

OMEGA TYPE LTB-890 Logic Simulator (TTL) has been designed specifically to make the students familiar with the study of ICs and verification of the truth table of logic gates, NOT, OR, AND, NAND, NOR flip-flops, Gates.

Practical experience on this trainer/board carries great educative value for Science and Engineering Students.

OBJECT- 1 STUDY OF BASIC GATES AND VERIFICATION OF THEIR TRUTH TABLES.

- 1.1 2 INPUT NOT GATE
- 1.2 2 INPUT OR GATE
- 1.3 2 INPUT AND GATE
- 1.4 2 INPUT NAND GATE
- 1.5 2 INPUT NOR GATE

OBJECT- 2 STUDY AND VERIFICATIONS OF THE LAW OF BOOLEAN ALGEBRA AND DE-MORGAN'S

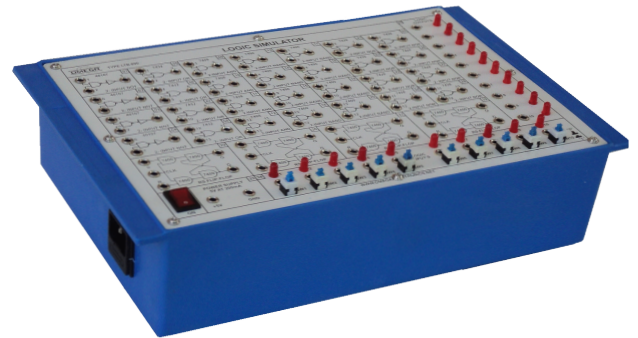
- 2.1 AND GATE
 - 2.2 OR GATE
- THEOREMS

- 01 $A + 0 = A$
- 02 $A + 1 = 1$
- 03 $A + A = A$
- 04 $A \cdot 1 = A$
- 05 $A \cdot 0 = 0$
- 06 $A \cdot A = A$
- 07 $A (A + B) = A$

OBJECT- 3 STUDY OF IMPORTANT TTL TERMINOLOGIES. VERIFICATION OF IMPORTANT TTL CIRCUIT PARAMETERS

- 3.1 Low State Input Current I_{iL}
- 3.2 High State Input Current I_{iH}
- 3.3 Low State Output Voltage V_{oL}
- 3.4 High State Output Voltage V_{oH}
- 3.5 TTL Transfer Characteristics

OBJECT- 4 CONSTRUCTION AND VERIFICATION OF RS FLIP-FLOPS



SPECIFICATIONS

- 01 OUTPUT D.C. VOLTAGE : 5V at $\pm 5\%$
- 02 OUTPUT CURRENT : 200 mA
- 03 LOAD REGULATION : $\pm 1\%$ of the (NO LOAD TO FULL LOAD) highest specified output voltage.
- 04 RIPPLE AND NOISE : less than 2 mV.
- 05 LOGIC INPUTS : 10 switches for High/Low
- 06 OUTPUT INDICATORS : 10 bright Red LEDs.
- 07 Mains ON/OFF switch, Fuse and Jewel light.
- 08 The unit is operative on 230V $\pm 10\%$ at 50Hz A.C.
- 09 Adequate no. of patch cords stackable 2mm spring loaded plug length 50cm.
- 10 Strongly supported by detailed Operating Instructions, giving details of Object, Theory, Design procedures, Report Suggestions and Book References.
- 11 Weight : 2.300 Kg. (Approx).
- 12 Dimension : W 340 x H 125 x D 210

We are committed to the continuous development of our products, and therefore reserve the right to amend specifications without prior notice.

OMEGA ELECTRONICS