



Sciencetech TechBooks are compact and user friendly learning platforms to provide a modern, portable, comprehensive and practical way to learn Technology. Each TechBook is provided with detailed Multimedia learning material which covers basic theory, step by step procedure to conduct the experiment and other useful information.

Multiplexer-Demultiplexer and Encoder-Decoder TechBook Sciencetech 2503 provides all necessary inputs and connections for students to study Analog Time Division Multiplexing / Demultiplexing, Digital Time Division Multiplexing/Demultiplexing of signals, Pulse Position Modulation and Manchester Encoding / Decoding techniques. 2503 can be used independently or can be used to establish fibre optic link by using Fiber Optic TechBookSciencetech 2501and 2502.

Features

- Functional blocks indicated on board mimic
- Crystal Controlled Clock
- On board Sine wave and Digital Signal Generator
- 4-channel Time Division Multiplexing/Demultiplexing (Analog)
- 16-channel Time Division Multiplexing/ Demultiplexing (Digital)
- Manchester Coding and Decoding
- Pulse Position Modulation
- Can be used with Fiber Optic & various other Communication Links

Scope of Learning

- Study of 4-channel Analog Time Division Multiplexing / Demultiplexing
- Study of 16-channel Time Division Multiplexing/Demultiplexing
- Study of Pulse Position Modulation/Demodulation
- Study of Manchester Coding and Decoding
- Scientech 2503 can be also used with Scientech Fiber Optic TechBook 2501 & 2502

Technical Specifications

Function Generator

Crystal Frequency	: 4.096 MHz
Analog Input Channels	: 4 nos
Digital Input Channels	: 16 nos
On Board Analog Signals	: 250 Hz, 500 Hz, 1 KHz, 2 KHz (Adjustable Amplitude)
On Board Digital Outputs	: 16 Square wave frequencies(1 KHz - 2 MHz) Clock Generator 8 bit data
Modulation	: Pulse Position Modulation
Multiplexing	: Time Division Multiplexing (4 Channel Analog and 16 Channel Digital)
Coding	: Manchester Coding andDecoding
Test Points	: 27 nos
Interconnections	: 2mm sockets
Dimensions (mm)	: W 326 × D 252 × H 52
Power Supply	: 230 V, ± 10%, 50 Hz / 60 Hz
Power Consumption	: 2 VA approximately
Weight	: 1 Kg approximately
Product Tutorial	: Online on www.ScientechLearning.com

Included Accessories

Patch cord 16" (Red) 2mm	: 4 nos.
Patch cord 16" (Black) 2mm	: 2 nos.
Mains cord	: 1 no.