



An ISO 9001:2015 Co.

## IC LM 380 as Audio Amplifier

### Model : SD-141

**SINCOM SD-141 IC LM 380 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 most popular audio IC LM 380 as Audio Amplifier in a simple experimental way.

### Features

- ❖ IC LM 380 wired with Resistive Capacitive network to operates as a IC LM 380 Audio Amplifier
- ❖ IC LM 380 Monolithic DIP plastics package on board
- ❖ Wide Bandwidth AF Amplifier
- ❖ Higher Audio Output
- ❖ Low Noise
- ❖ Internally Fixed Voltage Gain
- ❖ Resistive as well as Loud Speaker as 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	: IC Regulated Fixed +12V/500mA
▪ Amplifier Type	: IC LM 380 based Audio Amplifier
▪ IC Package	: IC LM 380 Dual In-Line plastics package
▪ IC Used	: IC LM 380 Monolithic
▪ Max Audio Output	: 4W (RL=4 $\Omega$ )
▪ Resistive Load	: 10K $\Omega$ Fixed Resistive Load
▪ Speaker Load	: 4 $\Omega$ Fixed Resistive Load
▪ Input Impedance	: High 150K $\Omega$
▪ Input Output Coupling Capacitors	: Two No. Electrolytic type
▪ Voltage Gain Internally Fixed	: 50 maximum
▪ Input Signal Type	: Sine wave
▪ Max. Input Frequency Range	: 60Hz-100KHz approx.
▪ Output Frequency Response	: 60Hz-20KHz approx.
▪ Weight	: 2.0 kg (approx)



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- Dimensions (mm) : L 220 x W 270 x H 110
- Interconnections : 2mm Banana sockets
- Operating Temperature : 0-50<sup>0</sup>C, 80% RH

### Learning Scope

- To Study IC LM 380 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