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VAG OBD

HELPER MANUAL



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Product Description:

VAG OBD Helper is a software tool commonly used for Volkswagen-Audi Group (VAG) vehicles to assist in the process of key programming, ECU diagnostics, and other vehicle-specific tasks. It helps generate and retrieve necessary data like the Component Protection (CP) file or the pre-coding data for key programming. This software works in conjunction with OBD (On-Board Diagnostics) tools and is often used by automotive locksmiths and technicians for faster and more efficient work with VAG cars, including VW, Audi, Skoda, and SEAT models.

Here are its key features and uses:

1. Key Programming Assistance

- » The software helps generate the required security data for key programming. It retrieves data like the CS (Component Security), PIN, and MAC, which are needed to program new keys.
- » This is especially useful for locksmiths and technicians who need to quickly program or replace car keys.

2. Component Protection Bypass

- » Many VAG vehicles are equipped with Component Protection, a security measure that restricts the installation of certain parts without authorized tools. VAG OBD Helper assists in retrieving data that can help remove or bypass this protection.

3. Integration with OBD Tools

- » It works with popular OBD tools like VVDI2, Lonsdor, and Autel to streamline the key programming process.



- The software provides the necessary pre-coding files that these tools need to successfully code a new key to a vehicle.

4. Supported Vehicles

- The software supports a wide range of models from VW, Audi, SEAT, and Skoda, covering many different years and configurations, from older models to newer, highly secure systems.

5. ECU and IMMO Data Extraction

- It assists in retrieving important immobilizer (IMMO) data and ECU information needed for advanced diagnostics or replacement of ECUs and modules.

6. Offline Operation

- Unlike some other tools that require an active internet connection, VAG OBD Helper allows for offline data retrieval, making it easier to work in various environments.

How to use VAG OBD Helper with an OBD Tool:

To use VAG OBD Helper with a specific OBD tool and program keys or retrieve data, here's a step-by-step guide, especially for tools like VVDI2, Lonsdor, or Autel:

Steps to Use VAG OBD Helper with an OBD Tool:

1. Prepare Your Equipment:

- **OBD Tool:** Ensure your tool (e.g., VVDI2, Lonsdor, Autel) is updated with the latest firmware.
- **VAG OBD Helper Software:** Install the software on your laptop or diagnostic tool.
- **OBD Connector:** You'll need an OBD-II cable to connect your tool to the vehicle.



2. Connect to the Vehicle:

- Plug the OBD-II cable into the car's diagnostic port (usually located under the dashboard).
- Connect the other end to your OBD tool (e.g., VVDI2).
- Turn on the car's ignition without starting the engine.

3. Launch the VAG OBD Helper Software:

- Open VAG OBD Helper on your laptop or directly through the diagnostic tool if it's compatible.
- Select the vehicle brand and model (VW, Audi, Skoda, or SEAT).

4. Read Security Data:

- The software will prompt you to read and retrieve security data such as CS (Component Security), PIN, and MAC.
- This is required to generate the necessary files for key programming.
- Follow the on-screen instructions to allow the software to extract the data from the car's ECU or immobilizer system.

5. Generate Pre-Coding Files:

- Once the data is retrieved, the software will generate a file containing the necessary information for pre-coding the key (e.g., VIN, PIN, CS).
- Save this file to your laptop or OBD tool.

6. Upload the Data to Your OBD Tool:

- On your OBD tool (like VVDI2 or Autel), load the pre-coding file that VAG OBD Helper generated.
- The OBD tool will use this file to complete the key programming process.



7. Program the New Key:

- Insert the new blank key into the vehicle's ignition.
- Follow your OBD tool's key programming procedure to program the new key using the security data provided by VAG OBD Helper.

8. Test the New Key:

- Once programmed, remove the OBD tool and test the new key.
- The key should be able to start the car and, in the case of remote keys, operate the central locking system.

Compatibility with Specific Models:

- Volkswagen: Works on models like Golf, Passat, Jetta, and Touareg.
- Audi: Supports models like A3, A4, A6, and Q7.
- Skoda & SEAT: Includes Fabia, Octavia, Leon, and Ibiza models.



