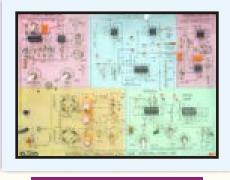


## VERIFICATION OF SAMPLING THEOREM NATURAL & FLAT TOP SAMPLING WITH SPECTRUM ANALYSIS MODEL - COM105L

This trainer has been designed with a view to provide practical & experimental Knowledge of sampling and reconstruction of analog signal using PAM technique.



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	:	1KHz
Amplitude	:	0 to 3 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

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- 6. Demodulator Sections : Interpolation Filter
- All parts are soldered on single PCB with multicolor Section wise blocks and complete circuit diagram Screenprinted with true value fo part. The PCB provided with multi-colour 2mm Testing points and acrylic cover for safety in wooden box.
- 8. Standard Accessories
- 1. A Training Manual and Connecting Patch cords.

**EXPERIMENTS** 

- 1. To study verification of Sampling Theorem
- 2. To study PAM Techniques (Flat top & Natural sampling)
- 3. To study effect of variable sampling rate,
- 4. To study effect of filter cutoff frequency
- 5. To reconstruct original signal using Interpolation filter
- 6. To study aliasing effect in frequency domain
- 7. To observe Spectrum of Sampled signal on Spectrum analyser

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