

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: Toshiba EX100 M20/40 Maintenance Course

The Toshiba EX100 M20/40 maintenance training course has been designed to familiarise Electricians, Technicians and Maintenance Engineers with little or no experience of Toshiba EX100 M20/40 controllers to the many different aspects associated with the operation and maintenance of Toshiba EX100 M20/40 controllers and EXPDD programming software.

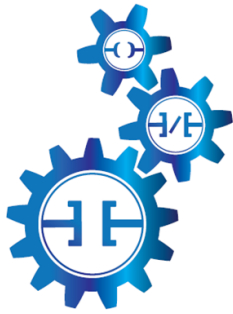
Where possible, application specific exercises, actual drawings and plant programs will be used to allow the students to gain the greatest possible benefit from the course.

Course Objectives:

- ☒ To introduce students to the concepts and operation of Toshiba EX100 M20/40 controllers.
- ☒ To recognise and understand the hardware associated with a Toshiba EX100 M20/40 controllers.
- ☒ To be able to understand the structure of the PLC program in the EXPDD programming software and to have the confidence to implement minor changes to the program.
- ☒ To be able to use the EXPDD programming software to connect online to monitor and be able to use the search and cross reference facilities to chase through the Toshiba EX100 M20/40 program to determine problems on plant.
- ☒ To be able to locate and replace faulty modules by understanding and using the system diagnostics available in the programming software when an error is present.
- ☒ To be able to create a backup copy of the controllers program. To be able to restore a program back into the controller from a backup copy.

Course Content:

The hardware architecture of the Toshiba EX100 M20/40 range of controllers.
Understanding Toshiba EX100 M20/40 I/O modules, their plant wiring and LED indicators.
Addresses used in the Toshiba EX100 M20/40 range of controllers.
An overview of the TOSHIBA EX100 M20/40 program structure in EXPDD.
First steps using the EXPDD programming software.
Creating a training program to demonstrate plant programming examples.
Downloading the project to the controller.
Online monitoring and the search facility within EXPDD.
Data monitoring the PLC addresses in EXPDD.
A demonstration of simple program editing and modifying plant programs.
Reading the T Toshiba EX100 M20/40 controllers instruction set.



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

Programming examples including relay, timers, maths, move, and comparisons.
Binary, Decimal and Hex numbering systems and their use in a EXPDD program.
Using and creating program documentation.
Analogue modules and analogue signal processing.
Understanding and using the controllers status and error information for fault finding.
Comparing offline and online programs.
Forcing and toggling operations on the Toshiba EX100 M20/40 EX100 M20/40 controllers.
If released to us two weeks before the scheduled course start date then we will include application exercises on your plant Toshiba EX100 M20/40 controller programs.

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: Toshiba EX100 M20/40 Training Manual.

Equipment per student: Toshiba EX100 M20/40 EX100 M20/40 controller
Programming laptop
Plant simulator

Web link: [Toshiba EX100 M20/40 Maintenance Course](#)