

# FREQUENCY DIVISION MULTIPLEXER / DEMULTIPLEXER TRAINER

**OMEGA TYPE ETB-264** 



**OMEGA TYPE ETB-264** FDM trainer demonstrates FDM technique. Two different modulated inputs can be transmitted as a single communication line using FDM The trainer is selfcontained and all the inputs are on board.

#### **OBJECTS:**

- 01 Study of Frequency Division Multiplexing / Demultiplexing with sinusoidal wave.
- 02 Study of Frequency Division Multiplexing / Demultiplexing with audio inputs
- 03 Study of Fourier Spectrum of FDM
- 04 Study of DSBSC Modulation/Demodulation

#### **TECHNICAL SPECIFICATIONS**

01 Carrier Generator :Sine wave 32KHz.

64KHz

02 Modulating Input A : Sine wave 300Hz - 3.4

Frequency KHz (variable)

03 Audio Input Amplifier : Gain of 100 (approx.)

04 Modulator/Demodulator: DSBSC Modulator /

Demodulator

05 Low Pass Filters : Second Order Butter

worth Filters with a cut off frequency of

4KHz

06 Audio Output Amplifier: Output Amplifier with

a gain of 20

07 Test points : Available

08 Interconnection : 2mm banana socket 09 Power Supply : 230VAC ±10%, at 50Hz

10 Power Consumption: 3 VA (approx.)11 Weight: 2.800Kg (approx.)

12 Dimension (mm) : W415×D165×H315.

#### **FEATURES:**

- 02 Self contained and easy to operate
- 03 Two variable modulating (sinusoidal) input channels with provision of voice inputs
- 04 Two DSBSC modulators for frequency band translation of two test signals
- 05 Two Carrier Generators
- 06 Two Sets of Audio input Amplifier
- 07 One adder/transmission Amplifier
- 08 Two Demodulators
- 09 Two low pass filters for smooth output
- 10 Two Inbuilt Speakers.

### **LIST OF ACCESSORIES**

01	Mic02
02	Patch cord 2mm length 50cm Red10
03	Patch cord 2mm length 50cm Black10

We are committed to the continuous development of our products, and therefore reserve the right to amend specifications without prior notice.

## **OMEGA ELECTRONICS**