

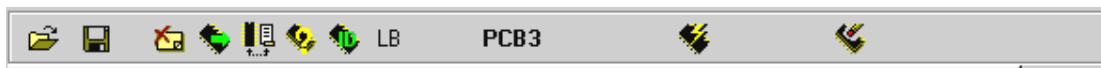
Universal Willem EPROM Programmer

Quick Start Guide

V1.1

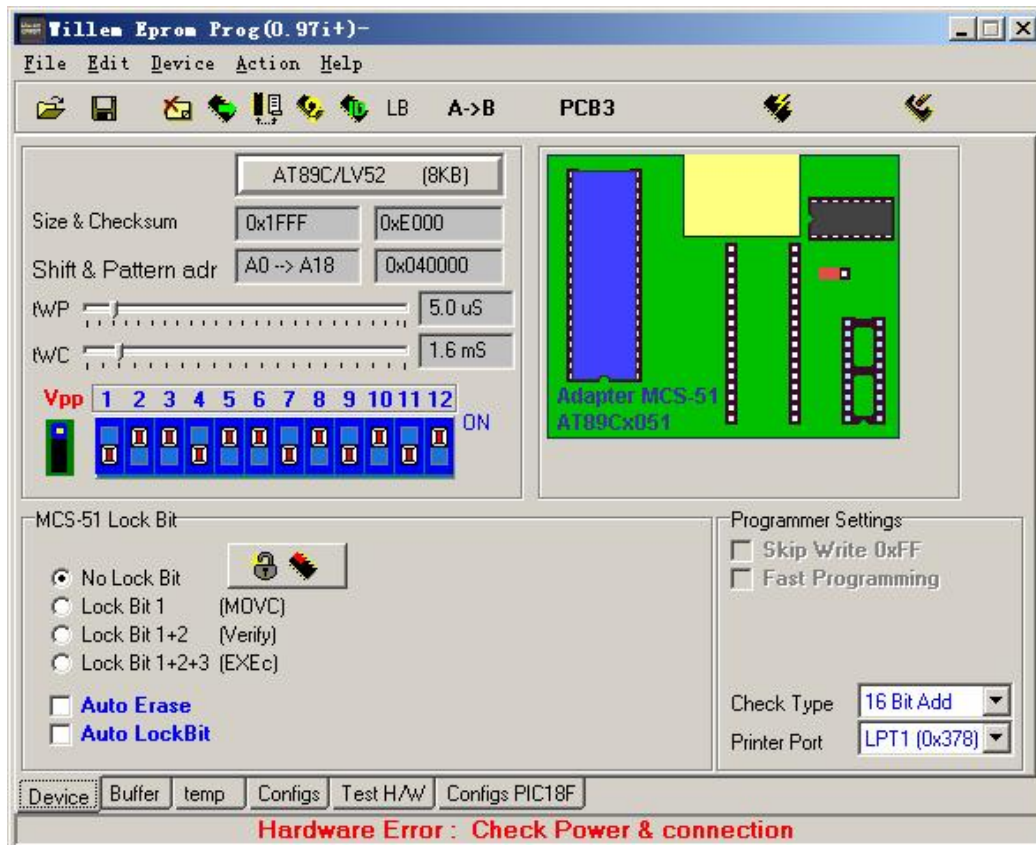
1. Installation

- 1.1 Turn off the PC
- 1.2 Connect the DB25 parallel cable **Male** connector to PC's printer port
- 1.3 Connect the DB25 parallel cable **Female** connect to Universal Willem EPROM Programmer
- 1.4 Plug in the USB cable to the PC USB port
- 1.5 Connect the USB Cable to the Universal Willem EPROM Programmer – **the Green LED should light up**
- 1.6 Turn on the PC
- 1.7 Download the parallel port IO driver from-- www.driverlinx.com/ftp/unsupported/port95nt.exe
- 1.8 Install the drivers then restart your PC, run the utility and playaround with it a bit to get the DLL and SYS file installed in the system and start a service.
- 1.9 Copy the programmer software **97g.zip** from Floppy Disk into the Hard Disk
- 1.10 Unzip the file 97g.zip, all unzipped files should put in the same directory/folder
- 1.11 Double click the **EpromM51** icon to start the program, then check the programmer type, change it to **PCB3** if it shows **Willem**.

