



Order Code-40614 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:

- Single Channel Serial Input.
- Pulse Code Demodulation.
- On-board 4th order Butter-worth Low pass filter with cut off frequency of 3.4kHz
- On-board PLL Technique for regeneration.
- Error Check code option (None, Even, Odd, Hamming)
- None, Even, Odd, Hamming Parity selections.
- Pseudo random sync. code generation.
- In-Built Power Supply

LIST OF EXPERIMENTS:

- **Study of Pulse Code Demodulation.**
- **Study of Error Check Code Logic:**
 - None Parity Coding.
 - Odd Parity Coding.
 - Even Parity Coding.
 - Hamming Coding.
- **Study of Synchronization techniques using PLL.**
- **Study of effect of faults in Modulation & Demodulation Techniques.**

SPECIFICATIONS:

- **Input Channels**
 - 2 Channel Time Division Multiplexed Pulse Code Modulation Receiver.
- **Mode of Operation**
 - Fast (240 KHz/Channel approx)
 - Slow (1Hz./channel approx.)
- **On-board features**
 - Pseudo random sync. Code generator for FRAME Synchronization.
- **On-board features**
 - Pseudo random sync. Code generator for FRAME Synchronization.
 - Receiver clock generation using PLL.
 - Error Detection of None, Even, Odd, Hamming.
 - Error Correction using Hamming Code technique
 - None, Even, Odd, Hamming Parity selections
 - Two Nos. of 4th order Butterworth Low pass filter with cut off frequency of 3.4 KHz.
 - Four Switched Faults for Fault Selection
 - 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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