

# VIJAYANTA

**VIJAI ELECTRONICS**  
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**WSC**  
ISO - 9001-2008  
Certificate No. WSC-215028-A

## STUDY OF BASIC OPERATIONAL AMPLIFIER,

MODEL - LM - 741. (MODIFIED)

The term Operational Amplifier (Op - Amp.) refers to high gain D.C. Amplifier that has a different input (Two input leads) and a single ended output (One output leads) Op - Amps have characteristics such a high input resistance, low output resistance, high gain. Low drift etc. that make them highly suitable for many application and therefore, wide spread use in electronic circuit.



The experimental set - up on the study of Op - Amps consists of a 741 I.C. with facilities for convenient connections, two regulated power supplies (  $\pm 12$ , Volt), a variable voltage source and a multirange Digital Voltmeter with 3 ½ Digit LED display. The resistance (0.1% metal film) required are mounted on the board separately, which may be connected as and when required through patch chords. The student can also connect external components if required.

The set - up is provided with booklet which contains its theory of operation, description suggestions and discussion on the various experiments that may be performed with it.

### THE FOLLOWING STUDIES CAN BE CARRIED OUT :

1. Working of the basic circuit.
2. Measurement of bias and offset currents.
3. Study of inverting and non - inverting amplifier configurations.
4. Introduction to amplifier drift.
5. Measurement of Open Loop Gain.
6. Measurement of Input Offset Voltage.
7. Measurement of C.M.R.R.
8. Measurement of Slew Rate.

The set - up is complete in all respects.