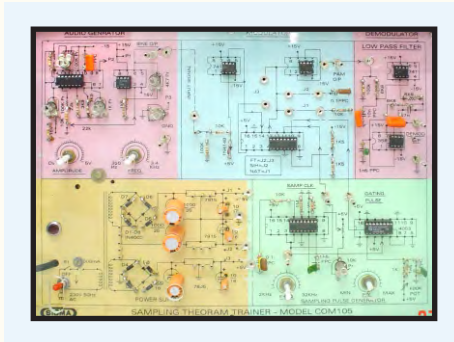# SAMPLING THEOREM TRAINER
(SAMPLING & RECONSTRUCTION)
MODEL- COM105M

SIGMA

This trainer has been designed with a view to provide practical & experimental Knowledge of three different types of Sampling process on a SINGLE P.C.B of size 12 "x 9".

SPECIFICATIONS

1.	Power supply requirement	:	230V AC, 50 Hz.
2.	Built in IC based power supply.		
3.	On Board AF Modulating signal generator - Sine wave		
	Frequency Range	:	300Hz to 3.4KHz
	Amplitude	:	0 to 5 Vpp.
4.	On Board Sampling Pulse signal generator.		
	Frequency Range	:	2 KHz to 32 KHz.
	Pulse width	:	Variable.
5.	Types of sampling processes	:	Natural sampling, Flattop sampling, Sample and Hold.
6.	Demodulator Sections	:	Low Pass Filter
7.	Standard Accessories	:	1. A Training Manual.
			2. Connecting Patch cords.

EXPERIMENTS

1. To study theory of different types of Sampling process.
2. To generate PAM signal by flattop sampling.
3. To generate PAM signal by Natural sampling.
4. To generate PAM signal by S/H circuit.
5. To demodulate using Low Pass Filter.
6. To see the effect on PAM modulated output by varying the amplitude and frequency of modulating signal.
7. To vary Pulse width of Sampling frequency and see the effect on amplitude of S/H and reconstructed signal.
8. To vary frequency of Sampling pulse generator and see the aliasing effect.
9. To prove Nyquist's Sampling Theorem.

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