

Lab No. 01

INTRODUCTION TO DIGITAL LOGIC DESIGN LAB EQUIPMENT

Objective:

To Study the operation of different parts of Digital Analog Training System (ETS-7000)

Tools:

- 1- **Digital Analog Trainer (ETS-7000):**
The digital analog trainer is designed for beginners to enhance their concepts about digital and analog theory. It has a solderless breadboard with other parts like switches, LEDs, Seven Segment Display and other slots for wires.
- 2- **Breadboard:**
It is used for the prototyping and hardware simulation of a circuit. It is used to test and check a circuit before soldering the circuit components on a PCB or a Vero board. It makes the testing and analysis of a circuit, a reversible and easy to troubleshoot process unlike the analysis of a circuit on a Vero board.
- 3- **Jumper Wire:**
This wire is used with a breadboard to transmit electric signals. It is used as a conductor with high conductivity and low resistivity.
- 4- **Logic Indicator:**
This indicator is mounted on the trainer and is used to monitor the logic state of the circuit.
- 5- **Logic Switch:**
It is a diode arrangement present on the ETS-7000 trainer and is capable of directing an input signal.
- 6- **DC Power Supply:**
It is an electronic device used in order to supply DC energy to an electrical load.



Figure 1: ETS-7000 (Digital Analog Trainer)

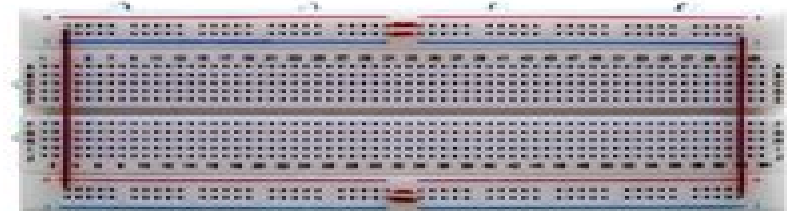


Figure 3: Jumper Wires



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