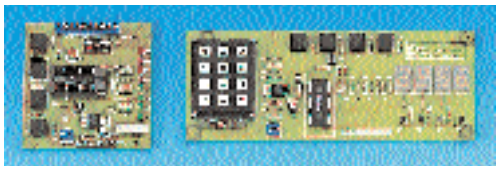
PIC Trainer Project Boards



These populated boards are ideal for prototype evaluation and for learning PIC programming. The boards have been designed so that the user can start with a working PCB to reduce development time. The project boards are supported by 'The Engineers Guide to Programming PICs' book, Order Code 183-143. PIC Trainer 1 refers to program examples with some code modifications shown in the last chapter.

PIC Trainer 1 Features push button inputs and LED outputs with provision for a ULN2803 Darlington driver.

- Suitable for 18-pin devices (16C54, 16C56, 16C71 and 16C84)
- Socket provided for a Darlington driver (ULN2803)
- 4 input switches connected to port A
- 8 LEDs connected to port B
- Suitable projects include push button switching, LED pattern generator, delay timers and logic replacement

PIC Trainer 2 Features 4 3 data entry keypad, 4 push button inputs and 4 seven segment display drivers.

- Suitable for 28-pin devices (16C55 and 16C57)
- 4 3 keypad connected to ports A and B
- 4 input switches connected to port B
- 4 7 segment LED displays connected to port B
- Suitable projects include digital clock, simple calculator, key scan and HEX to 7 segment display

Both project boards have:

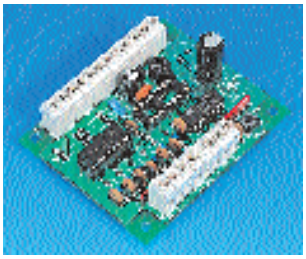
- ZIF socket for easy insertion of the PIC
- 4MHz crystal for 1µs instruction time
- 5V regulator and a diode to protect against incorrect voltage polarity

The two boards are also available in kit form, without the ZIF sockets.

SEM768

PIC Trainer 1	**Order Code 300-3942**	**each**
PIC Trainer Kit 1	**Order Code 300-3954**	**each**
PIC Trainer 2	**Order Code 300-3980**	**each**
PIC Trainer Kit 2	**Order Code 300-3991**	**each**

PIC Block MC18D



New

This populated board is a high quality PCB designed to accept any 18 pin DIL PIC or SCENIX microcontroller. Its use is not only confined to being a development board but also due to the features on board. It can also be integrated into a system as a finished product. The PIC BLOCK has an on-board power supply section, input conditioning, output drive of 500mA per channel and all connections are via PCB mounting screw terminals.

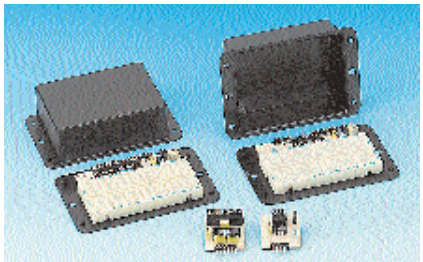
Features:

- 6 buffered and filtered inputs to cope with a range of input voltages and noisy environments. Input voltage range 3 to 24V DC
- 6 open collector digital outputs each capable of sinking 500mA
- Power source can be AC 7-20V, or DC 9-28V. A low current regulated 5V supply is available to power external circuits
- An on-board reset button is provided as is space for output pull-up resistors should they be required
- On board 4MHz resonator
- PCB construction all PTH and ground planed on both sides
- Dimensions 81 x 66 x 22mm with 4mm mounting holes

SEM888

PIC Block MC18D	**Order Code 332-7980**	**each**

PIC Panic Modules



The PANIC modules are a means to quickly produce professionally housed prototyped PIC projects. Two ready assembled modules have been developed to enable prototyping with either 18 or 28 pin 16Cxx PICs and then simply replace the cover and mount accordingly.

The modules comprise a socket for the PIC with all the I/O brought out, a small proto-block, a 78L05 regulator and a socketed 4MHz resonator.

With the addition of a COMMS module, remote data transfer is possible on either RS232 (2xTX, 2xRX pins) or RS485 (with terminating resistor).The modules plug directly into the proto-board and are fitted with screw connectors for external cable connections.

Use with a PICSTART Plus Programmer (704-740) and the PIC of your choice.

SEM691

PANIC18 module	**Order Code 113-578**	**each**
PANIC28 module	**Order Code 112-203**	**each**
COMM232	**Order Code 118-072**	**each**
COMM485	**Order Code 118-084**	**each**

apPICations

The apPICations range of kits has been designed for those interested in using the **PIC** in real world applications, without the need to outlay on development tools.

Each kit comprises all the necessary components, PCB, circuit etc., to enable the user to build the project. PIC device is also provided - ready programmed for the application plus fully commented software and design notes for further development if desired.

Each apPICation has a complexity rating - see table below.

Construction tools needed to complete the projects are wire cutters, solder, soldering iron and a battery.

SEM692

apPICation	Complexity Level	Aspect of PIC covered	Order Code	Price Each
Traffic Ligh/Zebra Crossing Simulator ...	Beginner	Timers, I/O, sequential logic	**120-042**	
Big thermometer - 2 digit 0-99 deg C.....	Beginner	A/D, LED driving, sleep/wakeup	**120-078**	
Quiz master - enables up to 4 players to compete in challenge games	Beginner	I/O, simple logic	**120-080**	
Freezer Alarm	Beginner	Interrupts, sleep/wake-up, A/D	**120-091**	
Electronic Lock.....	Beginner	Interrupt, EEPROM, sleep/wakeup, I/O	**120-108**	
Cable Identifier - identifies one of 8 wires. Both TX and RX end supplied.....	Intermediate	Timers, I/O	**120-110**	
4 channel digital volt-meter with RS232 output.....	Intermediate	A/D, USART, timers	**120-121**	
Rugby Clock receiver.	Advanced	LCD driving, signal decoding, timing, I/O	**120-133**	
Baud Rate Monitor Identify baud, parity and stop information for RS232 data	Advanced	USART, Interrupts, LCD display driving	**120-145**	

Continued

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If you prefer, you can fax your orders and data requests to us using the fax form at the back of the Farnell catalogue.