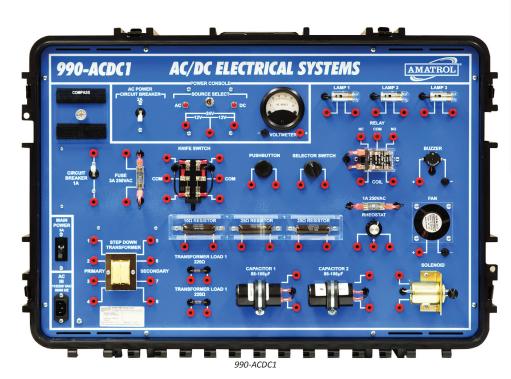
# Portable AC/DC Electrical **Learning System**

990-ACDC1





Student Reference Guide AC/DC Electrical Interactive Multimedia Curriculum



Portable Workstation

# **Learning Topics:**

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

Amatrol's AC/DC Electrical Learning System (990-ACDC1) is a portable solution when training space is limited but comprehensive knowledge and skill building cannot be sacrificed! This portable system can be placed on a conference room table, shop floor desk, or practically anywhere due to its small footprint. Its compact size and durable case also provide for safe storage when available training space must be used to teach other topics.

The 990-ACDC1 workstation combined with a highly-engaging interactive multimedia teaches the fundamentals of AC and DC electrical systems used for power and control in industrial, commercial, agricultural, and residential applications. Using a variety of input, output, and other electrical components, it offers industry-relevant skills including how to operate, install, design, and troubleshoot basic AC and DC electrical circuits.

This system provides the knowledge and skills you need with unmatched flexibility!



#### **Technical Data**

Complete technical specifications available upon request

#### **Portable Case**

Suitcase: 28.8" L x 20.1" W x 14.8" D

**Durable ABS Plastic** 

#### 990-ACDC1 Mounted Panel

Pushbutton Switch

Selector Switch

Circuit Breaker Switch

**DPDT Knife Switch** 

24 VDC DPDT

Buzzer

Transformer

Lamps, 28 V (3)

Fan - 24 VDC

Solenoid

Compass Circuit Tester

Fuse

25 Ohm Resistors (2)

10 Ohm Resistors

Rheostat

Electrolytic Capacitors – 80-106 MF (2) 220 Ohm-5 Watt Transformer Load Resistors (2)

Power Cord, 14/3, 15A

24" Stackable Banana Leads (14)

Neon Circuit Tester

**Digital Multimeter** Spare Fuse, 10A

Fuses, 3A, Fast-Acting (12)
Multimedia Curriculum (M11133)

Instructor Guide (C11133)

Install Guide (D11133)

Student Reference Guide (H11133)

Additional Requirements:

See http://www.amatrol.com/support/

computer-requirements

**Utilities Required:** 120/220 VAC, 60 /50 Hz, Power Outlet

## **Learn about Electricity Nearly Anywhere**

Using the 990-ACDC1 and a computer, anyone can attain a wide array of AC/DC electrical training at a desk, in a conference room, or practically anywhere. This compact system opens up training areas in your facility that you have never been able to consider! This learning system



provides both knowledge and skill building by covering topics such as Ohm's Law and Kichhoff's Voltage Law. Then allows learners to apply the knowledge using real-world components including switches. solenoids, and digital multimeters. Learners build on this knowledge, adding skills such as operating a circuit using a circuit breaker, connect and operate a relay in a circuit, and connect and operate a basic lighting circuit.

# **Highly Engaging Interactive Multimedia**

The 990-ACDC1's extensive multimedia curriculum begins at the foundation of electrical power by defining electricity and then builds onto this fundamental knowledge by advancing to topics such as transformers and combination circuits. As the learner completes each new topic, they'll use this theoretical knowledge to complete hands-on skills like connecting and operating an electrical circuit containing resistors, using a digital multimeter to measure voltage, and troubleshooting a transformer. By com-

bining theoretical knowledge and hands-on skills, the learner's comprehension of electrical systems is greatly enhanced.



# The 990-ACDC1: Mobile, Durable, Efficient

Set within a durable ABS plastic case, the 990-ACDC1 features wheels and a handle to create a completely mobile learning system. This highly efficient learning system also includes a storage pouch in the inside cover for loose components, such as the banana leads used to connect the various circuits. The system's front cover is easily removed, enabling the case to sit upright on a flat surface for ease of use. It is easy to transport, easy to store.



### **Complimentary Student Reference Guide**

A sample copy of the ACDC1 Electrical Learning System's Student Reference Guide is included with the system for your evaluation. Sourced from the system's multimedia curriculum, the Student Reference Guide takes the entire series' technical content contained in the learning objectives and combines them into one perfect-bound book. Student Reference Guides supplement this course by providing a condensed, inexpensive reference tool that learners will find invaluable once they finish their training making it the perfect course takeaway.

If you would like to inquire about purchasing additional Student Reference Guides for your program, contact your local Amatrol Representative for more information.

