40694 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. 40694 has its own Audio Signal Generator and DC Source/ Level shifter on-board.

40694 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

Feature

1. On-board Audio Signal Generator
2. Amplitude and Frequency controls for Audio signal generator
3. Variable DC Source/ Level Shifter
4. Frequency Modulation using VCO
5. Frequency Demodulation using PLL

Object

1. Study of Frequency Modulation using Voltage Controlled Oscillator.
2. Study of Frequency Demodulation using Phase Locked Loop.
3. 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, ± 10%, 50 / 60 Hz
Test Points	:	10 nos.
Dimensions (mm)	:	250X150 mm
Weight	:	400 gm (approximately)
Operating Conditions	:	0-40° C, 85% RH
Included Accessories	:	2mm Patch Cord (Red) - 5 nos. 2mm Patch Cord (Black)- 2 nos.

Note: Specifications are subject to change.

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