Experimental Training Board has been designed specifically to study Pulse Code Modulation & Demodulation. In the basic PCM Modulator the base band analog signal is covered into 8 bit digital format using an ADC. The sampling rate is set at 2.5 KHz. The 8 bit parallel data from ADC is converted into serial bit stream at 33 kbps.

The PCM Demodulator receives the serial data, converts it into 8 bit parallel format. The Analog to digital converter transforms the 8 bit parallel data into analog level. Thus the output of DAC is a stepped approximation of input signal. A low pass filter is used to recover the analog signal. Practical experience on this board carries great educative value for Science and Engineering Students.

Object:
To study Pulse Code Modulation & Demodulation.

Features:
The board consists of the following built-in parts :
01. 5V D.C. at 100mA IC regulated power supply internally connected.
02. ± 15V D.C. at 100mA IC regulated power supply internally connected.
03. + 5V D.C. to -9V Variable D.C. output.
04. Built in TTL Clock Generator 33 KHz.
05. Modulating Signal Generator 15Hz to 300Hz.
06. PCM Encoder.
07. PCM Decoder.
08. Data display with LED's
09. Adequate no. of other electronic components.
10. Mains ON/OFF switch, fuse and jewel light.
    * The unit is operative on 230V ±10% at 50Hz A.C. Mains.
    * Adequate no. of patch cords stackable from rear both ends 4mm spring loaded plug length ½ metre.
    * Good Quality, reliable terminal/sockets are provided at appropriate places on panel for connections /observation of waveforms.
    * Strongly supported by detailed Operating Instructions, giving details of Object, Theory, Design procedures, Report Suggestions and Book References.

Other Apparatus Required:
    * Cathode Ray Oscilloscope 20MHz.

Note: Specifications are subject to change.