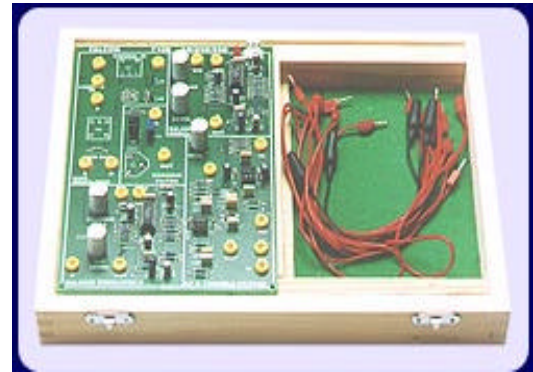


## TLA-02: AMPLITUDE MODULATION

This module allows the student to understand the functioning and operation of Balanced Modulator, Amplitude modulation with DSB/SSb, Ring modulator, Ceramic filter, Tunable filter & Low pas filter technique.

The detailed instruction manual explain the complete working of each of the individual section at the circuit level.



### Features :

- Balanced Modulator
- Ring Modulator
- Ceramic Filter
- Tunable Filter
- Low Pass Filter

### Technical Specifications :

- 2 nos. balance modulator for DSB/SSb amplitude modulation
- Carrier input : 1KHz - 900 KHz
- Modulating Input : 0.1KHz - 100KHz
- Carrier Null : Adjustable
- Output Amplitude : Adjustable

### Ring Modulator

- Diode balance modulator with AM DSB carrier (USB & LSB)
- Carrier input : 4KHz - 20Khz
- Modulating Input : 0.1KHz - 100KHz

### Ceramic Filter

- Central Frequency : 455KHz
- Banwidth :  $3 \pm 1$  KHz (Adjustable)

### Tunable Filter

- Central Frequency : Adjustable from 2 to 8KHz
- Detector Type : Diode envelope

### Low Pass Active Filter

- Cutting Frequency : 3.4KHz
- Interconnection : 2mm banana socket
- Power Supply : X axis

### Spectrum Detector

- Minimum Input : 100mVp-p
- Input Level : Adjustable
- Interconnection : 2mm standard banana socket
- Power Supply :  $\pm 12$ V