E-Blocks Installation Guide

This document will provide an overview for installing the necessary hardware and software for use with E-Blocks products.

Installation instructions - Software

Installing PPP v3
To install run PPPv3.exe, which is located at <D>:\PPPv3\PPPv3.exe and follow the instructions provided.
<D> refers to your CD drive.
By default PPPv3 is installed into:
C:\Program Files\Matrix Multimedia\Common\PPPv3\

There are four 'Features' that can be installed.
* PPP v3 core files - this is PPP v3 itself, and should be installed.
* Update ASM4PICs - This feature allows you to update ASM4PICs to use PPP v3.
* Update C4PICs   - This feature allows you to update C4PICs to use PPP v3.
* Update Flowcode   - This feature allows you to update Flowcode to use PPP v3.

The three updates will be automatically installed. Select the 'X' 'Do not install option' if you do not to update a feature.
If you need to update a product at a later date you can re-run the install and update that feature.

There is more help and information available on the CD provided at <D>:\PPPv3\readme.txt
<D> refers to your CD drive.

Installation instructions - Hardware

When you connect the Multiprogrammer to your computer, via the USB cable, the first time there will be installation routine for this 'new hardware'. For most users this will be a 'plug and play' routine where your computer will automatically recognize the hardware.

Running on Windows 2000 / ME / XP
These programs allow 'plug and play' for your new hardware. Therefore when you first connect the Multiprogrammer to your computer you will receive a pop-up screen that indicates that there is new hardware connected to the computer.
The program itself will deal with any installation of any drivers that it requires internally. Therefore you can use your Multiprogrammer immediately.

Running on Windows 98 (you will need the Windows 98 CD at hand)
When you connect the Multiprogrammer to the computer your Windows 98 program will run a 'New Hardware Wizard'.
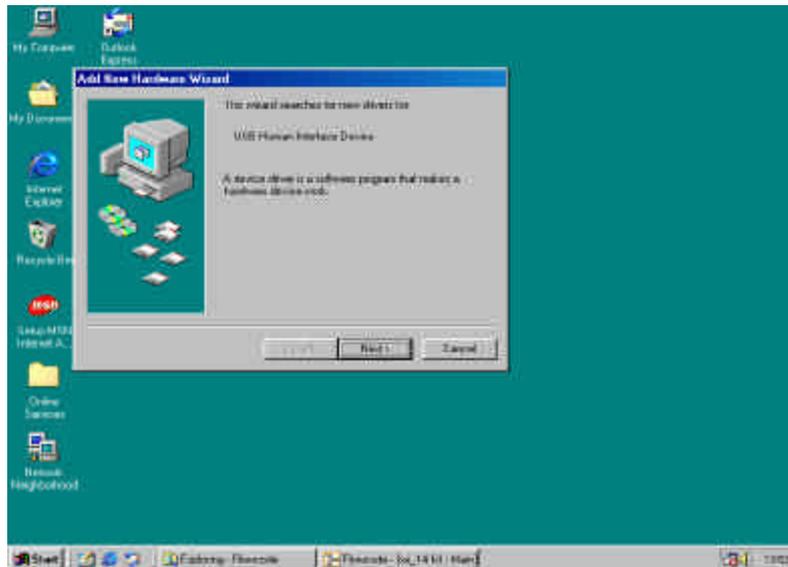
This show a screen shot of the 'Add New Hardware Wizard'

