

## PHASE SHIFT KEYING MODULATION/ **DEMODULATION SYSTEM TRAINER**

MODEL-COM116K

This trainer has been designed with a view to provide practical / experimental knowledge of PSK Modulation/Demodulation technique as practically implemented in Digital Communication systems on a SINGLE PCB.



SPECIFICATIONS

- 1. Power supply requirement :
  - 230V AC, 50 Hz.
- 2. Built in IC based power supply.
- 3. On Board Modulating Digital Data signal generator to generate any binary input word with Bit clock & Word

clock.		
Word Length	:	8 Bits.
Word Clock Frequency	:	8 KHz to 12 KHz.
Data Format	:	NRZ & Bipolar NRZ
Modulator Type	:	Balanced Modulator as Phase Modulator.

- 5. Demodulator Type Balanced Modulator as Phase detector. Bit clock recovery section. :
- 6. All parts are soldered on single pin TAGS on single PCB with complete circuit diagram Screen-printed.
- 7. Standard Accessories

4.

- 1. A Training Manual :
  - 2. Connecting Patch cords.

## **EXPERIMENTS**

- 1. To study theory of PSK Modulation & Demodulation.
- 2. To generate PSK signal and demodulate it in physical channel.
- 3. To observe PSK waveform on CRO.
- To observe spectrum of PSK on spectrum analyser. 4.
- 5. To determine essential bandwidth
- To analyse reception quality by cross co-relation characteristics and measure bit error rate in presence of 6. channel noise by Matlab Simulation.

In keeping view of SIGMA policy of continuous development and improvement, the Specifications may be changed without prior notice or obligation.