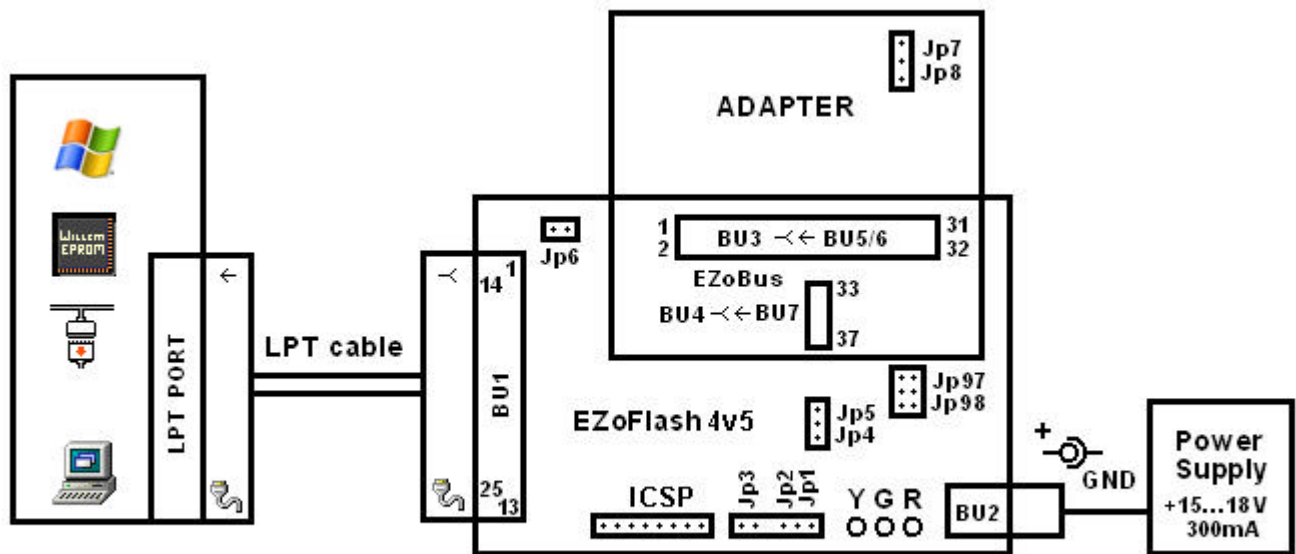


EZoFlash4v5 installation guide.



Programmer connection diagram

1. Power supply output voltage +15...+18V, max current 300mA or more.
Be sure , power supply connector internal positiv !
Recommended power supply with stabilised output voltage.
Check filtered non-stabilised power supply output voltage drop, load shortly power supply connector with resistor about 150 Ohm (load 100-120mA). Output voltage should remain in recommended voltage range. Expect EPROM adapters use, check power supply voltage with resistor about 47 Ohm (load 300-350mA).
DC Power Jack and Plug are available with internal diameter 2.1mm or 2.5mm. Adapt both connectors for the same size.
Be sure on power supply isolated output voltage, no static voltage between power supply connector and computer grounds.
2. Programmer EZoFlash+ default jumpers are Jp1, Jp3, Jp5, Jp6, Jp98.
Jumpers Jp1..Jp3 allow change programmer logic and target chip voltages in range +2.9.. +5V. Jumper set Jp1 and Jp3 supply +5V for programmer logic and target chip.
Change jumpers Jp1, Jp3 (+5V) to Jp2 (programmer +4.25V, target chip +3.5V) for low voltage (2.7-3.6V) target memory chip.
Change jumpers Jp1, Jp3 (+5V) to Jp2, Jp3 (+4.25V) for FWH/LPC adapters.
Remove all jumpers Jp1..Jp3 (programmer +3.5V, target chip +2.9V) for low voltage (2.7-3.6V) target SPI Flash chip.
Remove jumper Jp6 for programming of 5V (supply voltage 4.5-5.5V) serial EEPROM and PIC.
Change jumper Jp5 (A18) to Jp4 (RST/Vpp) for BU3 based adapters only where Vpp or RST required , read settings in adapters page.
Change jumper Jp98 to Jp97 to use old Willem software 0.97xx and utilities.
3. Required adapter for target chip find in EZoFlash adapters web page. <http://www.ezoflash.com/adapters.htm>
Details and settings find on selected adapter page.
Corresponding memory chip adapter can be found in chip database.
http://www.ezoflash.com/chip_database.php
Verified chips, used adapters and settings, test results are summarized in chip_test file.
http://www.ezoflash.com/downloads/chip_test.zip
Full designed board list available http://www.ezoflash.com/downloads/adapter_list.zip
Common jumpers on adapters – Jp7 (Vpp=Vcc), Jp8 (Vpp=+12V)
Extra adapter – voltage converter (dc2dc_a4) is used with EPROM adapters to have higher programming voltages (Vcc=+5.7V , +6.2V ; Vpp= +12.5V...+13.2V, +21V, +25V)