Now follow the instructions on screen:
1) Click on the 'Next >' button
2) Now you are asked to locate the drivers required, as can be seen below.
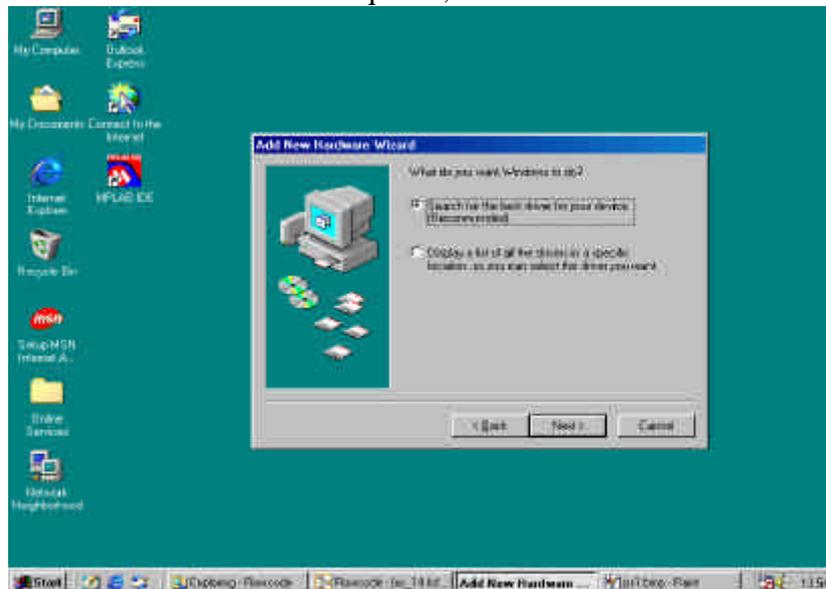
3) Highlight the 'Search for best driver for your device (Recommended)'
4) Click 'Next >'

5) You are now asked where you would like to search for the driver. Click 'Next >' here to progress
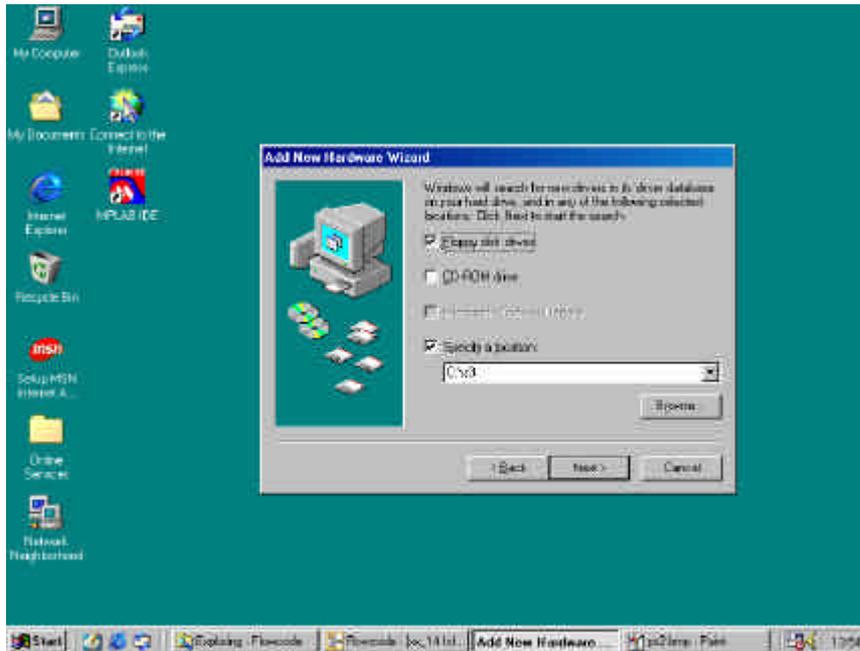
6) It is likely event that the driver is not already on the machine. Therefore you will now need to insert your Windows 98 CD. The on-screen instructions will prompt you of this, as shown below.
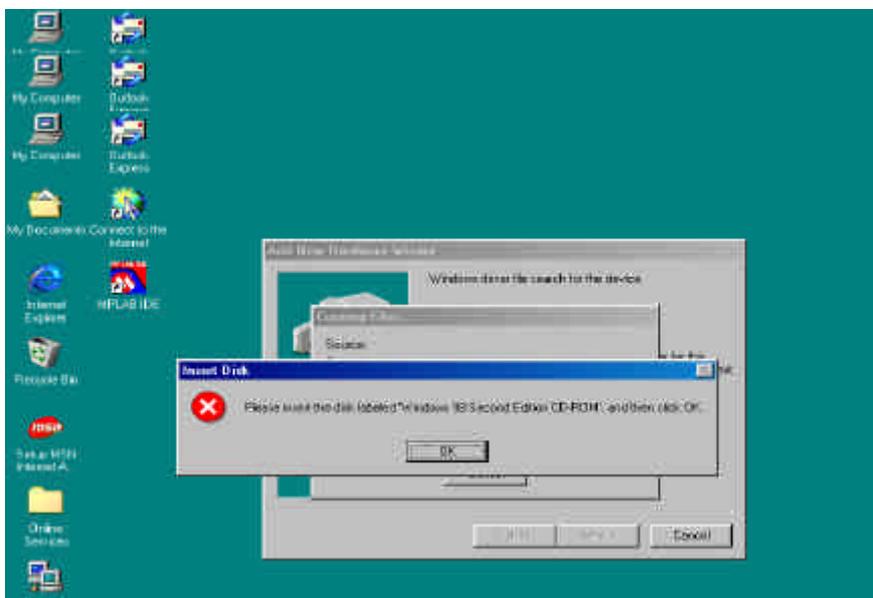
7) Insert the CD and click 'Ok'.

