



**PAM-PPM-PWM** are the basic Pulse Modulation techniques. The trainer provides complete set up to the students for performing experiments on these techniques. They can study Sampling, Pulse Modulation, Demodulation & Signal reconstruction process. Separate circuits are provided for each technique. The Operating Manual provides technology details and procedure to perform the experiments.

### Technical Specifications

#### Pulse Modulation Techniques :

1. Pulse Amplitude Modulation
2. Pulse Width Modulation
3. Pulse Position Modulation

#### On-board Sampling

**Frequencies (Pulse)** : 8 KHz, 16 KHz, 32 KHz, 64 KHz

#### On-board Generator :

1. Sinewave : 1 KHz & 2 KHz (Gain Adjustable)
2. Squarewave : 1KHz & 2 KHz

**Low Pass Filter** : 4<sup>th</sup> order BW Filter

**Voice Communication** : Voice Link using dynamic mic & speaker

**AC Amplifier** : With Adjustable Gain Control

**DC Output** : 0-4 V (Variable)

**Switched Faults** : 8 Nos.

**Interconnections** : 4mm Banana Sockets

**Test Points** : 29

**Power Supply** : 220 V  $\pm$ 10 %, 50 Hz / 60 Hz on request

**Power Consumption** : 3 VA (approx.)

**Dimensions (mm)**

: W 340  $\times$  D 241  $\times$  H 105

**Weight**

: 2.8 Kg (approx.)

**Accessories**

: Manual, Set of patch cord, Line cord, Microphone, Headphone

### Features

- ♦ PAM-PPM-PWM Modulation & Demodulation techniques, using Natural & Flat-top sampling.
- ♦ Analog Sample, Sample & Hold and Flat-top outputs.
- ♦ Selectable 4 different sampling pulse frequencies on board.
- ♦ Input-output and test points provided on board.
- ♦ Voice Communication using dynamic microphone & speaker
- ♦ On-board Filter and AC Amplifier
- ♦ 8 Switched Faults
- ♦ Built in DC Power Supply.

### Experiments that can be performed

- ♦ PAM using Natural & Flat Top sampling
- ♦ Sample, Sample & Hold & Flat-top outputs in PAM
- ♦ PPM using DC & AC (sinewave) modulating signals
- ♦ Pulse Position Demodulation
- ♦ Pulse width Modulation & Demodulation

Note: Specifications are subject to change.

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