

### DIGITAL IC TRAINER KIT

#### Overview

DIGITAL IC TRAINER is a product which provides facilities for hands on experience to various experiments in DIGITAL ELECTRONICS. The experiments are designed to each student's fundamental concepts and at the same time introducing them practical application that will enable them to design new circuits and independently implement the same.

Digital IC Trainers provide hands on practical experience on digital electronics at one place and save the time and money without compromising the standard.

This Digital IC Trainers is designed to educate the students in understanding, design evaluate, test and modify the digital circuits in an easy manner.

## Specification

#### Input

- 1. 16 Logic input toggle switches.
- 2. One push button for Mono pulse.

## Output

- 1. 16 Logic output indicators LED display.
- 2. 7 Segment Display
  - 2 Internal driver driven
  - 1 External driver driven
- 3. Software De-bounced Mono pulse generator.
- 4. Microcontroller based TTL Clock generation of
- 5. 1 Hz, 10Hz, 100Hz, 1KHz, 10KHz, 20KHz
- 6. DC Power Supply Tapings
- 7. (Short circuit protected & IC Regulated)
  - 0, GND, +5V, +12V, -12V



#### **Features**

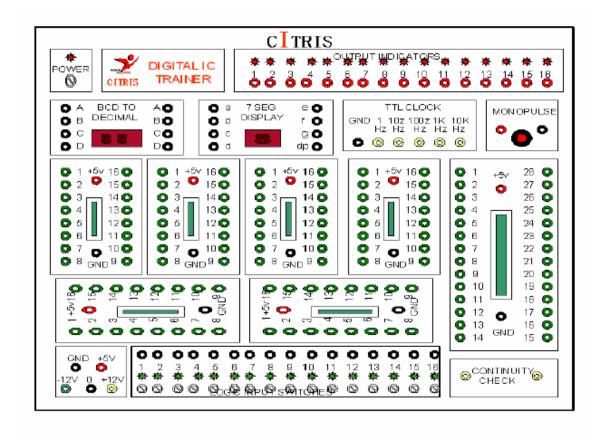
- 1. ZIF Sockets
- 2. 16 pin ZIF 6 Nos
- 3. 28 pin ZIF 1 No
- 4. Facility to check continuity of connecting wires.
- 5. Cabinet with 48.26cm x 48.26cm (19" x 19") size with powder coated with good aesthetic.
- 6. Input power with fuse protected
- 7. 220V, 50Hz AC

# **Applications**

- 1. Study the Truth Table of Logical Gates
  - Flip Flops, Counters, Registers, Decoders, Mux, Demux
- 2. Combinational circuits using gates
  - OR gate from NAND gate
  - AND-OR INVERT as NOR gate
  - NON Inverting gate
  - RS Flip Flop using NOR gate
- 3. Binary addition and Full adder
- 4. BCD to Decimal conversion and many more......



#### Front Panel View of Trainer Kit





# Embedded Core

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