Key Features

- Uses Microchip's PIC16F887, a 8-bit microcontroller, to implement various I/O control experiments.
- Contains most of the powerful functions in modern MCUs.
- Can be used for automation, motor control, device measurement, and mechanical controls...etc.
- PIC16F is popular and well-known by its economic cost
- Wide applicability
- High accessibility and reliable stability.
- Contains several peripheral devices, from basic LED to advanced capacitive sensing module
- With self-paced experiment manual
- Learn the control of PIC MCU for more conveniently and efficiently.
- Ideal for beginners of learning programming language.
- Each experimental block uses individual control switch to avoid interference if sharing pin.
- Pins of the microcontroller have been connected to the peripherals inside the trainer.
- There is no need to connect it manually.
- "Reset'" button. to reset the chip if errors occur
- Development interface is reserved for advanced learners, which can connect the external modules to the chip pins.

1.) **PIC16F887 chip x 1**

- 40 pins(35 input/output pins)
- 368 bytes RAM memory
- NanoWatt Technology
- (4) 10-Bit Analog-to-Digital (A/D) Converter
- Operating Frequency (0 20MHz)

2.) UART to USB Interface x 1

Note: Specifications are subject to change, Photos shown above are Indicative, Actual Product can Vary.

3.) EEPROM 64Kbits x 1
4.) 20 x 2 character LCD x 1
5.) 4-digit 7-segment display x 1
6.) Capacitive Sensing Button x 1
7.) LED x 11
8.) 8 x 8 multicolor dot matrix LED display x 1
9.) Buzzer and status LED x 1
10.) 5K variable resistor x 1
11.) AD590 temperature sensor x 1
12.) Stepping motor and status LED 7.5 degrees x 1
13.) 10 x 2 extend socket x 2
14.) Slide switch x 8
15.) 4 x 4 matrix keypad x 1
16.) Built-in power supply.

Input : 100 240 VAC, 50/60Hz, 0.65A
Output : 12V/1.2A, 5V/2.1A, 3.3V/1A

Experiments

- Basic I/O Controls
- External Interrupt I/O Experiment
- Chip Clock
- Watchdog Timer
- Timer
- UART
- I2C
- LCD module experiment
- Temperature Measurement experiment
- LED matrix display experiment
- Stepping Motor experiment
- Capacitive touch sensing experiment

Accessories Included:

- A.C. power cord 1pc
- Fuse 1pc
- Experiment manual 1pc
- Experiment CD 1pc
- USB A-B type cable, 150cm 1pc
- IDC cable 10x2 pin, 20cm 1pc
- Dupont Line 1P-1P, 150mm 20pc
- 6pin Programmer Cable 1pc
- Microchip PICkit 3 debugger/programmer

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