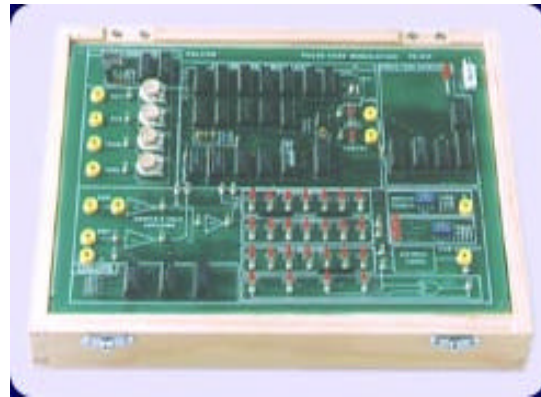


TLD-03: PULSE CODE MODULATION TRANSMITTER

This module allows students to learn and experiment Pulse Code Modulation (PCM) techniques.

Provided are two channel Time Division Multiplexed Pulse Code Modulation kits. It enables students to learn the basics of timing synchronisation between the transmitter and receiver. PCM receiver is a separate kit.



Features :

- 2 channel TDM Pulse Code Modulation transmitter section.
- Real-time operation using fast mode or Examination of data and control signal using LED's in slow mode.
- Parity selection - None, Even, Odd, Hamming.
- 4 Single Bit error option using switched fault mode.
- On-Board sinewave and two variable amplitude DC Level.
- Various test points provided on-board.

Technical Specifications :

- Input channels : 2 Nos. Time-division Multiplexed pulse modulated
- Onboard signals : 1KHz, 500Hz variable amplitude
- Synhronised sinewaves; Two Avariable amplitude DC levels
- Synchronization signal : Pseudo random code generation.
- Parity code facility : Even, Odd, Hamming, no Parity.
- Modes of Operation : Fast/Slow.
- Interconnection : 2mm standard banana socket.
- Power Supply : +5V, +/-12V

List of Experiments :

- Study of 2 channel Time Division Multiplexing and its Pulse Code Modulation.
- Study of Analog to Digital Principles
- Study of Pseudo Random sequences Generation.
- Study of Error Generation Code Logic using Odd parity, Even parity and Hamming Parity.
- Study of effect of single bit error using switch faults.