

# Key coding for Fiat / Alfa / Lancia / Iveco

This is PRELIMINARY WORKING DRAFT for SECONS Ltd. internal use and FiCOM users.  
*Please excuse the typos and errors.*

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## Transponder types


Fiat uses the following types of transponders. We note that the transponder system rolling code (starting CODE2) must be pre-programmed, because they contain pre-programmed binary encryption key (the dealer key, which can only be ordered based on the VIN code).

Previously deleted keys cannot be programmed again. Diagnostics can only add keys to the system and later CODE2 (Megamos crypto + HITAG).

## Body system

Body modules use following types of transponders:

Megamos Crypto	Philips Crypto
Alfa 147	Alfa 159
Alfa GT	Fiat Croma 2005+
Fiat Dobló	Alfa Brera
Fiat Palio RST	Fiat Brava 2007+
Fiat Punto 1999-2004	Lancia Delta 2008+
Fiat Idea	Fiat Punto 2005+
Fiat Palio RST 2	Fiat 500 2008+
Fiat Perla	Fiat Fiorino 2008+
Fiat Stilo	Ford Ka 2008+
Fiat Ducato 2006+	Peugeot Bipper 2007+
Fiat Linea	Citroen Nemo 2007+
Citroen Jumper 2006+	Alfa Mito
Citroen Relay 2006+	Fiat Panda 2003+
Peugeot Boxer 2006+	
Iveco Eurocargo 2006+	
Iveco Daily 2006+	
Lancia Thesis	
Lancia Musa	

 Warning: key contains programmed data for a specific vehicle (the dealer key), this must be ordered from Fiat or pre-programmed by special tools from the content of EEPROM BSI.

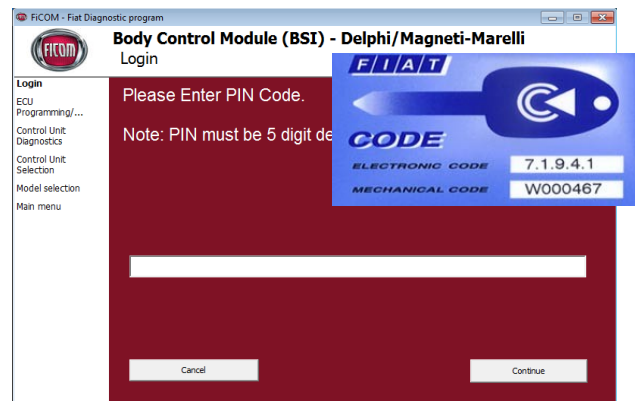
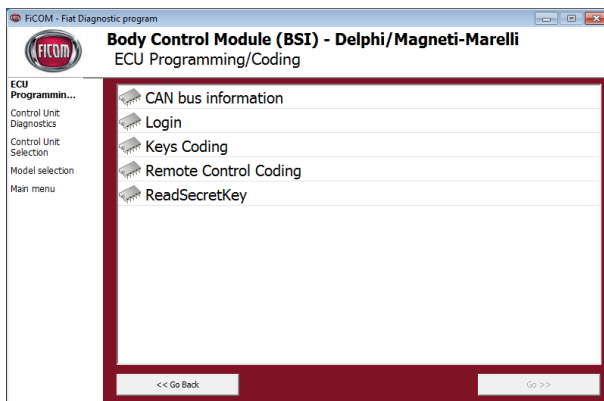
## Key coding

The function is available from menu of coding BODY COMPUTER control unit.


Login function is used to verify the PIN code from CODE card and to gain access to secure special functions (for key coding is not needed)

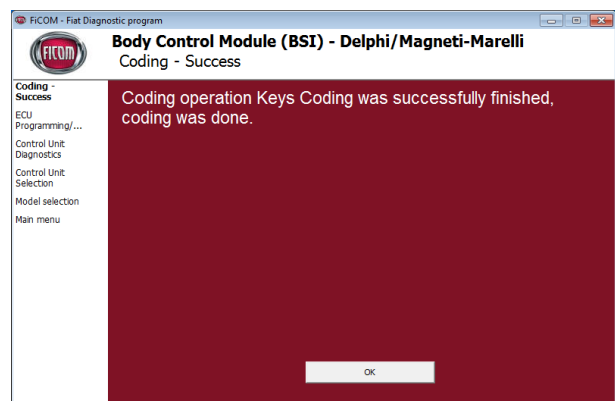
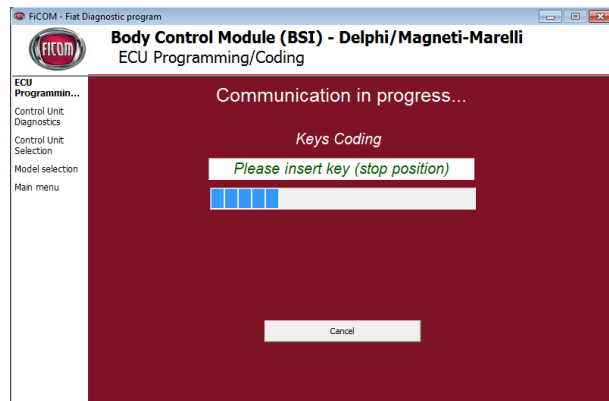


## Transponder coding



Coding transponders can be done by selecting the "Keys Coding" function. The procedure is as follows:

- Activate function
- Enter login code "ELECTRONIC CODE" from the CODE card
- Insert all keys one by one into ignition according to program message. After inserting all keys will appear a window asking if you want to coding another key. If you answer yes, the program will wait to insert a new key again. Otherwise, it will save the loaded keys and display information about the end of encoding.
- After you insert all keys one by one, end the coding routine.
- You will be asked if you want to save transponder keys in memory. **If you confirm the saving, you will delete all the keys that were not inserted into ignition during the operation and these keys will be not possible to coding in future again.** 



Previously deleted keys cannot be programmed again. Diagnostics can only add keys from system CODE2 and later (Megamos crypto + HiTag).

