



**Order Code-40612** 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:

- On-board 250Hz, 500Hz, 1KHz, 2KHz Sine-wave generator.
- Sampling rate of 32 KHz/Channel.
- Channel Identification Signal of 8 KHz.
- 4 Nos. of Analog Input Channel for multiplexing & Demultiplexing.
- Clock regeneration at receiver using PLL
- On-board 4th order Butter-worth Low pass filter with cut off frequency of 3.4kHz.
- In-Built Power Supply

#### LIST OF EXPERIMENTS:

- Study of Time Division Multiplexing and Demultiplexing using Pulse Amplitude modulation and demodulation.
- Study of TDM Pulse Amplitude modulation and demodulation With Channel Identification Information.
- Study of TDM Pulse Amplitude modulation and demodulation using PLL method.

#### SPECIFICATIONS:

- **Sine Wave Generator**
  - Provides Sine waveform output of 250Hz, 500Hz, 1 KHz, and 2 KHz.
  - Amplitude adjustments possible
- **DC Source**
  - Separate DC source Available.
  - Amplitude adjustments possible
- **Pulse Generator**
  - Sampling rate of 32 KHz/channel.
  - 8KHz. Channel Identification Signal
  - 6.144 MHz. Crystal Controlled Pulse Generator.
- **On-board features**
  - Four Analog Input Channels for Multiplexing/Demultiplexing
  - Clock regeneration at receiver using PLL.
  - 4th order Butterworth Low pass filter with cut off frequency of 3.4 KHz.
  - 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 enclosure.
- Set of 2mm Patch cords for interconnections.
- User's Manual with sample experiments Programs.
- 315mm x 245mm x 105mm (L x W x H).
- Weight 3 Kgs.

Note: Specifications are subject to change.

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