

SERIAL PIC PROGRAMMER

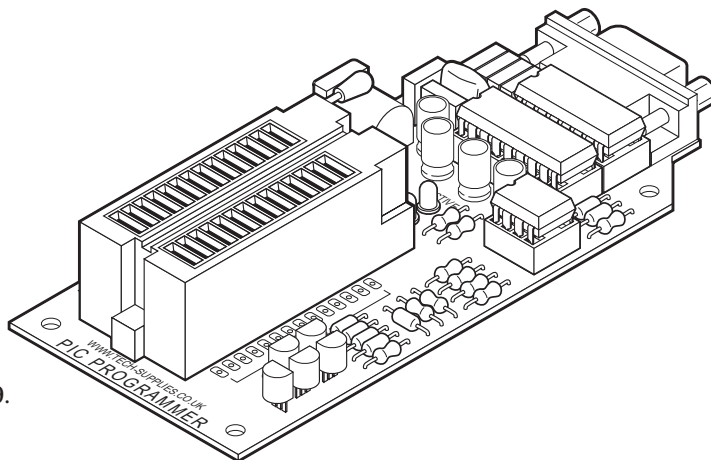
Order Codes:

BAS800	Standard PIC Programmer
BAS800C	Cased PIC Programmer

Contents:

- Product Information Sheet
- Programmer Module
- Serial Cable
- Self-adhesive Feet

Please note that a 9V DC power supply is also required (2.1mm, +ve tip connector). This is available as part PWR009. A USB adapter is required for USB connection (part USB010).



Introduction

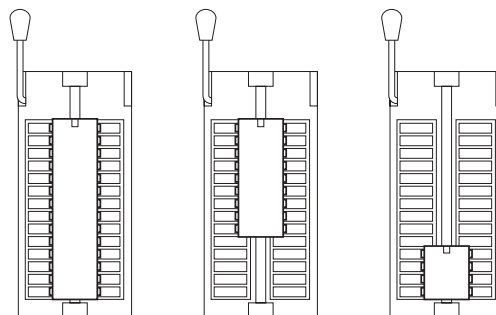
The programmer is designed to allow low-cost development programming of the Microchip PICmicro family of microcontrollers (including the popular PIC16F84A and PIC16F872 devices). The programmer supports all 8, 18 and 28 pin PICmicro 12C, 12F, 16C, 16F family microcontrollers (excluding the 16c5x family).

Software

- **Serial PIC Programmer Software (assembled hex files)**
This free software allows an assembled hex file to be downloaded to the microcontroller. It is designed for use with third party assemblers. This software is supplied as a module within the Programming Editor software (see below).
- **Programming Editor (BASIC or assembler code files)**
This free software allows assembler code or BASIC programs to be entered, assembled and programmed. It is a complete assembly code development environment. This software may also be used with the BASIC interpreter which allows programs written in PICAXE BASIC to be automatically converted into assembler code.
- **Third Party Software**
The programmer is supported by a number of third party software applications including:
 - Chip Factory software (www.rev-ed.co.uk)
 - Crocodile Technology (www.crocodile-clips.com)
 - PIC-Logicator v2 (www.economatics.co.uk/education)

Instructions for use:

1. Download and install the Programming Editor software (incorporating the Serial PIC Programmer module) from www.picaxe.co.uk
2. Connect the serial cable between the serial port of the computer and the programmer. For USB connection purchase adapter part USB010.
3. Connect a 9V power supply (order code PWR009) to the programmer.
4. Insert the microcontroller into the ZIF socket, ensuring the correct position and orientation of the device. 18 and 28 pin microcontrollers are inserted at the top of the socket, with pin1 nearest the LEDs. 8 pin microcontrollers are inserted at the bottom of the socket, with pin1 nearest the LEDs.
5. Follow the appropriate software instructions to program the device.



Programming 14 and 40 pin PICs in the Serial PIC Programmer.

The Serial PIC Programmer is primarily designed for programming 8, 18 and 28 pin microcontrollers. However it can also be adapted to program 14 and 40 pin microcontrollers.

To do this you must first purchase a 40 pin ZIF socket. We recommend the 'Aries' brand as used with the 28 pin ZIF socket. Carefully remove the 28 pin ZIF socket from the PCB (it is pushed into an IC socket) and replace it with the 40 pin socket, aligning pin 1 by the 7805 voltage regulator. The bottom 12 pins (6 on each side) of the 40 pin ZIF socket will overhang the bottom of the IC socket.

Then, whilst the Serial PIC Programmer software is running, press <CTRL><F3> and <CTRL><F7> to manually enable the 14 and 40 pin PIC options on screen (so that the correct PIC type can be selected).

When inserting the 40pin PIC, pin 1 should be in the 28 pin - pin 1 position at the top of the ZIF socket.

When inserting the 14pin PIC, pin 1 should be in the 8 pin - pin 1 position, which will be towards the middle of the 40 pin ZIF socket (position 10). Make sure this is very carefully aligned (ie there will be 3 spare pin spaces in the ZIF socket below the 14 pin PIC chip).

After inserting the chip in the correct position program as normal.