

MicroLogix™1000 Controller Video Training Series

INDUSTRIAL
text & video

BULLETIN
ABT-ITV1761

Finally, everyone can understand, apply, and maintain a MicroLogix™1000 controller-based system.



Everyone who has an Allen-Bradley MicroLogix™1000 controller should have this program.

Our program is designed to help electrical maintenance and engineering personnel—even those without any prior PLC knowledge—completely understand, program, and troubleshoot the MicroLogix™1000 controller.

Nine videos, computer software, four reference books—this program has everything needed to become a MicroLogix™1000 controller expert in one complete, easy-to-use package.

This series provides approximately 18 hours of instructional material and topics covered are equivalent to a 5-day PLC course. Plus, you can easily train multiple people by purchasing additional student kits.

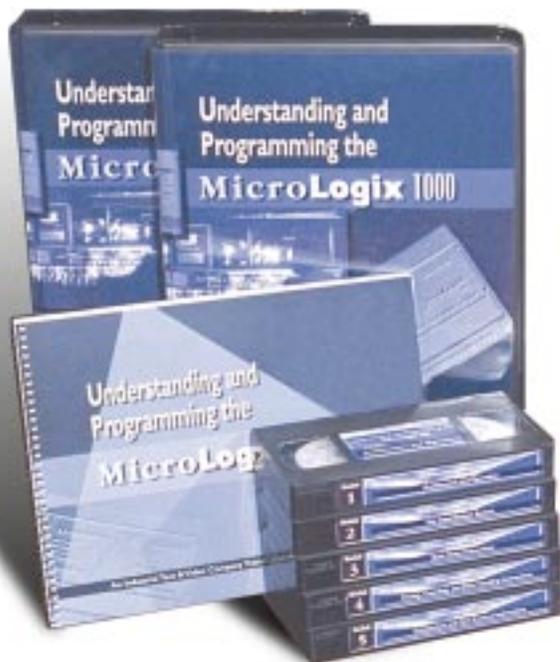
Contents:

- **Videos.** Nine videos divided into two sections: *Understanding and Programming the MicroLogix™1000 Controller.* (Five videotapes) *Installation, Start-Up, Maintenance, and Troubleshooting of the MicroLogix™1000 Controller.* (Four videotapes)
- **Electronic Courseware Series Software.** This is our computer testing software, which includes 855 questions of varying difficulty covering all aspects of the MicroLogix™1000 controller.
- **Books.** Two video reference handbooks, one for each video section, packed with job aids, checklists, and tech tips.

Benefits:

- **Train Everyone.** No prior PLC knowledge required.
- **Flexibility.** Schedule the training times that work best for you. Employees can watch a tape, take a review quiz, and be back to work in under two hours.
- **Training Assessment and Validation.** Use the software to manage the training process without any extra work for you.
- **Money-Back Guarantee.** Our program is backed by a 30-day, unconditional, money-back guarantee. If you are not completely satisfied with the training series simply return it.

Section 1: Understanding and Programming the MicroLogix™1000 Controller



One of a kind. The first section, *Understanding and Programming the MicroLogix™1000 Controller*, covers the basic operation of programmable controllers as well as explains the specific features of the MicroLogix™1000 PLC. Principles of operation, specifications, I/O structure, programming instructions, and addressing notations—it's all covered. And when it comes to programming, all the examples are shown using the RSLogix™500 software. This section comes with a 143-page video reference handbook that covers all the key information presented in the videos. It's also packed with tech tips and time-saving hints.

You Will Learn:

- How to wire both sinking and sourcing devices
- RSLogix™500 software addressing notations
- How to implement simple motor control circuits
- The controller's intricate memory system
- The basics of ladder programming
- The many I/O interface configurations and wiring requirements
- How to go from relay logic to the MicroLogix™1000 controller's logic
- How to program normally closed input devices
- How to apply specific programming techniques
- How to use data-handling instructions to move and convert data
- How to use flow control instructions to increase program speed
- And much more...

