



# DIGITAL IC TRAINER KIT

MODEL – Digi Lab – 203

## **GENERAL DESCRIPTION:**

This experimental board offers a great facility for digital circuit experiments. It is very useful in digital laboratories for performing digital experiments in Colleges, Universities and also very useful in testing circuit and making projects related to digital electronics.

### **FEATURES:**

- \*\* Self Contained and easy to operate.
- \*\* Functional blocks indicated on board mimic.
- \*\* Solder less Bread Board.
- \*\* On Board DC Power Supply, 1 MHz Pulse
  - Generator with TTL/CMOS mode.
- \*\* Pulsar Switches, 8 bit data switches.
- \*\* Bicolor LED display, Builtin Logic probe.
- \*\* BCD to Seven Segment Display.
- \*\* CMOS / TTL outputs.
- \*\* Overlay System.

### **EXPERIMENTS:**

- 1. To study operation of all logic gates.
- 2. Binary Addition: Half Adder, Full Adder,
  - 2 bit binary Parallel adder.
- 3. Binary Subtraction.
- 4. Binary to Gray Code Conversion.
- 5. Gray Code to Binary Conversion.
- 6. Binary to Excess 3 Code Conversion.
- 7. R-S, J-K, T, D, Master Slave Flip Flops.
- 8. Crystal Oscillator.
- 9. 4 Bit Up down Counter.
- 10. Johnson Counter.
- 11. Shift Register.
- 12. Pulse Stretcher Circuit.
  - .... And many more.

### **TECHNICAL SPECIFICATIONS:**

Bread Board : 175, mm. x 134, mm. Connections : 1480.

D.C. Power Supply  $\pm$  5 Volt at 500 mAmp. (Fixed)

± 2 to 15 Volt at 500 mAmp. (Variable)

Pulse Generator : Frequency Range : 1 Hz to 1 MHz in 6 steps.

Variable in between steps.

Amplitude: 2 Volt - 15 Volt (CMOS), 5 Volt (TTL) p - p.

Duty Cycle: 50%, TTL/CMOS Output

Pulsar Switches : 2 Nos. (Push to On – 1 Hz)

Data Switches : 8 Nos. (Toggle switches for both TTL & CMOS).

L.E.D. Display : 8 Nos. (TTL / CMOS Mode)

BCD to seven Segment Display : 2 Nos.

Logic Probe : Logic Level Indicator for TTL/CMOS. (7 Seg.)

Power : 230 Volt,  $\pm$  10%, 50 Hz. Weight : 4Kg Approximately Dimension :  $252 \text{mm} \times 330 \text{mm} \times 72 \text{mm}$ 

Note: A set of components to perform the experiments supplied with the board.

NOTE: There may be any change in specification due to continuous R & D without notice.

# VIJAYANTA TECHNOLOGIES PVT. LTD.

(Formerly Vijai Electronics)

Dr. Baldev Singh Marg 28/147 Civil Lines, Roorkee-247667 Distt. Haridwar, Uttarakhand

Phone No.: 01332 - 272509, 7579200827

E-Mail: vijayantatechologies@gmail.com, vijaielectronics1965@gmail.com

