

## GENERATION & DETECTION OF DIRECT SEQUENCE SPREAD SPECTRUM

MODEL - DSSS100

This trainer has been designed with a view to provide practical / experimental knowledge of Direct Sequence Spread Spectrum Modulation/Demodulation.



## **SPECIFICATIONS**

1. Power supply requirement : 230V AC, 50 Hz.

2. On Board Pseudo-Noise (PN) Code generator.

Bits : 16 bits
Clock Frequency : 100 KHz

3. On Board Digital Data generator to generate any binary input word of

Word Length : 8 Bits.
Bit Clock Frequency : 6.666 KHz
Data Format : NRZ.

4. Spreading Code Mixer and Unipolar to Bipolar Converter section.

5. Modulator Type : Coherent Binary PSK Modulator

6. Demodulator Type : Coherent Detector.

Low pass Filter cutoff Frequency : 105 KHz

Code Despreading : Using EX-NOR gate.

7. Standard Accessories : 1. A Training Manual.
2. Connecting Patch cords.

## **EXPERIMENTS**

- 1. To study theory of Direct Sequence Spread Spectrum Modulation & Demodulation.
- 2. To generate and receive DS-SS modulated signal.
- 3. To observe effect of different PN codes on DSSS Out put.
- 4. To observe spectrum of DSSS Signal on spectrum analyzer.

## **Sigma Trainers**

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**Dealer:-**