

Who should attend?

Manufacturing engineers, industrial engineers, plant operations managers, maintenance or any personnel involved in the planning, design and set-up of manufacturing facilities, or personnel who encounter control systems in their course of daily functions. This course will benefit personnel who might be programming, installing equipment, maintaining equipment, purchasing or implementing cost reduction and automation programs, or maintaining and troubleshooting PLC-based equipment.

#### What are the benefits?

- Offers exposure to state-of-the-art PLCs to keep engineers proficient
- Provides experience to your staff that allows them to install and troubleshoot PLCs
- Offers information for management to use in daily operations to make production more flexible, reliable, productive and profitable

"Finally, an instructor who has practical work experience. I feel we got our money's worth and then some.

> Jerry Oven Project Electrician

"The knowledge gained immediately allowed us to purchase and program three Koyo PLCs for high service pump control. We first programmed them using ladderlogic and then wrote them using stage instructions, which worked better for us during start up and debugging. This effort would not have been possible without your class.

Robert Karrels Instrumentation Supervisor West Cost Regional Water Supply Authority

"I have been to many trainings in the past ten years, and yours is the best of all.

Pierre Doucet Technical Representative Electro-Roberge, Inc.

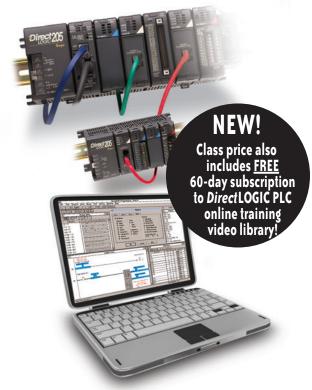
"The PLC course presented by Interconnecting Automation has enabled me to develop programming for our test facility. This has made data acquisition very inexpensive with the use of AutomationDirect products. The course cleared up a lot of questions about the use of memory to make ladder programming shorter."

JWilliam H. Dobbs, Jr. Electrical Engineering Dept. C.H. Heist



## InterConnecting Automation Inc.

3821 S. 93rd Street, Milwaukee, WI 53228 Phone: 414-425-8348 Fax: 414-425-8363 Web site: www.InterConnectingAutomation.com



#### Fee includes:

- Continental breakfast
- · AutomationDirect PLC User Manual
- Training manuals
  - 60-day subscription to online videos

In order to assure registration, all class fees must be received prior to the scheduled class date.

Hotel rooms are available at a discounted rate, however, reservations must be made two weeks prior to date of class.

## Course Syllabus

#### Day One

- Introduction of AutomationDirect PLC family
- Operation of AutomationDirect products

What is a CPU?
What is an input/output module?
What is a specialty module?
Sinking vs. sourcing modules

- Designing and laying out a project
   Power budget Special bits
   I/O mapping Retentive ranges
   V-memory
- Introduction to *Direct* SOFT
   What is it?
   Online and offline programming
   Entering and exiting
   Editing a ladder program
   The launch pad
   Cut and paste
   Configuring *Direct* SOFT
   Basic ladder functions
   Establishing a link
   Control relays
   Different menus of *Direct* SOFT
   Counters

**Timers** 

#### Day Two

DirectSOFT

Review simple ladder
Program shift register
Advanced ladder functions
Program bit math
Program masking bits
Analog input/analog output
Binary to BCD conversions
BCD to binary conversions

#### Day Three

• DirectSOFT

Drum sequencers
Troubleshooting using
DirectSOFT
PLC diagnostics
Watch windows
PLC status screens
Remote I/O
Specialty cards

# Course Fee: \$879.00 per person

Includes FREE 60-day subscription to DirectLOGIC PLC online training video library!

## 2016 - 2017 Schedule

 Sept 13-15, 2016
 Atlanta GA\*

 Oct 11-13, 2016
 St Louis Mo

 Oct 18-20,2016
 LasVegas NV

 Nov 8-10, 2016
 Newark NJ

 Dec 6-8, 2016
 Atlanta GA\*

Jan 24-26, 2017 Feb 28-Mar 2, 2017 March 14-16, 2017 April 18-20, 2017 May 16-18, 2017 Dallas TX Orlando FL Irvine CA Chicago IL Atlanta GA\*

\*Classes held at AutomationDirect Headquarters in Cumming, GA.

Please visit our Web site for an updated list of future class dates!

www.InterConnectingAutomation.com

### About the Instructor: Doug Bell

Planned and coordinated automation of a Milwaukee manufacturing facility.

Designed from scratch the automation portion of a new automated can plant using AutomationDirect products exclusively.

Designed electronic control systems for more than 45 facilities worldwide using multiple vendor PLC products.

Developed and implemented a variety of cost and labor-saving equipment.

20 years experience with industrial electronics, including 17 years of PLCs.

Wide variety of applications experience, including electronic feeder controls, HVAC controls, automated test stations, coating lines, printing lines, coordinated drive systems, motion systems, high-speed applications, communication systems, PC-based control solutions and HMI systems.

#### Registration Form (Act now - seating is limited) Telephone Fax \_\_\_\_\_ City State Zip \_\_\_\_\_ Location/date of class E-mail address Method of payment □ Check ■ Purchase Order Credit Card or P.O. # □ VISA Exp. Date (Visa/Mastercard - Last three digits of account number panel on card back, American Express - Four digit code on the front of the card just above and to the right of your main credit card number.) Mastercard CSV Security Code \_\_\_\_\_ ■ American Express



Reply by FAX: 414-425-8363 Reply by mail: 3821 S. 93rd Street

Milwaukee, WI 53228

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ONSITE TRAINING AVAILABLE

Customized to fit your needs. Call for details.

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