

VIJAYANTA

VIJAI ELECTRONICS
28/147, CIVIL LINES
ROORKEE - 247667



SECOND ORDER ACTIVE SYSTEM TRAINER

MODEL SAT - 01

Description

The stability analysis trainer kit is designed to study the open – loop, closed loop response of an electrical system. Through this trainer, the stability of system can be studied under positive and negative feedback mode. Furthermore, the stability criterion can also be investigated by introducing gain in the closed-loop system. The kit contains three different kinds of plants to work on.

Signal Source

There are a 5 Volt DC built in source in this unit.

Features

- This unit is inside ABS cabinet with front panel block diagram.
- All necessary switches, test points are on the front panel.
- All waveforms can be measured on a CRO.
- Built in DC signal source of 5 Volts
- Indicator which show the mode of the system under positive and negative feedback.
- Knob of variation of gain and switch to select different plant.
- Built in regulated power supply : 230 Volt, $\pm 10\%$, 50 Hz mains operated.
- Reset switch to quick deactivate the system response.
- Detailed literature and patch chords.

Object

Through this kit following objectives can be achieved:

1. Study of open and close loop response to step signal and calculation of steady state error for step input.
2. For step input, stability analysis on varying gain in closed-loop mode under
 - a) Positive feedback mode
 - b) Negative feedback mode
3. Determine the gain at which the control system become marginally stable for different plants for step input.

Accessories required

Digital Storage Oscilloscope

Due to continuous development in diagram and specification, there may be any change without any notice.