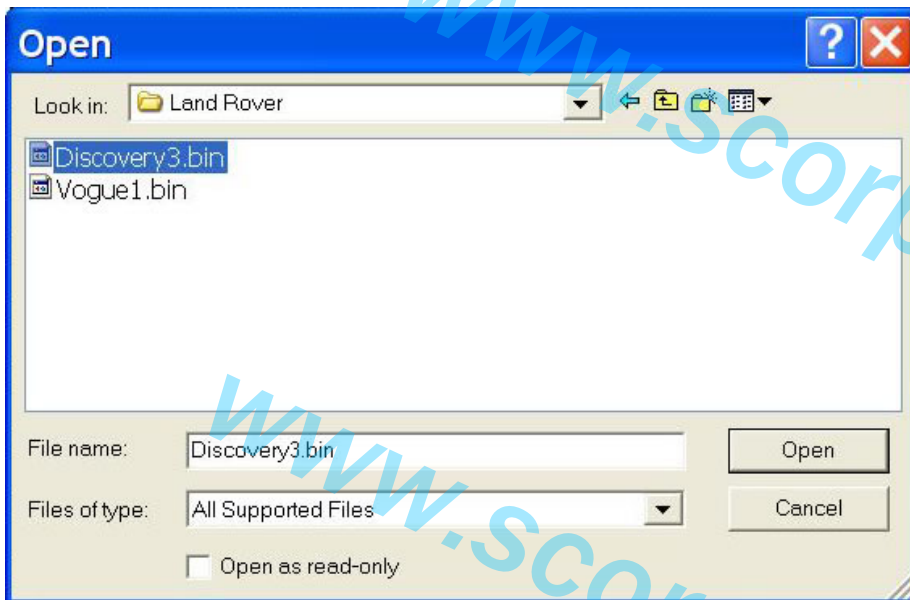1. Click "Select Type" and choose "3-O5 immo".
2. The left window: "PCF"
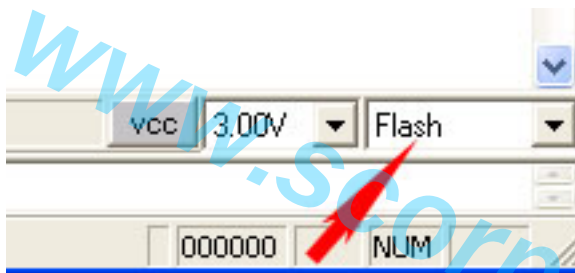3. The right window: "PCF7941v2 Reset "

4. Click "File Open" and load appropriate type *.bin file. Files can be found at
…orange5/HPL/O5IMMO/PCF7941 Reset Files/...
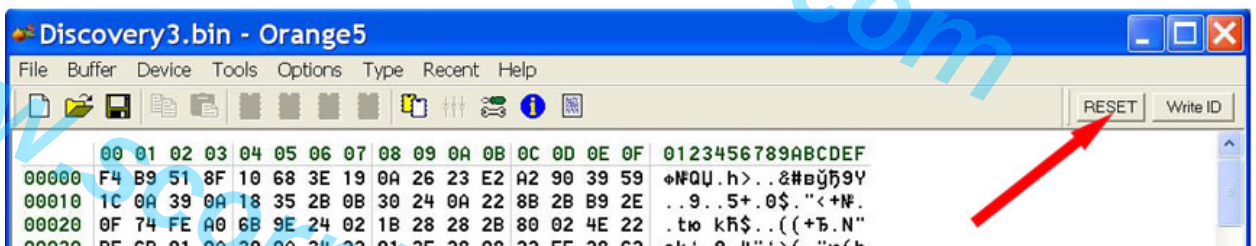
Example Land Rover Discovery 3:

