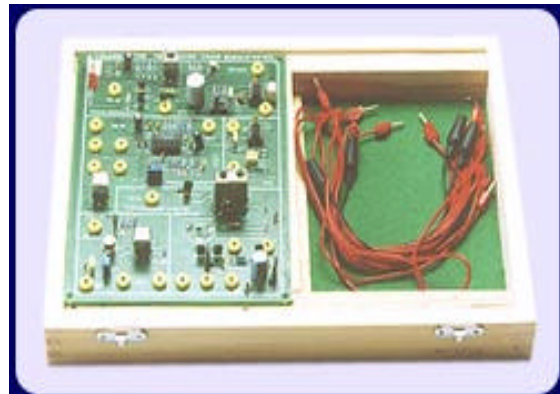


TLA-04: FREQUENCY MODULATION AND PHASE MODULATION

This module allows the student to understand the functioning and operation of Frequency Demodulation concept. This module also explain the working of Phase Modulation and Demodulation concepts.

The Detailed manual explains these concepts using the circuit diagram, to enable students of understand these concepts in details.



Features :

- Phase Modulator
- Limiter
- Automatic Frequency Control
- Foster Seely & Ratio Detector Product Detector/Quadrature detector

Technical Specifications :

Phase Modulator

- Modulation Technique : FET amplifier with resonate load
- Operating Frequency : 400KHz to 500 KHz
- Indirect Frequency Modulation

Limiter

- Operating Frequency : 455 KHz
- Input Amplitude : From 0.5 to 5 Vp-p
- Output Limited Amplitude : 1.5 Vp-p

Automatic Frequency control

- Frequency of Fm Modulator can be controlled with interrative effect

Foster-Seely Demodulator

- Operating Frequency : 400KHz to 500 KHz
- Input Amplitude : 1 Vp-p

Ratio Discriminator

- Operating Frequency : 400KHz to 500 KHz
- Input Amplitude : 1 Vp-p
- Phase Detector and FM Quadrature Deteror
- Phase Shiffer, Product detector and RC filter
- Operating Frequency : 400KHz to 500 KHz
- Input Amplitude : 1 Vp-p

Interconnection : 2mm banana Socket

Power Supply : $\pm 12V$