



Carrier Demodulation & Data Reformatting Receiver 40533 is complete digital communication platform which efficiently explains all communication processing steps involved in reception of Digital signals. Various digital demodulation techniques viz. ASK, FSK, PSK, DPSK, QPSK etc. can be implemented using 40533.

Features

- 7 different Data reconditioning formats NRZ (M), RZ, AMI, RB, Biphase (Manchester), Biphase (Mark).
- ASK, FSK, PSK, DPSK & QPSK Carrier demodulation.
- On board Biphase clock recovery circuit.
- On board Data squaring circuit and differential decoder.
- On board 4th order Butterworth filters
- On board 8 bit Data receiver
- Online Product Tutorials

Experiments

- Study of Data Formats
- Study of Amplitude Shift Keying
- Study of Frequency Shift Keying
- Study of Phase Shift Keying
- Study of Differential Phase Shift Keying
- Study of Quadrature Phase Shift Keying
- Study of Differential Quadrature Phase Shift Keying

Technical Specifications

- **Input** : From 40533
- **Carrier Demodulation**
 - ❖ ASK – Diode Detector
 - ❖ FSK – PLL Detector
 - ❖ PSK – Square Loop Detector
 - ❖ QPSK – Fourth Power Loop Detector

Note: Specifications are subject to change.

- **Power Consumption** : 6 VA (approx.)
- **Test Points** : 39 nos.
- **Interconnections** : 2 mm Sockets
- **Power Supply** : 110-220V, 50/60 Hz
- **Product Tutorials** : Online (Theory, procedure, reference results, etc)
- **Dimensions (mm)** : W 326 x D 252 x H 52
- **Weight** : 2 Kg. (approximately)
- **Operating Conditions** : 0-40oC, 85% RH

Included Accessories

- Patch cord 16" : 30 nos.
- Patch cord 32" : 4 nos.
- Mains Cord : 1 no.

Digital Communication Interactive Software
(optional)

Topics

- Source: Signal Source, Pulse Generator, Data Generator, Delay
- Math Operations: Adder, Subtractor, Multiplier
- Natural and Flat-top Sampling
- Line Encoding and Decoding
- Delta Modulator and Demodulator
- Adaptive Modulator and Demodulator
- Sigma Delta Modulation and Demodulation
- PCM Transmitter and Receiver
- DPCM Transmitter and Receiver
- DPCM Transmitter and Receiver
- A-Law and MU-Law
- Pulse Position Modulation and Demodulation
- Pulse width Modulation and Demodulation
- 2-Channel TDM-PCM Multiplexer