



Sciencetech 2116 MSK Modulator/ Demodulator demonstrates the basic working of Minimum Shift Keying technique. As the name suggests, MSK results in a modulation scheme which has smooth phase variations in contrast to other phase modulation schemes where the modulated signal contains abrupt phase changes. The immediate advantage of such a scheme is the reduction in modulated signal bandwidth.

Sciencetech 2116, MSK Modulation / Demodulation comprises of following major blocks :

- Digital Data Generator
- Sine and Cosine Wave Generator for wave shaping
- Sine and Cosine Carrier Generator
- Clock Signal Generator
- MSK Modulator and Demodulator sections with complete signal flow

Features

- Self contained and easy to use
- Functional blocks indicated on board mimic
- On board Data Generator
- On board Carrier Generator
- On board Clock Generators
- MSK Modulator
- MSK Demodulator

Scope of Learning

Study of :

- Sinusoidal wave shaping used in MSK Modulation
- Minimum Shift Keying (MSK) Modulation process
- Minimum Shift Keying (MSK) Demodulation process

Technical Specifications

Data Source

Data rate	: 16 Kbps
Word Length	: 15 bits
Data Format	: NRZ (Non Return to Zero)
Clock Source	: 16 KHz, 8 KHz
Carrier Generators	: 32 KHz (Sinusoidal)
Pulse Shaping Waveform	: 4 KHz
Interconnections	: 2 mm socket
Test Points	: 36 nos
Weight	: 1.1 Kgs (approximately)
Product Tutorial	: Online on www.SciencetechLearning.com
Dimensions (mm)	: W 420 x D 255 x H 100
Power Supply	: 110V - 260V AC, 50/60Hz
Weight	: 1 Kg. (approximately)
Operating Conditions	: 0-40°C, 85% RH
Included Accessories	
Patch cord 16"	: 20 nos
Main cord	: 1 no.