

Code Reader 2



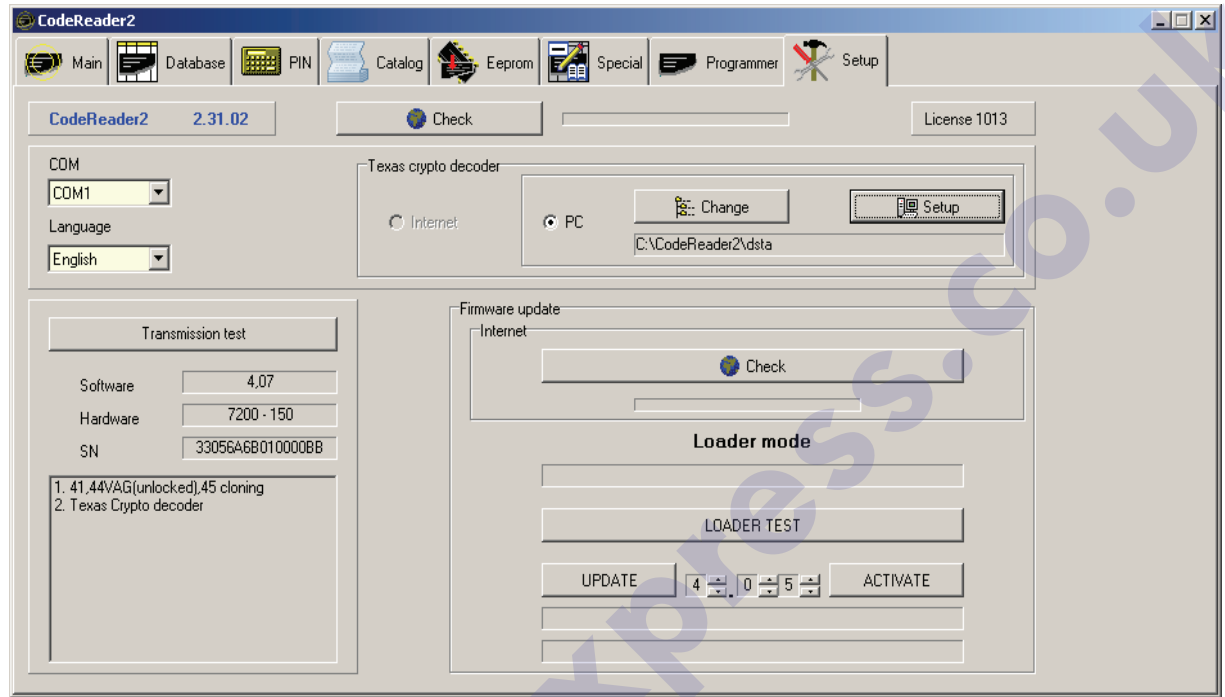
User manual

Table of Contents

- 1. Setup.**
- 2. Main operations.**
- 3. Database.**
- 4. PIN Calculator.**
- 5. Transponder Catalogue.**
- 6. EEprom Calculator.**
- 7. Special Functions.**
- 8. Transponder Programming.**

1. Setup.

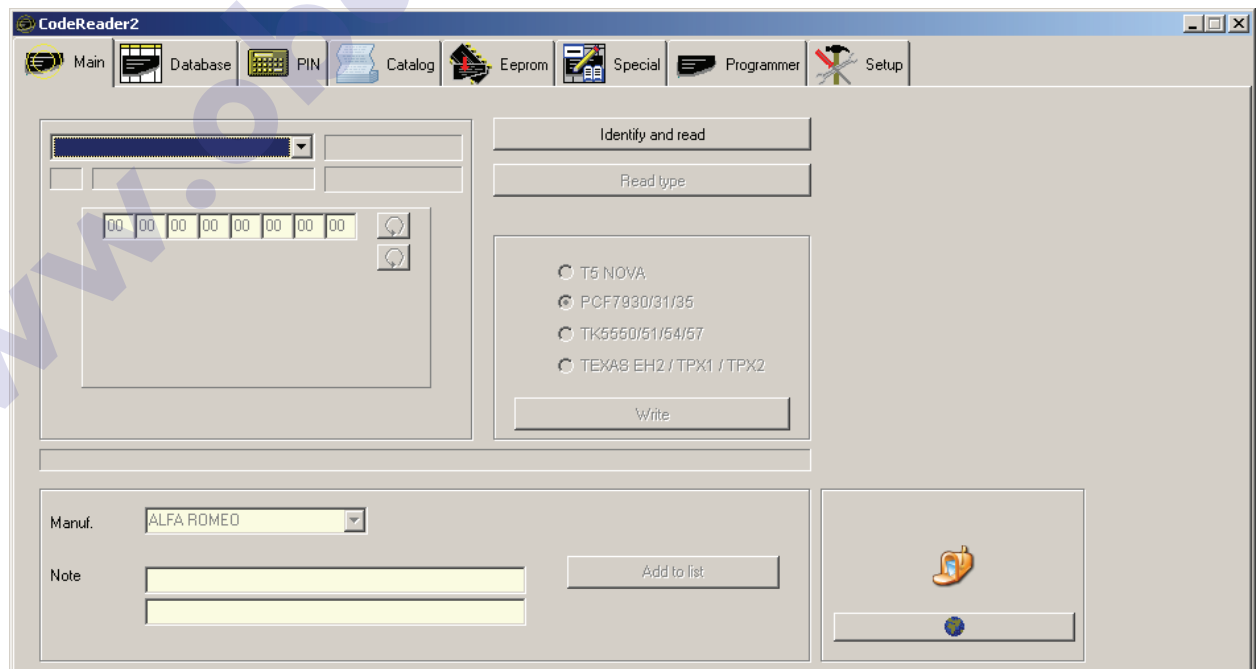
Insert USB security key into your PC. Connect Code Reader-2 to your PC via data cable. Turn ON the Code Reader-2. Place security card on over the hole of device and keep it there while login will accepted. Start the software. Choose COM port, language and press “Transmission test” button on “Setup” page. If transmission will be establish you see device information in “Software”, “Hardware”, “Serial number” windows. If you see the window “Transmission error” check COM port choice and power supply.



