Description Key Less Prog

Introduction document for the device and for the software. You will get more information after purchase.

The description of capabilities of the software:

The purpose of the device

Using this device, you can program electronic keys for Mercedes vehicles, check validity of information in the memory dumps from electronic units and edit them. The device facilitates seeking of malfunction of the authorization system to get access to FSB3.

<u>Current capabilities of the basic device and the program of calculating dumps</u>

- Testing of loaded memory dumps to check compatibility according to HASH mathematics, availability of blocking, operating state, and inauthenticity of total sums.
- The function of generating dumps with automatic saving in different combinations, capability of making new memory dumps for some of the units .
- The capability of "eeprom" recovery of the original key on the Motorolla processor) if there is a kind of damage without physical intruding the units of the vehicle.
 - Displaying of the actual information with the capability of editing it from the program fields.
 - Displaying of the action log with the capability of saving it in Word-document.
 - Reading off of the "eeprom" memory from the electronic locks EZS via K-line, CAN or infrared portal EZS (IR).
 - Reading/recording of coding data of the EZS units.
 - Reading off of the operating state, block flags and signs of using keys.

- Reading off of the "eeprom" memory from the unit of the electronic selector of the vehicles W220, W230, W215.
- The complete reading off/recording of "eeprom" of the AAM and DAS (W163) units via K-line. Generation of the key dumps via the data that has been read off.
- Reading / removing/recording of the steering lock (ESL) without the necessity of removing it from the vehicle, testing of its mechanical disrepair.
- Reading / recording "eeprom" and the flash units ECU (*developing*)
- Emulation of the ESL unit (anyone, including NEC, except W204, W212) for the capability of checking electronic lock EZS by its absence.
- Universal calculator of the key dumps allows checking the state of the "eeprom" key data and calculating the necessary amount of the program startup.
- Calculator of the run double in EZS.
- Database of standard FULL-dumps of the HC908 processors and the EZS unit for checking and recovering.
- Module construction. The capability of enlarging of functions on the level of "hardware" and the program.
- Renew of the program of the device via USB.
- Interface of the program has two languages (Russian and English).

Add-in-module of the NEC Programmer

- Testing of the state "eeprom" of the microprocessor NEC, removed from the key plate.

- Removing of the NEC processor in order to record it later in the key components via IR.
- The capability of recovering bytes of the authorization of the radio transmission in case they have been damaged earlier.
- Recording of the NEC microprocessor by the key dump with 041 or 051 type.
- Reading off and recording of 6 bytes of "eeprom" of the key microprocessor (RW bytes).
- The capability of inquiring about the current key HASH and its decoding, knowing the key password (PSW) (for example, from the EZS dump). In this case the password will be checked to prove the belonging to this key. The key recourse will be reduced by 2. The capability of checking of the key compatibility with NEC to the EZS dump, seeking disrepair at the same time.
- Supported NEC versions for operating on the Programmer board.

Without option Keyless Go

567897041 - ROM \$28 567897051 - ROM \$35 567897061 - ROM \$40 567897071 - ROM \$51 567897081 - ROM \$57 00040229 - ROM \$57

Within option Keyless Go

00028772 - ROM \$07 00032094 - ROM \$09 567912011 - ROM \$41 567912021 - ROM \$42 567912041 - ROM \$59 567912051 - ROM \$61 00032638 - ROM \$03 00040582 - ROM \$06 00043650 - ROM \$08

Add-in-module of IR-Tester

- Testing of the key state via IR-channel.
- Key recording on the basis of NEC microcontroller by the key dump 041 or 051 that has been removed from the NEC Programmer board earlier.
- Reading /Recording of 6 bytes of "eeprom" of the key microprocessor (RW bytes)
- The capability of inquiring about the current key HASH and its decoding, knowing the key password (PSW) (for example, from the EZS). In this case the password will be checked to prove the belonging to this key. The key recourse will be reduced by 2. The capability of checking of the key compatibility with NEC to the EZS dump, seeking disrepair at the same time.
- The capability of operating with pairs of keys (212, 639) that have a state (OC F4, O4 FC). Reading the password and key activation OC F4 in the state O4 FC. The data that has been read off records in the EZS, ESL (ESM), ECU units of the vehicle. The key data (the data of a pair of keys) does not change.

