

Experimental Training Board has been designed specifically to study Differential Pulse Code Modulation & Demodulation. In the basic DPCM 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 DPCM Demodulator receives the serial data, converts it into 8 bit parallel format. The Digital to Analog 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 Differential 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. \pm 12V D.C. at 100mA IC regulated power supply internally connected.
- 03. 5V D.C. to + 5V D.C. Variable D.C. output.
- 04. Audio Frequency Oscillator 10Hz to 100Hz for modulation.
- 05. DPCM Modulator (DPCM ENCODER).
- 06. DPCM Demodulator (DPCM DECODER).
- 07. Adequate no. of other electronic components.
- 08. Mains ON/OFF switch, fuse and jewel light.
 - * The unit is operative on $230V \pm 10\%$ at 50Hz A.C. Mains.
 - * Adequate no. of patch cords stackable from rear both ends 4mm spring loaded plug length ¹/₂ 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

* Dual Trace Cathode Ray Oscilloscope 20MHz.

Note: Specifications are subject to change.

Tesca Technologies Pvt. Ltd.

IT-2013, Ramchandrapura Industrial Area, Sitapura Extension, Near Bombay Hospital, Vidhani Circle, Jaipur-302022, Rajasthan, India, Tel: +91-141-2771791 / 2771792; Email: info@tesca.in, tesca.technologies@gmail.com Website: www.tesca.in

