

# 7410 PAM-PPM-PWM Modulation and Demodulation Trainer



#### **Key Features:**

- Functional Blocks indicated via on board mimics
- 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
- Voice Communication using dynamic microphone & speaker
- On-board Filter and AC Amplifier
- 8 Switched Faults

PAM-PPM-PWM are the basic pulse modulation techniques. The 7410 can be used to study Sampling, Pulse Modulation, Demodulation & Signal reconstruction processes. Separate circuits are provided for each technique.

#### **Experiments**

- Pulse Amplitude Modulation using natural and flat top sampling
- PAM using sample and hold sampling
- Pulse Amplitude Modulation and Demodulation with sample, sample and hold and flat top
- PPM using DC input
- PPM using sine wave input
- PPM demodulation
- PWM using different sampling frequency
- Pulse Width Demodulation
- Voice link using Pulse Amplitude Modulation
- Voice link using Pulse Position Modulation
- Voice communication using Pulse Width Modulation

## Specification

Pulse Modulation Techniques 1. Pulse Amplitude Modulation

2. Pulse Width Modulation

3. Pulse Position Modulation

**On-board Sampling Frequencies** 

(Pulse)

8KHz, 16KHz, 32KHz, 64KHz

On-board Generators 1. Sine wave 1KHz & 2 KHz(Gain adjustable)

2. Square wave 1KHz & 2 KHz

Low Pass Filter 4th order BW Filter

Voice Communication Voice Link using dynamic mic & speaker

AC Amplifier With Adjustable Gain Control

DC Output 0-4V (Variable)

Switched Faults 8
Test Points 29

 Power
 110-260V AC, 50/60Hz

 Dimensions (mm)
 W340, H100, D260

 Weight
 1Kg (approx.)

**Ordering Information** 

Model Number: 7410

Consists of: PAM-PPM-PWM Modulation & Demodulation Trainer

Manual Power Cord Set of patch cables Microphone Headphones

Notes.

1. Specification is subject to change without notice.

2. All dimensions are in mm unless otherwise stated

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