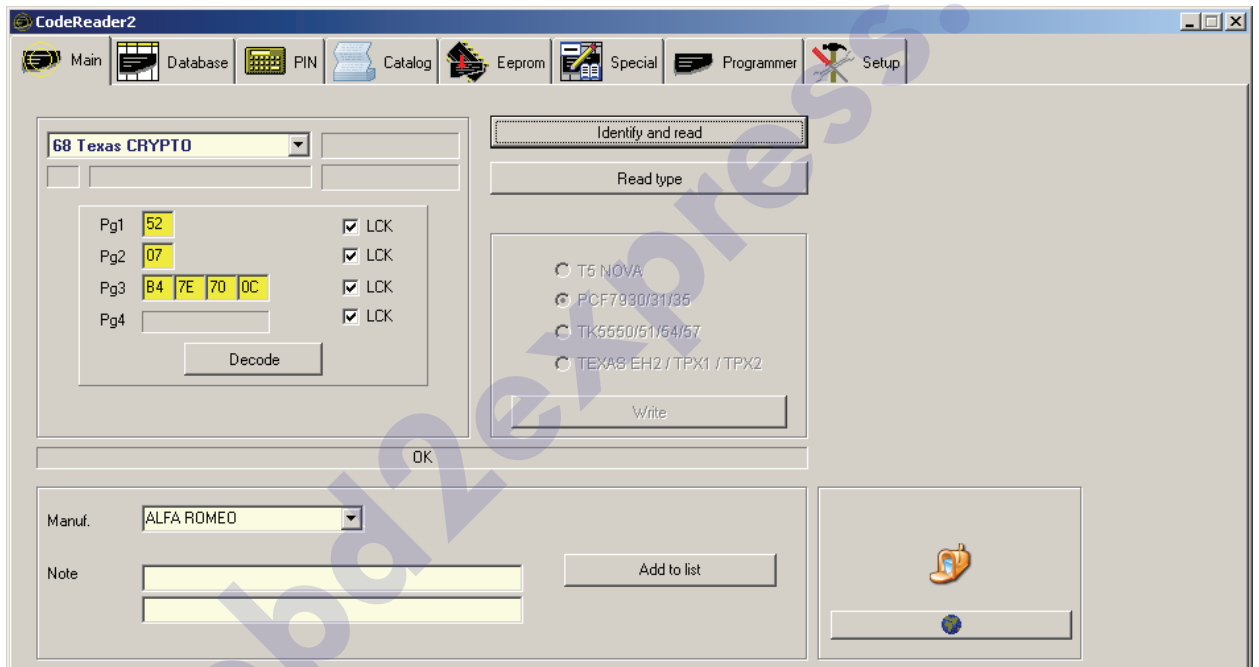
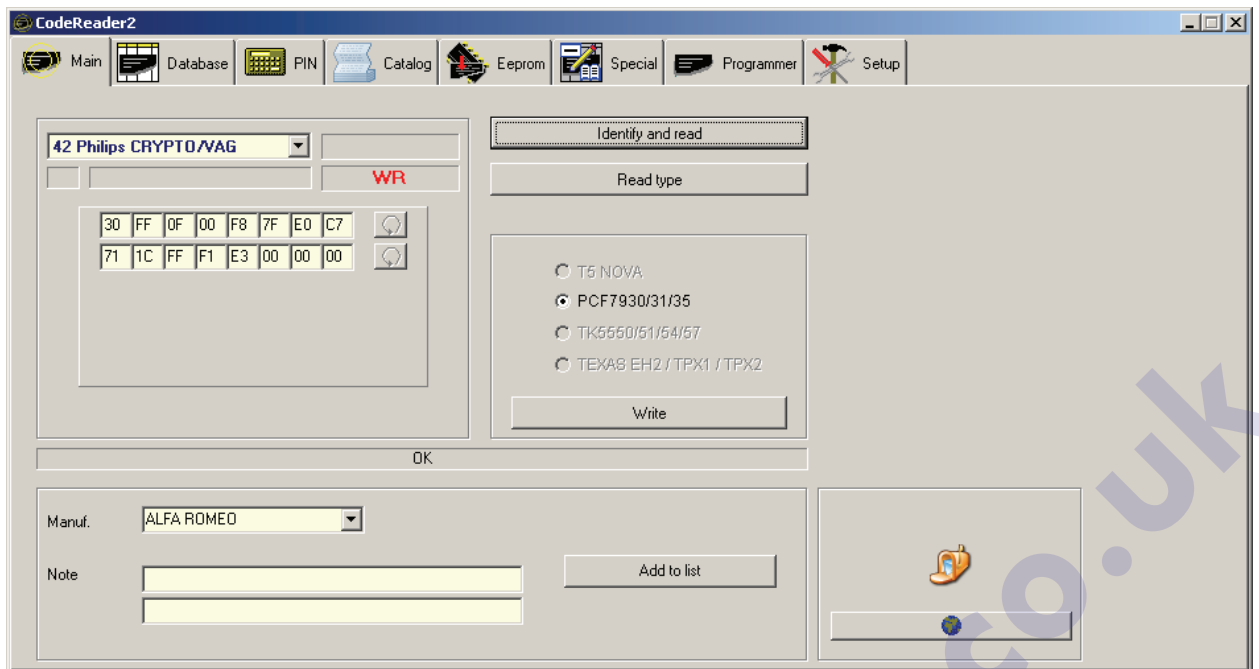
2. Main operations.