5. Ensure the "FLASH" area selected in the right bottom corner:
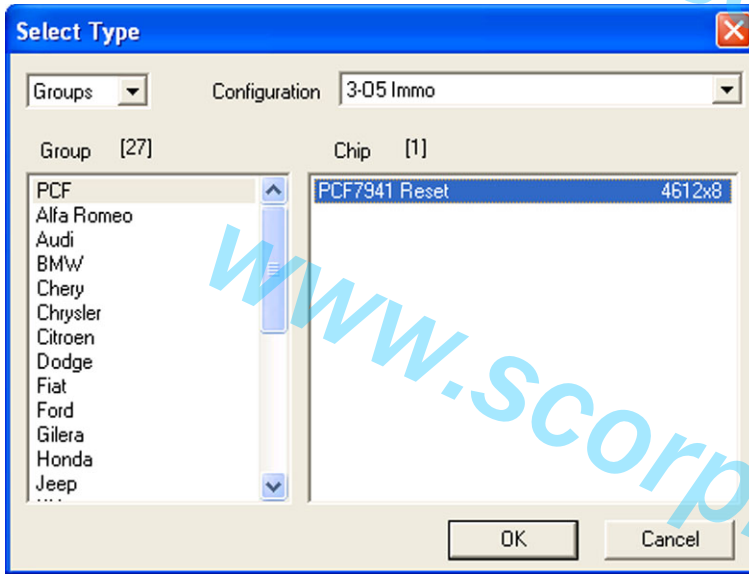

6. Click "RESET" button:

After RESET finishes the PCF7941 has status of a new unused transponder and may be used for programming to a car. The default crypto key is 4D494B52 : 4F4E.

IV. Write ID

This feature is not compatible for using on implemented types of keys. Random or different value than required by particular type of vehicle causes remote functions failure.
The feature may be applied to any locked PCF7941. It restores default settings and changes the page0 of a transponder.
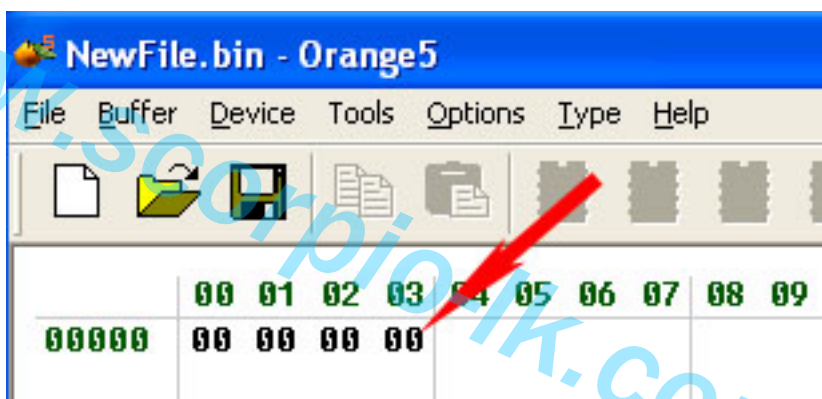
1. Click "Select Type" and choose "3-O5 immo".
2. The left window: "PCF"
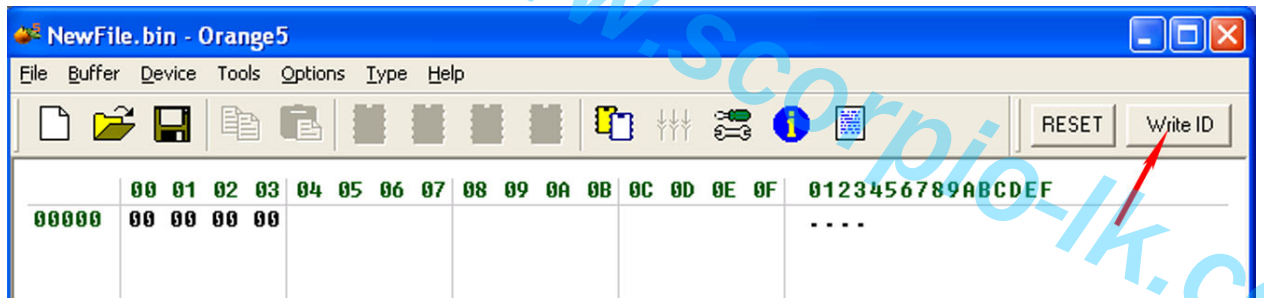3. The right window: "PCF7941 Reset"

