

EWS4 emulator

BN83

for CAS_BUS

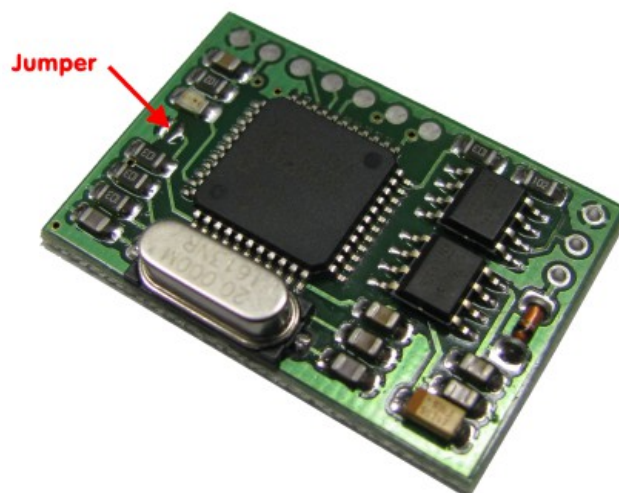
Description:

Device emulates EWS4/CAS for drive authorization where direct connection between CAS/EWS and ECU is used for authorization purposes (CAS_BUS or EWS_DDE / EWS_DME line) and EWS4 protocol is active (all Tricore based ECU's). All E-series cars has this line. In case of E83 it is only possible communication line for drive authorization between EWS4.4 (and up) and ECU (there is no direct CAN communication between EWS and ECU) All other E6x models use this line for spare communication (main communication is via CAN, it is much faster).

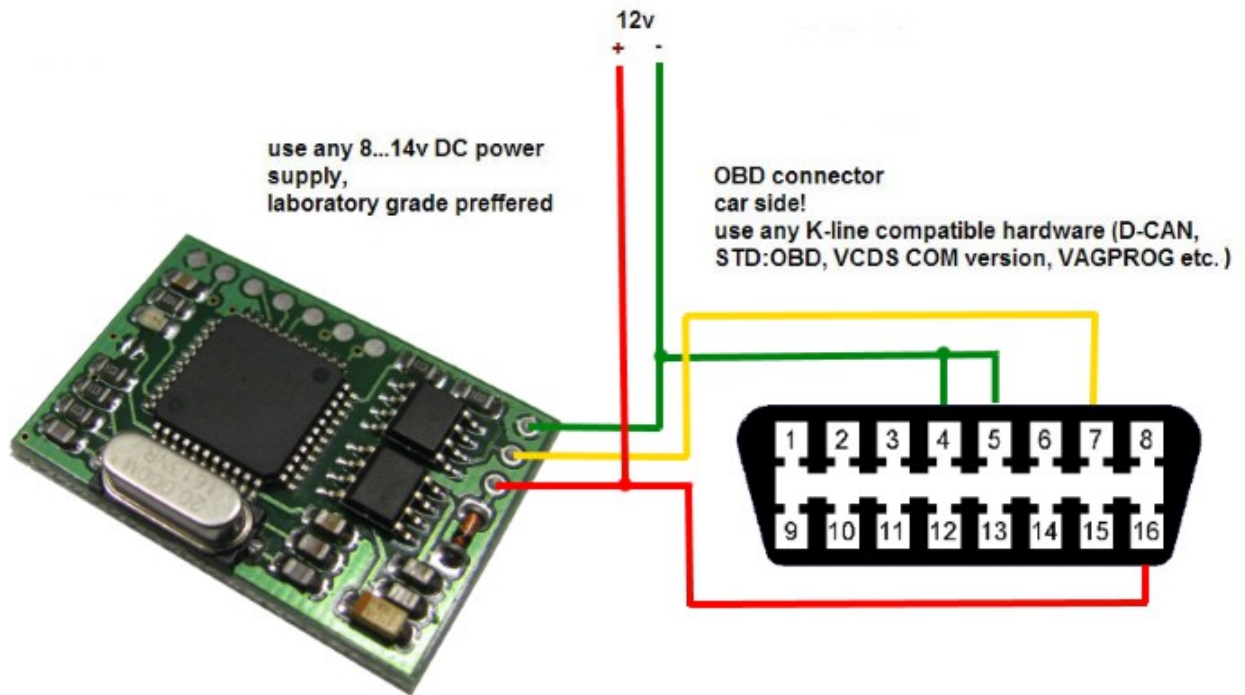
Note:

ECU accepts first CAS/EWS response, no matter it is received via CAS_BUS or CAN. If you use emulator on any regular E6x car, you must disable EWS4 functionality in CAS (for example you can switch CAS back to EWS3 instead of EWS4).

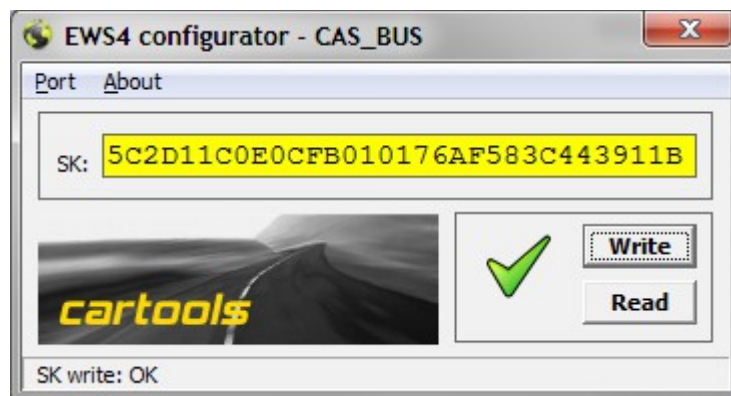
How to configure:



At first place jumper (solder joint), attach any K-line compatible adapter and power supply, choose COM port (valid values are from 1 to 4), store desired SK. Remove solder joint. Device is ready to use now, no additional alignment necessary.



Configurator:



There is a LED on emulator board:

- Long blink (0.4s): valid message received (normal communication)
- Four short blinks: invalid message or wrong mode is set by jumper.

ECU initiates communication with CAS/EWS periodically (each 5 seconds). If response is wrong (no response or wrong SK used) requests are sent more often.

You can check ECU status (authorized or not) via Tool32, job: **STATUS_EWS**