Place transponder or key near the device hole.

Press “Identify and read” button for identification and reading any transponders and keys.



Then you will see transponders information.



Code Reader-2 can identify and read following types of transponders:

- 11 Temic
- 12 Temic
- 13 Megamos
- 14 Megamos
- 15 Megamos
- 20 T5
- 33 Phillips
- 40 Phillips Crypto
- 41 Phillips Crypto
- 42 Phillips Crypto
- 44 Phillips Crypto
- 45 Phillips Crypto
- 46 Phillips Crypto 2
- 48 Megamos Crypto
- 4C Texas
- 60 Texas Crypto

61 Texas Crypto
 62 Texas Crypto
 63 Texas Crypto
 64 Texas Crypto
 65 Texas Crypto
 67 Texas Crypto
 68 Texas Crypto
 73 Multiblock
 8C Temic
 8E Sokymat Crypto

For make copy mark the type of transponder where you would like to copy the original one, place new transponder near the device hole and then press “Write” button. Keep new transponder near the device coil (hole) while the process will be finished.

If you have read Phillips Crypto transponder you can see red letters “WR” and “Write” button will be active. It means you can copy it directly into other transponder.

With Code Reader-2 you can copy following Phillips Crypto transponders:

- ID 41,
- some of ID 40 Opel/GM (T9 type),
- ID 42 VAG,
- some of ID 44 VAG (not LCK),
- ID 45 Peugeot/Citroen.

You can copy all those transponders into precoded PCF7935 transponders called “UNI” transponders.

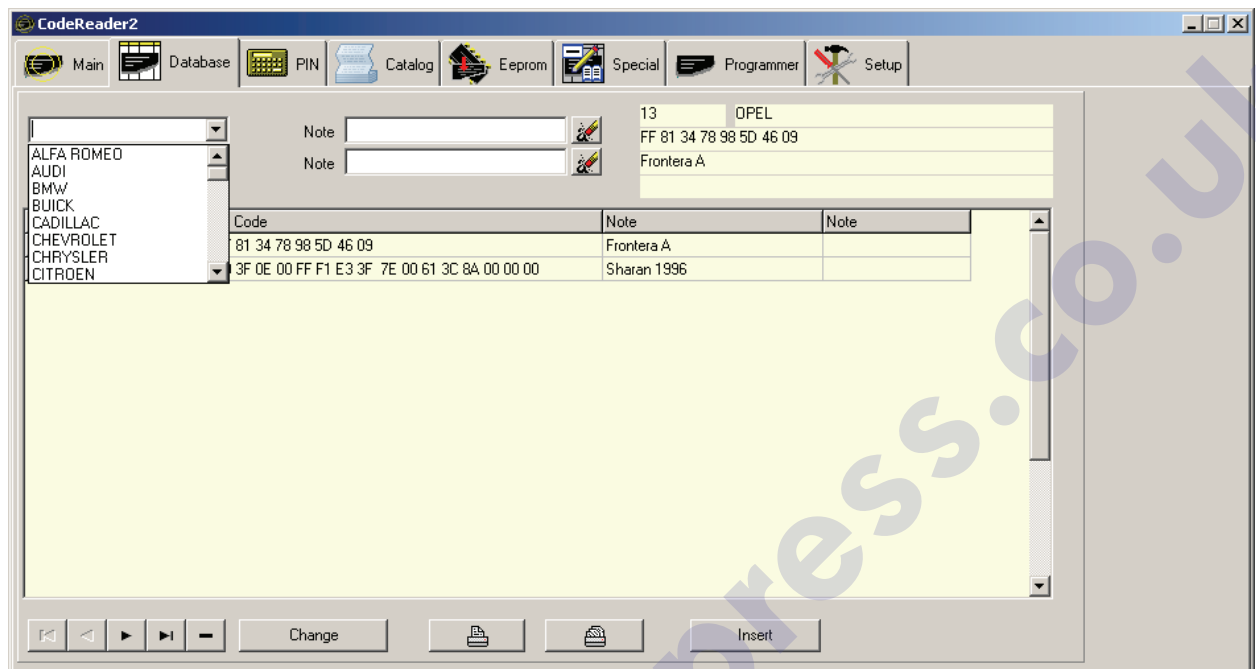
Code Reader-2 can identify, read and copy following types of transponders:

