Complementary Symmetry Push Pull Amplifier

Model : SD-112

SINCOM SD-112 Complementary Symmetry Push Pull Amplifier is simply designed trainer for the purpose to study the concept, operation, Frequency response and determine the Bandwidth, Voltage gain and other parameters of a complementary symmetry Class-AB Push Pull Amplifier in a simple experimental way.

Features

- User friendly Design
- NPN and PNP complementary BJTs are connected in a Push-Pull mode with voltage divider base biasing and emitter resistive load operates as a complementary symmetry Push Pull amplifier circuit.
- Silicon NPN and PNP BJT of TO-92 package on board
- Wide Bandwidth AF Amplifier
- Resistive Load
- In-Built Fixed Dual regulated DC Power Supply
- Very Easy for Operation
- Multi color Circuit Diagram is printed on the front panel of the white board
- Enclosed in an attractive, light weight, High Quality, Poly Coated Imported Pine Wooden cabinet
- Facility to connect external Function Generator and Oscilloscope
- 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 +6V and -6V/500mA
Amplifier Type	: Complementary Symmetry Push Pull Amplifier
Transistor Type and Package	: Bi-Polar Silicon-NPN and PNP, TO-92 Package
Transistor Used	: NPN CL100 and PNP CK100
Transistor Configuration	: Push-Pull configuration
Biasing Method	: Voltage Divider Bias

- BJT Junction Voltage : 0.7V
- Max. Collector Emitter Voltage : 6VDC
- Emitter Base Voltage V_{BE} : 5V
- Input Output Coupling Capacitors : Two No. Electrolytic type
- Base Resistors : Four No. MFR 1KΩ (2No) and 100Ω (2No), ±5%
- Emitter Output Load : 10KΩ Fixed Resistive Load
- Input Signal Type : Sine wave
- Max. Input Frequency Range : 60Hz-500KHz approx.
- Output Frequency Response : 100Hz-20KHz approx.
- AC Mains Power Supply : 230V ±10%, 50Hz
- 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 Complementary Symmetry Push-Pull Amplifier circuit. To Observe & Note change in output w.r.t. change in I/P Frequency & to study the effect of each transistor on O/P.
- To Plot frequency response & Determine Bandwidth, Voltage Gain, Efficiency & Distortion.

Other Instruments Required : Oscilloscope, Function Generator 1MHz.

Accessories Included : Set of Patch Cord and Details Instruction Manual

Subject to Change