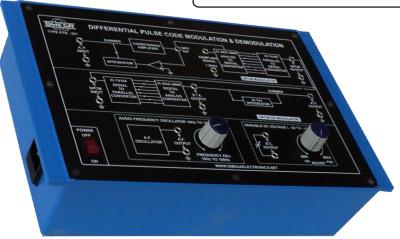


DIFFERENTIAL PULSE CODE MODULATION AND DEMODULATION TRAINER

OMEGA TYPE ETB-221



OMEGA TYPE ETB-221 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. Alow pass filter is used to recover the analog signal.

Practical experience on this board carries great educative value for Science and Engineering Students.

OBJECT

01 To study Differential Pulse Code Modulation & Demodulation.

FEATURES

The board consists of the following built-in parts:

- 01 5V D.C. at 100mAIC regulated power supply internally connected.
- 02 ± 12V D.C. at 100mAIC 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.
- 09 The unit is operative on 230V ±10% at 50Hz A.C. Mains.
- 10 Adequate no. of patch cords stackable from rear both ends 4mm spring loaded plug length 50cm.
- 11 Good Quality, reliable terminal/sockets are provided at appropriate places on panel for connections /observation of waveforms.
- 12 Strongly supported by detailed Operating Instructions, giving details of Object, Theory, Design procedures, Report Suggestions and Book References.

13 Weight : 2.200 Kg. (Approx.) 14 Dimension : W 340 x H 125 x D 210

OTHER APPARATUS REQUIRED:

01 Dual trace CRO 20MHz OMEGATYPE CRO-20

We are committed to the continuous development of our products, and therefore reserve the right to amend specifications without prior notice.

OMEGA ELECTRONICS