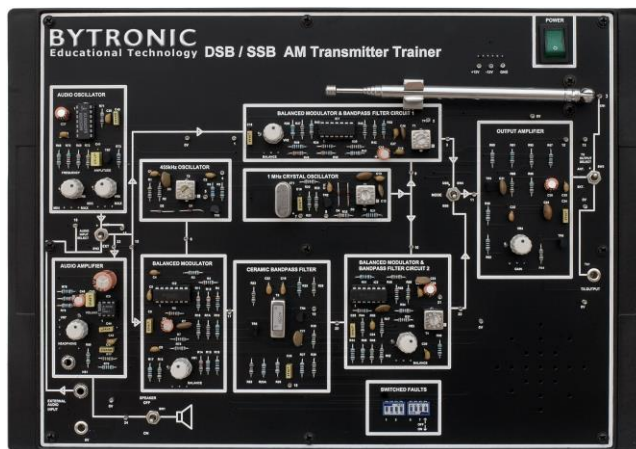


7501 - DSB / SSB AM Transmitter



Key Features:

- Functional Blocks indicated via on board mimics
- Switched Faults
- Oscillator controlled carrier frequency
- On board audio oscillator
- On board transmitting antenna
- On board speaker

The 7501 DSB/SSB AM transmitter trainer is part of an analogue communication range which provides all the necessary inputs, test points and connections for experimentation. The 7501 trainer teaches students the basics of DSB/SSB Amplitude modulation and transmission systems through measurement of voltages via the on-board test points.

The 7502 DSB/SSB AM Receiver is required to work with this unit.

Experiments

Automatic Gain Control:

1. Double Sideband AM Generation
2. To calculate modulation index of DSB wave by trapezoidal pattern
3. Double Sideband AM Reception
4. Study of Diode Detector

Single Side Band Transmission:

5. Signal Sideband AM Generation
6. Single Sideband AM Reception.
7. Operation of the Automatic Gain Control Circuit (AGC)

Receiver Characteristics (Selectivity, Sensitivity, Fidelity):

8. To plot selectivity curve for radio receiver
9. To plot sensitivity curve for radio receiver
10. To plot fidelity curve for radio receiver

Specification

Audio Oscillator	With adjustable Amplitude & Frequency (300 Hz - 3.4 KHz)
Audio Output	Amplifier with speaker / headphone
Modulators	2 x Balanced Modulators with Band pass Filters (1 MHz), 1 x Balanced Modulator (455 KHz) 1 x Ceramic Bandpass Filter (455 KHz)
Carrier Frequency	1 MHz (Oscillator controlled)
Transmitter Output	Gain adjustable DSB (1 MHz), SSB (1.445 MHz) connected to Antenna/cable
Test Points	27
Switched Faults	8
Power	110-220V AC \pm 10% , 50/60Hz
Dimensions (mm)	W326 , H52, D252
Weight	2 Kgs (approx.)

Ordering Information

Model Number:	7501
<i>Consists of:</i>	DSB / SSB AM Transmitter Trainer Manual Power Cord Set of patch cables

Notes.

1. *Specification is subject to change without notice.*
2. *All dimensions are in mm unless otherwise stated*

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