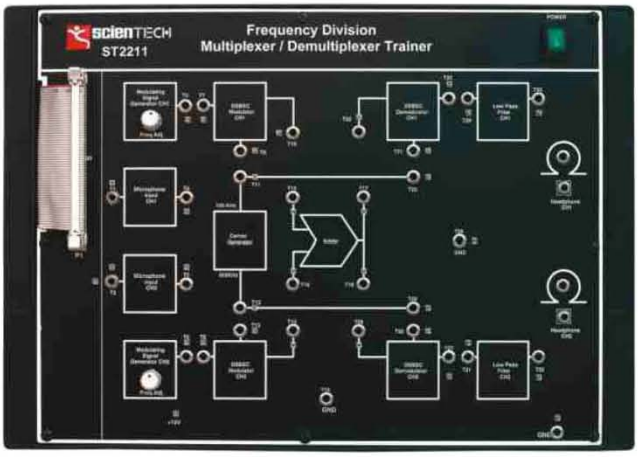
Frequency Division Multiplexing/ Demultiplexing Trainer ST2211



Scientech new FDM trainer ST2211 demonstrates FDM technique. Two different modulated inputs can be transmitted as a single communication line using FDM The trainer is self-contained and all the inputs are on board.

Technical Specifications

Carrier Generator : Sine wave 100 KHz & 200 KHz
Modulating Input Frequency : Sinewave 1 KHz -10 KHz (variable)
Audio Input Amplifier : Gain of 100 (approx.)
Modulator / Demodulator : DSBSC Modulator/Demodulator
Low Pass Filters : Second Order Butterworth Filters with a cut off frequency of 10 KHz
Audio Output Amplifier : Output Amplifier with a gain of 20
Test points : 30
Interconnection : 4mm banana socket
Power Supply : 220 V ±10 %, 50 Hz / 60 Hz on request
Power Consumption : 3 VA (approx.)
Dimension (mm) : W 340 × D 240 × H 105
Weight : 3.5 Kg (approx.)
Accessories : Microphones, Headphones, Patch Cords, Manual and Mains Cord

- Self contained and easy to operate
- Two variable modulating (sinusoidal) input channels with provision of voice inputs
- Two DSBSC modulators for frequency band translation of two test signals
- Two Carrier Generators
- Two Sets of Audio input Amplifier
- One adder/transmission Amplifier
- Two Demodulators
- Two low pass filters for smooth output

Experiments that can be performed

- Study of Frequency Division Multiplexing / Demultiplexing with sinusoidal & audio inputs
- Study of Fourier Spectrum of FDM
- Study of DSBSC modulation/Demodulation
- Study of Fourier Transform of DSBSC Modulation

and many more...