

PPM Modulation and Demodulation Trainer

Nvis 6577

TECHBOOK



Nvis 6577 PPM Modulation and Demodulation Trainer is a very prominent training product designed for students to elucidate them the concept of Modulation and Demodulation. PPM is a method of encoding information in a signal by varying the position of pulses. The unmodulated signal consists of a continuous train of pulses of constant frequency, duration and amplitude. During modulation the pulse positions are changed to reflect the information being encoded

The amplitude and width of the pulse is kept constant in the system. PPM has the advantage of requiring constant transmitter power since the pulses are of constant amplitude and duration. It is widely used but has the disadvantage of depending on transmitter-receiver synchronization

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 Position Modulation
- 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: $230V \pm 10\%$, 50HzPower Consumption: 3VA (approximate)Dimensions (mm): $W 350 \times D 280 \times H 55$

Designed and Manufactured in India by -