

40705 provides an extensive hands on learning on QPSK, OQPSK, DQPSK Modulator & Demodulator.

Features

1. Personalized Learning platform
2. On-board four variable line speed rates and single bit data pattern.
3. On board DDS technology based Carrier Generator
4. SMD LED indicators
5. Can be issued just like a book for hands-on learning

Technical Specifications

Modulation & Demodulation

Techniques	: QPSK , OQPSK , DQPSK
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, Cosine
SMD LED Indicators	: 25 nos. for Digital data selection, data frequency selection and technique selection
Number of Test Points	: 57 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.

Object

Quadrature Phase Shift Keying Modulation and Demodulation Study and analysis of:

1. QPSK Modulation and Demodulation with variable bit pattern and frequency.
2. 2 bit encoding as I-Channel & Q-Channel encoding and decoding.
3. Integrator and Comparator at the Demodulator end.

Offset Quadrature Phase Shift Keying Modulation and Demodulation

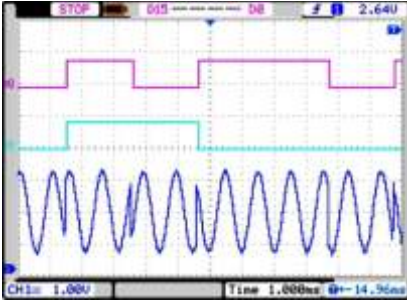
4. OQPSK Modulation and Demodulation with variable bit pattern and frequency.
5. 2 bit encoding as I- Channel & Q-Channel encoding and decoding.
6. Offset encoding and decoding.
7. Integrator and Comparator at the Demodulator end.

Note: Specifications are subject to change.

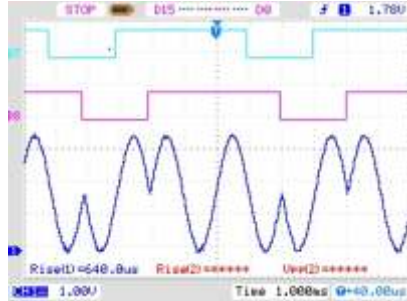


Differential Quadrature Phase Shift Keying Modulation and Demodulation

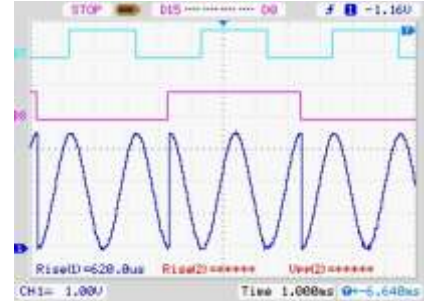
8. DQPSK Modulation and Demodulation with variable bit pattern and frequency.
9. 2 bit encoding as I-Channel & Q-Channel encoding and decoding.
10. Differential encoding and decoding.
11. Integrator and Comparator at the Demodulator end.



QPSK



OQPSK (Q-Channel)

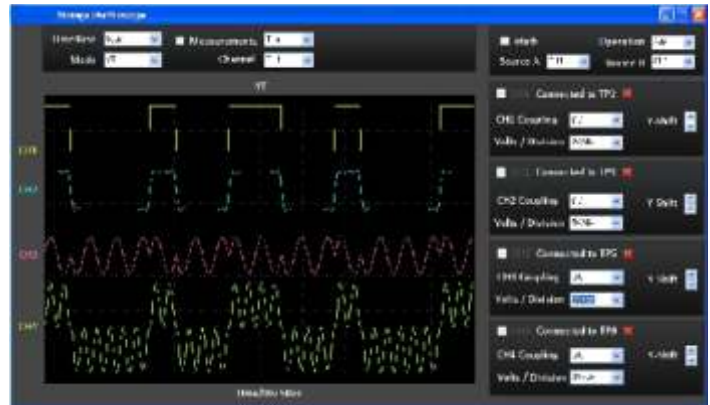
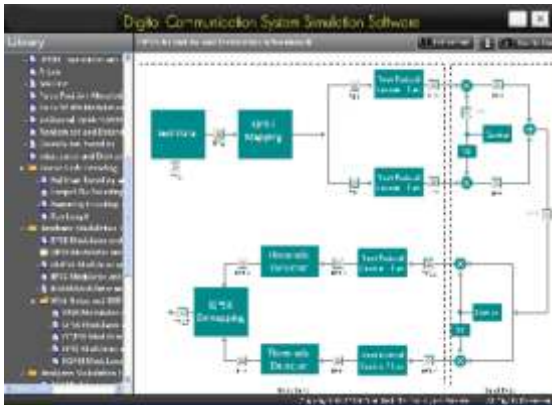


DQPSK (I-Channel)

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.