

Logic Trainer is designed for the logic beginners to enhance the comprehension of basic logical theory. The digital lab covers regular digital circuits by solder-less interconnections on breadboard and as well as compitable with all optional modules through use of 2mm brass terminals and patch cords The design of the equipment is easy to operate and understand. It is equipped with various kinds of basic logic gates, debounced logical switches, LED indicators, DC power supply with short circuit protection, pulse generator and solderless bread board. The unit housed in attractive enclosure is supplied with mains cord, patch cords, Instruction manual.

Learners in high schools, Polytechnic Colleges and Universities, can use the trainer as independent activity tool.



Experimental Coverage:

- 01. Logic gates operation
- 02. To prove De-morgan's theorem with boolean logic equations
- 03. Binary to Gray code conversion
- 04. Gray code to Binary conversion
- 05. Binary to Excess-3 code conversion
- 06. Binary Adder and Subtractor
- 07. Binary Multiplier
- 08. EX-OR gate implementation
- 09. Application of EX-OR gate
- 10. To verify the dual nature of Logic Gates
- 11. Study of Flip-Flops RS, JK,

Specifications:

Basic Logic Gate Units : It contains 6 kinds of logic gates, i.e. AND GATE X 6, OR GATE X 6, NAND GATE X 6, NOR GATE X

6, XOR GATE X 3, NOT GATE X 3. Input voltage of Hl level > 2.25V Input voltage of LO level < 0.8V

DC Power Supply: Equipped with short circuit protection and indicator.

a. Output voltage +5V ± 5%
 Max. output current 1 Amp.
 Line regulation<50mV
 Load regulation<100mV
 b. Output voltage - 5V ± 5%
 Max. output current 500 mA
 Line regulation<25mV
 Load regulation<30mV

c. Output voltage ± 15V ± 5%
Max. output current 500 mA
Line regulation<150mV
Load regulation<150mV

Pulse Generator : 3 kinds of time interval, 1 sec, 0.1 sec, 0.01 sec.

Output voltage +5V

Debounced Logic Switch : 4 No's HI / LO

LED Indicator : 8 Bits LED Output Indicator, Max. Input Voltage<= 15V DC

Breadboard : Interconnected Solder less Breadboard having 2120 tie points, fitting all DIP sizes and all components

with lead and solid wire AWG # 22-30 (0.3 - 0.8 mm)

Accessories : Mains Cord, Instruction Manual, Red & Black patch cords (2mm with Pin) 10 each, Red & Black patch

cord (Pin to Pin) 10 each. Wire 24/25 SWG. 1Meter each 5 Colour

Note: Specifications are subject to change.

Tesca Technologies Pvt. Ltd.

IT-2013, Ramchandrapura Industrial Area, Sitapura Extension,

Near Bombay Hospital, Vidhani Circle, Jaipur-302022, Rajasthan, India,

Tel: +91-141-2771791 / 2771792; Email: info@tesca.in, tesca.technologies@gmail.com

Website: www.tesca.in