

Sciencetech TechBooks are compact and user friendly learning platforms to provide a modern, portable, comprehensive and practical way to learn Technology. Each TechBook is provided with detailed Multimedia learning material which covers basic theory, step by step procedure to conduct the experiment and other useful information.

Sciencetech TechBook 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. Power Supply module - 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:

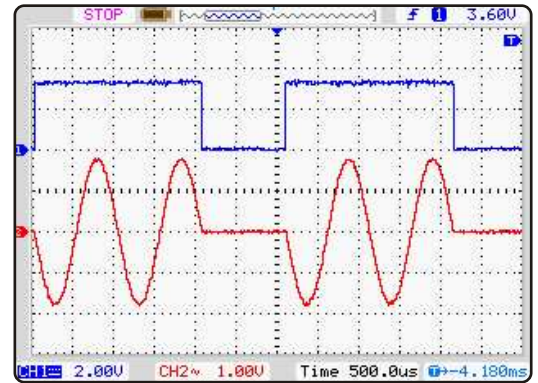
- Frequency Shift Keying Modulation
- Frequency Shift Keying Demodulation.
- Integrator and Comparator block.

Binary Phase Shift Keying Modulation & Demodulation

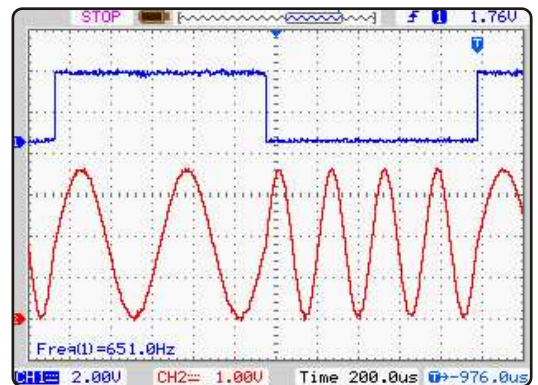
- Binary Phase Shift Keying Modulation .
- Binary Phase Shift Keying Demodulation.
- Integrator and Comparator block .

Differential Binary Phase Shift Keying Modulation & Demodulation

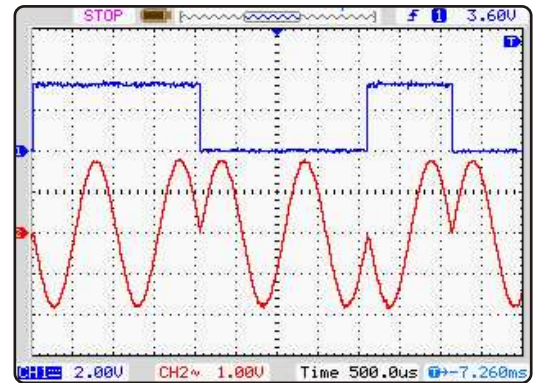
- Differential encoder and decoder.
- Differential Binary Phase Shift Keying Modulation .
- Differential Binary Phase Shift Keying Demodulation.



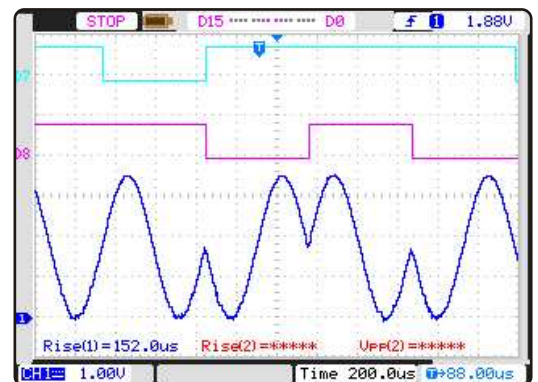
ASK



FSK



BPSK



DBPSK