Potentiometer as an Error Detector

Model : SE-1029

SINCOM SE-1029 Potentiometer as an Error Detector is a versatile trainer designed for studying the potentiometer as an Error Detector. It allows users to analyze the error characteristics and the behaviour of these potentiometers when subjected to variable DC input voltage and multiple resistors. The potentiometer features an on-board 0-300^{O} marked shaft angle dial, providing precise control and measurement for both types of potentiometers.

Features

- Two Linear Potentiometers
- 0-300^{O} marked shaft angle dial
- In-Built Variable regulated DC Power Supply
- Resistors Bank
- Facility to connect the External meters.
- Presents a multi-color Circuit Diagram printed on the front panel of the white board
- Enclosed in an attractive, light weight, High Quality, Poly Coated Imported Pine Wooden cabinet
- Interconnections by 2mm high quality banana sockets and pins.

Technical Specifications

AC Mains Power Supply	: 230V ±10%, 50Hz
Regulated DC Power Supply	: Variable 0 to +12V
No. of Potentiometer	: 02
Linear Potentiometer	: Two 10K Multi turn Pot
Dial Shaft angle	: 0-300^{O}
Current Controlling Resistor	: 1KΩ, ±5% in series
Maximum Forward Current	: 50mA
Maximum Output Voltage	: 12V
Loading Resistors	: Six Fixed resistors
Weight	: 3.0 kg (approx)

- Dimensions (mm) : L 220 x W 270 x H 110
- Interconnections : 2mm Banana sockets
- Operating Temperature : 0-55^{0}C, 80% RH

Learning Scope

- To study Potentiometer as an Error Detector.
- To study the loading effect of the potentiometers & to calculate loading error.
- To plot the graph of shaft position Vs unloaded and loaded output voltage.
- To plot the graph of shaft position Vs Error Voltage.

Other Instruments Required : Digital Multimeter

Accessories Included : Set of Patch Cords, Detail Instruction Manual.