TW-DIY-5134

The aim of this kit is to show how to use a 16x2 alphanumeric Liquid Crystal Display (LCD) with a PC. First we show how to connect it to the parallel port and echo and handle keyboard input. Then we show how to use the LCD to display temperature from a DS1620 Digital Thermometer/Thermostat chip and set the HI & LO triggerpoints in it. All C source code is provided.

zoom photo

Introduction to LCD's Kit - DIY

Learn how to connect a 2x16 LCD to a PC parallel port. First this kit will show you how to write keystrokes from the PC keyboard to display on the LCD. It will show you how to process this data (rotate the string left and right.) All the code is provided. Second, there is an on-board DS1620 to measure temperature. The temperature is displayed in F or C. Just press a button to display either. With the DS1620 you may set breakpoints to turn a thermostat on/off. We provide all the code to do this. Once the DS1620 is programmed it may be removed and placed in another device for temperature control. Many web references are provided.

- **PARTS LIST - KIT 134**

  Resistors (0.25W carbon)

  10K.....R1-4 4

  10K trimpot.....VR1..... 1

  Capacitors

  100nF monobloc .....C3..... 1

  10uF 25V electrolytic...C2..... 1

  100uF 16V electrolytic..C1..... 1

  Semiconductors

  1N4004.....D2..... 1

  1N4148.....D1..... 1

  78L05.....IC2 1

  +5V regulator, TO-92 package

  DS1620 .....IC1 1

  Digital Thermometer and Thermostat Liquid Crystal Display..LCD 16 x 2, no b/l .. 1

  Miscellaneous 2.5mm DC jack .....X2..... 1

  PCB mounting D25 connector.....X1..... 1

  PCB mounting, right-angle, male 5-pin SIL header.....X3..... 1

  8-pin IC socket .....for IC1..... 1

  14-pin SIL socket .....for LCD..... 1

  14-pin SIL header... ...for LCD..... 1

  Screw, 2.6mm x 18mm long2 Nut, 2.6mm . 6

  PCB, K134..... 1