



In control system there are different types of controller. Study of two-position mode as ON/OFF controller and continuous controller modes as PID controller is a very important part of control engineering. To have a basic idea and practical hands on controllers our PID Trainer has been designed to be used by student to investigate the fundamental principles of PID by applying different signals to it.

With PID controller trainer student can study two position mode as ON/OFF controller and continuous controller modes as P-control mode, Icontrol mode, D control mode, PI-control mode, PD - control mode and PID control mode. This modes of controller can be performed individually and also with different combinations in open loop and close loop system. With this trainer user can easily understand the difference between the different modes of controllers used. Square wave, triangular wave generator and variable DC supply as set point is given on board and disturbance generator is provided. Effect of PID can be seen on first order system and second order system in open loop and close loop system, which is given on the board.

- Proportional, Integral and Derivative functions can be checked on same board (configurable as P,I, D, PI, PD, PID)
- ON/OFF controller
- Square and triangular wave with variable frequency for testing PID
- Variable DC for set point
- Error detector
- Ist order system & IInd order system
- In built power supply
- Dead zone and disturbances generator
- Built-in 3<sup>1</sup>/<sub>2</sub> DVM for DC measurement
- Test point at varies block to measure and observe the signals.
- Manual describing working of trainer along with detailed experiment descriptions

## Technical SpecificationsProportional Band:5% to 55%.Integrator:10 msec to 110 msecDerivative:1 msec to 110 msecON/OFF controller:ON = 12 V, OFF = -12 VOn board Generator:Square wave & triangular wave<br/>Generator of 0 - 156 Hz, Two Variable DC<br/>+6 V, +10 VInterconnections:2 mm socketPower Supply: $220 V \pm 10\%$ , 50 Hz/60 Hz on requestPower Consumption:1.6 VA (approx.)

Note: Specifications are subject to change.

## Tesca Technologies Pvt. Ltd.

IT-2013, Ramchandrapura Industrial Area, Sitapura Extension, Near Bombay Hospital, Vidhani Circle, Jaipur-302022, Rajasthan, India, Tel: +91-141-2771791 / 2771792; Email: info@tesca.in, tesca.technologies@gmail.com Website: www.tesca.in