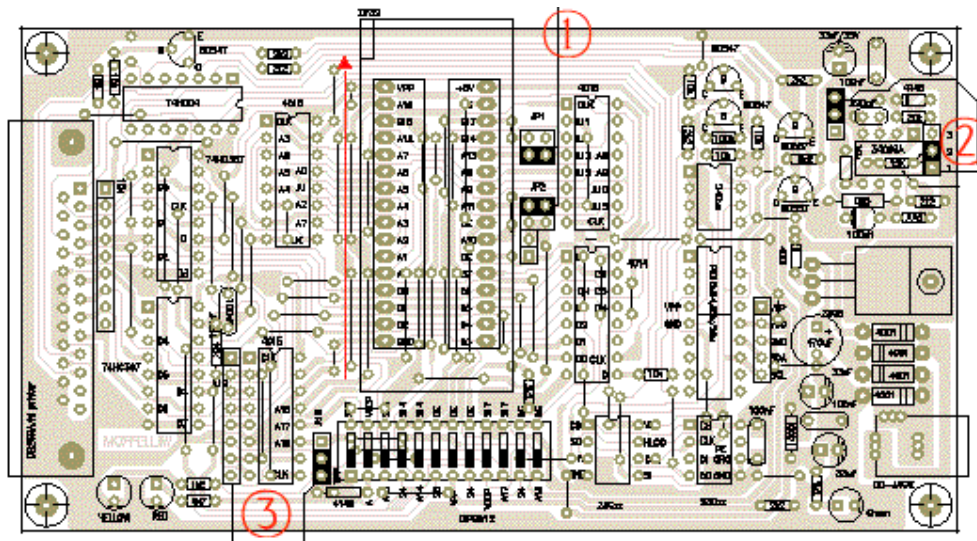


- 1.10 Select Help from the main, then click Test Hardware. It should shows

Hardware Present in the status bar, otherwise please **Check Power & connection**



2. Jumper Setting



The Jumpers are divided into 3 Groups

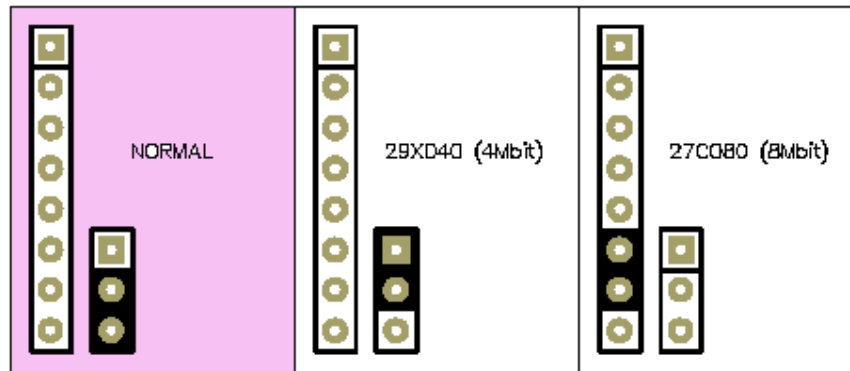
2.1 **Group 1** - For selecting different types of EPROM, EEPROM and Flash EPROM

NORMAL	2732	2716	2816	28F001	AT29C256
JP1	JP1	JP1	JP1	JP1	JP1
JP2	JP2	JP2	JP2	JP2	JP2

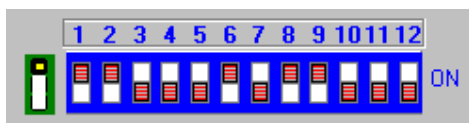
2.2 **Group 2** – For selecting 27xxx type EPROM programming voltage

normal (12.5V)	21V	25V	15V

2.3 **Group 3** – Only for 4M or 8M memory chip



Once completed the Jumper setting, please follow the program instruction/hence to config the DIP switch setting before programming any chip



3. Devices supported



EPROM	27C64, 27C128, 27C256, 27C512, 27C010, 27C020, 27C040, 27C1001 M27C1001, M27C2001, M27C4001 27C080 (A19) , M27C801, M87C257 2716(Vpp25V), 2732, (adapter DIP24) 2764, 27128, 27256, 27512, 27010, Vpp12.5V (21Vpp Modify Circuit)
EEPROM	28C65, 28C64, 28C128, 28C256, 28C512, 28C010, 28C020, 28C040 M28C16A/17A (DIP28) (Adapter or Jumper) 28C16, XLS2816 (DIP24)
FLASH Memory	28F64, 28F128, 28F256, 28F512, 28F010, 28F020 MX26C1000, MX26C2000, MX28F1000, MX28F2000 Am28F256A, Am28F512A, Am28F010A, Am28F020A (New command erase/prog.) -- intel --- i28F001BX, 28F004, 28F008, 28F016
FLASH Memory	29F64, 29F128, 29F256, 29F512, 29F010, 29F020, 29F040, 29F080 29F001, 29F002, 29F004, 29F008, 29F016, 29F032
Serial (I2C) EEPROM 24Cxx	24C02, 24C04, 24C08, 24C16, 85C72, 85C82, 85C92 --- page write ---- 24C32, 24C64, 24C128, 24C256, 24C512
Microwire EEPROM	<----- Data 8bit -----> (pin 6 ->ORG. [Schematic connect to GND]) 93C06, 93C46, 93LC46, 93C56, 93C57,



