

**52088** Control System Simulator which covers basic theory, step by step procedure to conduct the experiment and other useful information.

52088 Control System Simulator helps the users to gain invaluable knowledge about Order and type of Control System. Square wave, Ramp wave, Parabolic wave, Unit step signal and variable DC supply are provided on board as standard inputs. On board Resistance, Capacitor and Inductor banks for studying different combination for the order of a system are also available.



**Objects:**

1. To observe the First Order control system for different values of the Damping Ratio at different values of resistance
2. To observe the Second Order control system for different values of the Damping Ratio at different values of resistance
3. To observe the Third Order control system for different values of the Damping Ratio at different values of resistance
4. To observe the Type0 control system Steady State Error (Ess) for Unit Step or Square wave input
5. To observe the Type0 control system Steady state error (Ess) for Ramp as input
6. To observe the Type0 control system Steady State Error (Ess) for Parabolic as input
7. To observe the Type1 control system Steady State Error (Ess) for Unit Step or Square wave input
8. To observe the Type1 control system Steady State Error (Ess) for Ramp as input
9. To observe the Type1 control system Steady State Error (Ess) for Parabolic as input
10. To observe the Type2 control system Steady State Error (Ess) for Unit Step or Square Wave input
11. To observe the Type2 control system Steady State Error (Ess) for Ramp as input
12. To observe the Type2 control system Steady State Error (Ess) for Parabolic as input

**Technical Specifications:**

|                       |  |
|-----------------------|--|
| Unit Step Signal      |  |
| Square Wave           | : 100Hz + 20%                              |
| Ramp Wave             | : 100Hz + 20%                              |
| Parabolic Wave        | : 100Hz + 20%                              |
| Resistance Bank       | : 100E, 1K, 10K, 10K, 50K, 100K            |
| Inductor Bank         | : 1uH, 680uH, 10mH, 10mH, 68mH, 68mH       |
| Capacitor Bank        | : 0.001uF, 0.01uF, 0.01uF, 0.1uF, 1uF, 1uF |
| Learning Material     | : Theory, procedure, reference results etc |
| Dimensions (mm)       | : W 415 x D 165 x H 315                    |
| Power Supply          | : 230V AC, 50/60Hz                         |
| Weight                | : 1.5Kg (approximately)                    |
| Operating Conditions: | 0-40 C, 85% RH                             |

**List of Accessories:**

1. Patch cord 4mm length 50cm Red .....04
2. Patch cord 4mm length 50cm Black .....04

**Features**

1. Study of I Order System
2. Study of II Order System
3. Study of III Order System
4. Study of Type 0 System
5. Study of Type 1 System
6. Study of Type 2 System
7. Additional Resistance Bank
8. Additional Capacitance Bank
9. Additional Inductance Bank
10. Unit Step Output
11. Square Wave Output
12. Ramp Output
13. Parabolic Output
14. Buffers
15. Ess Block

Note: Specifications are subject to change.

