



Sciencetech 2170K FM Modulation and Demodulation is a comprehensive lab training solution for students who have just started their first course on electronic communication. This board implements Frequency Modulation using Voltage Controlled Oscillator. The frequency demodulation consists of simple Phase Locked Loop circuit. Sciencetech 2170K has its own Audio Signal Generator and DC Source/ Level shifter on-board.

Sciencetech 2170K FM Modulation and Demodulation comprises of following blocks :

- AC Source with variable amplitude and frequency
- DC Source/Level Shifter
- Frequency Modulation using VCO
- Frequency Demodulation using PLL
- Low pass filter

Features

- On-board Audio Signal Generator
- Amplitude and Frequency controls for Audio signal generator
- Variable DC Source/ Level Shifter
- Frequency Modulation using VCO
- Frequency Demodulation using PLL
- Online Product Tutorial

Scope of Learning

- Study of Frequency Modulation using Voltage Controlled Oscillator.
- Study of Frequency Demodulation using Phase Locked Loop.
- Measurement of modulation index.

Technical Specifications

Audio Signal Source

Type	: Sinusoidal
Frequency range	: 0- 3.4 KHz
Amplitude	: 0-5 V variable

DC Source/Level Shifter : 0-5 V variable

Frequency Modulation : Using VCO

Frequency Demodulation : Using PLL

Interconnections : 2mm socket

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

Test Points : 10 nos.

Dimensions (mm) : 250X150 mm

Weight : 400 gm (approximately)

Operating Conditions : 0-40°C, 85% RH

Product Tutorial : Online on www.SciencetechLearning.com

Included Accessories : 2mm Patch Cord (Red) - 5 nos.
2mm Patch Cord (Black) - 2 nos.

Sciencetech 2170K Power Supply -1no.