

## PWM Modulation and Demodulation Trainer Nvis 6576

TECHBOOK



**Nvis 6576 PWM Modulation and Demodulation Trainer** is a useful training product for students to understand the concepts of Modulation and Demodulation. Pulse width modulation (PWM) is a technique used for controlling analog circuits with processor's digital outputs.

PWM is a way of digitally encoding analog signal levels. The duty cycle of a square wave is modulated to encode a specific analog signal level. The PWM signal changes the width at any given instant of time.

## **Features**

- Self contained Trainer
- Selectable 4 pulse frequencies on board
- On board Sine and Square wave Generators
- Voice Communication using Dynamic Microphone and Speaker
- On Board Filter and AC Amplifier
- Functional Blocks indicated on board mimics
- Input-Output and test points provided on board
- In-built DC Power Supply
- Compact Size
- Online product tutorial

## Scope of Learning

- To study the Pulse Width Modulation
- Concept of Duty Cycle
- To study the Demodulation
- To study the Voice Modulation and Demodulation

## **Technical Specifications**

Pulse Output (frequency): 8kHz, 16kHz, 32kHz, 64kHz

(approximate)

**Function Generators** 

Sine wave :(Gain Adjustable)

1kHz (12Vpp)

2kHz (4Vpp)

Square wave : 1kHz and 2kHz (6Vpp)

**Low Pass Filter** : 4th order BW Filter

**Voice Communication**: Voice Link using Dynamic Mini

Microphone and Speaker

AC Amplifier : With adjustable gain control

**DC Variable Output** : 0-12V

Power Supply: 230V ±10%, 50HzPower Consumption: 3VA (approximate)Dimensions (mm): W 350 x D 280 x H 55