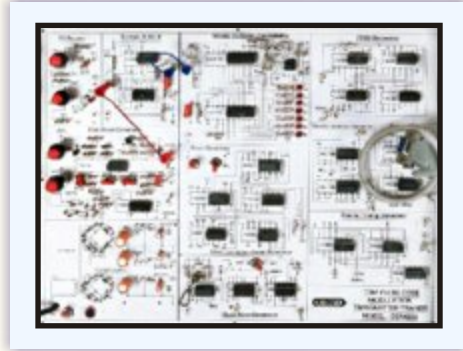




# TDM PULSE AMPLITUDE MODULATION/ DEMODULATION TRAINER

MODEL-COM202

This trainer has been designed with a view to provide practical and experimental knowledge of 4 channel Time Division Multiplexing Demultiplexing using PAM technique as practically implemented in Digital Communication systems on a SINGLE P.C.B.



## SPECIFICATIONS

1. Crystal Frequency : 6.4 MHz
2. Analog Input channel : 4
3. Multiplexing : Time Division Multiplexing
4. Modulation : Pulse Amplitude Modulation
5. On-board Analog Signal : 250Hz, 500Hz, 1 KHz 2KHz (Sine Wave synchronized to sampling pulse adjustable Amplitude and separate variable DC level)
6. Sampling Rate : 16 KHz/Channel
7. Sampling Pulse : With Duty Cycle variable from 0-90% in decade steps
8. Clock Regeneration at Receiver Using PLL
9. Low pass Filter Cut-off Freq.3.4 KHz
10. Test points : More than 40
11. Interconnections : 4mm Sockets
12. Power : 230V  $\pm$  10%, 50/60 Hz, 4VA (approx.)
13. Accessories included : Manual, Set of patch cord, Line cord

## EXPERIMENTS

1. Pulse Amplitude Modulation technique
2. Time Division Multiplexing and De multiplexing
3. PLL as Frequency Multiplexer to generate clock from sync signal
4. 3 modes of operation to generate original signal
  - a) 3 connections between transmitter & receiver (Clock, sync, & information)
  - b) 2 connections (information, sync) Clock generator at receiver
  - c) 1 connection (information only), Clock and sync derived at receiver
5. Effect of varying duty of sampling pulse on signal reconstruction.

In keeping view of SIGMA policy of continuous development and improvement, the Specifications may be changed without prior notice or obligation.

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