

**40701** provides an extensive hands on ASK, FSK, BPSK, DBPSK Modulator & Demodulator.

### Features

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

### Object

**Study and analysis of :**

#### Amplitude Shift Keying Modulation & Demodulation

1. Amplitude Shift Keying Modulation
2. Amplitude Shift Keying Demodulation.
3. Integrator and Comparator block.

#### Frequency Shift Keying Modulation & Demodulation Objectives:

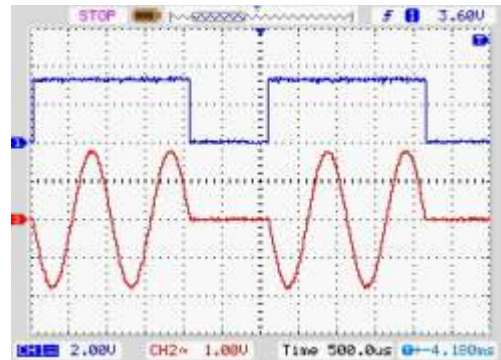
1. Frequency Shift Keying Modulation
2. Frequency Shift Keying Demodulation.
3. Integrator and Comparator block.

#### Binary Phase Shift Keying Modulation & Demodulation

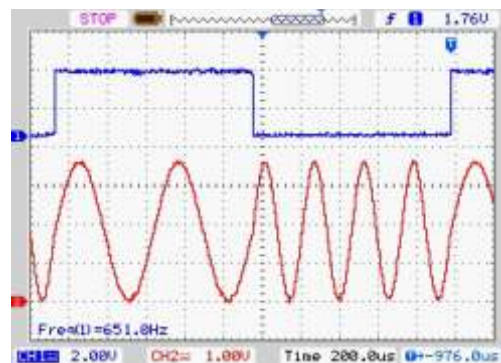
1. Binary Phase Shift Keying Modulation .
2. Binary Phase Shift Keying Demodulation.
3. Integrator and Comparator block .

#### Differential Binary Phase Shift Keying Modulation & Demodulation

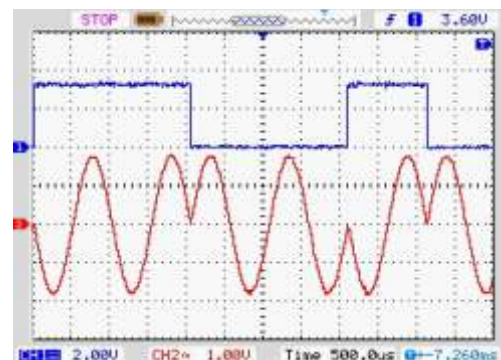
1. Differential encoder and decoder.
2. Differential Binary Phase Shift Keying Modulation .
3. Differential Binary Phase Shift Keying Demodulation.



ASK



BPSK



FSK

Note: Specifications are subject to change.

### Technical Specifications

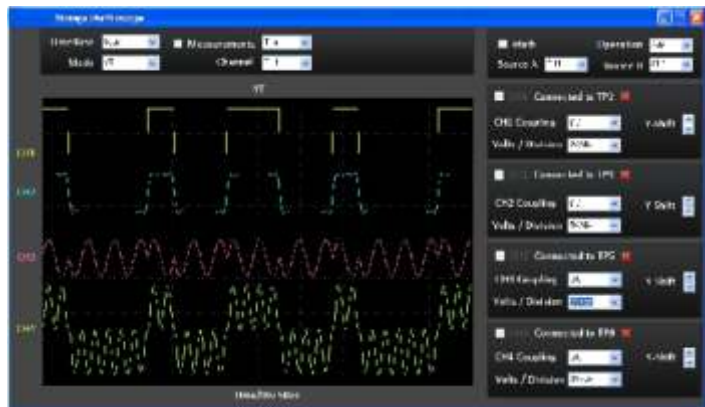
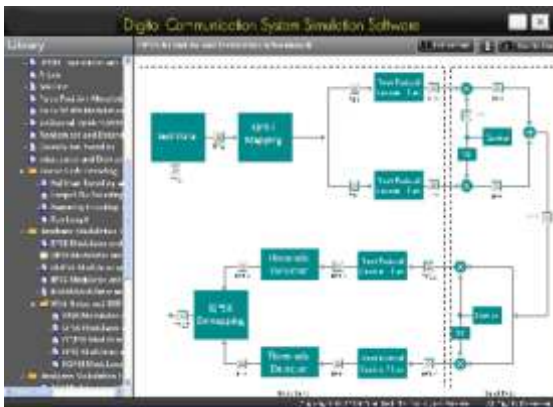
#### Modulation & Demodulation

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	:	0-400C, 85% RH
Included accessories	:	2mm Patchcord - 1no.

**Simtel 11** - Digital Communication Interactive Software (optional)

#### Topics

1. Source: Signal Source, Pulse Generator, Data Generator, Delay
2. Math Operations: Adder, Subtractor, Multiplier
3. Natural and Flattop Sampling
4. Line Encoding and Decoding
5. Delta Modulator and Demodulator
6. Adaptive Modulator and Demodulator



Note: Specifications are subject to change.

