

TRANSPONDER CLONING TOOL CODEREADER

- KMRW-1T reads fixed code transponders:
 - PHILIPS® PCF7930/31 - SILCA® 33, 73,
 - PHILIPS® PCF7935 - SILCA® 40-45
 - TEMIC® - SILCA® 11 i 12,
 - MEGAMOS® - SILCA® 13,
 - SILCA® T5,
 - TEXAS® - SILCA® 4C;
- Recognizes MEGAMOS® CRYPTO - SILCA® 48, PHILIPS® CRYPTO - SILCA® 46 , TEXAS® DST - SILCA® 4D , TEXAS® DST+;
- Writes PCF7930/31/35 , T5 , TK5550/1/4/7(PC) and **TEXAS 4C - KEYLINE® , SILCA®**;
- Writes PCF7936 (password mode) Megamos® Crypto and TEXAS® DST using PC .
- Fast detecting the existence of transponder;
- Possibility of software upgrade;
- Connects to a PC using RS232 interface - program KMRW for Windows®;
- Multi language: English, German, Spanish, Polish, Danish.



Power supply and RS232 interface



transponder position



key position

Transponder may be in key.

**0011223344556677
64 TYP:11-T5**

Line I:

64 bits of code

Line II:

Code length.

Transponder type:

- 11 - TEMIC® 11 (-T5 emulate)
- 12 - TEMIC® 12 (-T5 emulate)
- 13 - MEGAMOS® 13 (-T5 emulate)
- 33 - PHILIPS® 7930/31 (-T5 emulate)
- 20 - T5 different 11,12,13,33
- 40 - PHILIPS® CRYPTO 7935 / GM
- 41 - PHILIPS® CRYPTO 7935 / NISSAN
- 42 - PHILIPS® CRYPTO 7935 / VAG
- 44 - PHILIPS® CRYPTO 7935
- 45 - PHILIPS® CRYPTO 7935 / PEUGEOT
- 46 - PHILIPS® CRYPTO2 7936
- 48 - MEGAMOS® CRYPTO
- 4C - TEXAS
- 4D - TEXAS CRYPTO (DST)
- 4E - TEXAS CRYPTO 2 (DST+)
- 73 - PHILIPS® 7930/31-multiple block

For type 33 additional information:

- HR - Honda-Rover
- GM - Opel
- PG - Peugeot
- RN - Renault
- VG - Volkswagen
- NS - Nissan

Fast detecting the existence of transponder

F1 Switch to test mode. Note **>TRANSPONDER<** indicates existence of transponder. Test doesn't detect TEXAS transponders and Philips crypto2 (PCF7936 not in public mode).

TEST

F3 Return

>TRANSPONDER<
TEST

Reading

F2

0000000000000000
READ

0000000000000000
TYP:

Missing or unknown transponder

0011223344556677
64 TYP:11-T5

OK, transponder type and ID code

F3

If length of ID code isn't equal 64 bits – view next bits.

Information line for crypto transponders 46 and 48.

32 bity Serial Number – Page 0 32 bity Config bits – Page 3

0011223344556677
LCK TYP:46

LCK – transponder in crypto mode or with unknown password

32 bity Serial Number ID31-ID0 32 bity LB1, LB0, UM29-UM0

0011223344556677
LCK TYP:48

LCK – transponder locked

For type 48:

If code consists only '0' change transponder position while using read/write feature for Megamos crypto.

Writing

Write operation is possible after reading source transponder or typing ID code.