Add-in-module of IR-Portal

- Operating with the EZS unit via IR of the key.
- It is available at this moment to read off the EZS key data (as the alternative way of reading off via K-line). It is available to read operating state, blocking flags, signs of using keys, serial numbers and HASH.
- It is possible to make this device at home (changing of the NEC plate)

*The instruction for producing is delivered if there is a request. It is not produced and it is not sold as a set, being ready for usage.

The list of the supported electronic units

EZS

W202, W208, W210 - MC68HC05X32 - a calculator and a dumps tester, reading off of "eeprom" and the data via K-line.

W203, W463, W639 - MC68HC908AZ60 - 2 variants of the structure of "eeprom" dumps, a calculator and a dump tester, reading of "eeprom" and the data via K-line.

W220, W230 - MC68HC05X32 - a calculator and a dump tester, reading of "eeprom" and the data via K-line.

W220, W230 - MC68HC908AZ60 - 2 variants of the structure of "eeprom" dumps, a calculator and a dump tester, reading of "eeprom" and the data via K-line.

W209, W211 - MC68HC912Dx128 (112 pin) - a calculator and a dump tester, reading of "eeprom" and the data via CAN- by the direct connection with EZS (speed 83,333 KB/s, and also via ZGW, operating via OBD connector (speed 500 KB/s).

W209, W211, W215 - MC9S12Dx128 (80 pin) - a calculator and a dump tester, reading of "eeprom" and the data via CAN- by the direct connection with EZS (speed 83,333 KB/s, and also via ZGW, operating via OBD connector (speed 500 KB/s).

W164 - - MC9S12Dx128 (80 pin) - a calculator and a dump tester, reading of "eeprom" and the data via CAN- by the direct connection with EZS (speed 83,333 KB/s, and also via ZGW, operating via OBD connector (speed 500 KB/s).

W163 - AAM - MC68HC705X32, EAM - MC68HC705X32/93C56 - a calculator and a dumps tester, reading of "eeprom" and the data via K-line.

W906, W639 - MC9S12DT256 - a calculator and a dump tester, reading of "eeprom" and the data via CAN- by the direct connection with EZS (speed 83,333 KB/s, and also operating via OBD connector (speed 500 KB/s).

ECU

UDO 24C02 (static synchronization or renew only).

UDO CDI 24C04 (renew only). Bosch ME2.x 95P08 (a tester and a calculator of keys, renew only). Bosch CDI 95P08 (a tester and a calculator of keys, renew only). Bosch MC68HC11E9 (2 variants of operating static synchronization or renew only). Temic CDI 95080 (a tester and a calculator of keys). Siemens SIM4LE Flash 29F400 M111 (decrypt, a tester and a calculator of keys, renew only). Siemens SIM4LKE Flash 29F800 M271 (a tester and a calculator of keys, renew only). Bosch CDI 95160, 95320 (a tester and a calculator of keys, renew only). Bosch ME9.7 (renew only). ESL Within microprocessor MC68HC705E6 . Reading , removing and recording. Within microprocessor NEC. Reading and testing of the state only. ESM (W220, W230) Reading of "eeprom" 93C56 and MCU via K-line, testing of the compatibility and the state . KEY type 011, 021, 031, 041, 051 (generation of the "eeprom" dumps). The capability of calculating the key dump "eeprom" from the

very beginning with any response resource. The HASH testing

of the key in the lock and adjustment of the created key dump to this resource (the function of recovery of the original key). The capability of producing both keys unauthorized (the state of a new key, never used in the EZS) and authorized (the active state).

