40693 DSB-AM Modulat ion & Demodulation is a comprehensive training solution for acquiring in-depth knowledge of the fundamental techniques used in DSB Amplitude Modulation and Demodulation. The implementation of DSB AM is tough, hence this board has been designed for beginners to get acquainted with concept of the real technology implementation.
40693 DSB-AM Modulat ion & Demodulation comprises of following blocks :

- AC Source with variable amplitude and frequency
- Carrier Source
- DC Source/Level Shifter
- Balanced Modulator with adjustable gain
- Transistorized AM Modulator
- Envelope Detector with adjustable band filter

Features

1. On-board Audio Signal Generator with Amplitude and Frequency control
2. On-board Carrier Generator
3. Variable DC Source/Level Shifter
4. Amplitude modulation using
   - Balanced Modulator
   - Transistorized AM Modulator
5. Gain adjustment for Balanced Modulator
6. Envelope detector for demonstration of demodulation method

Object

1. Study of Amplitude Modulation using a Balanced Modulator.
2. Study of Amplitude Modulation using a Transistorized AM Modulator.
3. Observations of modulation index/modulation depth.
4. Study of envelop detector and its utilization in AM detection.
5. To establish a relationship between RC time constant of diode detector, carrier frequency and modulating signal frequency.

Technical Specifications

Audio Signal Source

Type : Sinusoidal

Frequency range	:	200 Hz to 3.5 KHz
Amplitude	:	0 – 5 V variable
Carrier Source	:	1 MHz
DC Source/Level Shifter	:	0 – 5 V variable
Balance Modulator	:	DSB - AM
Transistorized Modulator	:	DSB - AM
Envelope Detector	:	With adjustable band filter
Test Points	:	14 nos.
Interconnections	:	2 mm Sockets
Power Supply	:	110 -220 V, ± 10%, 50 / 60 Hz
Dimensions (mm)	:	W 255 X D 155 X H 80
Weight	:	350 gm (approx)
0 Operating Conditions	:	0-40 C, 85% RH

Included Accessories

1. 2mm Patch Cord (Red) -5 nos.
2. 2mm Patch Cord (Black)-2 nos.
3. Power Supply-1no.

Note: Specifications are subject to change.

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