## **SuperPro In-System (In-Circuit) Programmers (ISP)**

In-System programming (ISP), also known as in circuit programming, allows programming and reprogramming of microcontrollers positioned inside the end target system.



Xeltek In-System Programming tools provide a convenient method for configuring your microcontrollers and other devices.

Using Xeltek's In-System Programming tools, you can eliminate the need for the physical removal of chips from your system and program your microcontroller, Flash memories, PLDs, and FPGAs using simple wires.

Devices are programmed in the target system or target hardware. Typically, there has to be a jumper/DIP switch which enables in-system programming and a set of serial programming connector (such as an IDC connector) which connects to an ISP programmer.

If you want to check to see if your device is supported by our Programmers, then please go to our Device Search page. Enter your device part number and see if your device is supported.

## How do I use my ISP Xeltek Adapter, ISP-HEADER01?

The PCB end of the header is placed bottom justified on the ZIP socket of the programmer. See

Fig. A.5.1.



Fig. A.5.1.

Select your in-circuit programmable chip on our software. If ISP programming mode is supported under your programmer, an ISP mark will be shown in front of your chip part number on our software. Select this device name on our software. An adapter information dialog box will appear indicating which pins will be used on your chip and from which color signal line from the ISP-HEADER01 it's associated with. For example, see Fig. A.5.2 for the adapter information dialog box for MICROCHIP (ISP)PIC10F200.

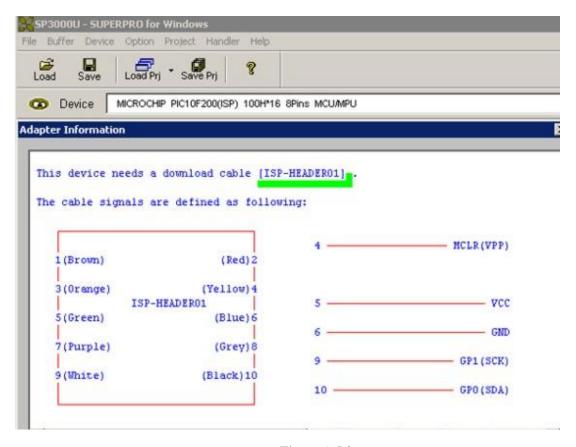


Figure A.5.2

## **ISP Header-01 Adapter Pinout Information**

The PCB end of the adapter is composed of 48 pins, dual in line layout. Only the last 5 pins of each column of pins are used so it is just a 10 pin header.

Here is the pin mapping layout:

Pin#1 --> Brown

Pin#2 --> Orange

Pin#3 --> Green

Pin#4 --> Purple

Pin#5 --> White

Pin#6 --> Black

Pin#7 --> Grey

Pin#8 --> Blue

Pin#9 --> Yellow