Type of transponder	Identify and Read	Copy	In which transponder
11 Temic	+	+	T5, TK5550/51/54/57
12 Temic	+	+	T5, TK5550/51/54/57
13 Megamos	+	+	T5, TK5550/51/54/57
33 Phillips	+	+	T5, PCF7930/31/35
40 Phillips Crypto	+	+	44 uni (T9 only)
41 Phillips Crypto	+	+	44 uni
42 Phillips Crypto	+	+	44 uni
44 Phillips Crypto	+	+	44 uni (not LCK)
45 Phillips Crypto	+	+	44 uni
46 Phillips Crypto	+	-	-
48 Megamos Crypto	+	-	-
4C Texas	+	+	EH1, EH2, TPX1/2
60 Texas Crypto	+	+	EH2, TPX2
61 Texas Crypto	+	+	EH2, TPX2
62 Texas Crypto	+	+	EH2, TPX2
63 Texas Crypto	+	+	EH2, TPX2
64 Texas Crypto	+	+	EH2, TPX2
65 Texas Crypto	+	+	EH2, TPX2
67 Texas Crypto	+	+	EH2, TPX2

68 Texas Crypto	+	+	EH2, TPX2
+ Available			
- Not available			

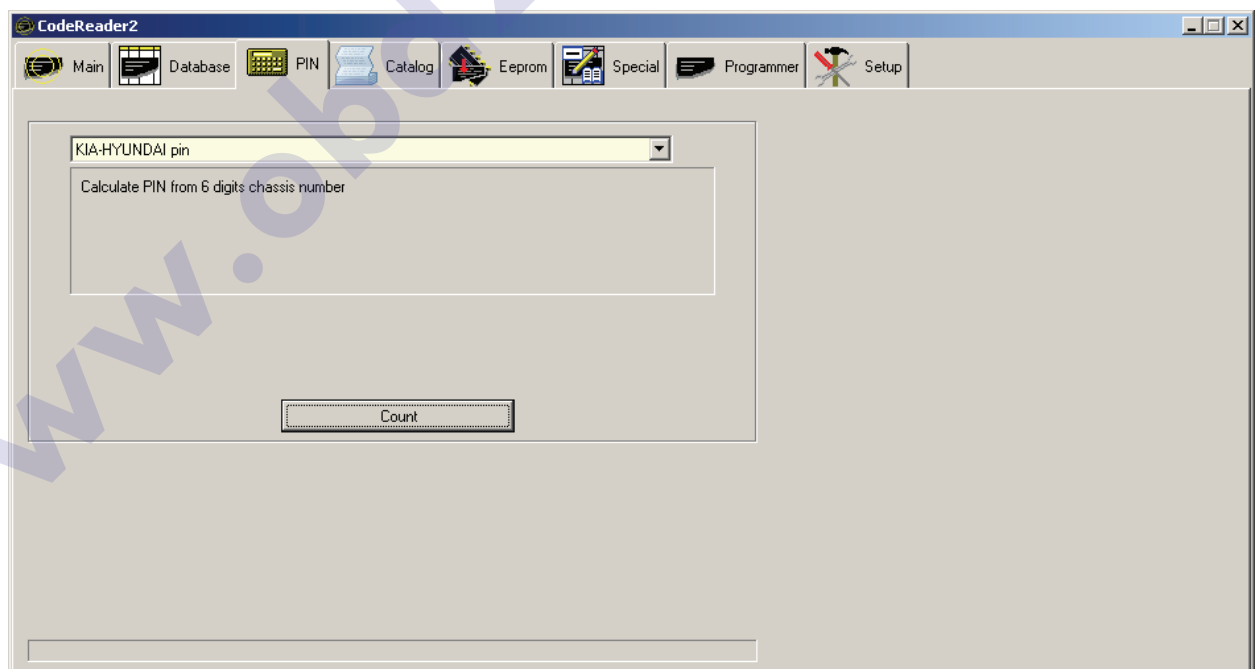
3. Database.

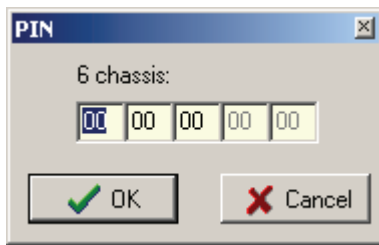
You can save all information in Database after reading.



