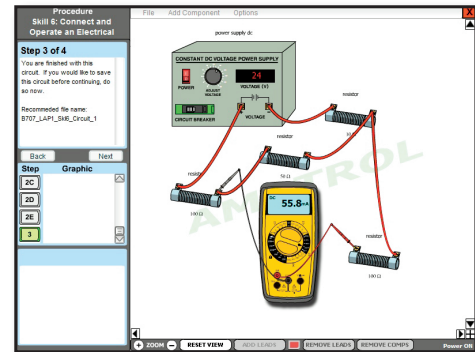


AC / DC ELECTRICAL LEARNING SYSTEM

T7017-A



Optional Virtual Trainer T7017

CURRICULUM IS THE KEY TO LEARNING

Learning Topics:

- AC / DC Voltage and Current Principles
- Resistance, Inductance, and Capacitance Principles
- Power Generation Principles
- Ohm's Law and Kirchoff's Law
- Series and Parallel Circuits
- Multi-meters; Manual Switches
- Basic Output Devices
- Fuses and Circuit Breakers
- Resistors; Capacitors; Inductors
- Potentiometers; Solenoids
- Control Relays; Circuit Testers
- Circuit Protection Calculations
- System Design
- Troubleshooting

Amatrol's T7017-A AC/DC Electrical Learning System teaches fundamentals of AC and DC electrical systems used for power and control in industrial, commercial, agricultural, and residential applications. Students learn industry-relevant skills including how to operate, install, design, and troubleshoot basic AC and DC electrical circuits for various applications.

The model T7017-A includes a bench top-mount workstation, AC power supply, DC power supply, electrical components set, lead set, hand-held multi-meter, circuit tester, built-in instrumentation console, student learning materials for both theory and lab, and teacher's assessment guide. This system uses industrial quality components to help students become better prepared for what they will encounter on the job.

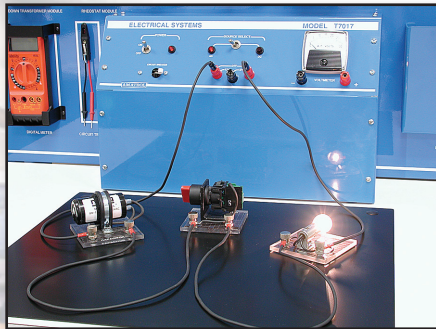
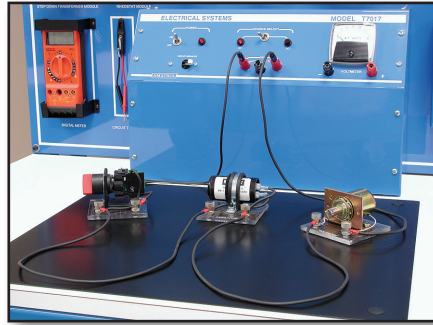
AMATROL[®]

www.amatrol.com

DESIGNED FOR LEARNING

Industrial Size Components

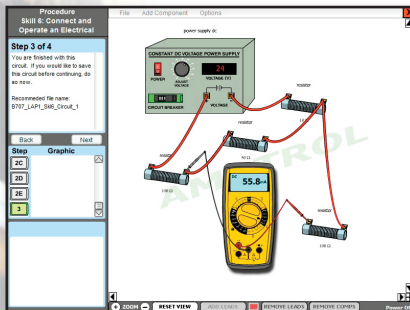
The T7017-A features industrial size electrical power and control components, typical of what students will find in the field. This experience better prepares students to recognize industrial component styles and troubleshoot them effectively. Safety is emphasized throughout. Safety devices include a 24-volt power or less, grounding and guards.



Each component's leads are attached to quick-turn terminal posts, allowing students to use leads to quickly interconnect components for a variety of circuit applications.

Effective Component Inventory

Components are stored on a vertical storage panel with silk-screened and labeled outlines so components can easily be identified and inventoried. This makes setup quicker so students can do more in less time. Components also do not get lost as easily.



Optional Virtual Trainer VT-T7017

Amatrol's virtual trainers replicate hands-on equipment in such great detail that students will feel like they are using the actual equipment. Students will perform essentially the same tasks using virtual trainers that they would perform using equipment hardware.

Transition from theory to hands-on is a seamless process. These skills enable students to work effectively in business settings.

TECHNICAL DATA

Workstation

- Welded frame, 1.5 in. steel tube, 38" (97cm) L x 35" (89cm) H x 30" (76cm) W
- Integrated instrumentation console
- Component test surface
- Component storage panel, vertical, silk-screened outlines, 16 ga. steel integrated instrumentation console
- Power supply with 12 and 24 volt outputs, AC and DC, 3.0 Amp
- Main power on / off switch
- Power-on indicator lamp
- AC/DC power selector switch
- AC/DC power indicator lamps
- Circuit breaker
- AC/DC power output terminals for connection to devices
- Analog AC/DC voltmeter with terminals, range 0 to 30 volts

Electrical Component Set

- Module mounting plexiglas panels (21)
- Knife switch module, DPDT
- Push button switch module, SPST
- Selector switch module, SPST
- Lamp modules, 28V @ 0.67A (3)
- Resistor modules, 25 ohm with protective cover (2)
- Resistor module, 10 ohm with protective cover
- Capacitor module, 88-106 MF, electrolytic (2)
- Control relay module, DPDT 24VDC
- Solenoid module, 24VDC
- Buzzer module, piezoelectric, 20VDC
- Fan module, 24VDC / .11A
- Circuit breaker module, 1A/277VAC
- Fuse module, 3A, 3AG, fast acting
- Rheostat module, 1A/ 25 ohm, 25 watt
- Transformer module, 9.6VA
- Transformer load module with 2 resistors, 220 ohm, 5 watt
- Compass module

Lead Set

- Test leads, spade-to-spade connections, 24-in. length (10)
- Test leads, spade to banana, 24-in. length (4)
- Multi-meter test cord set, red (1), black (1)

Hand Held Instrumentation Set

- Neon circuit tester (90-300V)
- Multimeter

Student Learning Activity Packet Set, BB227 Teacher's Assessment Guide, CB227

Additional Required Items:

- PC – Windows XP or higher, see <http://www.amatrol.com/support/computer-requirements>
- One of the following Amatrol mobile workstations or equivalent models: 82-609, 82-610, or 82-611