

VIJAYANTA

VIJAI ELECTRONICS
28/147, CIVIL LINES
ROORKEE - 247667



LINEAR SYSTEM SIMULATOR TRAINER,

MODEL - LSS - 101.

Description of Instrument :

The linear system simulator set-up is designed to study the transient response of a linear system. Simple block diagram approach is used to system configuration. Disturbance points etc. a description is given below :

SIGNAL SOURCES :

There are three built-in sources in this unit.

Frequency : 40 - 90 Hz (Variable)

Square Wave : p - p amplitude 0 - 2 Volts

Triangular Wave : p - p amplitude 0 - 2 Volts

Trigger : ± 5 Volts (approximate)



FEATURES

- ** This unit is inside a metallic cabinet with front panel block diagram.
- ** All the necessary switches, potentiometer and test points are on the front panel.
- ** All the waveforms can be measured on a C.R.O.
- ** Simulated First, Second and Third order system of Type - 0 and Type - 1.
- ** Calibrated Variable gain amplifier of resolution 1 : 1000.
- ** Builtin Signal source, Square wave and triangular wave with 45 - 90 Hz Frequency and 0 - 2.5 amplitude.
- ** Provision for disturbance inputs.
- ** Builtin Regulated Power Supply : 230 Volt, $\pm 10\%$, 50 Hz mains operated.
- ** Detailed literature and patch cords.

OBJECT:

To study the time response of various simulated linear systems.

1. Open Loop Response :
 - (a) Error Detector Cum Variable Gain
 - (b) Disturbance :
 - (c) Amplifier :
 - (d) Integrator :
 - (e) Time Constants :
2. Closed Loop Response :
 - (a) First Order System :
 - (b) Second Order System :
 - (c) Third Order System :

Accessories Required :

1. A general purpose Dual Trace, Oscilloscope.