Crossadapter prot_a1 is used with 8-bit flash memory adapters to provide sector lock/unlock in high voltage autoselect mode.

4. Printer LPT extension cable is used to connect programmer and PC. Cable has 2 connectors (male and female), wired 1:1. Shorter cable is recommended, but no more than 1.8m. Cable wires should be shielded, shield connected to both connectors housing. Long cable, bad quality and without shield may cause random errors in data transfer.
5. Willem software supports programmer connected to standard LPT1, LPT2 or LPT3 port.
Set selected in programmer software settings "Printer Port"
Data transfer generally works on default LPT port settings. Check parallel port settings in PC BIOS, sometimes change from ECP mode to EPP or Normal required.
Laptops with parallel port converters, PC with specific LPT port address and USB/LPT converters are not supported.
Utilities are LPT1 supported only.
6. EZoFlash+ programmer works with Willem group programmer software in all main 32bit PC OS - Windows 98SE, XP, 2000, Vista, Windows7. 64bit version of Windows not supported.
Recommended latest software version 0.98d12c3.
<http://www.ezoflash.com/downloads/software/098d12c3.zip>
Download package with files EpromM51_98D12C3.exe and io.dll, unzip it and place files in the target directory.
Create program shortcut in Desktop.
Old version downloads are available in russian forum topic
<http://www.ezoflash.com/forum/viewtopic.php?f=4&t=2155>
Click on program shortcut, programmer software window is launched.
Software versions ICProg, WinPic, WinPic800 can be used for chip programming in serial mode.
7. Utility 29C0x0.exe <http://www.ezoflash.com/downloads/software/29C0x0.zip> read boot block lockout on Atmel and Winbond small sector chips. Winbond chips boot block lockout can be enabled/disabled.
Utility hvasm.exe <http://www.ezoflash.com/downloads/software/hvasm.zip> allow 8 bit flash memory sector lock/unlock in high voltage autoselect mode.
Utility 28FxxxJx.exe <http://www.ezoflash.com/downloads/software/28FxxxJx.zip> allow flash memory 28FxxxJx sector lock/unlock.
Utility extID_erase16.exe http://www.ezoflash.com/downloads/software/extID_erase16.zip allow read flash memory extended 3byte ID, erase high density memory with adapter tsop48d3.
More utilities are available, details and download find in forum topics.
8. Installing sequence.
 - Connect LPT cable to PC and programmer.
 - Run Willem software.
 - Connect power supply to programmer. Programmer green LED flash only.
 - Run Willem SW command Help/Test Hardware. Expect reply "Hardware present"
 - Insert adapter with target memory chip.
 - Run Get ID/Read/Erase/Blank check/Program.
Command in progress – green LED flash (Vcc on), yellow LED flash (Vpp on).
 - Command finished, programmer green LED flash only. Remove adapter or replace target memory chip.Powered programmer, don't connect and disconnect LPT cable.
Willem SW not launched, don't use or install adapter with target memory chip. All LED's can flash on powered and connected programmer without software, target chip can be damaged !!
Command in progress, red or yellow LED flash, don't remove or install adapter with target memory chip.
9. Share your experience and problems in EZoFlash english and russian forums.
<http://www.ezoflash.com/forum/index.php>