## Remote controls coding

Operation works similarly as transponders coding.

## Verification of coded keys

Value of "Number of enabled keys" in measured values should be the same.

The screenshot shows the FiCOM diagnostic program window. The title bar reads "FiCOM - Fiat Diagnostic program". The main window title is "Body Control Module (BSI) - Delphi/Magneti-Marelli" and the subtitle is "Measured Values - List View". On the left, there is a navigation menu with options: "Measured Values - List View", "Control Unit Diagnostics", "Control Unit Selection", "Model selection", and "Main menu". The main area displays a table of measured values:

HEATED REAR WINDOW	Not activated
Hazard lights	Activated
Headlamp washer	Not activated
Heated rear window relay	OFF
High-beam headlights	Not activated
LH door lock signal	ON
LH door release signal	ON
LH indicator	Not activated
Number of enabled keys	3.000
Parking brake	Released
RH door lock signal	OFF
RH door release signal	OFF
RH indicator	Activated
Rear foglights	Not activated
Rear left door	Open

At the bottom of the window, there are several buttons: "Graph View", "3x3 View", "Copy", "Print", "Start logging", and "<< Go Back".

## Immobilizer Code2

Code2 Bosch ST7	Code2 Bosch 93C56	Code2 Marelli	Code2 Delphi
?Philips Crypto?	Philips Crypto	Megamos Crypto	Megamos Crypto
Alfa 156 2003+	Alfa 156 -2002 Alfa 166	Citroen Jumper Citroen Relay 2001-2006 Fiat Ducato RST Fiat Multipla Lancia Lybra Peugeot Boxer 2001-2006	Citroen Jumper Citroen Relay 2001-2006 Fiat Ducato RST Fiat Seicento Peugeot Boxer 2001-2006

Warning: key contains pre-programmed data for a specific vehicle (the dealer key).

Login

Key coding

Information about coded keys

Key deletion

## Immobilizer Code2 Iveco Bosch

Transponder Philips Crypto, key contains pre-programmed data for a specific vehicle (the dealer key).

Key coding is not supported at this time.

### ***Emergency start***

This procedure allows you to start the engine in a situation, when it is not possible to recognize the key or in case of failure of immobilizer control unit. Starting the engine is possible after entering the electronic code via the accelerator pedal. Proceed as follows:

- Turn the key in ignition to MAR.
- After 2 seconds, the EDC warning light starts to blink.
- Depress the accelerator pedal up to the stop and hold it depressed for 5 to 12 seconds.
- EDC warning light starts to flash more slowly.
- When the number of flashes equals to the first digit of electronic code, depress the accelerator pedal to the stop and subsequently release it (when depressing the accelerator pedal, the EDC warning light turns OFF ). Follow the same procedure for entering of remaining digits of the electronic code.
- After correct entering of the code, the EDC warning light stops flashing (otherwise repeat the procedure). Contact your authorized service always for check the system.

## Immobilizer Code

First generation of CODE control unit does not have a diagnostics, keys are coded by master key. The keys doesn't contain data for a specific vehicle. It is not possible to code more than 7 keys.

Code Marelli IMM110.01	Code Marelli IMM001.01	Code Delphi	Code Bosch
<b>Temic</b>	<b>Temic</b>	<b>Megamos</b>	<b>Philips</b>
Fiat Brava 1998-2001 Fiat Marea 1996-2002 Fiat Palio 1996-1999 Lancia Dedra 1997 Maserati GT 1995-1998	Fiat Bravo 1998-2001 Fiat Marea 1998-2001 Fiat Palio 1996-1999 Lancia Dedra 1997- Lancia Ypsilon Maserati GT 1995-1998	Fiat Barchetta 1995-1998 Fiat Brava 1995-1998 Fiat Bravo 1995-1998 Fiat Cinquecento 1995-1997 Fiat Ducato 1998-2001 Fiat Marengo Fiat Panda 1995-2002 Fiat Punto 1995-1999 Fiat Seicento 1997-1999 Fiat Tempra 1995-1998 Lancia Dedra 1995-1998 Lancia Delta 1995-1998 Citroen Jumper 1998-2001 Citroen Relay 1998-2001 Peugeot Boxer 1995-2001	Alfa 145 Alfa 146 Alfa 155 Alfa 164 Alfa GTV Alfa Spider Fiat Croma 1995-1998 Iveco Daily 1998-2001 Lancia K

### ***Procedure of key coding***

- 1) Insert a red master key, turn on the ignition and turn it off immediately when immobilizer warning lamp goes off .
- 2) Remove the red master key and insert another key to coding within 10 seconds
- 3) Turn on the ignition and turn it off immediately when immobilizer warning lamp goes off
- 4) You can repeat procedure from point 2 and code other key within 10 seconds
- 5) When all keys are coded, end the procedure by inserting the master key and turning the ignition on and off when immobilizer warning lamp goes off.