SECTION 1 CONTENTS

Module 1: Architecture & Operation (49 minutes)

- Basic Principles of Operation
- MicroLogix™1000 Controller Specifications
- I/O Structure and Memory System
- Addressing

Module 2: The Input/Output System (44 minutes)

- Types of Input/Output Devices
- Input Interfaces
- Output Interfaces
- System and I/O Power Distribution Wiring

Module 3: Basic Relay Instructions (54 minutes)

- Ladder Programming
- Input/Output Instructions
- Special Programming Issues
- Basic Relay Programming Examples

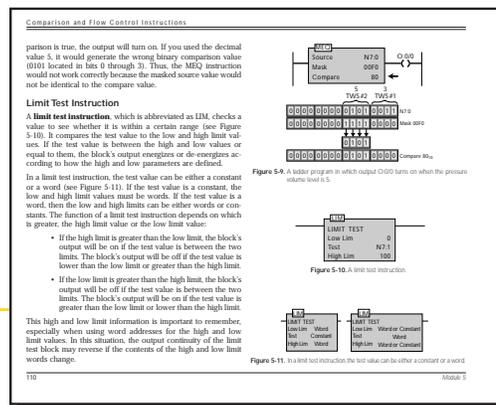
Module 4: Timing, Counting, and Data-Handling Instructions (61 minutes)

- Timing Instructions
- Counting Instructions
- Data-Handling Instructions

Module 5: Comparison and Flow Control Instructions (43 minutes)

- Comparison Instructions
- Flow Control Instructions
 - Alter Sequence
 - Halt Execution
 - Alter I/O Scan

Sample page from Section 1 Handbook



There isn't a better reference tool anywhere.

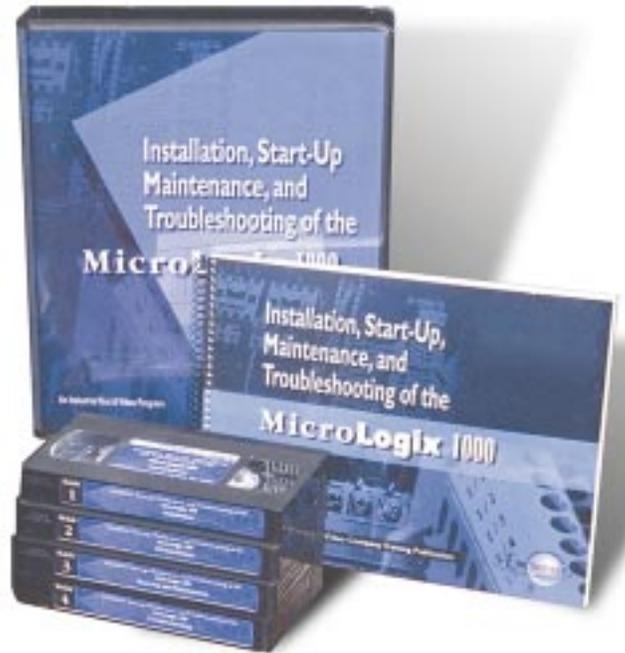
Section 2: Installation, Start-Up, Maintenance, and Troubleshooting of the MicroLogix™1000 Controller

Get it going and keep it running. The second section, *Installation, Start-Up, Maintenance, and Troubleshooting of the MicroLogix™1000 Controller*, covers everything you need to know to get a MicroLogix™1000 controller-based system up and running. This section comes with a 126-page video reference handbook that includes checklists, maintenance how-tos, and troubleshooting guides. It also presents all the key information from the videos.

Enclosure requirements...component layout...wiring...troubleshooting. This section covers it all.

You Will Learn:

- How to troubleshoot sinking and sourcing inputs
- How to create a user-error fault routine for automatic error recovery
- All of the error faults and codes
- Proper component placement
- The importance of safety circuitry in protecting people and equipment
- The applications of the powerful status file
- A 4-point checklist to ensure proper grounding
- A 36-point procedure for safe system start-up
- How to pinpoint and isolate input/output problems
- How to engineer preventive control through user-defined faults and error codes
- How to identify and correct leakage current problems
- And much more...



