Schmitt Trigger using Transistor

Model : SE-122

SINCOM SE-122 Schmitt Trigger using Transistor is a useful trainer to study the concept, operation and characteristics of Schmitt Trigger circuit to provide square output for the applied DC and AF Input signals in a simple experimental way.

Features

- Two NPN Transistor with common emitter feedback resistor
- Silicon NPN BJT of TO-92 package on board
- Resistive Identical collector load
- Facility to connect DC Input voltage and AF Sine wave Input signals.
- Variable DC Input voltage on board
- In-Built Fixed regulated DC Power Supply
- User friendly Design
- Very Easy for Operation
- Multi color Circuit Diagram is printed on the front panel of the white acrylic board
- Enclosed in an attractive, light weight, High Quality, Poly Coated Imported Pine Wooden cabinet
- Facility to connect external function generator, Oscilloscope and Digital Meters.
- Interconnections by 2mm high quality banana sockets and pins
- Maximum Test points to explore all the corners of experiment
- 1 Year Warranty

Technical Specifications

AC Mains Power Supply	: 230V ±10%, 50Hz
DC Power Supply	: IC Regulated Fixed +12V/300mA
Transistor Type and Package	: Two BJT Silicon NPN BC548, TO-92 Package
Amplifier Type	: CE Switching Amplifier
Feedback Elements	: One Resistor
DC Trigger Input Voltage	: Variable 0-12V DC
External AF Input	: AF Sine wave Input @ 100Hz-5KHz, 5Vpp
Collector load	: Resistive load of 10KΩ
Output waveform	: Square wave of variable frequency
Max. Collector Emitter Voltage	: 12 VDC
Weight	: 2.0 kg (approx)
Dimensions (mm)	: L 220 x W 270 x H 110
Interconnections	: 2mm Banana sockets
Operating Temperature	: 0-50^{0}C, 80% RH

Learning Scope

- To Study operation of Schmitt Trigger using Transistor.
- To Determine UTP,LTP & Hysteresis Voltage.
- To Observe & Note Square output signal w.r.t. applied DC Input voltage signal.
- To Observe & Note Square output signal w.r.t. applied AF sine Input signal.

Other Instruments Required : Oscilloscope, Function Generator 1MHz and Digital Multimeter.

Accessories Included : Set of Patch Cord and Details Instruction Manual.