

ANALOG COMPONENT TRAINER WITH SEVEN BASIC MODULES - ANALOG100I

This trainer has been designed with a view to provide practical and experimental knowledge of different Analog Circuit Design using Bread Boards and with Seven Basic modules used in IOT Electronics.



SPECIFICATIONS

(1) Hardware

Following Parts are assembled on Single PCB of size - 18 Inch x 15 Inch

- Regulated DC power supplies : + 5V, 1A Fixed 1. +12V, 500mA - Fixed ±12V, 500mA - Variable
- 2. AC supply

4.

9V-0V-9V/500mA :

Sine, Square, Triangle (1Hz to 100KHz)

- Function Generator 3.
 - : Modulating Signal Generator
- 5. Breadboard for Circuit design - 640 Points - 02 Nos

Basic Modules

- Diode Characteristics (Si,Zener,LED) 1.
- 2. **Rectifier Circuits**
- 3. Diode as Clipper Circuit
- **Diode as Clamping Circuit** 4.
- 5. Zener as voltage regulator.
- 6. Transistor Type NPN
- 7. Transistor Type PNP

Sigma Trainers and Kits E-113, Jai Ambe Nagar, Near Udgam School, Thaltej, AHMEDABAD - 380054. INDIA.	Phone(O): +91-79-26852427 Phone(F): +91-79-26767512 Mobile : +91-9824001168 Email : sales@sigmatrainers.com : drluhar@gmail.com Web : www.sigmatrainers.com	Dealer:-
--	--	----------

(2) Accessories

- 1. Patch cords
- 2. Practical Manual Printed + Soft Copy : 1 No.
- 3. E-Books for Subject

: 20 Nos : 1 No. : 10 Nos. in PDF Format

(3) Cabinet and PCB

The complete circuit diagram is screen printed on component side of the PCB with circuit and Parts at the same place. The PCB with components on front side is fitted in elegant wooden box having lock and key arrangement. The acrylic cover is fitted on PCB to safeguard parts. It works on 230 V AC Supply.

EXPERIMENTS

- 1. To plot Silicon Diode Characteristics
- 2. To plot Zener Diode Characteristics
- 3. To plot LED Diode Characteristics
- 4. To experiment Half wave, Full wave and Bridge Rectifier Circuits
- 5. To study Diode as Clipper Circuit
- 6. To study Diode as Clamping Circuit
- 7. To study Zener as voltage regulator.
- 8. To plot NPN Transistor Characteristics
- 9. To plot PNP Transistor Characteristics
- 10. To Study CE, CB, CC Amplifier Circuits
- 11. To Study RC Coupled Amplifier Circuit
- 12. To Construct R-C Phase Shift oscillator Circuit
- 13. To construct Astable Multivibrator Circuit
- 14. To study Low pass and High Pass Filter circuit