Using VAG OBD Helper with VVDI2 to program keys

Step	Description	VVDI2 Actions
1. Prepare Equipment	Ensure VVDI2 is updated to the latest firmware. Install VAG OBD Helper on your laptop.	Update VVDI2 firmware via the Xhorse platform.
2. Connect to Vehicle	Plug the OBD-II cable into the car's diagnostic port and connect it to the VVDI2 tool. Turn on ignition.	Connect VVDI2 via the OBD-II port under the dashboard.
3. Launch VAG OBD Helper	Open VAG OBD Helper on your laptop. Select your vehicle model (e.g., VW, Audi, Skoda, SEAT).	Launch VAG OBD Helper software.
4. Read Security Data	Use VAG OBD Helper to retrieve PIN, CS, and MAC needed for key programming.	Follow on-screen prompts to extract the data.
5. Generate Pre-Coding File	VAG OBD Helper generates a pre-coding file with vehicle data (PIN, VIN, CS, MAC). Save this file.	Save the pre-coding file to your laptop.
6. Upload Data to VVDI2	Load the pre-coding file into VVDI2 software to prepare for key programming.	In the VVDI2 software, select the "Load Data" option.
7. Program New Key	Insert a blank key into the ignition. Use VVDI2 to complete the key programming process.	In VVDI2, navigate to "Key Programming" and follow the steps.
8. Test the Key	Test the newly programmed key to ensure it starts the car and controls the locking system.	Test ignition and remote locking/unlocking functions.

Notes for VVDI2:

Supported Vehicles: Volkswagen (Golf, Passat), Audi (A3, A4), Skoda (Fabia, Octavia), SEAT (Leon, Ibiza).

Pre-Coding: The VAG OBD Helper generates pre-coding files which VVDI2 uses to program keys, especially on newer MQB platforms.

Additional Functions: VVDI2 can also handle other tasks like ECU adaptation, immobilizer bypass, and more advanced diagnostics.



Here's how to identify the IMMO system in your vehicle when using VVDI2 and how to navigate VVDI2 to handle different immobilizer systems:

Identifying the IMMO System in Your Car

Volkswagen Group (VW, Audi, Skoda, SEAT) vehicles use different immobilizer systems depending on the model and year. Knowing which system your vehicle uses is crucial for key programming.

Here's how to identify it:

By Vehicle Model and Year:

- **IMMO2 (Immobilizer 2):** Common in VW Group cars from 1998 to 2002.
- **IMMO3 (Immobilizer 3):** Found in cars from 2002 to around 2008.
- **IMMO4 (Immobilizer 4):** Present in vehicles from 2008 to around 2014.
- **IMMO5 and MQB Platform:** Found in cars made after 2014, especially in newer MQB platform vehicles (like VW Golf MK7, Audi A3, Skoda Octavia).

Check via VVDI2:

- Connect VVDI2 to your vehicle via OBD-II.
- Open VVDI2 Software and go to the "VAG Immobilizer" or "Key Learning" section.
- VVDI2 will automatically detect the IMMO system of the car when connected and show the system on the screen.
- This step will confirm if you are dealing with IMMO2, IMMO3, IMMO4, IMMO5, or the MQB platform.

Navigating VVDI2 for Different IMMO Systems

- Each immobilizer system has different programming methods.



Here's how to navigate VVDI2 based on the detected IMMO system:

1. IMMO2 (1998-2002) and IMMO3 (2002-2008):

- In VVDI2, select "VAG Immobilizer" from the main menu.
- Choose the vehicle type and select IMMO2 or IMMO3 from the system list.
- Insert the blank key into the ignition and follow the instructions on the VVDI2 screen.
- VVDI2 will retrieve the PIN and automatically program the new key.
- After completion, test the key by starting the car.

2. IMMO4 (2008-2014):

- Go to "VAG Immobilizer" and select IMMO4.
- The process is more secure than IMMO3, so VVDI2 may require pre-coding files from VAG OBD Helper.
- Retrieve the PIN, CS, and other security data via VAG OBD Helper and upload it into VVDI2.
- Insert the blank key and follow VVDI2's prompts to program it.
- Test the key after programming.

3. IMMO5 and MQB Platform (2014-Present):

- In VVDI2, select the "MQB Immobilizer" option.
- IMMO5 and MQB systems are very secure and often require advanced programming. You will need the pre-coding file generated by VAG OBD Helper.
- Use VAG OBD Helper to retrieve the CS, PIN, and MAC and upload it into VVDI2.
- VVDI2 will write the data to the key and complete the programming process.
- Test the new key in the ignition and for remote functions.