

**Carrier Demodulation & Data Reformatting Receiver Sciencetech 2157** 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 Sciencetech 2157.

## Features

- 7 different Data reconditioning formats NRZ (M), RZ, AMI, RB, Biphasic (Manchester), Biphasic (Mark).
- ASK, FSK, PSK, DPSK & QPSK Carrier demodulation.
- On board Biphasic 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

## Scope of Learning

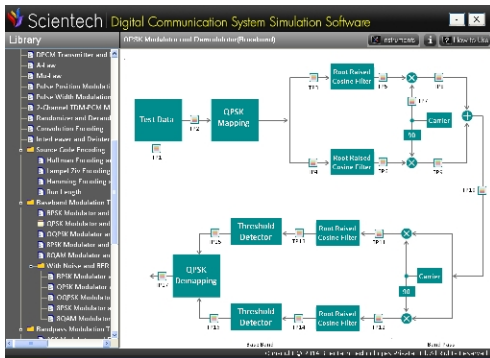
### Study of

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

### Technical Specifications

<b>Input</b>	: From Sciencetech 2156
<b>Carrier Demodulation</b>	: ASK – Diode Detector FSK – PLL Detector PSK – Square Loop Detector QPSK – Fourth Power Loop Detector
<b>Power Consumption</b>	: 6 VA (approximately)
<b>Test Points</b>	: 39 nos.
<b>Interconnections</b>	: 2 mm Sockets
<b>Power Supply</b>	: 110-220V, 50/60 Hz
<b>Product Tutorials</b>	: Online (Theory, procedure, reference results, etc)
<b>Dimensions (mm)</b>	: W 326 x D 252 x H 52
<b>Weight</b>	: 2 Kg. (approximately)
<b>Operating Conditions</b>	: 0-40°C, 85% RH
<b>Included Accessories</b>	
Patch cord 16"	: 30 nos.
Patch cord 32"	: 4 nos.
Mains Cord	: 1 no.

### Simtel 11 - 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

For more details refer Simtel 11 Catalog

