INTRODUCTION

CHAPTER

1

In This Chapter...

Introduction

The Purpose of this Manual

This manual describes how to use the ***Direct*SOFT6** software for programming and monitoring any of the ***Direct*Logic** and compatible CPUs. ***This manual will not teach you how to develop a relay ladder logic (RLL) program or attempt to familiarize you with the instruction sets of the CPUs.*** Please refer to the applicable PLC user manual for the RLL instructions. The Quick Start chapter will show the first time user how to get started using ***Direct*SOFT6**. The balance of the manual will detail all of the programming tools made available to the user.
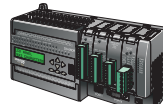
Who Can and Should Use *Direct*SOFT6

If you have a PLC belonging to the ***Direct*LOGIC** CPU family, you can use ***Direct*SOFT6** to manage your existing ladder logic programs and to create new ones. The families of PLCs that currently exist under this description are shown below.
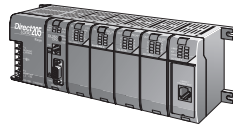
*Direct*LOGIC PLC Family

DL05 CPUs
Two built-in ports
Max. baud = 38.4 K

DL06 CPUs
Two built-in ports
Max. baud = 38.4 K

DL105 CPUs
One built-in port
Fixed baud = 9.6 K

DL205 CPUs
One built-in port D2-230; fixed baud = 9.6 K
Two built-in ports D2-240; max. baud = 19.2 K
Two built-in ports D2-250(-1)/D2-260/D2-262 max baud =38.4 K

DL305 CPUs
D3-330 requires D3-232-DCU; max. baud = 19.2 K Two built-in ports D3-340/D3-350; max. baud = 38.4 K

DL405 CPUs
Two built-in ports D4-430/D4-440; max. baud = 19.2 K
Four built-in ports D4-450/D4-454; max. baud = 38.4 K

Besides being easy to use, ***Direct*SOFT6** includes the following new features:

Crisp new graphics-based displays in Ladder View and Stage View with alpha-blended Block Cursors.

Color Setup dialog now offers selection of over 16 million colors -- along with the ability to configure Block Cursor and Ladder View Box colors.

Now ZOOM IN / ZOOM OUT to eleven (11) levels via new drop-down Zoom control on the main offline toolbar.

New Trend View tool which is a new debugging tool for tracking multiple elements values over time.

New graphical indicator denotes edge-triggered (vs. level-triggered) Boxes and IBoxes in Ladder View.

***Direct*SOFT** now automatically Checks for Updates on startup. Also added ability to manually "Check for Updates..." under the Help menu.

Over 40 new IBoxes including: MOVER - Move Real, FILTERD - Filter Over Time - BCD Double and DECBYBCD - Decrement by BCD

Secure installation of program to meet safety needs.

See the chart below for the PLCs and the supporting firmware revisions required for the new IBox instructions.

Only One *Direct*SOFT6 Version

There is only one ***Direct*SOFT** version for the ***Direct*LOGIC** PLC family. All licensed versions of ***Direct*SOFT** programming software (v1.0 - v5.0) can be upgraded to version 6. Also, all programs created with older versions of ***Direct*SOFT** are compatible with ***Direct*SOFT6**.

PLC	Firmware
DL05	5.10
DL06	2.10
D2-250-1	4.60
D2-260	2.40
D2-262	1.00
D4-450	3.30
D4-454	1.01

Supplemental Manuals

Depending on the products you have purchased, there may be other manuals that are necessary to use for your application.

User Manuals

DL05 User Manual – D0-USER-M

DL06 User Manual – D0-06USER-M

DL105 User Manual – D1-USER-M

DL205 User Manual – D2-USER-M

DL305 User Manual – D3-USER-M

DL350 User Manual – D3-350-M

DL405 User Manual – D4-USER-M

DL454 User Manual – D4-454-M

NOTE: AutomationDirect also has many associated product user manuals, such as analog system manuals, which will assist you with your application.

Technical Support

We realize that even though we strive to do our best, we may have arranged our information in such a way that you cannot find what you are looking for. First, check these resources for help in locating the information:

Table of Contents – chapter and section listing of contents, in the front of this manual

Appendices – reference material for key topics, near the end of this manual

Index – reference for key items

You can also check our online resources for the latest product support information:

Our website is: **http://www.automationdirect.com**

If you still need assistance, please call us at 770–844–4200 or visit our technical support page at:http://support.automationdirect.com. Our technical support team will be available to work with you to answer your questions. They are available Monday through Friday from 9:00 A.M. to 6:00 P.M. Eastern Standard Time.

Conventions Used

When the "notepad" symbol is shown in the left-hand margin, the paragraph to its immediate right will be a special note. The word NOTE: in boldface will mark the beginning of the text.

When the "exclamation mark" symbol is shown in the left-hand margin, the paragraph to its immediate right will be a warning. This information could prevent injury, loss of property, or even death (in extreme cases).
The word WARNING: in boldface will mark the beginning of the text.

Whenever the "lightbulb" is shown in the left-hand margin, the paragraph to its immediate right will provide a **special tip**. The word **TIP:** in boldface will mark the beginning of the text.

Menu Selections and Keystrokes

When the software requires you to use a particular keystroke or menu selection, the written instructions will be in boldface type. Combination keystrokes will be separated with a plus (+) sign. For example, **Ctrl + C** means: Hold down the **Ctrl** key and press the **C** key. Menu selections can also be combinations and separated by a greater-than sign. For example, **File > Write Program > to Disk** is a menu selection combination.

Key Topics for Each Chapter

The beginning of each chapter will list the key topics that can be found in that chapter.