

ACT-04 TDM Pulse Code Modulation Trainer Kit



ACT-XX is a Digital Communication Trainer System to understand various digital Modulation and Demodulation Techniques. Various functional block diagrams are provided on-board for Teaching/Training. This Kit provides with various Test Points to visualize the signals on Oscilloscopes.

Features

- Internal 500Hz & 1KHz Sine-wave generator
- Two Nos. of variable Amplitude DC Level
- 2 Nos. of Analog Input Channels
- Error Check code option (None, Even, Odd, Hamming)
- None, Even, Odd, Hamming Parity selections
- Pseudo random sync. code generation
- 2 Mode of Operation Fast (240 KHz/Channel approx.) & slow (1Hz./channel approx.)
- In-Built Power Supply

Specifications

- **Sine Wave Generator**
 - › Provides Sine waveform output of 500Hz, 1 KHz.
 - › Amplitude adjustments possible
- **DC Source**
 - › Two Nos. of variable DC source.
 - › Amplitude adjustments possible

- **Mode of Operation**
 - › Fast (240 KHz/Channel approx)
 - › Slow (1Hz./channel approx.)
- **On-board features**
 - › Two Nos. of Input Channels.
 - › Pseudo random sync. Code generator for FRAME Synchronization.
 - › PLL for Bit synchronization.
 - › 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

LIST OF EXPERIMENTS

- ☞ Study of Pulse Code Modulation.
- ☞ To study the principles of Analog to Digital and Digital to Analog Conversion
- ☞ Study of Pseudo Random Sequences
- ☞ Study of Error Check Code Logic:
 - None Parity Coding.
 - Odd Parity Coding
 - Even Parity Coding
 - Hamming Coding
- ☞ Study of effect of faults in Modulation & Demodulation Techniques.

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