4. PIN Calculator.

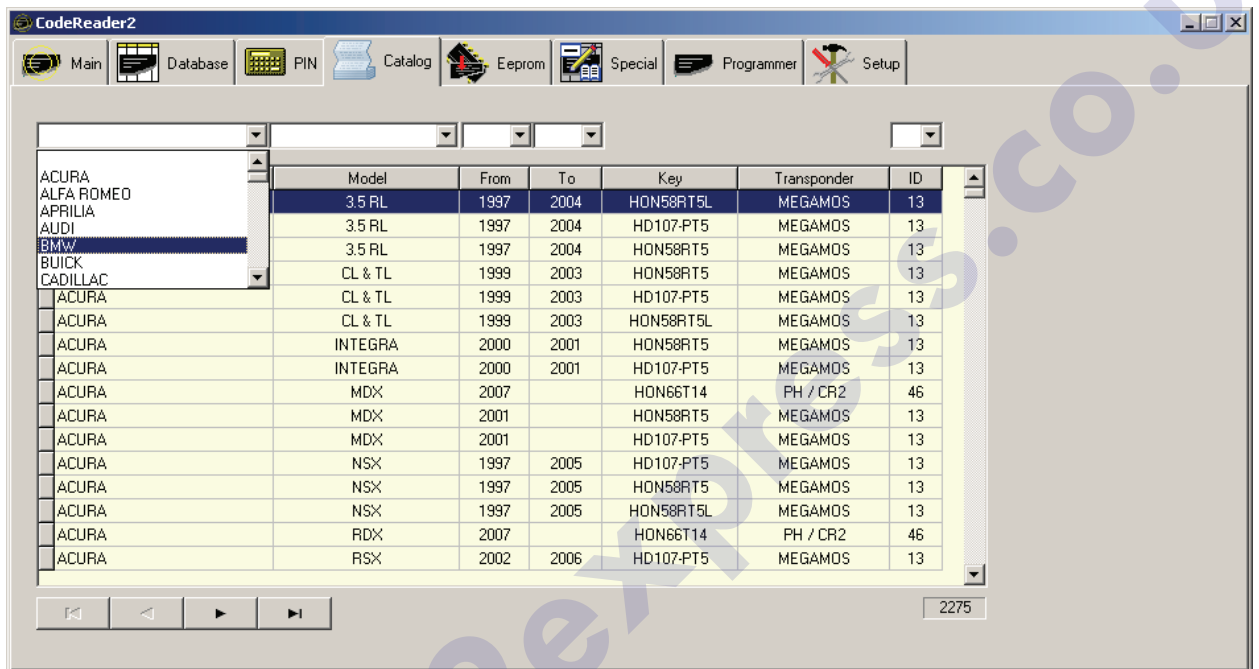
With “PIN Calculator” you can calculate 6-digits login for KIA and Hyundai from last 6 digits of VIN.





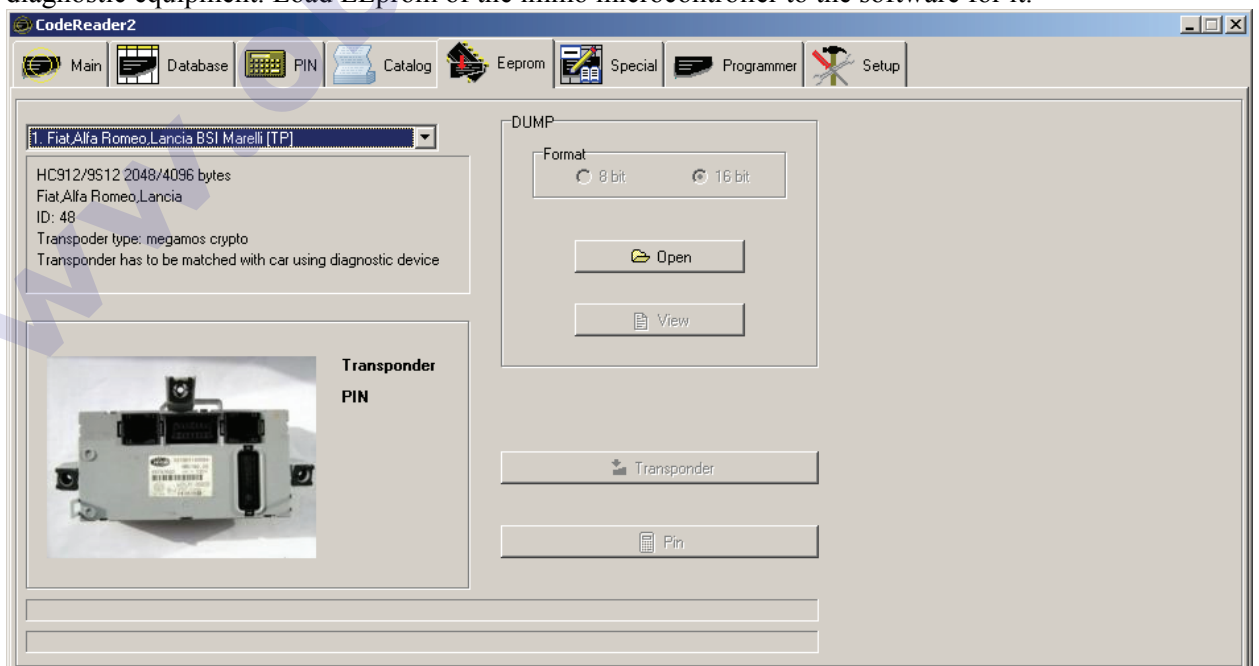
5. Catalogue.

There is transponders catalogue with lookup function inside the Code Reader-2 software.



6. EEprom Calculator.

You can get PIN codes and prepare transponders for start the car or for programming into the car with diagnostic equipment. Load EEprom of the immo microcontroller to the software for it.



