Basic Electricity Training System

ZT/ETS-2221

Item : Basic Electricity Training System(Different Type)

Learning Objectives : Trainees can learn and analyze working principle of control system by referencing diagram and real object.

Training Panel is installed with detection terminals to detect electric signals, for example, resistance, voltage, current, and frequency, of circuit components of the exterior lighting system.

System : Designed based on 1.6L Exterior Lighting System to holistically demonstrate structure and operation of system. The device applies to theoretical teaching and maintenance training of the lighting system in secondary and senior vocational skill schools, normal education and training institutions.

Trainer Features : as listed below :-

A real and operable system is used to illustrate the structure of system. Various lighting switches can be operated .In this way, the device demonstrates operation of the exterior lighting system.

Construction : Training Panel : Made of Advanced Aluminum-Plastic Plate with characteristics of not less than 4mm thick, corrosion resistance, impact resistance, pollution resistance, fireproof, and moisture-proof.

Finishing : Surface processed by special craft and spraying primer.

Circuit Diagram : Never-fade color Circuit Diagram and working principal diagram painted on board surface coated with varnish.

DESCRIPTION:

- This Trainer is an ideal teaching aid for all types of electronic circuits
- Located all around the 2230 Tie-Point removable bread board is a variety of functional input and out-put circuits, which can be used to stimulate or measure
- Electrical signals from the circuit under test or development.

- ❖ The removable bread board area is not connected to These peripheral circuits and is meant to be connected by the user.
- ❖ Standard solid AWG #22-3O wire.
- ❖ These circuit functions allow for the bread boarding and testing of circuits without the need for many expensive individual pieces of equipment.

SPECIFICATIONS:

- Completely Self-Contained Unit
- Built-in regulated D.C. supplies:+ 5V @ 1.0A - 5V @ 250 mA
- 1A Variable
- ±18V & 0-9V 1A AC Constant Supply (Optional)
- full short circuit protection and indicators

Function Generator:

- 1Hz to 100 KHz continuously variable over 5 decade ranges.
- Sine wave: variable O to ±4 Vp-p
- Triangle wave: ±4Vp-p
- Square wave:± 5Vp-p

Others:

- 3 state logic probe
- Two single shot pulse generators, 80 µs
- 8 Bit LED display
- 3.5 Digit Digital Voltmeter:
  - 4 ranges: 199.9mV, 1.999V, 19.99V and
  - 199.9V fsd. LCD Display
  - Input impedance: 4M Ω .
- Analog Current Meter: 0 to 1mA
- 2.5 inch 8 Ohm, 1W Loud Speaker
- Two flip-flow gates-with "mimic" diagram
- 1K & 100K Potentiometer (Optional)
- Input/ Output connector, BNC & Banana
- Two logic switches +5V/OV/ -5V with current limit
- Eight data switches +5V/OV
- Two 25-Pin D-Type connectors for computer interface
- Removable breadboard with 223O
- Inter connected tie-points,
- accepts 0.3-0.8mm solid wire
- AC 200-240V . 50Hz, 60Hz are available

APPLICATIONS:

- Ohm's law and Kirchho˜'s laws
- Controlling current and voltage
- Serial and parallel resistor circuits
- Power and DC circuits
- Algebraic fractions
- Digital switching units
- Binary coding and computer arithmetic
- Logic circuit tracing using Boolean Algebra
- Pulse processing circuits Network theorems
- Applications of trigonometric functions
- Diode networks
- Analyzing transistor circuitry
- Audio amplier circuits
- Digital systems and trouble shooting
- Time base generators
- Magnetic circuits
- Digital interfacing circuits
- Computer interfacing circuits