

ACT-02

PAM / PWM/ PPM Modulation & Demodulation 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

- *PAM/PWM/PPM Techniques using Natural & Flattop sampling*
- *On-board 250hz, 500hz, 1KHz, 2Khz Sine-wave generator with adjustable amplitude*
- *Sampling Clock of 4, 8, 16, 32 Khz*
- *On-board 4th order Butterworth Low pass filter with cut off frequency of 3.4khz*
- *In-Built Power Supply*

Specifications

- **Sine Wave Generator**
 - ✓ Provides Sine waveform output of 250Hz, 500Hz, 1 KHz, and 2 KHz.
 - ✓ Amplitude of 0 - 4Vp-p
 - ✓ Amplitude adjustments possible
- **Pulse Generator**
 - ✓ Switch selectable sampling clock of 4, 8, 16, 32 KHz.
 - ✓ Crystal Controlled Pulse Generator.
- **On-board features**
 - ✓ Analog Sample Circuit/Output
 - ✓ Sample & Hold Circuit/Output

- ✓ Flat Top Circuit/Output
- ✓ 4th order Butterworth Low pass filter with cut off frequency of 3.4 KHz.
- ✓ Block Description Screen printed on glassy epoxy PCB

● Modulation Techniques

- ✓ PAM modulation & demodulation
- ✓ PWM modulation & demodulation
- ✓ PPM modulation & demodulation

● 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 Amplitude modulation and demodulation using Natural Sampling
- ☞ Study of Pulse Amplitude modulation and demodulation using Flat Top Sampling
- ☞ Study of Pulse Width modulation and demodulation using Natural Sampling and Flat Top Sampling
- ☞ Study of Pulse Position modulation and demodulation using Natural Sampling and Flat Top Sampling

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