F4

0011223344556677
1-PH 2-T5 3-ESC

F1

Select transponder PCF7930/1 or TEXAS

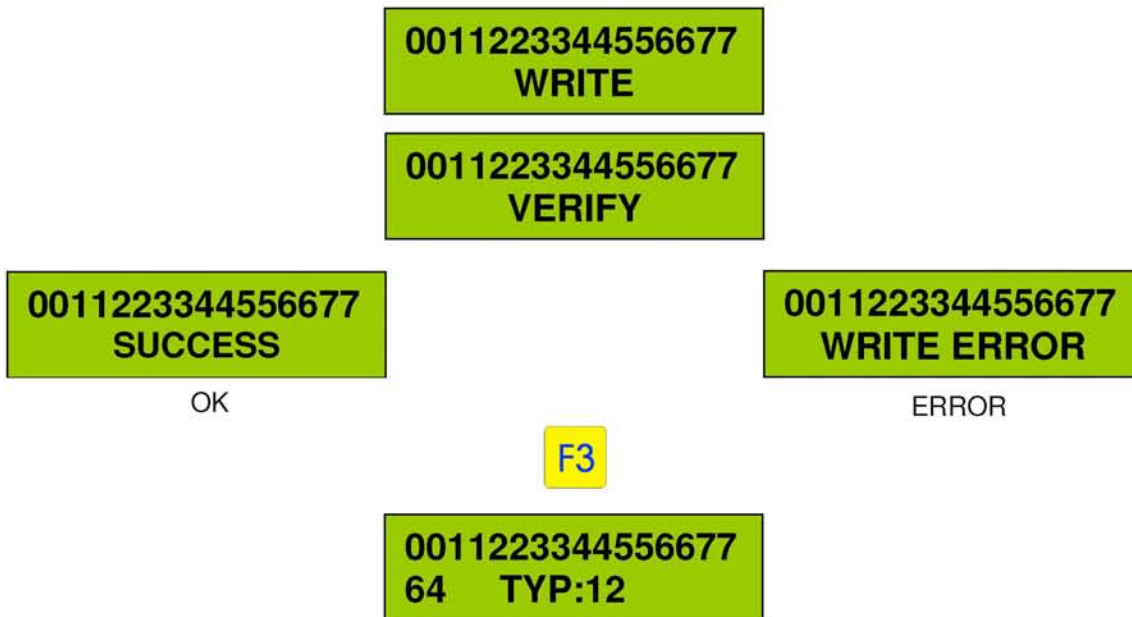
F2

Select transponder T5

F3

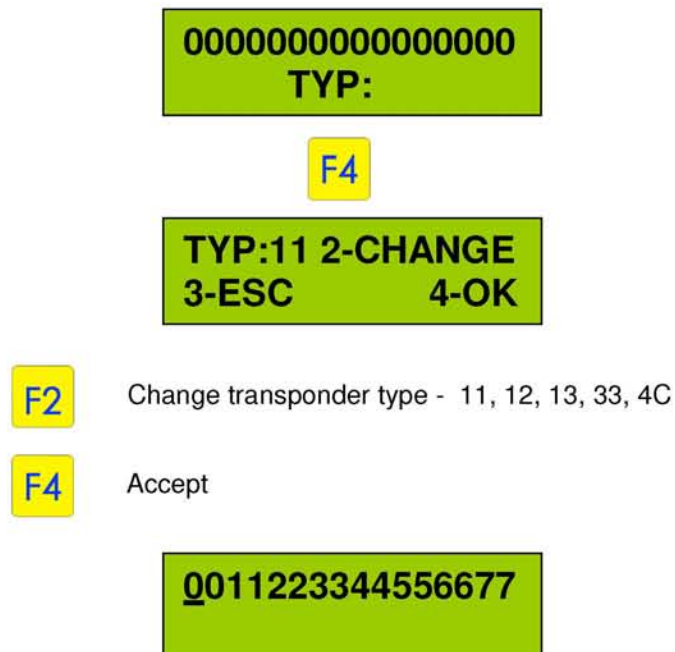
Cancel

0011223344556677
1-TEXAS 3-ESC



Writing free ID code

Writing free ID code without PC. Display must be clear. To clear display activate read function without transponder.



