

UNIVERSAL LAB TRAINER

MODEL : Uni Lab – 103



GENERAL DESCRIPTION :

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

FEATURES :

- ** Self Contained and easy to operate.
- ** Functional blocks indicated on board mimic.
- ** Solderless Bread Board.
- ** On Board DC Power Supply,
- ** On board AC power supply.
- ** Pulsar Switches. ** 8-bit data switches.
- ** LED display, builtin Logic Probe.
- ** BCD to Seven Segment Display.
- ** CMOS / TTL outputs. ** Overlay System.
- ** Function Generator. ** 8-Bit LED display.
- ** BAR Graph. ** Logic probe. ** Speaker.
- ** Digital Panel Meter. ** Potentiometers

EXPERIMENTS CAN BE PERFORMED :

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. Study of Half Wave and Full Wave Rectifiers.

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

1. Study of Low Pass Filter, High Pass Filter & Band Pass Filters.
 2. Study of CE and CB Configuration of NPN and PNP Transistors.
 3. Study of Monostable, Bistable & Astable Multivibrators using transistor.
 4. Study of Transistor Series Voltage and Shunt Voltage Regulator.
 5. Study of Zener Diode as a Voltage Regulator.
- And many more digital and analog experiments.

TECHNICAL SPECIFICATIONS :

Bread Board	:	175, mm. x 134, mm.	Connections :	1480.
D.C. Power Supply	:	± 5 Volt at 500 mAmp. (Fixed)		
		± 2 to 15 Volt at 500 mAmp. (Variable)		
A.C. Power Supply	:	9 – 0 – 9 Volt / 500, mAmp.		
Function Generator	:	Frequency Range : 1 Hz to 200 KHz in 7 steps.		
		Variable in between steps. (Sine, Triangular, Square)		
Pulsar Switches	:	2 Nos. (Push to On – 1 Hz)		
BAR Graph	:	10 LED. (2.5 Volt / 5 Volt)		
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.)		
Digital Panel Meter	:	200, mAmp / 200 Volt. (D.C).		
Power	:	230 Volt, $\pm 10\%$, 50 Hz.		

- Note :** (i) A set of components to perform the experiments is supplied with UNI LAB-103.
(ii) 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