SECTION 2 CONTENTS

Module 1: Installation (38 minutes)

- System Layout Guidelines
- Power Requirements
- Safety Circuitry
- Electrical Noise and Heat Problems

Module 2: I/O Installation (37 minutes)

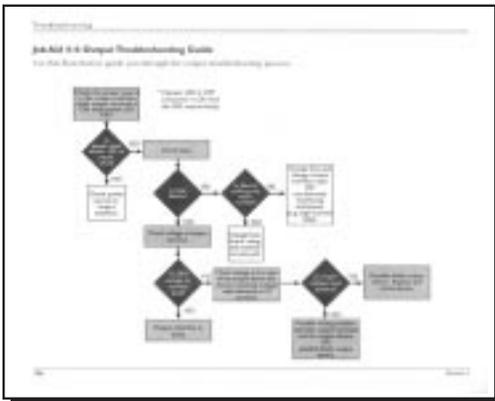
- I/O Installation Guidelines and Techniques
- Basic I/O Wiring Procedures
- Special Interfacing Situations

Module 3: Start-Up and Maintenance (24 minutes)

- Start-Up Procedures
- Maintenance Guidelines

Module 4: Troubleshooting (64 minutes)

- Power Diagnostic Indicators
- Outputs
- CPU
- Error Faults
- Preventive Maintenance



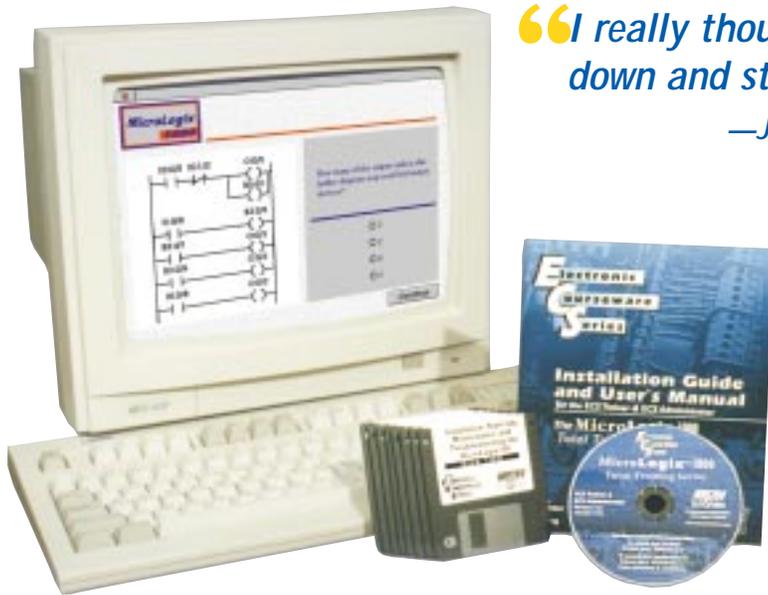
Sample page from
Section 2 Handbook

**Packed with great
troubleshooting techniques.**

Electronic Courseware Series

“I really thought that I knew it all until I sat down and started answering the questions.”

—John Rzczkowski, Journeyman Electrician



As one of the steps in the training process, the Electronic Courseware Series (ECS) Software lets your people sharpen and test their knowledge on the material covered in the videos. It consists of two parts—the ECS Trainer for testing and the ECS Administrator for reporting. Once your people use this software (included with the Section 1 and Section 2 videos), you can be sure they are qualified to work with the MicroLogix™1000 controller.

ECS Trainer

Use our exclusive interactive software to train and evaluate everyone going through the videos—without any extra work for you.

The ECS Trainer includes 855 practical, real-life questions of different levels of difficulty. You can use it to test employees as well as prescreen new hires.

