

Finally fit SK1. It can be a bit tricky to juggle all of the pins into place at once. The mounting screws and nuts should be tightened before soldering. There is no need to solder all of the pins, only those with connections.

Testing

Check the board - a good visual inspection of soldering, component identification and polarity will save a lot of time fault finding. Once it looks correct, plug in the four 'dip' switches and plug in the PIC 16C84 - The Magenta Chip comes with a test program already loaded - . Set up the switches for testing as shown in the tutorial, connect the power supply to +12 and 0 and the lights should start flashing. Most faults should be traceable on inspection or with a simple multimeter.

Component	Value	Description	Identification
R1	2k2	Resistor 0.25 W	Red Red Red Gold
R2-4, 6-18; 32-36	1k	..	Brown Black Red Gold
R5	10k	..	Brown Black Orange Gold
R19-31, 37-44	100R	..	Brown Black Brown Gold
C1, 2	10pF	Capacitor	Small brown axial tubular marked 10J fit either way
C3,9	1uF	Capacitor	1uF marked on tubular body. stripe = negative
C4,5,8	100nF	Capacitor	Yellow or white box marked 104 or 100n fit either way
C6,7	22uF	Capacitor	22uF marked on tubular body. stripe = negative
C9 - alternative	10uF	Capacitor	10uF marked on tubular body. stripe = negative
VR1,3	100k	Preset	marked 104 on underside
VR2	4k7	Preset	marked 472 on underside
D1, LA0-4 LB0-8		l.e.d.	Bar on lead is Negative
D2-4	1N4148	Diode	Small blue body - dark blue band is cathode 'k'
TR1-4	BC182,3,4	NPN Transistor	Equivalent of BC337 - marked with type number
IC1	PIC 16C84	Microcontroller	Notch identifies pin 1 end - PROGRAMMED with Magenta Test Program.
IC2	7,805	Voltage Reg.	Fit with tab to centre of board
S1-6, SA2x SB2x	SPDT	Slide switch	Metal body black slider - fit either way
SA 0-4 SB 0-7	N/O	Push Switch	Fit either way round
SA xx SB xx	8 x SPST	DIL Switches	Printed identification on body
Miscellaneous - SK1, centronics connector with fixing screws & nuts, 4 x 16 pin IC sockets, 4 x pillars and screws, SK2, Stereo 3.5 mm socket. Magenta 182 PCB. Terminal pins and strips, Crystal - 3.2768MHz			

SPARE PARTS

All of the components for the PIC tutorial are available as are the optional ZIF socket, LCD, and LED displays
All of our prices include VAT Postage and packing is £3.00 per order extra. Terms are payment with order - Cheques,* Postal Orders, Switch and most Credit Cards are Accepted.

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