

ACT-XX

ANALOG COMMUNICATION TRAINER KIT

ACT-13 TRANSMISSION LINE TRAINER



**Specifications**

- **Sine Wave Generator**
  - Provides Synchronized Sine waveform output ranging from 4 KHz to 4 MHZ.
- **Pulse Generator**
  - 10 KHz square wave generator
- **Transmission Lines**
  - Coaxial cables are used as Transmission Lines.
  - Four Nos. of 25 meter each totaling 100 meter cables.
- **Impedance Matching**
  - Impedance Matching Resistance of 0 to 100  $\Omega$ .
  - Two Nos. of Impedance Matching Resistance provided.
- **Interconnections**
  - All interconnections are made using 4mm 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,  $\pm 12V/250mA$  with Power ON indication.

- Set of 4mm Patch cords for interconnections.
- Set of BNC to BNC and BNC to Crocodile cables.
- User's Manual with sample experimental programs.

● **LIST OF EXPERIMENTS**

- Measuring the Characteristics of a line
- Measuring the attenuation of Line
- Measuring the Input Impedance of the Line.
- Study of Phase Displacement between the Current & Voltage at Input of Line
- Study of Frequency Characteristics of the line.
- Study of Stationary Waves
- Study of Signal Phase Shift Along the Line.
- Study of Fault Localization with the Line
- Study of Line under Pulse Condition.