It's easy. Just watch one of the videos. Then, take a review quiz to see how much was learned.

Instant feedback. Using A-R-M (Automatic Reinforcement Mode) technology, if someone misses a question, they get instant feedback and receive a follow-up question to make sure they understand the explanation.

ECS Administrator

Produce simple reports to assess the performance of each person going through the *MicroLogix™ 1000 Controller Total Training Series* and validate the entire training process.

No Licensing Fees

Unlike most software packages, our ECS software doesn't have any licensing fees. The program is licensed per facility. This means you can install it on one computer or 1,000 computers. Employees can even install it on their computers at home. We do recommend, however, that you order extra student kits for everyone who will be going through the program.

Features at a glance:

- No licensing fees
- Networkable
- 855 questions
- A-R-M technology
- Training and testing modes
- Random question selection on final exams

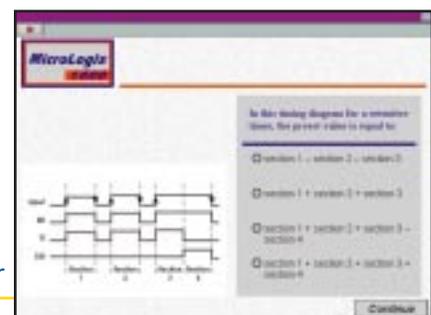
Benefits of computer testing:

- Take it anytime you want
- Take it anywhere you want
- Immediate feedback
- Great for refresher training
- Reduced learning time
- Self-paced

Minimum system requirements:

- 486 PC (Pentium recommended)
- Windows™ 3.1 and 4MB RAM or Windows™ 95, 98, or NT and 16MB RAM
- 256-color monitor
- 15MB free hard-drive space
- Mouse

Sample question from the ECS Trainer



• Catalog Numbers •

Description	Catalog #	Price (\$US)
<p>MicroLogix™1000 Controller Total Training Series includes one of each:</p> <ul style="list-style-type: none"> • Section 1: <i>Understanding and Programming the MicroLogix™1000 Controller</i> (5 videotapes) • Section 2: <i>Installation, Start-Up, Maintenance, and Troubleshooting of the MicroLogix™1000 Controller</i> (4 videotapes) • ECS Software for Sections 1 and 2 on CD-ROM • Student Kit for the <i>MicroLogix™1000 Controller Total Training Series</i> (ABTITV1761SK) includes one of each: <ul style="list-style-type: none"> - Video Reference Handbook for Section 1 (ABTITV1761VRH1) - Video Reference Handbook for Section 2 (ABTITV1761VRH2) - Available in DVD of VHS Format - Course Completion Certificate 	ABTITV1761C	1,701
<p>Additional Student Kit for the <i>MicroLogix™1000 Controller Total Training Series</i> includes one of each:</p> <ul style="list-style-type: none"> • Video Reference Handbook for Section 1 (ABTITV1761VRH1) • Video Reference Handbook for Section 2 (ABTITV1761VRH2) • Course Completion Certificate 	ABTITV1761SK	64
<p>Additional Video Reference Handbook for Section 1: <i>Understanding and Programming the MicroLogix™1000 Controller</i></p>	ABTITV1761VRH1	32
<p>Additional Video Reference Handbook for Section 2: <i>Installation, Start-Up, Maintenance, and Troubleshooting of the MicroLogix™1000 Controller</i></p>	ABTITV1761VRH2	32

Other products available from Industrial Text and Video

Product	See Bulletin #
<p>Electrical and Motor Controls Video Training Series Get everyone up to speed on electrical maintenance and troubleshooting.</p>	ABT-ITV700
<p>Complete PLC Video Training Series (Generic PLC Program) Applicable to all PLCs, this series focuses on programming, analog I/O, system implementation, and much more.</p>	ABT-ITV500

For more information on these and other products, please contact your local authorized distributor or visit our website at: www.industrialtext.com

All products are backed by a 30-day, unconditional, money-back guarantee.