

EFIChip Login Reader User Manual

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Introduction

From year 1995 in Audi-VW (VAG) cars is used engine immobilizer. The VAG group immobilizer system consists of an immobilizer ECU which controls the recognition of keys and the Engine Management ECU system. Immobilizer is activated when the ignition key is removed and, together with the engine control unit, largely prevents unauthorized starting of the engine. The system uses a transmitter and receiver unit in the ignition key (transponder). Whenever an attempt is made to start the engine, it transmits a new code to the car's electronics. The immobilizing is only cancelled and car motor electronic receives permission to start engine if the key sends a right authorization code.

If the keys are lost or a replacement Engine Management ECU is fitted then the transponder keys will need programming so that the ECU memories recognize the codes. The Login Code required to program new keys for all VAG cars. This code is on the plastic label and usually is connected together with car keys. If you lost or don't know car Login Code you must contact dealer and order it - this can take up to 1 month. Or you can read it with our tools.

Our EFIChip Login Reader can read this secret code from car and can simply adapt additional on new key.

!!!Attention!!! READ THIS FIRST:

- Key learning will erase all programmed keys from vehicle; make sure that you have all car keys.
- Wrong Login code can be entered only 3 times. Key learning with wrong Login Code not erase original key and after this car will start with original key. If after 3 unsuccessful key learning attempts you will see "fault" on trip display, you must wait 15 minutes with ignition "ON" to try again. In this "wait period" even good Login Code will be ejected like incorrect.

VAG immobilizer types and description

VAG to year 2004 use 3 immobilizer types named IMMO1, IMMO2 and IMMO3.

- **IMMO1** is first immobilizer system used in Audi 100, A6, A4 to year 1997 and VW Golf III, Passat B4, Seat older models. On this system Login Reader by diagnostic

not work, but you can calculate immobilizer login code from immobilizer internal EEPROM file. You must remove immobilizer box from the car (white box in Audi and black box in VW), find inside internal EEPROM and read it with programmer. Now with our Login Reader program you can calculate login code. Immobilizer Emulator can be used to skip immobilizer function for these models.

- **IMMO2** immobilizer is integrated in vehicle instrument cluster. IMMO2 is used in Audi A2, A3, A4, A6 and TT from 1997-2000 and VW Passat B5, Golf IV, Beetle to year 2000, Seat and Skoda to year 2000. You can read login code by OBDII diagnostic using our Login Reader. Immobilizer Emulator can be used to skip immobilizer function for these models.
- **IMMO2** also is used in Audi A8, VW Sharan, Polo and Lupo, but on these cars immobilizer is not integrated in dash, but have separated immo box. Login Reader by diagnostic not work, you can calculate immobilizer login code from immobilizer internal EEPROM file like on IMMO1 system.
- **IMMO3** is used in Audi, VW, Seat and Skoda models from year 2001. On most cars Login Reader can read login by OBDII.

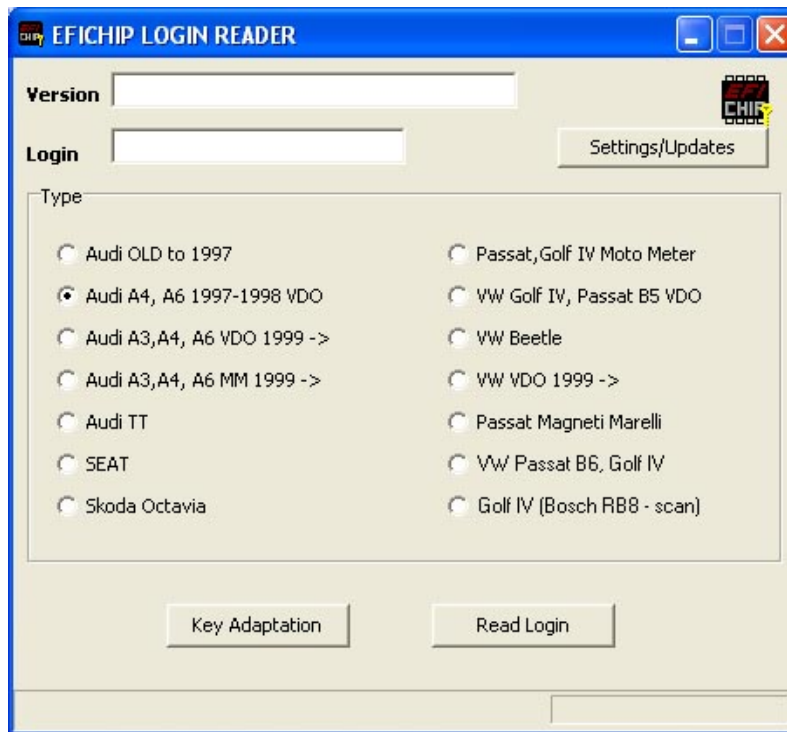
How to understand Immobilizer Indicator (on picture):

- After ignition "ON", "yellow key light" go ON for 3 seconds and after go OFF: car transponder key is accepted, you can start vehicle.
- After ignition "ON", "yellow key light" start to flash: wrong car transponder key inserted, you can't start vehicle. Need to learn this key to vehicle.
- "Yellow key light" is ON: immobilizer is in programming state, good Login Code was entered.