8) Now the appropriate drivers will be installed on your computer
9) Click 'Finish' when the on-screen instructions prompt you, as shown below.
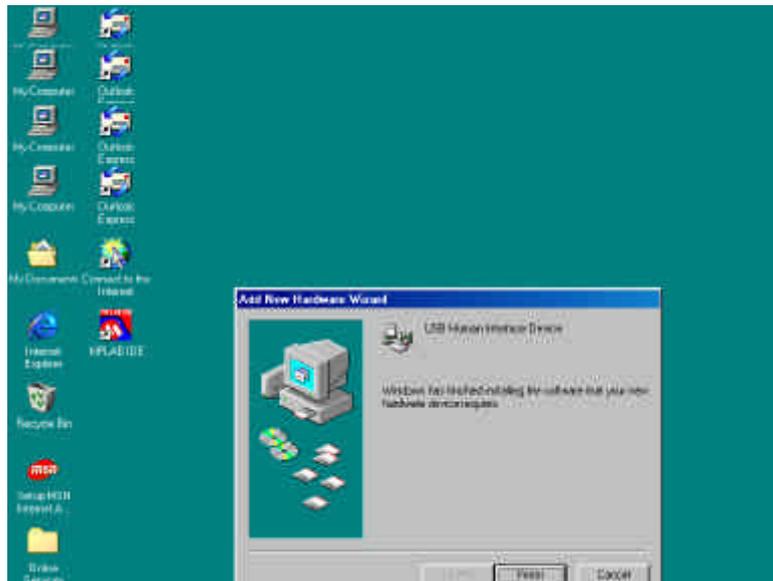
Once this has been completed the Mulitprogrammer will be ready to use.

Programming the PIC16F88 using the Multiprogrammer Board

To test the board properly a small amount of programming is necessary. For this purpose we provide a simple test routine. If you are unsure on the programming procedure there is detailed instructions in the PPPv3 help file.

This test is to make sure that the Board is fundamentally operating correctly. This test assumes you will be using the PIC16F88 shipped with the Board. The following instructions will allow you to place a program into the PIC16F88 to enable you to see the functionality of the Board.

These instructions assume that the PPPv3 software has been properly installed onto your computer: -
- o Open PPPv3
- o Click on Start menu at bottom left of screen
- o Scroll up to Program Files > Matrix Multimedia > PPPv3, then click on the PPPv3 icon to open
- o Connect a 14V power supply via either Power socket or Screw terminals
- o Connect USB cable to computer and the Board via the USB connector
- o An LED Board (EB-004-00-1) or an oscilloscope to Port B (J3)
- o Ensure that the Board settings are as follows
    - SW2 to XTAL position (to centre of Board)
    - Ensure that a 19.6608MHz crystal is inserted in the Multiprogrammer board
- o Click on "Configure PICmicro…." button in PPP
- o In the pull down menu "Select Chip" select the PIC16F88
- o Press 'Ok'
- o Click on "Open" button in PPP
- o Browse to the directory <D>:\eblocks\Multiprogrammer, open file follower.hex
- o Click on "Send to PICmicro" button in PPP
- o This will load the program into the PIC
- o Check that the LEDs are illuminating in a follower style

This will fully test the functionality of the Board with respect to being a programmer.

There is more help and information available on the PPPv3 help file.

You may wish to visit the Matrix Multimedia E-blocks web page at
www.matrixmultimedia.com/eblocks
for up-to-date information and updates software updates.