

## IC 741 as Audio Amplifier

### Model : SD-142

**SINCOM SD-142 IC 741 as Audio 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 OP-AMP IC 741 as Mono Audio Amplifier in a simple experimental way.

### Features

- ❖ OP-AMP IC 741 wired with Resistive Capacitive network to operates as an Audio Amplifier
- ❖ Mono Amplifier
- ❖ OP-AMP IC 741 Monolithic DIP plastics package on board
- ❖ Wide Bandwidth AF Amplifier
- ❖ Higher Audio Output
- ❖ Low Distortions
- ❖ Resistive load and Loud Speaker Inductive Load
- ❖ Input and Output Coupling Capacitors
- ❖ 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 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 $\pm$ 10%, 50Hz
▪ DC Power Supply	: Dual IC Regulated Fixed $\pm$ 12V/500mA
▪ Amplifier Type	: IC 741 based Mono Audio Amplifier
▪ IC Used and Package	: IC 741 Dual In-Line plastics package
▪ Max Audio Output	: 4W (RL=4 $\Omega$ )
▪ Resistive Load	: 10K $\Omega$ Fixed Resistive Load
▪ Speaker Load	: 4 $\Omega$ Fixed Resistive Load
▪ Input Output Coupling Capacitors	: Two No. Electrolytic type
▪ Input Signal Type	: Sine wave
▪ Max. Input Frequency Range	: 60Hz-100KHz approx.
▪ Output Frequency Response	: 60Hz-20KHz approx.
▪ Weight	: 2.0 kg (approx)
▪ Dimensions (mm)	: L 220 x W 270 x H 110
▪ Interconnections	: 2mm Banana sockets
▪ Operating Temperature	: 0-50 $^{\circ}$ C, 80% RH

**Learning Scope**

- To Study IC 741 as Audio Power amplifier circuit.
- To Observe & Note change in Output w.r.t. change in Input Frequency.
- To Plot the frequency response & To Determine Bandwidth, Voltage Gain.

**Other Instruments Required :** Oscilloscope, Function Generator 1MHz.**Accessories Included :** Set of Patch Cord and Details Instruction Manual