This software version supports following immobilizers and microcontrollers:

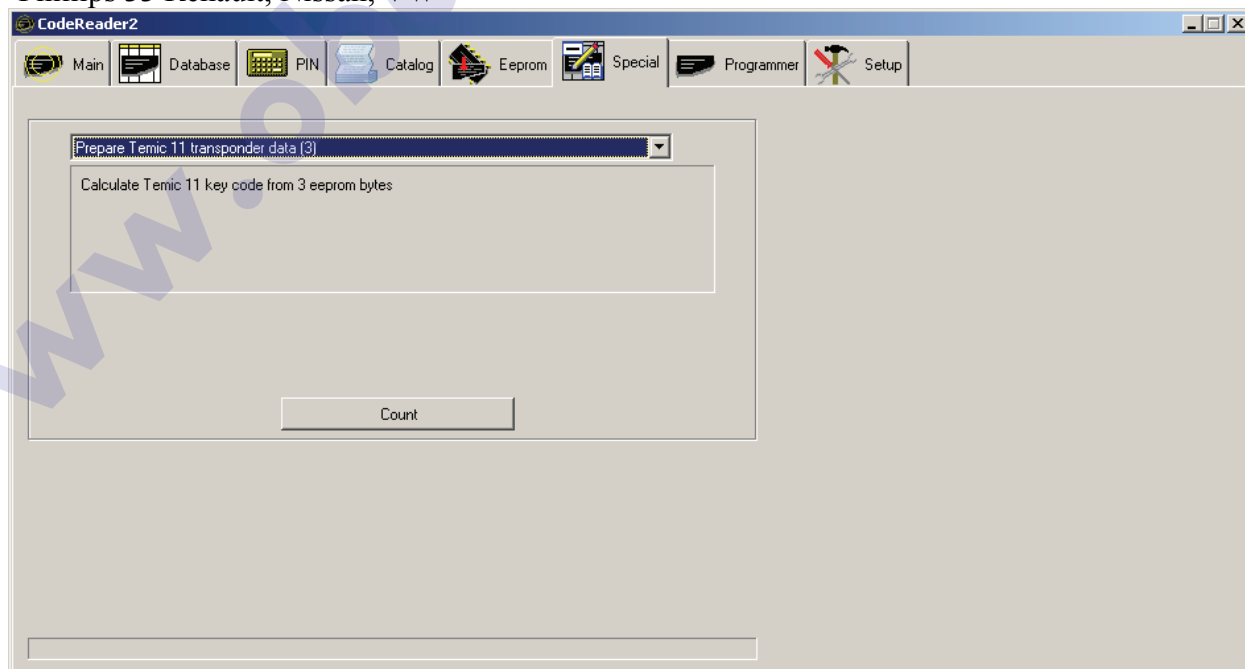
N	Vehicle	IMMO Type	Transponders ID	PIN code reading	Transponder programming
1	Fiat, Alfa, Lancia	BSI Marelli HC912/9s12	48 Megamos Crypto	+	Ready for programming
2	Fiat, Citroen, Peugeot	Code-2, Delfi 93c56	48 Megamos Crypto	+	Ready for programming
3	Fiat, Alfa, Lancia	BSI Delfi 93c66	48 Megamos Crypto	+	Ready for programming
4	Opel/ GM	Immo2, Siemens, TMS370	40	+	Ready for start
5	VW, Seat	Immo2 Siemens, TMS370	42	+	Ready for start
6	VW, Seat	Immo3 Valeo 24c04	44	+	Ready for start
7	Fiat, Lancia, Citroen, Peugeot	Delfi 93c46	13 Megamos	-	Ready for start
8	Alfa, Iveco	Code1, Bosch	33	-	Ready for start
9	Honda, Acura	Megamos	13 Megamos	-	Ready for start
10	Honda, Rover	Valeo	33	-	Ready for start
11	Fiat, Lancia	Marelli 001.01	11 Temic	-	Ready for start
12	Fiat, Lancia	Marelli 110.01	11 Temic	-	Ready for start
13	Sprinter, Vito	Temic	12 Temic	-	Ready for start
14	VW, Skoda, Seat	Immo1 Siemens	33	+	Ready for start
15	Renault	Valeo 93c46	33	+	Ready for start
16	Renault, Dacia	Sagem 93c46	33	+	Ready for start
17	Renault	UCH Siemens 93c66	46	+	
18	BMW	EWS	33	-	Ready for start
19	Toyota Corolla 1998-99	89780-12060 93c66	4C	-	Ready for start
20	Toyota Corolla 2000-02	ECU Denso 93c56	4C	-	Ready for start
21	Toyota Corolla	ECU Bosch 24c02	4C	-	Ready for start
22	Toyota Yaris	ECU 93c56	4C	-	Ready for start
23	Toyota Corona	Immo 24c04	4C	-	Ready for start
24	Renault Laguna 2	IKKB	46	+	
25	Iveco	Immo 93c56	46	+	
26	Renault Megan 2	IKKB	46	+	
27	Alfa	Code2 Bosch 93c56	44	-	Ready for start
28	Mitsubishi	Bosch 93c56	44	-	Ready for start
29	Volvo	Immo3 Bosch	44	-	Ready for start

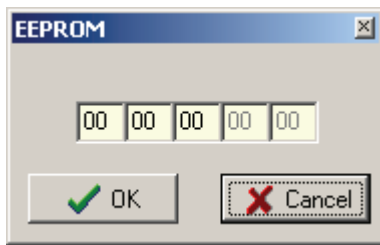
		93c56/66			
30	Peugeot, Citroen	Valeo 93c46	33	-	Ready for start
31	Mitsubishi Lancer	24c01	4C	-	Ready for start
32	Daihatsu	Immo 93lc66	4C	-	Ready for start
33	Audi	Delfi 93c46	13	-	Ready for start
34	Nissan, Subaru	Immo Siemens	33	-	Ready for start
35	Sprinter, Vito	Temic	12	-	Ready for start
36	Opel/GM	Immo1 Siemens	33	+	Ready for start
37	Mitsubishi	Bosch Cartronic 93c46	44	-	Ready for start
38	Fiat, Lancia, Citroen, Peugeot	Texton 95040	33	-	Ready for start
39	Mazda	Temic	12	-	Ready for start
40	Peugeot 206	BSI Siemens	45	+	
41	Renault	Immo Siemens	33	-	Ready for start
42	Mercedes Atego/Actros	93c66, 93c86	13	-	Ready for start
43	Toyota Yaris	Bosch 95080	4C	-	Ready for start
44	Renault	UCH Sagem 93c66	46	+	

