

## DIGITAL TRAINER KIT (ADVANCE)

MODEL – Digi Lab – 203 AD

### GENERAL DESCRIPTION:

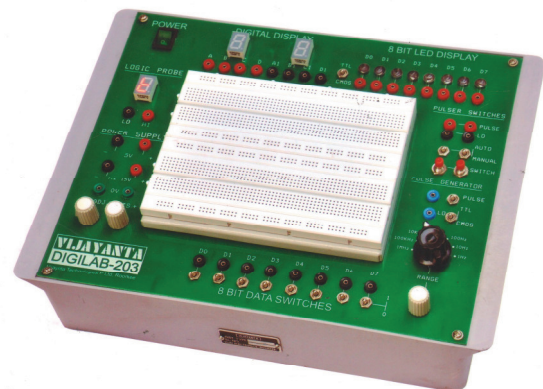
This experimental board offers a great facility for digital circuit experiments. It is very useful in digital laboratories for performing digital experiments in Colleges, Universities and also very useful in testing circuit and making projects related to digital electronics.

### 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, 10 – 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	:	1680.
Pulse Generator	:	Frequency Range : 1 Hz to 1 MHz in 7 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	:	10 Nos. (Toggle switches for both TTL & CMOS).
L.E.D. Display	:	10 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 Approx
Power Supply	:	DC 5V @600mA (over load trip reset by power off 30 sec)
Power Supply	:	DC $\pm 12V$ 3% @200mA (CC & CV)
Power Supply	:	AC 12 V - CT – 12V @200mA (Isolated)

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

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