	93C66, 93C76, 93C86 (8bit), AT59C11, AT59C22, AT59C13 CAT35C102, CAT35C104, CAT35C108 (pull up pin) <-----Data 16bit-----> (pin 6 ->NC [No Connect]) 93C06A , 93C46X, 93C56, 93C66, 93C76, 93C86 (NS)
MicroChip PIC	16C84, 16F84, 16F84A , 16F627/16F628 12C508/A, 12C509/A, 12CE518, 12CE519, 16C505 16C620 16C621, 16C622, 16CE623, 16CE624, 16CE625, 16C710/711 ---ICSP connector--- 16F870, 16F871, 16F872, 16F873, 16F874, 16F876, 16F877 PIC16F873A, PIC16F874A, PIC16F876A, PIC16F877A
Atmel Flash Memory (Sector Programming) (Software Data Protection)	AT29C256, AT29C512, AT29C010A, AT29C020, AT29C040, AT29C040A W29EE512, W29EE011, W29EE012, W29C020(128), W29C040 PH29EE010(W29EE011) ASD AE29F1008 (AT29C010), AE29F2008 (AT29C020) Ver 0.992 up(DOS). Can run under win9x (disable prog. CPUIdle or CPUCool)
Atmel Flash Memory AT49Fxxx (Subset 29Fxxx) (Byte-by-Byte Programming) (Software Data Protection)	Command seq. 5555/AA, 2AAA/55, 5555/A0 AT49F512, AT49F010, AT49F020, AT49F040 SST39SF010, SST39SF020 , SST39SF040 AT49F001, AT49F002 , AT49F008A Command seq. 555/AA, 2AA/55, 555/A0 Am29F512, Am29F010, Am29F020, Am29F040, HY29F080 29F002, 29F002T, Pm29F002T
Serial Peripheral Interface (SPI) EEPROM Mode0 (0,0) AT25xxx, W95xxx	[Atmel] AT25010, 020, 040 (A8-A0) AT25080, 160, 320, 640, 128, 256 (A15-A0) [ST] W95010...256, Microchip 25x010 - 25x640 --- Byte programming 25010, 25020, 25040 --- Page programming 25C080, 25C160, 25C320, 25C640, 25C128, 25C256, 25C512 AT25HP256, AT25HP512 AT25HP1024 (24bit address) -- CAT64LCxxx (16bit DATA IN/OUT) use Socket 93Cxxx CAT64LC010, CAT64LC020, CAT64LC040
Atmel EEPROM (page prog.) (Software Data Protection)	AT28C256, AT28C010, AT28C040
Nonvolatile SRAM (DS12xx)	DS1220, DS1225Y, DS1230Y/AB, DS1245Y/AB, DS1249Y/AB
static RAM (Test RAM)	6116, 6264, 62256, 62512, 628128
EPROM winbond, SST Electrical Erase Chip	W27E512, W27E010, W27C010, W27C020, W27C040 SST27SF256, SST27SF512, SST27SF010, SST27SF020