7. Special functions.

You can use IMMO EEprom information for calculation of transponder data:

- Temic 11
- Temic 12
- Megamos 13
- Texas 4C
- Phillips 33 Renault, Nissan, VW

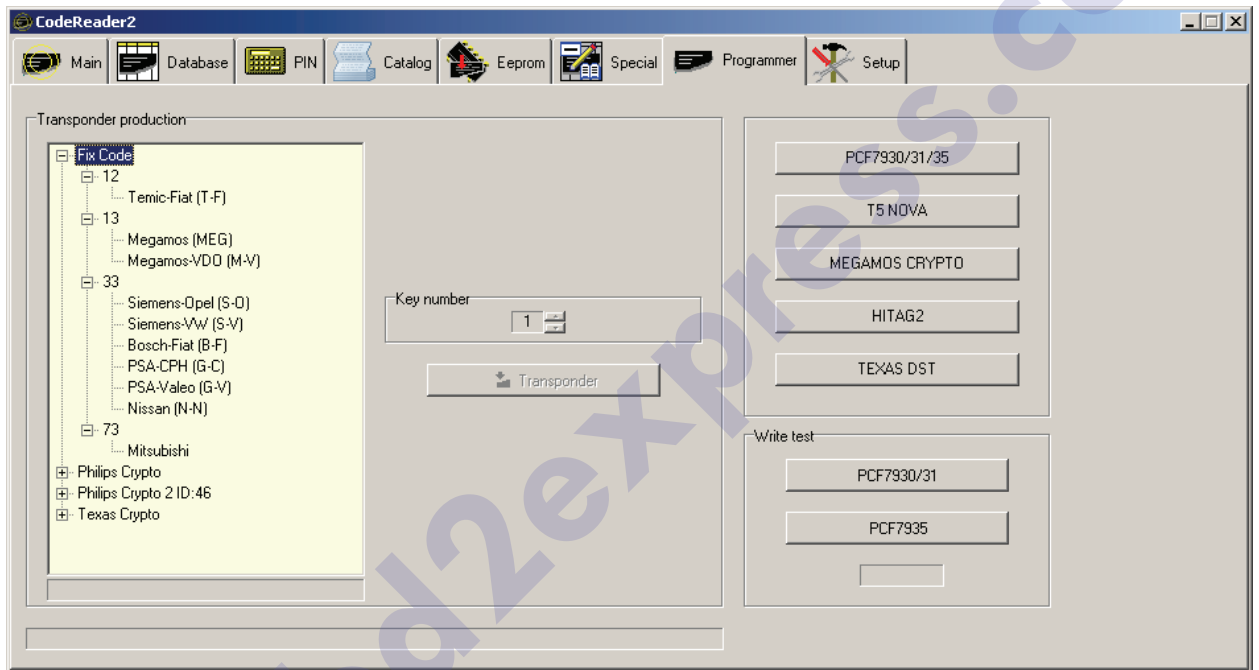




There are two function more in this window: unlocking of Megamos 48 Crypto and programming of master transponder for Mercedes Benz C, E and G classes.

9. Programmer.

Code Reader 2 can prepare some types of transponders which you can program into the car with diagnostic devices.



Kind of transponders	Type of transponders	Using transponder
Fixed	12 Temic Fiat	T5
	13 Megamos	T5
	13 Megamos VDO	T5
	33 Phillips Siemens Opel	T5, PCF7930/31/35
	33 Phillips VW	T5, PCF7930/31/35
	33 Phillips Bosch Fiat	T5, PCF7930/31/35
	33 Phillips Peugeot/Citroen CPH Texton	T5, PCF7930/31/35
	33 Phillips Peugeot/Citroen Valeo	T5, PCF7930/31/35
	33 Phillips Nissan	T5, PCF7930/31/35
	73 Phillips Multiblock Mitsubishi/Volvo	PCF7930/31/35
Phillips Crypto	40 Opel	PCF7935
	41 Nissan	PCF7935
	42 VAG	PCF7935
	44 VAG	PCF7935
	44 Mitsubishi/Volvo	PCF7935
	45 Peugeot	PCF7935
Phillips 46 Crypto-2	Audi A8 2003-2006	PCF7936
	BMW E60	PCF7936
	BMW E64	PCF7936
	BMW E65	PCF7936
	BMW E87	PCF7936

	Citroen C3 2000-2004	PCF7936
	Citroen Picasso 2000-2004	PCF7936
	Chevrolet	PCF7936
	Chrysler	PCF7936
	Mitsubishi	PCF7936
	Nissan	PCF7936
	Peugeot	PCF7936
	Porsche	PCF7936
	Renault	PCF7936
	Touareg	PCF7936
	Phaeton	PCF7936
Texas Crypto	ID 61	Texas DST ID60
	ID 62	Texas DST ID60
	ID 63	EHS2
	ID 64	EHS2
	ID 65	Texas DST ID60
	ID 67	EHS2, TPX2
	ID 68	EHS2, TPX2

