

SESSION PLAN

Directsoft 32

TC 040 - Basic

Programming software for Koyo PLC equipment

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	1.0 Added additional material

Course Summary and Equipment Requirements

This is a Skills/Information Session.

The objective of this session is to enable Inlec tradespersons to be able to use the Directsoft 32 software package to perform basic maintenance operations with Koyo series PLCs.

It is broken up into the following modules

Module 1	- Starting Directsoft 32
Duration	- 5 minutes
40 minutes	- Create a communications link
	- 15 minutes
	- Starting a new project
	- 10 minutes
	- Starting an existing project
	- 10 minutes
Module 2	- Connect to a PLC
Duration	- 15 minutes
35 minutes	- Upload from a PLC
	- 10 minutes
	- Download to a PLC
	- 10 minutes
Module 3	- Editing a project - Ladder
Duration	- 10 minutes
40 minutes	- Editing a project - Documentation
	- 10 minutes
	- Monitoring logic
	- 10 minutes
	- Serial communications port setup
	- 10 minutes
Module 4	- Backup a project
Duration	- 10 minutes
20 minutes	- Restore a project
	- 10 minutes

The following equipment is required

- Item 1 – Koyo Panel
- Item 2 – PCTC Projector
- Item 3 – Laptop with Directsoft 32
- Item 4 – Training notes with assessment sheet

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1 Purpose Statement

At the end of the session the participants will be able to use the Directsoft 32 software package to perform basic maintenance operations with Koyo series PLCs.

2 Introduction

2.1 Why the Participants have been Chosen

The participants of this course have been chosen because of the maintenance and breakdown requirements where a Koyo PLC is controlling a plant. Minimum down-times are required and this can be achieved with tradespersons who are confident working with the Directsoft 32 software package.

2.2 Where This Course Fits in

This course is designed as an introduction to Inlec tradespersons who have had little or no exposure to the Directsoft 32 software package. It is the first in a series of training courses to suit the Directsoft 32 software package.

2.3 Objectives of the Course

- Module 1: At the end of this session you will be able to start the Directsoft 32 program, create a correct communications interface and either start a new or existing project.
- Module 2: At the end of this session you will be able to switch between online and offline programming modes. You will also be able to upload or download a program from the PLC.
- Module 3: At the end of this session you will be able to edit both the ladder program and the documentation associated with it. You will be able to monitor online program code and setup the serial communications port to communicate with another device.
- Module 4: At the end of this session you will be able to backup and restore a project to the Directsoft 32 program.

2.4 How the Session Will Run

This session is fully described in the training notes "TC040 - Directsoft 32.ppt".

Skills Session –

A Skills session requires the following Skills demonstration and practice sessions. If there are more than 5 to 7 steps in a description of a skill, the session may be divided up into smaller sessions that each repeats the following structure.

Demonstration Section

- Silent demonstration
- Explanation Demonstration
- Check Demonstration

Practice Section

- Controlled Practice
- Own Pace Practice

- Test

Knowledge Session –

A Knowledge session requires the following structure. If a given session becomes extended it can be divided up into smaller sessions. Half an hour for a whole EAR session is suggested.

Explanation

Activity

Revise

2.5 Motivation for the Participants

This session will enable the participants to confidently perform basic tasks within the Directsoft 32 program in order to complete maintenance and fault finding tasks.

2.6 Prior Experience

Determine who has had prior experience.

Do they want to proceed directly to the test?

Would they be willing to demonstrate what they know as it is addressed in the course?

3 Test

The test for this session is

Activity 1: Demonstrate the ability to configure the correct communications port.

Activity 2: Create a new project.

Activity 3: Open an existing project and be able to identify the various components of the program.

Activity 4: Upload the current project in the PCTC PLC into the blank project created in activity 2.

Activity 5: Demonstrate the ability to monitor logic and determine what is changing state.

Activity 6: Create a blank project and demonstrate the ability to write new code as provided on the assessment sheet into a named block.

Note: test must be

- Valid to the material covered
- Quick to set and take
- Reliable – clear answers
- Cover a good sample of the course
- Discriminate between participants who now know the material and those who don't.

4 Summary

Help is available from the Process Control Training Centre staff, System Support Group members and other maintenance Inlecs.

What happens next?

Participants are welcome to book an appointment at the PCTC to refresh their skills and clarify or discuss any issues arising from field experiences.