F2 Change value at cursor 0,1...E, F

Accept

F4

F1 Cursor left

Cursor right

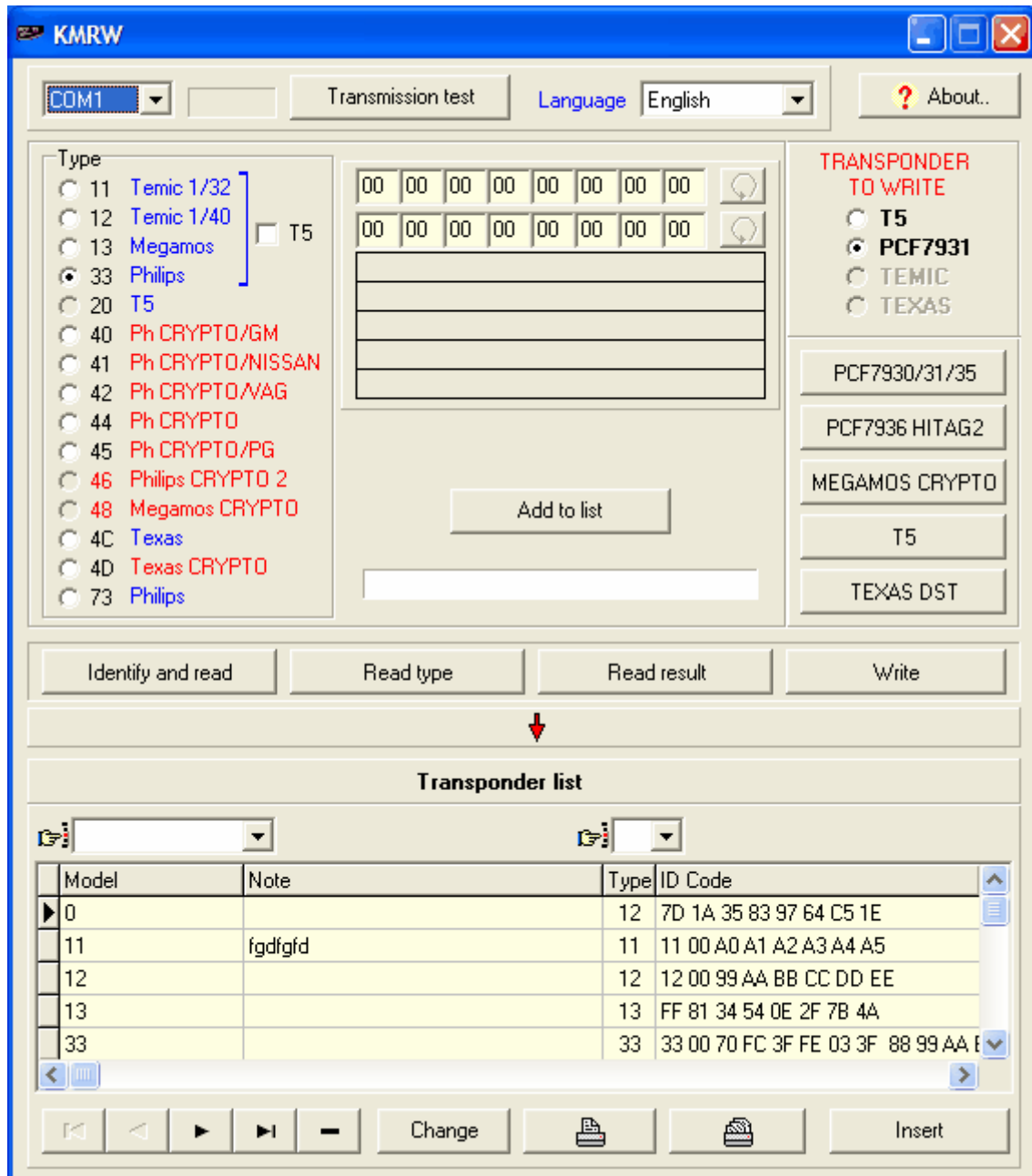
F3

For type 13 and 4C programmer checks code conformity with the rules.

Program KMRW for Windows®

Program KMRW enables writing free ID code. It's possible to build detailed transponder database.

- Connect programmer with PC using serial cable;
- select COM port;
- call **transmission test**;
- set language version – programmer language will be changed too.



Program functions:

- **identify and read** – read transponder – identify type and ID code;
- **read type** – read selected type transponder;
- **read result** – read result from programmer – last type and ID code;
- **write** – write code to transponder PCF/TEMIC/T5/TEXAS – code and transponder type may be insert manually;
- **add to list** – add transponder info to the database;
- **insert** – insert transponder info from database to main window;
- **print record/list** – print single record or whole database;
- **change** – change database record.

With edit buttons there is possibility to modify records. Records may be filtered using model and type data.

Transponder functions.

PCF7930/31/35

Write

Format – write bytes to access control memory PCF7930/31/35 – blocks 0 and 1:
RB1 /Read Block 1/ always read block 1 before others.
RFB /Read First Block/ number of first block to read.
RLB /Read Last Block/ number of last block to read.
BWR /Block Write Protection/ set write protection byte.
PAC /Password Checkbit/ set password protection byte.

Program – write to transponder.

Byte/Block – write string of bytes: block number (0-7), bytes (0-F):

ATTENTION!

Be careful while writing blocks 0 and 1. These blocks store information for access control.

Program – write to transponder.

Save – save to file.

Open – read from file.

Program format and block + read – write format, block (string of bytes) and read data from transponder.

When PCF793x password protection bit is set, writing will be possible after typing 7 bytes of correct password. Password checkbox must be set.

It's recommended to verify transponder after write.