Outlook of the basis device



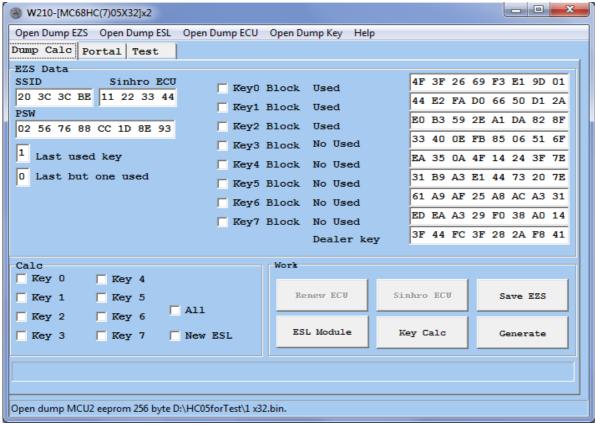
Cable Kit (sold separately).



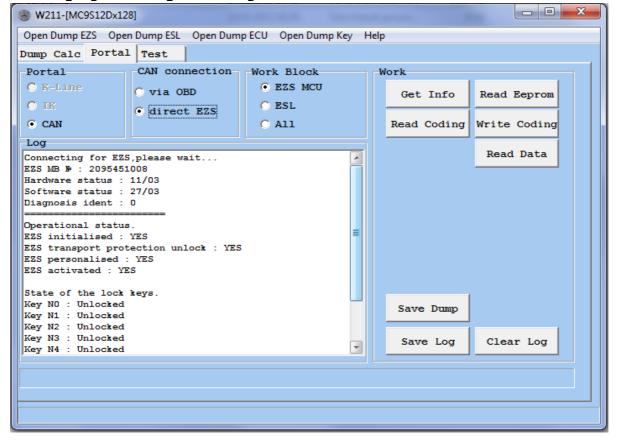
The main window of the program



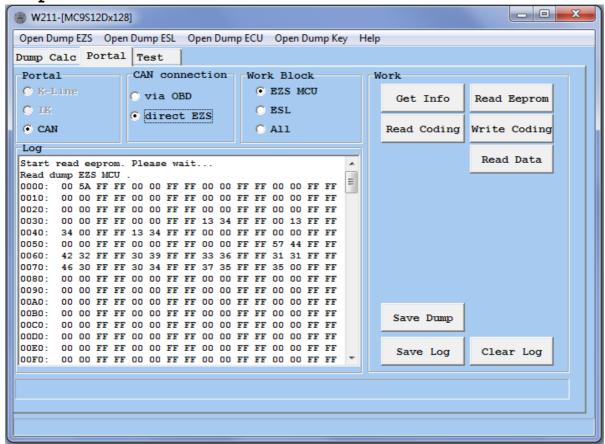
The window of calculator: The first page of the calculating and displaying of the information.



