

INTRODUCTION



CHAPTER

1

In This Chapter

Introduction	1-2
Conventions Used	1-5

Introduction

The Purpose of this Manual

This manual describes how to use the **DirectSOFT 6** software for programming and monitoring any of the **DirectLogic** 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 **DirectSOFT 6**. The balance of the manual will detail all of the programming tools made available to the user.

Who Can and Should Use **DirectSOFT 6**

If you have a PLC belonging to the **DirectLOGIC** CPU family, you can use **DirectSOFT 6** 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.

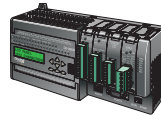


DL05 CPUs

Two built-in ports
Max. baud = 38.4 K



DirectLOGIC PLC Family



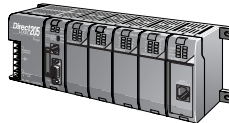
DL06 CPUs

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)/260 max baud = 38.4 K



DL305 CPUs

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



DL405 CPUs

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

Besides being easy to use, **DirectSOFT 6** 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.
- DirectSOFT 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

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

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

Only One **DirectSOFT 6** Version

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

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 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:

- Internet – the address of 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.

GETTING STARTED	
CHAPTER 1	
In This Chapter:	
Introduction	1-2
Conventions Used	1-3

Notes:

1