



Learning Topics:

- Electrical Control Wiring
- Electrical Prints
- Wire Color Coding
- Electrical Control System Wiring
- Panel Wiring
- Wire Bundling
- Pneumatic Control Circuit Wiring
- Electro-Pneumatic Valves
- Pneumatic Schematics
- Conductors
- Disconnects
- Overcurrent Protection

Amatrol's Electrical Wiring Learning System (850-MT6B) allows learners to study and practice electrical wiring skills like: installing control wiring in an electrical panel; installing wiring into limit switches, solenoids, and pressure switches; and understanding the importance of correct wire size, material, and insulation. The 850-MT6B is an invaluable industrial wiring technician training system for careers like electricians and industrial maintenance technicians that wire control panels and operator panels on manufacturing machines. This learning system can also be used to form a strong foundation toward attaining numerous industrial maintenance technician certifications.

The 850-MT6B includes real-world components such as a 3-phase motor, pushbuttons, switches, valves, and a 24VDC power supply all mounted on a mobile workstation. Learners will use these components to study areas like electrical control system wiring, pneumatic control circuit wiring, conductors, disconnects, and overcurrent protection. This combination of industrial components and comprehensive curriculum will reinforce electrical wiring concepts and skills and build up a learner's confidence and competence.



Technical Data

Complete technical specifications available upon request.

Mobile Workstation Control Panel Enclosure Manual Operator Station Limit Switch Level Pneumatic Cylinder, 5/8-in bore, 3-in stroke Air Pressure Regulator Single Solenoid Valve **Pressure Switch** Motor, 3 Phase, 1/3 HP Allen-Bradley 16A Motor Disconnect Switch Lockout / Tagout Push-to-Test Buttons (3) Student Curriculum – Interactive PC-Based Multimedia (M17461) Instructor's Guide (C17461) Installation Guide (D17461) Student Reference Guide (H17461) Additional Requirements: Hand Tools Package (41209) Consumable Package (17463) Computer. For requirements, see http://www. amatrol.com/support/computer-requirements **Utilities Required:** Electricity (208VAC/60Hz/3 phase) Compressed Air (5 CFM @ 100 psig / 0.142 cmm @ 690kPa)

Hands-On Electrical Wiring Skills on a Mobile Workstation

The 850-MT6B includes heavy-duty industrial components such as a 3-phase, 1/3 HP motor; disconnect switch; side rotary limit switch; manual shut off valve; emergency stop button;

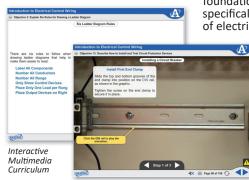
push-to-test buttons; and much more all on a mobile workstation! These industrial components can be used to practice an array of hands-on skills like installing a terminal block in an electrical panel; splice motor leads using ring lug connectors; bundle wires in an electrical panel; manually operate an electro-pneumatic valve; and select circuit protection for an application. These real-world industrial wiring components will allow learners to gain confidence and competence in working with equipment they'll actually see on the job.



Voltage Check Using Multimeter

Comprehensive Wiring Skills Build a Foundation Toward Industrial Certification

The 850-MT6B's curriculum provides a comprehensive lesson on the function, operation, installation, and construction of electrical wiring and wiring components, as well as forms a strong



foundation toward pursuing certifications. This course specifically covers topics such as learning the function of electrical prints, how to select a terminal block for an

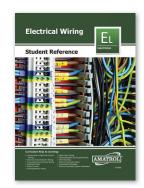
application, methods used to identify wires that are run between panels, methods to connect wires to terminal screws, the common line and component symbols used in pneumatic schematic diagrams, and common types of disconnects. This learning system's curriculum is presented in a stunning interactive multimedia format that features 3D animations, graphics, text with audio voice-overs, and much more!

Expanded Electrical Wiring Skill-Building Options!

In addition to all of the electrical wiring skills and exercises provided by the 850-MT6B, this learning system offers several optional add-ons to expand the real-work skill-building opportunities. These options include VFD/PLC Learning System (85-MT6BA), Industrial Soldering Learning System (85-MT6BB), and HMI Wiring Learning System (85-MT6BC). The 85-MT6BA will cover how to wire a VFD and PLC to a control panel. The 85-MT6BB will include soldering equipment and components commonly used in electrical connections within a control enclosure. The 85-MT6BC teaches wiring an HMI, analog wiring, and Ethernet cabling into a control panel mounted PLC.

Student Reference Guide

A sample copy of the Electrical Wiring Student Reference Guide is also included with the system for your evaluation. Sourced from the system's curriculum, the Student Reference Guide takes the entire series' technical content contained in the learning objectives and combines them into one perfectly-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.





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