

AUTOMATION ACADEMY

A u t o m a t i o n S y s t e m s T r a i n i n g S p e c i a l i s t s

Course Title: Alspa 80-75 Maintenance Course

The Alspa 80-75 Maintenance Course has been designed to familiarise Electricians, Technicians and Maintenance Engineers with little or no experience of Alspa systems to the different aspects associated with the operation and maintenance of Alspa controllers and the programming software. This course is intended to give students the background knowledge and practical experience in working on an Alspa system so that they have a good understanding of the system and have the ability to make small edits and make changes to program parameters.

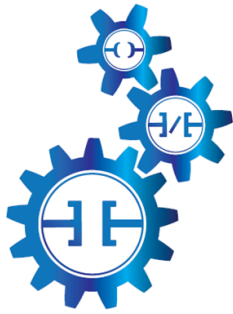
Where possible, application specific exercises, actual drawings and plant programs will be used to allow the students to gain the greatest possible benefit from the course.

Course Objectives:

- ☒ To introduce students to the concepts, terminology and operation of Alspa 80-75 Controllers.
- ☒ To recognise and understand the hardware associated with Alspa 80-75 controllers.
- ☒ To recognise and understand what the system LED's indicate.
- ☒ To be able to open and understand the project structure of the Alspa 80-75 program and to have the confidence to implement minor changes to the ladder program and register values.
- ☒ Understanding the use and operation of Alspa 80-75 ladder instructions set.
- ☒ To be able to use the programming software to connect online to monitor and be able to use the search facilities to chase through the program to determine problems on plant.
- ☒ To understand the operation and terminology of Alspa N80 communication links.
- ☒ To be able to locate and replace faulty modules by understanding and using the cpu diagnostics within the controller when an error is present and to be able to reset the fault using the software.
- ☒ To be able to create a backup copy of the Alspa controllers program. To be able to restore a program back into the controller from a backup copy.

Course Content:

The hardware architecture and operation of Alspa 80-75 controllers.
Understanding Alspa I/O modules, their plant wiring and LED indicators.



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Addresses used in the Alspa range of controllers.
First steps using the programming software.
Creating a training program to demonstrate plant programming examples.
Getting an online connection to the Alspa controller, serial and/or Ethernet.
Downloading the user program to the Alspa 80-75 controller.
Online monitoring and the Alspa search facility.
Creating and using tables to monitor the Alspa PLC status.
An overview of the Alspa ladder programming techniques used on plant programs.
A demonstration of simple program editing and modifying plant programs.
Reading the Alspa controllers standard instruction set.
Programming examples including relay, timers, logic, maths, and compares.
Understanding and configuring higher level ladder instructions in the program.
Binary, Decimal and Hex numbering systems and their use in an Alspa program.
Using and creating program documentation.
Using program documentation for fault finding purposes.
Analogue modules and the maths involved in analogue signal processing
The configuration and operation of Alspa N80 communications
Alspa controller fault and I/O messages and their meanings and how to clear them.

Customised training included in the course cost.

As part of this training course we will include custom application exercises for your own plant and processes, this value added option creates immediate payback for students on plant. It will have the benefit of the students becoming familiar with key areas of your PLC project(s) during the training course. This option does require the supply of your plant drawing and program listings at least 2 weeks prior to the course start date.

Course Duration: 3 Days

Documentation: Alspa 80-75 Controller Training Manual.

Equipment per student: Alspa 80-75 controller
Programming laptop
Plant simulator

We can incorporate extra modules into this training course to include more advanced options such as using a programmable communication module that allows the Alspa to communicate to a GEM 80 or as a Modbus master or slave. Please contact us for your exact requirements.

Web link: [Alspa 80-75 Maintenance Course](#)