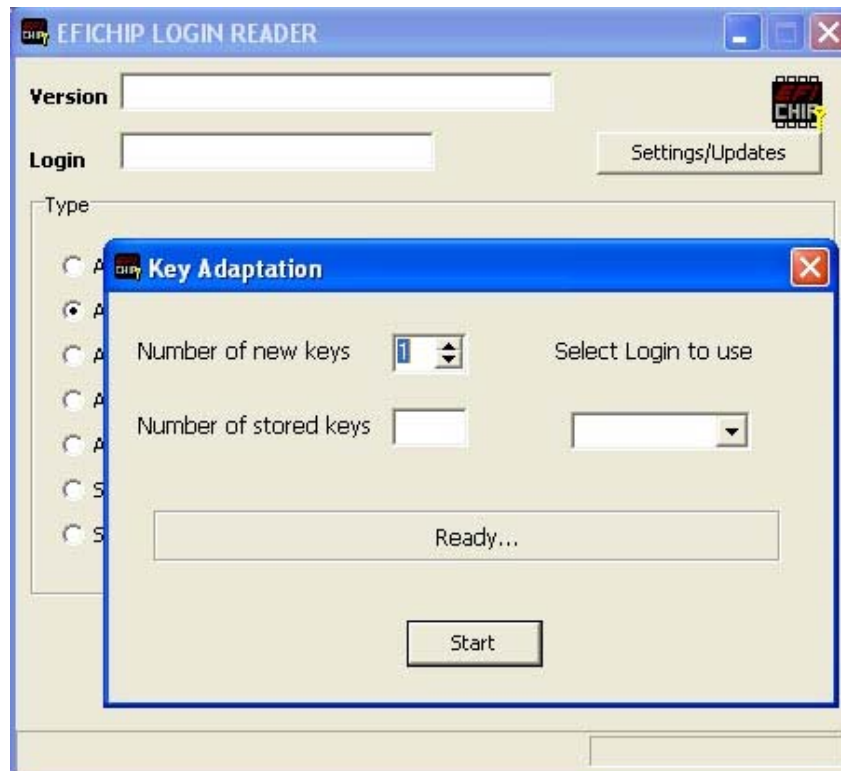


How to read Login Code and learn the key

- Connect Login Reader to PC com1 or com2 serial port and start Login Reader program.



- Connect Login Reader to car OBDII connector;
- Insert any (working or new - not important) key and run ignition "ON". Don't start vehicle;
- Select car type and push "Read Login". After few seconds you will see immobilizer version and Login Code. Not all cars and immobilizer software versions are supported! If you will see "Unknown version" you can try to select another car and read Login Code again. But on some cars is impossible read correct Login Code. If you receive 2 or 3 different Login Codes, this mean, that only one of these codes is correct, but you must select by yourself;
- If Login Code reading was successful you can start "Key Adaptation";



- Enter total number of keys to learn (including original and new keys - all original keys will be erased first). Select or enter manually Login Code (PIN code). Push "Start";
- If Login Code is correct immobilizer indicator (on picture) go ON for few seconds and OFF after key is learned or start to flash if key is incorrect (wrong transponder type or immobilizer can't detect car key).
- Wait to "Adaptation complete" and remove the key. Key is adapted. If you programming 2 or 3 keys, insert next key and run ignition ON. Yellow immobilizer indicator will illuminate for few seconds and go OFF. After last key learning immobilizer indicator will flash twice.
- Learning is completed.

Troubleshooting

- **Login Code Reader always write "Unknown version"**. This is unsupported car or immobilizer software version, check supported vehicle list on www.efichip.com
- **Login Reader read some login codes, but when I try to learn new key, always receive message "Incorrect Login Code"**. There is two possibilities:
 1. Login code is really incorrect (new immobilizer software version), please send version and exact car type and year, we will try to include this car in next update.
 2. Incorrect Login Code was entered more that 3 times, and now you must wait 15 minutes with ignition ON to try again. In this "wait period" even good Login Code will by ejected like incorrect.

- **Adaptation was completed, but immobilizer indicator flash.** Wrong transponder type or immobilizer can't detect car key. Check immobilizer system with any VAG program. Login code reader have incorporated K-line diagnostic adapter and you don't need additional interface for VW-Audi diagnostic. For diagnostic you can use freeware VAG program ([download](#)).