



Sciencetech TechBooks are compact and user friendly learning platforms to provide a modern, portable, comprehensive and practical way to learn Technology. Each TechBook is provided with detailed Multimedia learning material which covers basic theory, step by step procedure to conduct the experiment and other useful information.

Sciencetech 2322 TechBook enables students to study the basic functions and characteristics of operational amplifiers. The opamps are use in mathematical operations such as addition, subtraction, integration, differentiation and so on. However, an ideal operational amplifier is an extremely versatile circuit element, with many applications beyond mathematical operations and to understand and perform those application, it is necessary to have better understanding of its basic operation. Sciencetech 2322 has been divided into different blocks for the ease of user to understand the various operations of operational amplifier. A Function Generator, generating Sine wave, Square wave and triangular wave, and two variable DC Supplies are provided on board.

Features

- Self contained easy to operate TechBook
- On board Function Generator
- Functional blocks indicated on board mimic
- Built in DC Power Supplies
- Online Product Tutorial
- Compact size

Scope of Learning

Study and :

- Observe Open-Loop Gain as a function of frequency
Measure CMRR
- Op-amp gain in voltage series feedback configuration
Observe the functioning of voltage follower i.e. buffer
- Op-amp gain in voltage shunt feedback configuration
- Op-amp as a differential amplifier and observe its output
Observe Op-amp as I-V Converter
- Observe Op-amp as V-I Converter
- Observe Op-amp as Inverting Summer
- Observe Op-amp as Inverting Averager
- Observe Op-amp as Inverting Scaler
- Observe Op-amp as a non-inverting Averager
- Observe Op-amp as non-inverting Summer
- Observe Op-amp as an Integrator
- Observe Op-amp as Differentiator

Technical Specifications

Function Generator

Outputs	: Sine, Square and Triangle
Frequency	: 10 Hz, 100 KHz
DC Power Supplies	: 0 - 5 V variable, 2 Nos.
Test Points	: 28 nos

Power Supply : 110-220 V \pm 10%, 50/60 Hz

Power Consumption : 4 VA approximately

Dimensions (mm) : W 326 x D 252 x H 52

Weight : 2 Kg approximately

Operating Conditions : 0-40°C, 80% RH

Product Tutorial : Online on
www.SciencetechLearning.com

Included Accessories :

Patch cord 16" (Red) 2mm : 4 nos.

Patch cord 16" (Black) 2mm : 2 nos.

DC Power Supply for TechBook & Mains cord : 1 no.