You can work with dump of some types of transponders:

PCF7930/31/35:

PCF7930/31/35

PCF7930/35 PCF7931

Write

PSW ☐ 00 00 00 00 00 00 00 00

RFB 0 RLB 7

Byte / Block 7 Block number

16 checkboxes (all checked)

00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00

0 1 2 3 4 5 6 7 8 9 A B C D E F

Read

	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F	
0	30	FF	FF	1F	38	F0	1F	FF	FF	1F	38	F0	1F	F8	8F	1F	0яя.8р.яя.8р.шЦ.
1	30	FF	FF	1F	38	F0	1F	FF	FF	1F	38	F0	1F	F8	8F	1F	0яя.8р.яя.8р.шЦ.
2	30	FF	FF	1F	38	F0	1F	FF	FF	1F	38	F0	1F	F8	8F	1F	0яя.8р.яя.8р.шЦ.
3	30	FF	FF	1F	38	F0	1F	FF	FF	1F	38	F0	1F	F8	8F	1F	0яя.8р.яя.8р.шЦ.
4	30	FF	FF	1F	38	F0	1F	FF	FF	1F	38	F0	1F	F8	8F	1F	0яя.8р.яя.8р.шЦ.
5	30	FF	FF	1F	38	F0	1F	FF	FF	1F	38	F0	1F	F8	8F	1F	0яя.8р.яя.8р.шЦ.
6	30	FF	FF	1F	38	F0	1F	FF	FF	1F	38	F0	1F	F8	8F	1F	0яя.8р.яя.8р.шЦ.
7	30	FF	FF	1F	38	F0	1F	FF	FF	1F	38	F0	1F	F8	8F	1F	0яя.8р.яя.8р.шЦ.

8 Blocks

☐ Soft Reset

Open Save

0-n

T5:

T5 NOVA

CONFIG WORD

Mode 15-14	Rate 13-12	Memory 11	Modulation 10	Password 9
☒ 00 with LIW	☒ 00 RF/64	☒ 0 128bits	☒ 0 Biphase	☒ 0 OFF
☐ 01 with PMC	☐ 01 RF/40	☐ 1 64bits	☐ 1 Manchester	☐ 1 ON
☐ 10 without LIW	☐ 10 RF/32			

Write Protect 8-0

8	7	6	5	4	3	2	1	0
☐	☐	☐	☐	☐	☐	☐	☐	☐

WORD

15 ... 0
0 0000
1 0000
2 0000
3 0000
4 0000
5 0000
6 0000
7 0000

WORD 0-3 0-7

CONFIG WORD, WORD 0-3 0-7

0 1 2 3 4 5 6 7

0-7

Save Open

Megamos 48 Crypto:

MEGAMOS CRYPTO/CRYPTO2

Word	15	Bit	0	
F	00	00		UM2 63-48
E	00	00		UM2 47-32
D	00	00		UM2 31-16
C	00	00		UM2 15-0
B	00	00		PIN 31-16
A	00	00		PIN 15-0
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

SEND PIN

Phillips 46 Crypto 2:

HITAG2

LoHi

Crypto Lo 4D 49 4B 52

Crypto Hi 4F 4E

Default

Mode

☐ Password

☒ Crypto

Transponder

☒ PCF7936

☐ PCF7941

☐ PCF7942/44

☐ PCF7943

☐ PCF7946

Auto

31	bits	0	TM
0	00 00 00 00		SN/IDE
1	00 00 00 00		Crypto/ISK Lo
2	00 00 00 00		Crypto/ISK Hi
3	00 00 00 00		TMCF/PSW
4	00 00 00 00		User 0
5	00 00 00 00		User 1
6	00 00 00 00		User 2
7	00 00 00 00		User 3
4	00 00 00 00		RSK Lo
5	00 00 00 00		RSK Hi
6	00 00 00 00		RCF
7	00 00 00 00		SYND

IDE

1 1

2 2

3 3

4 4

5 5

6 6

7 7

TMCF

☐ SKL Secret Key Lock

☐ PG3L Page 3 Lock

☐ PWP1 Protect Write User Page 4,5

☐ PWP2 Protect Write User Page 6,7

☐ ENC Enable Cipher Mode

☐ MS1 Mode Select

☐ MS0 Mode Select

☐ DCS Data Coding Select

Save TM Open TM Open LoHi Open TM+LoHi

TEXAS DST

☒ DST ☐ DST ID64

PAGE 1 PASSWORD MSB 00 LSB ☐ LOCK

PAGE 2 IDENTIFICATION MSB 00 LSB ☐ LOCK

PAGE 3 SERIAL NUMBER MANUF. CODE MSB 00 00 00 00 LSB ☒ LOCK

PAGE 4 KEY MSB 00 00 00 00 00 LSB ☐ LOCK

Challenge MSB 00 00 00 00 00 LSB

Response MSB 00 00 00 00 00 LSB

Serial Number Signature

Lock Lock Lock Lock

Save Open

Selective read

10. Texas Crypto software installation.

For correct operation of Texas Decryption function you need to use PC with 512 Mb and over RAM and over than 35 Gb free space. For installation press “Setup” button and choose the directory. Then press “Start” button.