



Order Code-40625 is an Advance Digital Communication Trainer System that helps one understand various Digital Modulation and Demodulation Techniques. Various functional block diagrams are provided on-board as an aid for Teaching/Training. These Kits are provided with various Test Points to visualize the signals on Oscilloscopes.

FEATURES:

- Receiver Clock generated by PLL method.
- Demodulation is done using PLL and Envelop Detector Method.
- Switch faults are provided to study its effects on circuits.
- Block Description screen printed on PCB.
- In-Built Power Supply.

LIST OF EXPERIMENTS:

- To study DPCM modulation and Demodulation.
- To study ADPCM modulation Demodulation.
- To study Quantization Error.
- To study voice communication for DPCM / ADPCM (Optional).
- To study Effect of Switch faults.

SPECIFICATIONS:

- **Sine Wave Generator**
 - Provides Sine waveform output using IC 74164.
 - Frequency of Sine wave is 500 Hz with variable Amplitude of max. 0-4Vp-p
- **Data Clock Generator**
 - Jumper selectable clock with amplitude of 5V.
 - Clock of frequencies 64 KHz, 128 KHz, 256 KHz and 512KHz.
- **Sampling Clock**
 - Sampling Clock is generated using IC 4016.
 - Sampling Clock Frequency of 16 KHz and Amplitude of 5V.
- **On-board features**
 - DPCM modulation using sampler, quantizer and linear predictor.
 - Onboard Buffer is provided using Lf353.
 - DPCM demodulation using linear predictor, Integrator and Low pass Filter.
 - On-board Low pass filter using TI084.
 - 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/150mA, ±12V/250mA with Power ON indication
 - Attractive enclosure.
 - Set of 2mm Patch cords for interconnections.
 - User's Manual with sample experiments programs.

Note: Specifications are subject to change.

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