

# Digital Logic Trainer IC-DLT-I01

#### **INTEGRATED CIRCUITS**

**ELECTROINC INDUSTRIES** 

2025

### 1. Overview

The IC-DLT-I01 is an educational device designed to provide hands-on experience in the fundamental principles of digital electronics. It is primarily used for training students in the experimental verification and practical implementation of basic logic gates such as AND, OR, NOT, NAND, NOR, XOR, and XNOR.

Serving as a vital educational tool in technical institutes and engineering laboratories, the IC-DLT-I01 enables learners to construct, test, and troubleshoot a variety of digital logic circuits. Through interactive and practical exercises, the trainer fosters experiential learning and strengthens the understanding of digital system concepts.

## 2. Specification

- •Ideal for analog and digital circuits.
- •A minimum of eight high & low buffered logic indicators.
- •A minimum of eight selectable logic switches.
- •Function generator with continuously variable sine, square, and triangle waveforms and TTL pulses.
- •Triple-output power supply offers fixed 5 VDC supply plus two variable outputs:  $\pm 1.3$  to  $\pm 15$  VDC.
- •Two digital pulsers.
- Audio experimentation speaker.
- •Removable breadboard plate with additional plates available.



IC-DLT-I01

## 3. Experiment will be done

- •logic gates: AND, OR, NOT, NOR, NAND, XOR.
- •Full Adder.
- ·Comparator.
- Parity Generator.
- •Decoder + BCD to Decimal Decoder.
- Led-Display.
- •Encoder.
- Multiplexer, DE multiplexer.
- •SR, JK, and D flip-flops.
- •Counter: Binary Counter + UP/Down Counter.