

Advanced Communication Laboratory

Experiments using Kits

Kits Available: Analog Communication Kits, Digital Communication Kits.

AM, SSB-SC and DSB-SC modulation and demodulation techniques.

To study the cyclic encoding and decoding of BCD bit sequence.

To study the error detection & correction of bit sequence.

Study and Analysis of Frequency Division Multiplexing.

To study about Data Formatting & Carrier Modulation transmitter trainer:-

Data Formatting (line coding techniques)

Carrier Modulation

To study about data Re-Formatting & Carrier Demodulation

Transmitter Trainer:-

Data Re-Formatting (line coding techniques)

Carrier Demodulation

Signal Sampling and Reconstruction

Effect of Different Sampling Frequencies

Effect of varying the Sampling Frequency Duty Cycle

Study of second order and fourth order low pass filter

Effect of different Fault Switches

Study of Sample Signals and Sample/Hold signal through mic.

Study and analysis of continuous variable Slope Delta Modulator.

Study of various line coding techniques

Study of PAM, PPM and PWM techniques.

Study and analysis of Delta Modulation and Adaptive Delta Modulation.

Generate and observe Pulse-Code Modulation and Demodulation

Generate and observe differential Pulse-Code Modulation & Demodulation.

Experiments using MATLAB

Introduction to MATLAB, SIMULINK, and COMMUNICATION TOOLBOX

Programme for generating basic signals

Unit step signal b) Unit impulse signal c) Ramp sequence

D) Exponential signal e) Sine signal

Program for computing linear and circular correlation of the sequences.

Program for computing linear and circular convolution of the sequences.

Program for generating and analysing the following modulation techniques:

A) Amplitude Modulation b) Frequency Modulation c) Phase Modulation

Program for generating and analysing the following modulation schemes:

A) ASK b) FSK c) PSK

Program for generating and analysing following digital modulation and Demodulation techniques:

A) PAM b) PWM

Program for generating and analysing different Demodulation Techniques.

Experimental Kits for Analog Communication Laboratory



Experimental Kits for Digital Communication Laboratory

