# ANALOG COMMUNICATION LAB



.....a total solution for Educational Lab Trainers

# ACT-08 DSB/SSB Modulation Kit



**ACT-08** is a Analog Communication Trainer System to understand DSB/SSB Modulation Techniques. Various Test points/ functional block diagrams are provided onboard for Teaching/Training.

### Specification

- Sine Wave Generator
  - Provides Synchronized Sine waveform output ranging from 300Hz to 3.4 KHz
  - Provision for Amplitude adjustments provided
  - Provision for Frequency adjustments provided.
- Carrier Generator
  - Carrier Frequency of 1MHz is Crystal Controlled
  - Carrier Frequency of 455 KHz is generated using coil and Transistor.

#### Balanced Modulator

- Two Nos. of Balanced Modulator with Band Pass Filter circuit provided
- One Balanced Modulator with Band Pass Filter circuit for 1MHz & One Balanced Modulator with Band Pass Filter circuit for 455KHz
- On-board features
- Ceramic band pass filter
- Audio output amplifier with speaker
- Block Description Screen printed on glassy epoxy PCB
- Interconnections
  - All interconnections are made using 2mm banana Patch cords.
- Test points are provided to analyze signals at various points.
- All ICS are mounted on IC Sockets.
- Bare board Tested Glass Epoxy SMOBC PCB is used.
- In-Built Power Supply of +5V/1.5A, ±12V/250mA with Power ON indication
- Attractive ABS Plastic enclosures.
- Set of 2mm Patch cords for interconnections
- User's Manual with sample experimental programs

## ACT-09 DSB/SSB Demodulation Kit



**ACT-09** is a Analog Communication Trainer System to understand DSB/SSB Demodulation Techniques. Various Test points/ functional block diagrams are provided on-board for Teaching/Training.

### Specification

### Receiver Section

- Receiver circuit consists of RF Amplifier, Mixer, Local Oscillator, BFO, IF amplifier-1, IF amplifier-2.
- It works on Superhetrodyne Principle
- Frequency range of 525 to 1625 KHz.
- 455 KHz. IF Frequency
- Receiver Input
  - Telescopic Antenna or Directly using Cord from Transmitter
- Detectors
- Diode detector for DSB
- Product detector for SSB
- On-board features
  - RFAmplifier circuit provided
  - Switch selectable Automatic Gain Control
  - Gang condenser tuner provided
  - Audio Output Amplifier with Speaker.
  - Block Description Screen printed on glassy epoxy PCB
- Interconnections
  - All interconnections are made using 2mm banana Patch cords.
- Test points are provided to analyze signals at various points.
- All ICS are mounted on IC Sockets.
- Bare board Tested Glass Epoxy SMOBC PCB is used.
- In-Built Power Supply of +5V/1.5A, ±12V/250mA with Power ON indication
- Attractive ABS Plastic enclosures
- Set of 2mm Patch cords for interconnections
- User's Manual with sample experimental programs

Note : Specifications can be altered without notice in our constant efforts for improvement.

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