Order Code - 40530-8064
TDM Pulse Code Modulation Receiver Trainer

The trainer provides all necessary inputs and connection for students to study decoding and demultiplexing of data transmitted by PCM transmitter. On-Board PLL provides regeneration of Clock. Synchronization between transmitter and receiver is provided by Pseudo random code.

Technical Specifications

Input Channel	:	Time Division Multiplexed Serial Input
Demodulation	:	Pulse code Demodulation
Clock Regeneration	:	By phase Locked loop
Operating Speeds	:	Fast - 320 KHz/Channel, Slow 1.9 Hz / Channel
Error Detection (Single bit)	:	Off-Odd- Even parity & Hamming code
Error Correction	:	Hamming code
PC- PC communication	:	using 2 channels via RS232
Port	:	9 pin D type connector - 2 Nos.
Baud rate	:	Selectable from 300 to 2400
Test Points	:	50
Interconnections	:	2 mm sockets
Power Supply	:	220 V ±10%, 50Hz / 60 Hz on request
Power Consumption	:	4 VA (approx.)

- Functional blocks indicated via on board mimics
- Input accepts two channel multiplexed data
- On board De-multiplexed PCM Receiver
- On board L. P. Filter
- Fast & Slow modes for real time operation and data flow examination
- On board PLL for clock regeneration
- On board sync code detector
- Error +check code options
- Odd or Even Parity-Single bit error detection
- Hamming code single bit error detection and correction
- 4 Switched faults allow different error check code option
- PC - PC Communication via RS232 interface

Experiments that can be performed

- PCM Demodulation Technique
- Time Division Demultiplexing of PCM data
- Clock Regeneration by PLL
- Effect of induced faults in the transmitter & receiver
- Signal recovery in 3 connecting modes between transmitter & receiver
- Clock & Frame Synchronization in PCM system
- PC -PC communication in 3 modes
- Study of synchronization by pseudo random code
- Study of error check codes
- Study of A/D conversion
- Study of control signals and their timing
- Study of time division multiplexing

Note: Specifications are subject to change.

Tesca Technologies Pvt. Ltd.
IT-2013, Ramchandrapura Industrial Area, Sitapura Extension,
Near Bombay Hospital, Vidhani Circle, Jaipur-302022, Rajasthan, India,
Tel: +91-141-2771791 / 2771792; Email: info@tesca.in, tesca.technologies@gmail.com
Website: www.tesca.in