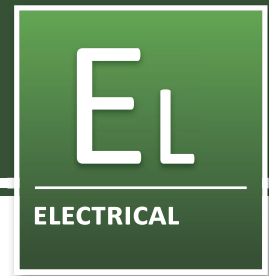
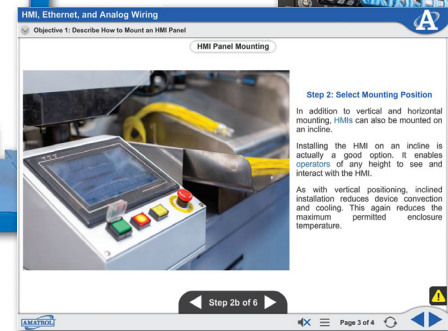
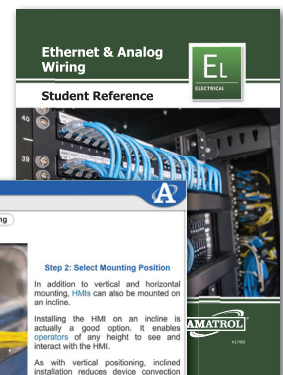


Ethernet and Analog Wiring Learning System

85-MT6BC



85-MT6BC (top right corner) with 850-MT6B and 85-MT6BA



Multimedia Curriculum and Student Reference Guide

Learning Topics:

- HMI Wiring
- HMI Panel Installation
- HMI Panel Interfacing
- HMI Panel Testing
- Ethernet Wiring
- Ethernet Switch Installation
- Cat 5 Ethernet Cable Construction
- Analog Wiring
- Analog Interfacing
- 2-Wire DIN Rail Mounted Transmitter Installation
- Thermocouple Interfacing

Amatrol's Ethernet and Analog Wiring Learning System (85-MT6BC) covers topics and skills related to the installation, operation, and wiring of Human Machine Interface (HMI) panels, Ethernet switches, and analog inputs. This learning system will provide invaluable hands-on practice for careers like electricians and industrial maintenance technicians. This system requires the Electrical Wiring (850-MT6B) and VFD/PLC Wiring (85-MT6BA) systems.

Ethernet and Analog Wiring includes a variety of real-world components such as a Siemens HMI panel, Ethernet switch, thermocouple, conduit set, and much more! Learners will study a variety of topics including how to interface and test an HMI Panel and PLC via Ethernet, how to install and test an Ethernet switch, and how to interface a transmitter to an analog input and test its operation and practice skills like interfacing a thermocouple to a transmitter.



Technical Data

Complete technical specifications available upon request.

Siemens HMI
Ethernet Switch
Ethernet Cable
Analog Transmitter Unit
Thermocouple with Mounting Hardware
Cooling Fan with Mounting Hardware
Conduit Set
Fitting Set
Multimedia Curriculum (M17469)
Instructor's Guide (C17469)
Installation Guide (D17469)
Student Reference Guide (H17469)

Additional Requirements:

Electrical Wiring Learning System (850-MT6B)
VFD/PLC Wiring Learning System (85-MT6BA)

Utilities:

Provided by 850-MT6B

Practice Hands-On Skills Like Constructing and Testing a Cat 5 Ethernet Cable

This system includes a variety of real-world industrial components like a Siemens HMI panel, Ethernet switch and cable, analog transmitter unit, thermocouple, cooling fan, and a conduit set. When used with the Electrical Wiring and VFD/PLC Wiring systems, learners will practice hands-on skills like wiring and testing an Ethernet switch and HMI panel ground and power circuits, interfacing a transmitter to an analog input, and constructing and testing a Cat 5 Ethernet cable.



Siemens HMI Panel Installed on the Electrical Wiring System

In-Depth Curriculum Covers How To Install and Wire Power to a 2-Wire DIN Rail Mounted Transmitter and Much More!



Ethernet and Analog Wiring's curriculum covers a variety of topics like HMI panel installation, wiring, interfacing, and testing, Ethernet wiring and switch installation, and analog wiring and interfacing. This system's curriculum is presented in a stunning multimedia format that fully engages learners through interactive quizzes and exercises, voiceovers of all of the text, videos, and 3D animations.