Read

Read from transponder number of blocks.

Number of blocks – number of blocks to read.

Soft-Reset – read using soft-reset function PCF7930 or 31.

Read – read from transponder.

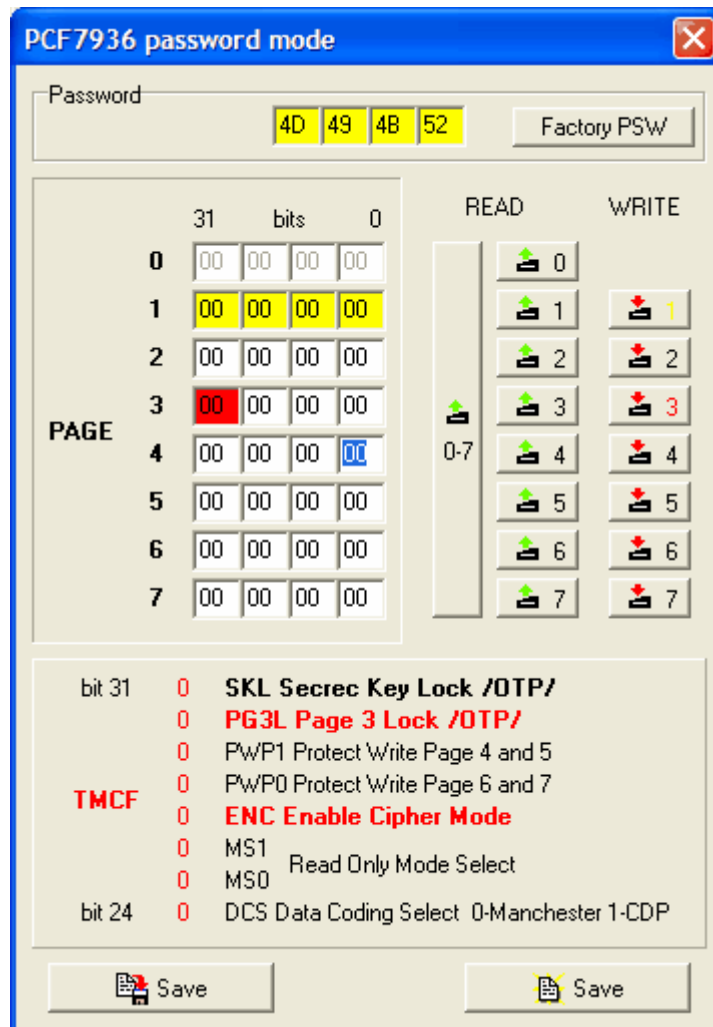
Save – save blocks to file

Open – read blocks from file.

Using right mouse button it's possible to store block in the field *write->byte/block*. Using double click on left mouse button it's possible to change selected byte.

Program 0-n - write all blocks to transponder from block 0 to *Number of blocks*.

PCF7936 HITAG2 – PASSWORD MODE



Communication is possible only in password mode after typing correct password. *Factory PSW* restores Philips 'transport password'.

MEGAMOS CRYPTO

Megamos crypto [X]

Word	15	Bit	0	
9	00	00		Crypto Key 95 - 80
8	00	00		Crypto Key 79 - 64
7	00	00		Crypto Key 63 - 48
6	00	00		Crypto Key 47 - 32
5	00	00		Crypto Key 31 - 16
4	00	00		Crypto Key 15 - 00
3	00	00		ID31 - ID16
2	00	00		ID15 - ID00
1	00	00		LB1, LB0, UM29 - UM16
0	00	00		UM15 - UM00

0	Lock Bit LB1	1
0	Lock Bit LB0	0

READ	WRITE
	9
	8
	7
	6
	5
	4
0-3	2-3
	1
	0

TEXAS DST

TEXAS DST [X]

PAGE 1	PASSWORD	MSB	00	LSB	<input type="checkbox"/> LOCK	MSB	00	LSB	<input type="checkbox"/>	
PAGE 2	IDENTIFICATION	MSB	00	LSB	<input type="checkbox"/> LOCK	MSB	00	LSB	<input type="checkbox"/>	
PAGE 3	SERIAL NUMBER	MANUF. CODE	MSB	000000	00	LSB	<input checked="" type="checkbox"/> LOCK			
PAGE 4	KEY	MSB	XXXXXXXXXX	LSB	<input type="checkbox"/> LOCK	MSB	00 00 00 00 00	LSB	<input type="checkbox"/>	
Challenge	MSB	00	00	00	00	00	LSB	Response	MSB	LSB
									SERIAL NUMBER	SIGNATURE