	MX26C4000 Vcc = 3.3-3.6V SST37VF512, SST37VF010, SST37VF020, SST37VF040
Flash Memory SST, Sanyo	SST28SF040A, LE28F4001
	Adapters
Atmel AT89Cxx (MCS-51) Adapter 32pin to MCS-51	Atmel Auto Select AT89C51, 52, 55, AT89LV51, 52, 55 AT89S8252 (8K+2K), AT89S53, AT89LS8252, AT89LS53 AT89C1051, AT89C2051, AT89C4051 (20pin) AT89C51RC (32KB), AT89C55WD (6.2V) SST89C54/58 (not fully support), SI89C52 Intel Auto Select i87C51, i87C51FA, i87C51FB ----- i8xC51, i8xC52, i8xC54, i8xC58 (tWP = 100uS*25 Pulse)
Atmel AVR 8-bit RISC AT90Sxxx (Parallel programming) Adapter 32pin to MCS-51	(read, write, erase, verify, checkempty, Lockbits, Fusebits) [Flash memory/EEPROM] AT90S1200, AT90S2313 90S2333, 90S4433, 90S4414, 90S8515, 90S4434, 90S8535 reference AT90S2313 pin Function Lockbit read AT90S2313 Errata Sheet.pdf
MCS-48, MCS-41 Adapter 32pin to MCS-48/41	ROM (read/verify) P8048AH, P8049AH, P8050AH, P8042AH Vea = 12V P8041, P8042 OTP (read/verify/Program) P8748, P8749H, P8742H Vea = 18V EPROM (read/verify/Program) D8748, D8749, D8742, D8741, D8742 Vea = 18V
FLASH memory 8/16bit (Software Data Protection) Adapter (TSOP48)	Am29F400, Am29F800, 29F160, 29F320 (read, write byte mode) HY29F200, HY29F400, HY29F800, AT49F2048A, AT49F4096A, AT49F8192A
FLASH memory 8/16bit (Vpp12V) (Software Data Protection) Adapter (TSOP48)	i28F200, i28F400, i28F800, i28F160 (TSOP48) 28F001 (DIP32 or PLCC32)
EPROM 16bit (DIP40) (1-4Mbit) Adapter Eprom 16bit Eprom only	27C1024 (27C210), 27C2048 (27C2002), 27C4096 (27C4002), Schematic by Toomas Toots (read, Program byte mode by use Resister pull up Data Bus (0xFF), A0 select low or high byte)

EPROM 16bit (DIP42) (4-32Mbit) Adapter Eprom DIP42 Eprom only	M27C400(DIP40), 27C800, 27C160, 27C322 Schematic by Toomas Toots (read,Program byte mode by use Resister pull up Data Bus (0xFF), A0 select low or high byte)
FLASH memory 8/16bit (Software Data Protection) Adapter (TSOP48LV)	29LV200, 29LV400,29LV800,29LV160,29LV320 (read,write byte mode)
Firmware Hub / LPC FLASH Adapter Firmware Hub/LPC (PLCC32) (PP mode) (3.3V)	-- Firmware Hub 82802AB, 82802AC, AT49LW040, AT49LW080 SST49LF002A, SST49LF003A, SST49LF004A, SST49LF008A W49V002FA, W39V040FA -- LPC flash SST49LF020, SST49LF040 W49V002A, W39V040A
P28F002BC Adapter P28F002BC (DIP40)	BOOT BLOCK FLASH MEMORY - P28F002BC

4. Common used Flash Memory chip for PC Motherboard

IC Manufacture		Part No.	Memory Size	VPP programming voltage
	AMD	Am29F010	1M	
		Am29F002	2M	
		Am29F040	4M	
		Am28F010 (A)	1M	VPP=12.0 V
		Am28F020 (A)	2M	VPP=12.0 V
		Am28F040	4M	VPP=12.0 V
	ASD	AE29F010A	1M	
		AE29F020	2M	
		AE29F040	4M	
		AE29F1008	1M	
		AE29F2008	2M	
	Atmel	AT29C010A	1M	
		AT29C020	2M	
		AT29C040	4M	
		AT49F001	1M	
		AT49F002	2M	
		AT49F004	4M	
	CATALYST	CAT28F001BX-T/B	1M	VPP=12.0 V
		CAT28F010	1M	VPP=12.0 V
		CAT28F020	2M	VPP=12.0 V
	Intel	i28F001BX-T/B	1M	VPP=12.0 V
		i28F010	1M	VPP=12.0 V
		i28F020	2M	VPP=12.0 V
	Macronix	MX28F1000P	1M	VPP=12.0 V
		MX28F2000P/T	2M	VPP=12.0 V
		MX29F001(N)T/B	1M	
		MX29F002(N)T/B	2M	
	Mosel-Vitec	F / V29C51001T/B	1M	
		F / V29C51002T/B	2M	
	SST	PH29EE010	1M	
		PH29EE020	2M	
		PH28SF040	4M	

		PH39SF010	1M	
		PH39SF020	2M	
	SGS—THOMSON	M28F256(A)	256K	VPP=12.0 V
		M28F512	512K	VPP=12.0 V
		M28F001	1M	VPP=12.0 V
		M29F002T / NT / B	2M	
	Winbond	W29EE011	1M	
		W29C010	1M	
		W29C020	2M	
		W29C040	4M	

End