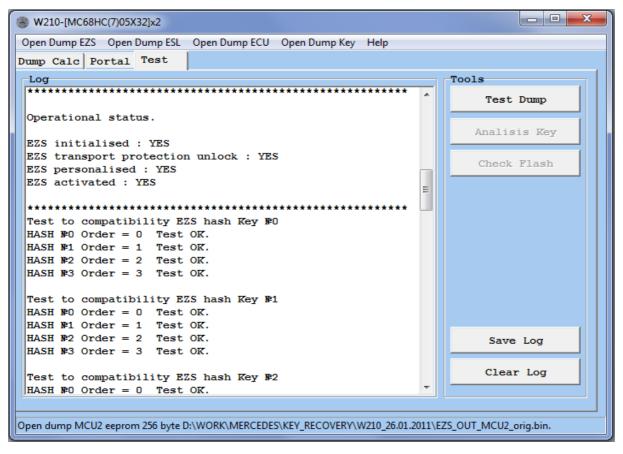
The page of operating with EZS via CAN



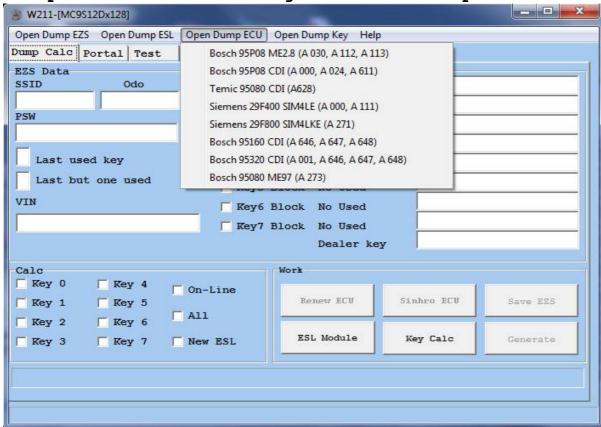
"Eeprom" of the EZS



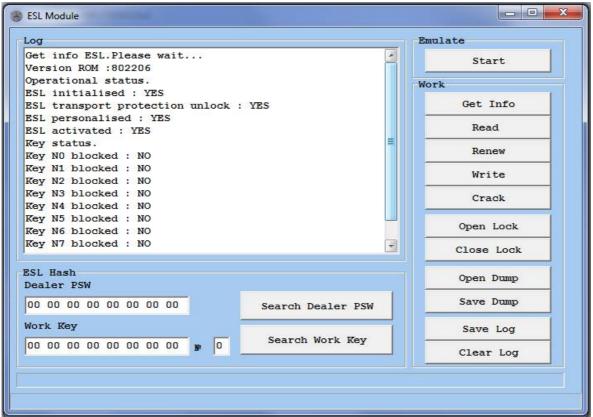
Inactive states and errors in "eeprom" are highlighted in red. tests and log operating



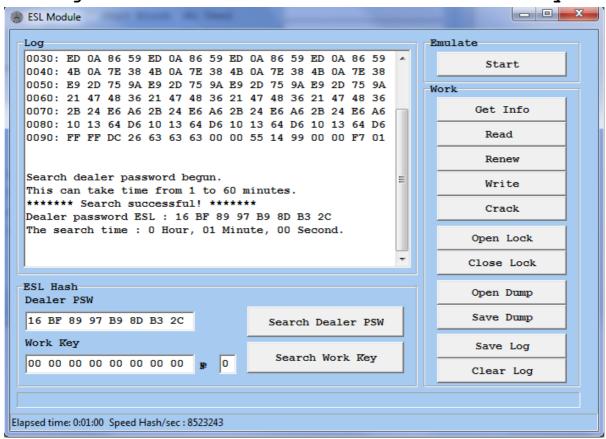
Example of a menu: Loading of the ECU dumps



The window of the operating module with ESL (locking of the steering wheel)



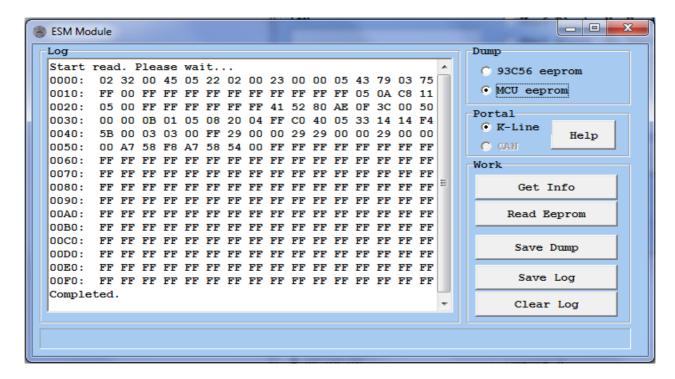
Finding a dealer access code has been successfully completed.



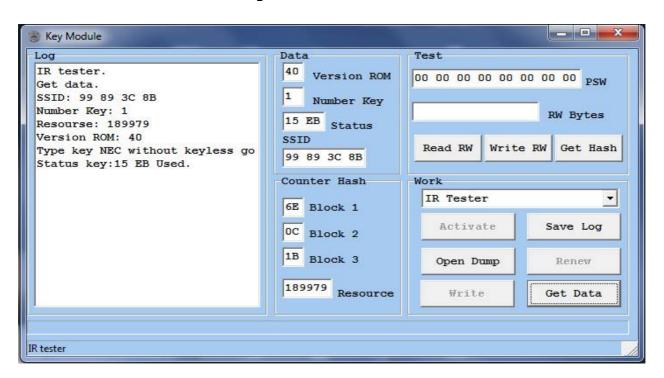
The window of the key calculator



The window of the operating module with ESM



The window of NEC Programmer and IR-Tester



The window of the operating module with the AAM/EAM units