T5

T5 ✕

CONFIG WORD

Mode 15-14 <input checked="" type="radio"/> 00 with LIW <input type="radio"/> 01 with PMC <input type="radio"/> 10 without LIW	Rate 13-12 <input checked="" type="radio"/> 00 RF/64 <input type="radio"/> 01 RF/40 <input type="radio"/> 10 RF/32	Memory 11 <input checked="" type="radio"/> 0 128bits <input type="radio"/> 1 64bits	Modulation 10 <input checked="" type="radio"/> 0 Biphase <input type="radio"/> 1 Manchester	Password 9 <input checked="" type="radio"/> 0 OFF <input type="radio"/> 1 ON	<input type="button" value="READ"/>
Write Protect 8-0 <input type="checkbox"/> 8 <input type="checkbox"/> 7 <input type="checkbox"/> 6 <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 <input type="checkbox"/> 0					<input type="button" value="WRITE"/>

WORD

15 ... 0							
0	0000	<input type="button" value="READ"/> WORD 0-3 0-7	READ	WRITE	0	<input type="button" value="WRITE"/> 0-7	
1	0000				1		
2	0000				2		
3	0000				3		
4	0000	4					
5	0000	5					
6	0000	6					
7	0000	7					

Transponder list

ID	TRANSPONDER		IDENTIFY	READ	WRITE
11	TEMIC 1/32		YES	YES	T5 TEMIC
12	TEMIC 1/40		YES	YES	T5 TEMIC
13	MEGAMOS		YES	YES	T5 TEMIC
20	T5		YES		As type 11,12,13,33,40-45ID
33	PHILIPS PCF7930/31		YES	YES	T5 PCF7930/31/35
40-45	PHILIPS PCF7935		YES	ID CODE	ID CODE T5 PCF7930/31/35 PC
46	PHILIPS PCF7936		YES	Serial number	PC Password mode
48	MEGAMOS CRYPTO		YES	ID CODE	PC
4C	TEXAS		YES	YES	KEYLINE SILCA
4D	TEXAS CRYPTO (DST)		YES	ID CODE	PC
4E	TEXAS CRYPTO 2 (DST+)		YES	ID CODE	
73	PHILIPS PCF7930/31 MULTIPLY BLOCK		YES	YES	PCF7930/31/35

ID code – only fixed code.

PC – writing (no cloning) is possible from PC. Password or crypto codes must be known.

TEMIC – write to transponders TK5550/1/4/7 is possible only from PC.

Transponders TEXAS 4C may be cloned using KEYLINE TK23 or TK24 transponder keys or SILCA electronic keys.



KEYLINE TK23, TK24



SILCA

Software update

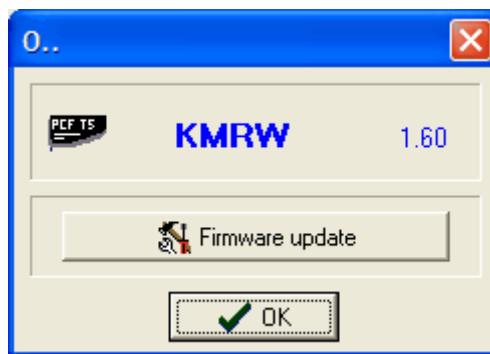
It's possible to firmware update programmers with software version higher than 3.00. Firmware version is displayed after power on.



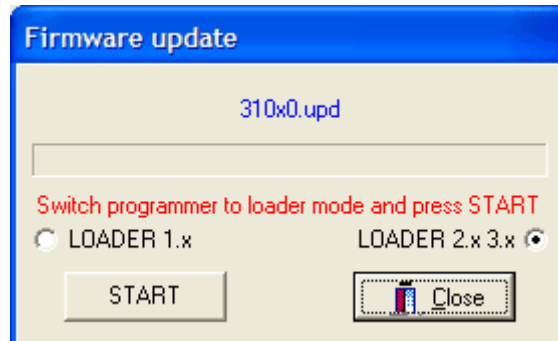
Serial number Version

Firmware update:

- Turn on programmer and push *About..* button

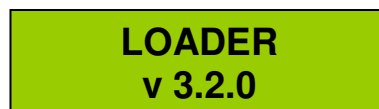


- Push *Firmware update* and load update file.



- Switch programmer to loader mode and set LOADER version.

Push key 3 while power on.



- Press *START*