

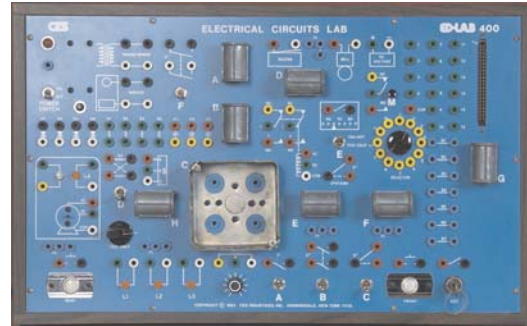


# Electrical Circuits Lab

## Ed-Lab 400



### CONCEPTS OF ELECTRICAL CIRCUITS IN A RUGGED INTRODUCTORY PROGRAM



The **ED-LAB 400 ELECTRICAL CIRCUITS LAB** is a self-contained trainer designed to introduce the concepts of electricity circuits and electrical switching and control systems. Permanently mounted components are interconnected using full size banana plugs. Experiments cover bell and buzzer circuits, switch and lamp circuits, relay and control circuits, motor circuits, alarm and detection systems and calling circuits. The student is introduced to the components and systems associated with electrical careers and occupations. The exposure provides an interesting and motivating experience in the electrical field for a rapid manner of presenting a wide variety of electrical circuits.

### The Electrical Circuits Lab Student Manual is outfitted below

#### UNIT NO. 1 SIGNALING JOBS

1. Bell Circuit
2. Door Bell Circuit
3. Buzzer Circuit
4. Door Bell with Bell Feed
5. Bell with 2 Buttons
6. Parallel Bell Circuit
7. Front and Rear Signaling
8. Maintained Action Switch
9. Master Switch Series
10. Calling System
11. Series Bell & Buzzer
12. Bell Cut-Off
13. Return Call System
14. Parallel Cut-Off
15. Signal System Installation Jobs

#### UNIT NO. 2 LIGHTING JOBS

16. Light Circuit
17. One Way Light Switch
18. Two Parallel Light Circuits
19. Series Light Circuit
20. Three Way Circuit
21. Four Way Circuit
22. Series Switch Circuit
23. Master Control
24. Parallel Switch Circuit
25. Series Parallel Circuit
26. Automobile Electric System
27. Transfer Circuit
28. Key Switch and Power Bus
29. Momentary Switch
30. Light Circuit Installation Jobs

#### UNIT NO. 3 MOTOR & RELAY JOBS

31. AC Motor Control for a Lathe
32. Motor & Light Monitor for Boat Anchor
33. DC Elevator Motor Reverse Direction Control
34. Two Hand Safety Switch Motor Control
35. Automatic Door Motor with Key Control
36. Relay Motor Controller
37. DC Relay Control of Remote Machine in AC Motor
38. Relay Switch Washing Machine Control
39. Rotary Switch Washing Machine Control
40. Normally Open Burglar Alarm
41. Normally Closed Burglar Alarm
42. Manual/Automatic Boat-Bilge Motor Control
43. Toll Booth Light & Gate Control
44. Boiler Motor Control Override
45. Magnetic Controller

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