

Sciencetech 2807 provides an extensive hands on ASK, FSK, BPSK, DBPSK Modulator & Demodulator.

Features

- Personalized Learning platform
- On-board Data Generator with various data patterns
- Selectable data frequencies and data patterns
- DDS technology based Carrier Generator
- SMD LED indicators
- Can be issued just like a book for hands-on learning

Technical Specifications

Modulation & Demodulation

Techniques	:	ASK , FSK , BPSK , DBPSK
Internal Data Generator	:	Digital data
Data Pattern	:	8-Bit , 16-Bit , 32-Bit , 64-Bit
Frequency	:	2KHz, 4KHz, 8KHz, 16KHz
Internal Carrier Generator	:	Direct Digital Synthesized
Carrier Signal	:	Sine
SMD LED Indicators	:	24 nos. for Digital data selection, data frequency selection and technique selection
Number of Test Points	:	39 nos.
Crystal Frequency	:	8MHz
Selection Mode	:	Push switches
Dimensions (mm)	:	W 326 x D 252 x H 52
Power Supply	:	110V - 260V AC, 50/60Hz
Weight	:	1.5Kg (approximately)
Operating Condition	:	0-40°C, 85% RH
Product Tutorial	:	Online on www.Sciencetechlearnig.com
Included accessories	:	2mm Patchcord - 1no.

Scope of Learning (with experimentation)

Study and analysis of :

Amplitude Shift Keying Modulation & Demodulation

- Amplitude Shift Keying Modulation
- Amplitude Shift Keying Demodulation.
- Integrator and Comparator block.

Frequency Shift Keying Modulation & Demodulation

Objectives:

- Frequency Shift Keying Modulation
- Frequency Shift Keying Demodulation.
- Integrator and Comparator block.

Binary Phase Shift Keying Modulation & Demodulation

- Binary Phase Shift Keying Modulation .
- Binary Phase Shift Keying Demodulation.
- Integrator and Comparator block .

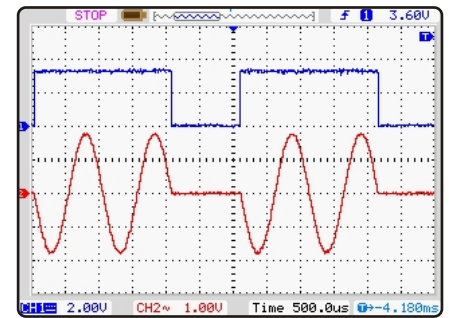
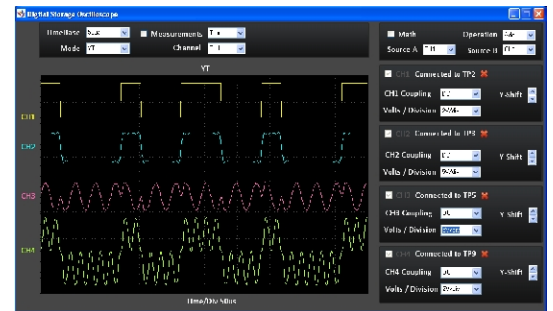
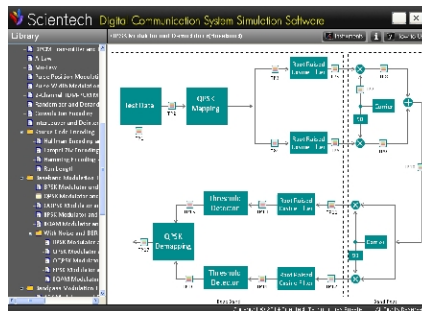
Differential Binary Phase Shift Keying Modulation & Demodulation

- Differential encoder and decoder.
- Differential Binary Phase Shift Keying Modulation .
- Differential Binary Phase Shift Keying Demodulation.

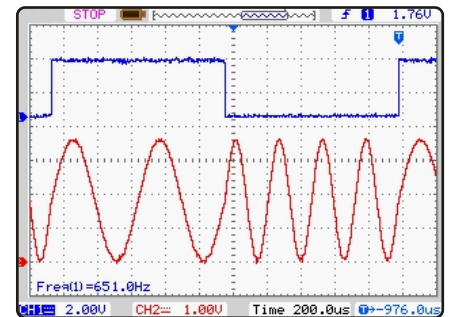
Simtel 11 - Digital Communication Interactive Software (optional)

Topics

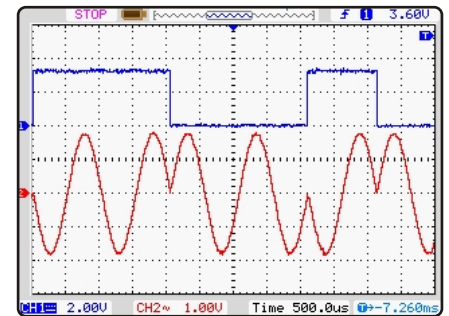
- Source: Signal Source, Pulse Generator, Data Generator, Delay
- Math Operations: Adder, Subtractor, Multiplier
- Natural and Flattop Sampling
- Line Encoding and Decoding
- Delta Modulator and Demodulator
- Adaptive Modulator and Demodulator



ASK



FSK



BPSK

For more details refer Simtel 11 Catalog