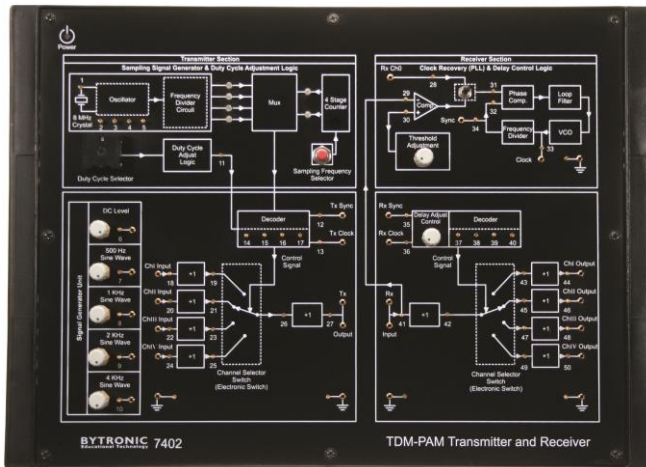


7402 – TDM Pulse Amplitude Modulation/Demodulation Trainer



Key Features:

- Functional Blocks indicated via on board mimics
- Test points
- Crystal controlled Clock
- On-board signal generator (Synchronized) DC and Sine
- On-board pulse generator
- Demonstrates sampling and reconstruction as per Nyquist criterion
- 4 Analog input channels (TDM-PAM)
- Four switch selectable sampling frequencies
- Pulse duty cycle selectable
- Generation of clock at receiver by PLL system
- 4th order Butterworth L. P. Filters

The unit is one of a range of digital communication trainers and provides all necessary inputs and connections for students to study pulse amplitude modulation / demodulation techniques, time division multiplexing and demultiplexing of signals and signal reconstruction.

Experiments

- Study of pulse amplitude modulation technique
- Study of time division multiplexing and demultiplexing
- Study of PLL as frequency multiplier to generate clock from sync signal
- Study of effect of varying duty cycle of sampling pulse on signal reconstruction
- Study of 3 modes of operation to regenerate original signal
- 3 connections between transmitter and receiver (clock, sync & information)
- 2 connections (sync & information). Clock regenerated at receiver
- 1 connection (information only). Clock and sync derived at receiver

Specification

Crystal Frequency	8 MHz
Analogue Input Channels	4
Multiplexing	Time Division Multiplexing
Modulation	Pulse Amplitude Modulation
On-board Analogue Signal	500Hz, 1KHz, 2KHz and 4KHz (sine wave synchronised to sampling pulse) adjustable amplitude and separate variable DC Level
Sampling Rate	32, 40, 50 and 80KHz channel (switch selectable)
Sampling Pulse	With duty cycle variable from 0-90% in decade steps
Clock Regeneration at Receiver	Using PLL
Test Points	55
Power	110-220V, 50KHz/60KHz
Dimensions (mm)	W326, H52, D252
Weight	2.5Kg (approx.)

Ordering Information

Model Number:

7402

Consists of:

TDM Pulse Amplitude Modulation / Demodulation Trainer
Manual
Power Cord
Set of patch cables

Notes.

1. *Specification is subject to change without notice.*

2. *All dimensions are in mm unless otherwise stated*

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