

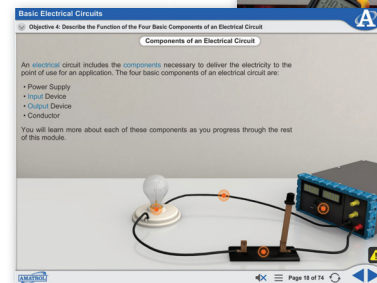
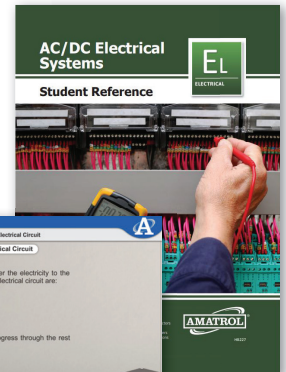
AC/DC Electrical Learning System

T7017A



AC/DC Electrical Learning System

Student Reference Guide



Interactive Multimedia Curriculum

Learning Topics:

- Basic Electrical Circuits
- Fundamentals of Electricity
- Electrical Measurements
- Series and Parallel Circuits
- Circuit Analysis
- Circuit Protection Devices
- Inductance
- Capacitance
- Electromagnetism
- Combination Circuits
- Transformers

Amatrol's AC / DC Electrical Learning System (T7017A) explores the fundamental concepts of AC and DC electrical systems. Learners will see how electricity is used for power and control in industrial, commercial, agricultural, and residential applications. This training system covers industry-relevant technical skills including how to operate, install, design, and troubleshoot basic AC and DC electrical circuits for various applications.

The T7017A includes a bench top-mount workstation, lamp module assembly, pushbutton switch module assembly, selector switch module assembly, circuit breaker module assembly, handheld digital meter, and much more! Learners will use these components to study topics such as manual input devices, voltage measurement, lighting circuits, voltage dividers, and troubleshooting. This system uses industrial quality components for durability to stand up to frequent use and to help learners become better prepared for what they will encounter on the job.



Technical Data

Complete technical specifications available upon request.

Workstation with AC/DC Power Supply
Lamp Module Assembly (3)
Knife Switch Module Assembly
Solenoid Module Assembly
Fuse Module Assembly
25 Ohm Resistor Module Assembly (2)
10 Ohm Resistor Module Assembly
Pushbutton Switch Module Assembly
Selector Switch Module Assembly
Circuit Breaker Module Assembly
Buzzer Module Assembly
Fan Module Assembly
Capacitor Module Assembly (2)
Relay Module Assembly
Rheostat Module Assembly
Step Down Transformer Module Assembly
Compass Module Assembly
Transformer Load Module Assembly
Patch Cords, Spade Lug to Spade Log (10)
Path Cords, Spade Lug to Banana (4)
Neon Circuit Tester
Handheld Digital Multimeter
Student Curriculum – Interactive PC-Based
Multimedia (NB227)
Instructor's Guide (CB227)
Installation Guide (DB227)
Student Reference Guide (HB227)

Additional Requirements:

Personal Computer; For PC requirements, see
[http://www.amatrol.com/support/
computer-requirements](http://www.amatrol.com/support/computer-requirements)

Utilities Required:

Electricity (120 VAC/60 Hz/1 phase)

Build Hands-On Electrical Skills for Residential and Industrial Applications

This AC/DC electrical training system features a heavy-duty welded steel frame with built-in AC and DC power supplies, instrumentation, component mounting surface, and component storage panel. It features industrial size electrical power and control components, typical of what student will find in the field. Learners will use these components to practice hands-on skills such as operate a circuit breaker, test a capacitor using a digital multimeter, connect and operate a basic lighting circuit, locate a short circuit, and troubleshoot a transformer by measuring continuity.



T7017-A

Build Foundational Electrical Knowledge and Apply It to Real World Applications

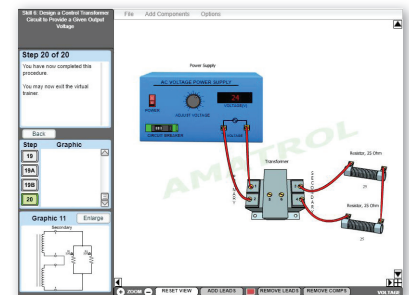
The T7017A's curriculum begins with the basics of electricity and builds to show learners how electricity is utilized in residential applications, as well as in industrial components and areas such as programmable controllers, electrical motor control, and electro-fluid power. Learners will study topics such as how to use a voltmeter to measure voltage, stating a formula for calculating total parallel resistance, the functions of four electromagnetic devices, how switches are used in combination circuits, and how to troubleshoot a transformer. This electrical training course is presented in an interactive multimedia format, which features stunning 3D graphics and video, audio voiceovers of all of the text, and interactive quizzes and activities.



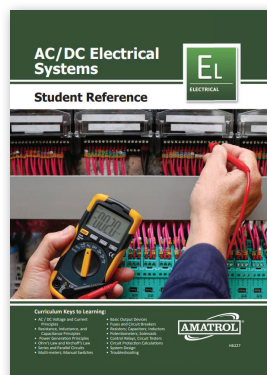
Interactive
Multimedia

Virtual Trainer for Online Electrical Skill-Building

The AC/DC Electrical Learning System also features a virtual multimedia trainer! Amatrol's virtual trainers replicate hands-on equipment in such great detail that students will feel like they are using the actual equipment. Learners 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.



Virtual Trainer for AC/DC Electrical



Complimentary Student Reference Guide

A sample copy of the AC/DC Electrical Student Reference Guide is included with the learning system. Sourced from the curriculum, the Student Reference Guide takes the entire series' technical content contained in the learning objectives and combines them into one perfectly-bound book. If you would like to inquire about purchasing additional Student Reference Guides for your program, contact your local Amatrol Representative for more information.