4. Ensure the "ID" area selected in the right bottom corner:

5. Type necessary value of ID (4 bytes):
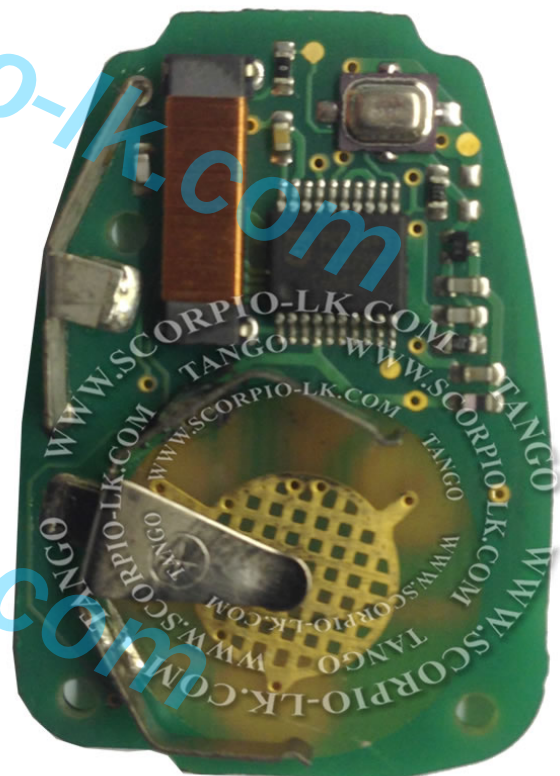
6. Click "Write ID" button:

Note
There is a standard that requires certain value at the LSB of ID depending of the transponder
type. The PCF7941 is marked with value "6" in the high nibble of LSB of ID, for example
A4 8B C0 6B. The module can write any values, but it should be taken into account that some
immobilizers check this value.

V. Supported Types

Chrysler
1. Bladed 315MHz ASK

2. FOBIK 434MHz ASK

Citroen
1. DS4 433Mhz

HELLA 434MHz
5FA010354-00
9665975480 00

CMIIT ID
XXXX XXXXXX

CE

2011/02

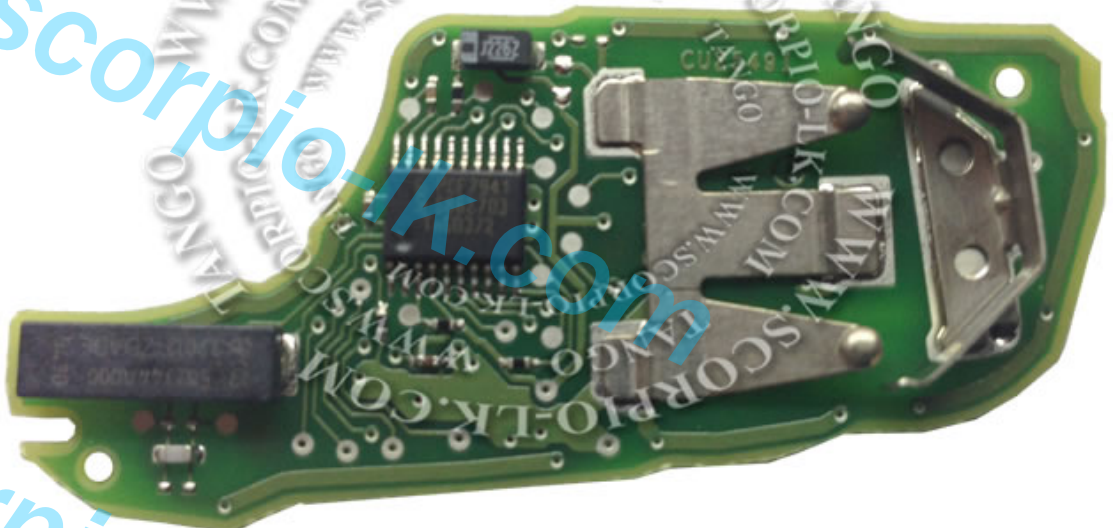# Land Rover
1. Land Rover Discovery 3, Range Rover Sport 433.92MHz

2. Vogue 433.92MHz

Smart
1. Smart 315MHz FSK