

# PLC I/O Simulator Training AB CompactLogix L16 | Hands-On Skills



## PLC Learning System - AB CompactLogix L16: 87-IOSAB53A

Amatrol's Programmable Logic Controller PLC I/O Simulator Learning System - CompactLogix L16 (87-IOSAB53A) covers the operation and programming of programmable controllers, one of the most important and widely-used products in modern industry. Along with an Allen-Bradley L16ER CompactLogix Programmable Controller, learners will utilize the 87-IOSAB53A to practice real-world, hands-on skills used within automated line applications ranging from automotive to packaging to biotech. The 87-IOSAB53A requires a computer and any one of Amatrol's Mechatronics Learning Systems (87-MS1 - 87-MS7) featuring the Mechatronics Learning System - CompactLogix L16 ([870-AB53A](#)).

The 87-IOSAB53A includes a PLC Simulator Module using a PLC separate from the Mechatronics cart to simulate inputs via writing PLC programs. This combination of hands-on skill practice and comprehensive curriculum will further ingrain programmable controller concepts and applications in a learner's mind and make more advanced topics easier to comprehend. This system will cover major topic areas like: basic programming, PLC motor control, PLC timer and counter instructions, event sequencing, application development, program control instructions, and math and data move instructions.

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## Teach Hands-On Skills

### Expand Your Ability to Teach Real-World Applications

The 87-IOSAB53A's PLC Simulator Module includes eight indicator lights and eight input switches, as well as a connector set and power cable. When used in conjunction with a computer and an L16ER CompactLogix PLC

featured on a Mechatronics cart, this simulator module will allow learners to practice a variety of hands-on skills. Some of these skills include: designing a PLC program to operate a reversing motor application; entering and editing a PLC program that uses an RTO (Retentive Timer On) instruction; designing a reciprocating actuator sequence PLC program; and entering and testing a PLC program that uses the First Scan Flag to initialize a program.

### **PLC I/O Simulator Training Includes Incredible Range of Expansion Opportunities**

The 87-IOSAB53A is just one in a large array of PLC options offered by Amatrol. Other Mechatronics options for L16ER Allen-Bradley PLCs include: Human-Machine Interface ([87-HMIAB53A](#)); EtherNet ([87-ENAB53A](#)); Barcode (87-BR1AB53A); and Vision Inspection ([87-VS1AB53A](#)).

## **Optional eBook**

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### **World-Class PLC Curriculum with an Optional eBook Format**

The comprehensive curriculum included with the 87-IOSAB53A provides a strong understanding of PLC operation, programming interfaces, programming software, and the basics of ladder logic. Within this curriculum, learners will study topics like: seal-in program logic; retentive timer instructions; count up and down instructions; continuous cycle logic; stop functions; subroutines; add, subtract, multiply, and divide instructions; and move instructions. Optionally, this curriculum is available in an online eBook format. This [eBook](#) includes all of the content from the printed version, but provides an efficient online alternative with enhanced features such as keyword searches and zoom controls that enable a user to quickly locate and view information.

## **Additional Info**

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### **Requirements:**

- [Mechatronics Learning System - AB CompactLogix L16 \(870-AB53A\)](#)

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#### **Address**

**Amatrol  
2400 Centennial Blvd  
Jeffersonville, IN 47130**

#### **Contacts**

**email: [contact@amatrol.com](mailto:contact@amatrol.com)  
phone: (800) 264 8285**