Add Industrial Soldering Learning System to Expand Training Capabilities

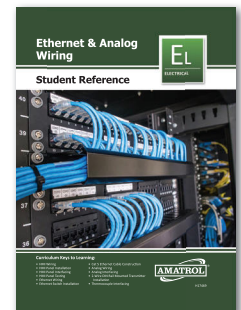
In addition to the Ethernet and Analog Wiring and VFD/PLC Wiring systems, Amatrol offers a third expansion system: Industrial Soldering (85-MT6BB). This system covers industrial soldering techniques commonly used within a control enclosure by industrial maintenance technicians.



Industrial Soldering Learning System (85-MT6BB)

Student Reference Guide

A sample copy of the Ethernet and Analog Wiring Reference Guide is also 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.



ETHERNET AND ANALOG WIRING LEARNING SYSTEM

This system adds to the Electrical Wiring Learning System (85-MT6B).

Ethernet Switch

Siemens HMI

Ethernet Cable; Analog Transmitter Unit

Thermocouple with Mounting Hardware

Cooling Fan with Mounting Hardware

Conduit Set

Fitting Set

Student Curriculum

The student curriculum supplied with each module shall be designed in a skill-based format that focuses on teaching industry-relevant tasks. This curriculum shall be designed for use in both self-directed student learning and group instruction formats. The objectives shall be accomplished by organizing the learning material into a series of learning activity packets, which are further subdivided into three or more segments per packet. All learning materials needed shall be contained in the packets including text material, laboratory equipment activities, and any multimedia directions. No external text sources shall be required. The specific cognitive skills taught by each text passage shall be identified next to the passage. Each lab activity shall be identified by the industrial task taught. All activities shall be highly detailed with step-by-step instructions to facilitate a self-directed learning environment. A combination of step-by-step enabling activities and creative, problem-solving activities shall be provided. A self-review of five to ten questions shall be provided after each segment.

Teacher's Assessment Guide

The teacher's assessment guide shall contain student data sheets, data sheet solutions, self-review answers, quizzes, quiz answers, student skill record sheets, and assessment directions. The student data sheets shall be designed with data collection blanks to permit students to record data without consuming the learning activity packets. A quiz shall be provided for each packet. A question shall be provided in each quiz for each cognitive objective taught and correlated as such. All tasks listed in the packet shall be listed on personalized student record sheets. Detailed instructions and any supplemental material shall be provided for the teacher to perform live assessment of each student.

Amatrol Model No. 85-MT6BC or equal

85-MT6BC
ETHERNET AND ANALOG WIRING LEARNING SYSTEM

MODULE 1 HMI, ETHERNET, AND ANALOG WIRING

SEGMENT 1	HMI PANEL INSTALLATION
OBJECTIVE 1	Describe how to mount an HMI panel
OBJECTIVE 2	Describe how to wire and test HMI panel ground and power circuits
SKILL 1	Wire and test HMI panel ground and power circuits
SEGMENT 2	HMI PANEL INTERFACING AND TESTING
OBJECTIVE 3	Describe how to construct and test a Cat 5 Ethernet cable
SKILL 2	Construct and test a Cat 5 Ethernet cable
OBJECTIVE 4	Describe how to interface and test an HMI panel and PLC via Ethernet
SKILL 3	Interface and test an HMI panel and PLC via Ethernet
SEGMENT 3	ETHERNET SWITCH INSTALLATION
OBJECTIVE 5	Describe how to install and test an Ethernet switch
SKILL 4	Install and test an Ethernet switch
SEGMENT 4	ANALOG INTERFACING
OBJECTIVE 6	Describe how to install and wire power to a 2-wire DIN rail mounted transmitter
SKILL 5	Install and wire power to a 2-wire DIN-rail mounted transmitter
OBJECTIVE 7	Describe how to interface a transmitter to an analog input and test its operation
SKILL 6	Interface a transmitter to an analog input and test its operation
OBJECTIVE 8	Describe how to interface a thermocouple to a transmitter
SKILL 7	Interface a thermocouple to a transmitter