

The Electronic Sequencer is intended for elementary as well as advance training of digital electronics. The trainer cover regular digital circuits by solder less inter connections through use of 4 mm brass terminations and patch cords. logic level input / output indicators and DC regulated power supply are in built. The unit housed in finished box.

### The Trainer Cover The Following Experiment:

**Experiment 1: Study Of Basic Gates And Verification Of Their Truth Tables.** 

1.1 NOT 1.2 OR 1.3 AND

#### Experiment 2: Study And Verifications Of The Law Of Boolean Algebra And De-morgan's Theorems.

- 2.1.1 AND
- 2.1.2 OR
- 2.1.3 COMPLEMENT OR NOT

#### **Theorems**

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2.2.1 (A = A + 0)
2.2.2 (1 = A + 1)
2.2.3 (A = A + A)
2.2.4 (1 = A + A')
2.2.5 (A.1 = A)
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- 2.2.6 (A.0 = 0)
- 2.2.7 (A.A = A)2.2.8 (A.A' = 0)
- 2.2.9 (a & b) De Morgan's Theorem-I LHS & RHS (A+ B)' = A'. B'
- 2.2.10 (a & b ) De Morgan's Theorem -II LHS & RHS (A . B)' = A' + B'
- 2.2.11  $\dot{A} + A\dot{B} = A$
- 2.2.12 A + A'B = A + B
- 2.2.13 (AB + AB') = A
- 2.2.14 (a & b)(AB + A'C) = (A + C) (A' + B)
- 2.2.15 AB + A'C + BC = AB + A'C
- $2.2.16 \quad A(A+B) = A$
- 2.2.17 (a & b)A(A' + B) = AB
- $2.2.18 \quad (A + B) (A + B') + A$
- 2.2.19 (A + B) (A' + C) = AC + A'B
- 2.2.20 (a & b)(A + B) (A'+ C) (B + C) = (A + B) (A'+C)

# **Experiment 3: Study Of Shift Register (sipo)**

## Feature:

Two Input AND Gate : 4 Nos Using 7408
Two Input OR Gate : 4 Nos Using 7432
NOT Gate : 6 Nos Using 7404
Memories Modules : 8 Nos Using 7474

Relays : 8 Relays with one Input terminal and three output contact terminals
Timers : 2 Timer section having variable potentiometer to cover 5 sec to 1 min range

DC Power Supply : Internally Connected

Debounce Logic Switch: 6 independent logic level inputs to select High / Low TTL levels

Output LED Indicators : 8 independent logic level indicators for High / Low status indication of digital outputs Power ON : Power ON switch with indicator for mains on indication and fuse for protection.

Patch Cords : 40 Safety Leads 4 mm (Different Colours & length)

Power Requirement : 230V + 10% single phase AC.

Instruction manual : One detailed instruction manual with well thought out experiments covering the above topics.

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

