

VIJAYANTA

VIJAI ELECTRONICS
28/147, CIVIL LINES
ROORKEE - 247667



ISO - 9001-2008
Certificate No. WSC-215028-A

STUDY OF VOLTAGE TO CURRENT CONVERSION,

MODEL - VC - 12.

This board is designed to study of an operational amplifier working as voltage to current converter. The board is fully self contained hence no other apparatus required to perform the experiments. The board has one Op - Amp $\mu A - 741$ with four resistors of same values, one continuously variable D.C. Supply 0 - 10, Volt and one Milliammeter, sockets provided for connections and necessary number of patch leads provided with board. The board has two experiments :

- (a) Voltage to Current Converter. (V - I)
- (b) Current to Voltage Converter. (I - V)



FEATURES :

- ** IC Regulated and short circuit proof ± 12 Volt Power Supply, suitable to experimental board in builtin.
- ** Circuit is drawn on a decorated bakelite sheet and the components are mounted on the top of the panel for better and clear understanding.
- ** A complete working manual containing theory, circuit details and operating instruction will be supplied alongwith experimental board.
- ** Stackable type connecting leads suitable to the terminals are supplied with the board for easy interconnections and longer life of the terminals.
- ** A Digital voltmeter of 0 - 10, Volt is provided for the measurement of voltages and a one Milliammeter for current measurement.

EXPERIMENTS :

1. To convert given voltage source in to a proportional current and verify the Eq.
 $V_{in} = V_{id} + V_f$
2. To make Op - Amp circuit as current to voltage converter and verify the Eq.
 $V_o = - I I_o R_F$

OTHER APPARATUS REQUIRED :

1. A Digital Milliammeter.
2. A Digital Voltmeter.

There may be any change in specification due to continuous R & D without notice.