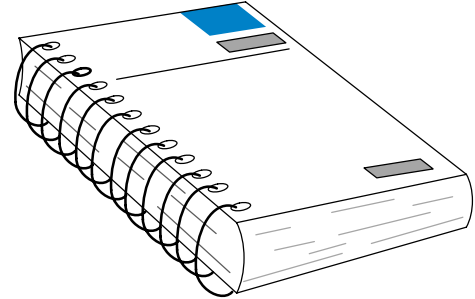# Introduction

1

In This Chapter. . . .
— Manual Overview
— Manual Layout
— Concept Background
— ScreenCreator™ Basics
— Installing ScreenCreator™

Manual Overview

The Purpose of this Manual

This manual shows you how to install and use ScreenCreator™, the Windows®–based configuration software for **Direct**Touch panels. If you are like most, you want to get your new **Direct**Touch panel out of the box and start creating screens as quickly as possible to get an idea of what's involved and to make sure it will "talk" to your PLC. This manual provides you with a Project Tutorial and an in-depth Reference, so you can get going quickly, but dig deeply as you continue using ScreenCreator.

Who Should Read this Manual

If you understand your PLC (Programmable Logic Controller) and you have a basic understanding of Microsoft Windows® 95/98 or NT™, this manual will provide all the information you need to use ScreenCreator software. With this manual, you can design, build and implement operator interface screens on your **Direct**Touch panel.

Technical Support

We realize even though we strive to be the best, we may have arranged our information in such a way you cannot find what you are looking for. If you need assistance, please call us at **1–770–844–4200 or FAX 1–770–886–3199**. Our technical support group is glad to work with you in answering your questions. They are **available weekdays from 9:00 a.m. to 6:00 p.m. Eastern Standard Time**. You can also contact us on the **Internet** at:
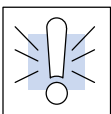
www.Automationdirect.com

If you find a problem with any of our products, services, or manuals, please fill out and return the survey card that came with this manual.

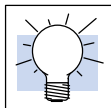The "note pad" icon in the left–hand margin indicates the paragraph to its immediate right will be a **special note**.

The "exclamation mark" icon in the left-hand margin indicates the paragraph to its immediate right will be a **warning** or **caution**. These are very important because the information may help you prevent serious personal injury or equipment damage.
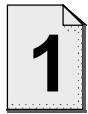
The "light bulb" icon in the left-hand margin indicates a **tip** or **shortcut**.

How this Manual is Organized

Chapters
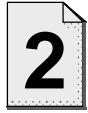
The main contents of this Manual are organized into these six chapters:

1 **Introduction** introduces the basic concepts of ScreenCreator and steps you through installing the software.

2 **Project Tutorial** takes you through the process of creating a simple project, from start to finish. You'll learn how to create screens and place various parts on them and how to download the project to your **Direct**Touch panel.

3 **Key Concepts** covers the basic concepts of building screens for the **Direct**Touch panel. You will learn about Projects, Screens, Parts, Textures, Bitmaps and Figures. You will also learn how to build a new part and store it as a Library Part.
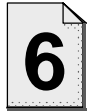
4 **ScreenCreator Menus and Toolbars** details the specific menus in ScreenCreator with descriptions of the individual menu commands.

5 **Control Reference** provides detailed reference information on each type of control in ScreenCreator.
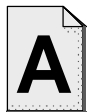
6 **Part Reference** provides detailed reference information on each type of part in ScreenCreator.
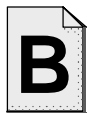
Appendices

Additional reference information for ScreenCreator software is available in these two appendices:

A **Connecting to a PLC** provides information on how to connect the Direct**Touch** panel to a PLC.
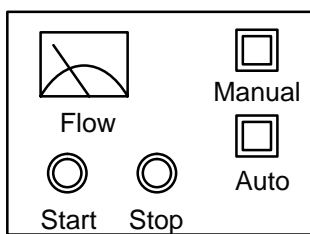
B **ScreenCreator and Direct Touch panel Error Codes** lists the Error Codes and Warning Codes for both ScreenCreator and the Direct**Touch** panel.
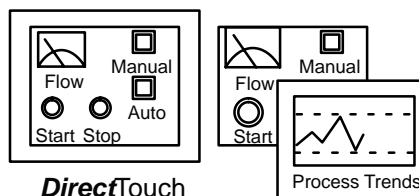
Introduction

Concept Background

**Touch panels:
The Concept**

Hard–wired physical Operator Interface Panels (OIPs) have been around for many years, with pushbuttons, panel meters and numerical displays, and so on. But it is very time-consuming to make changes to an OIP. For instance, to add or remove a pushbutton or meter requires drilling holes, punching out bigger holes and then mounting and wiring hardware, etc.

With the introduction of the touch panel all of this changes. A physical OIP can be replaced by an LCD (Liquid Crystal Display) panel. Better yet, the touch panel (or touchscreen) can have multiple screens, each screen being like another panel. Screen parts, text and graphics, even an entire screen, can be added or removed quickly.
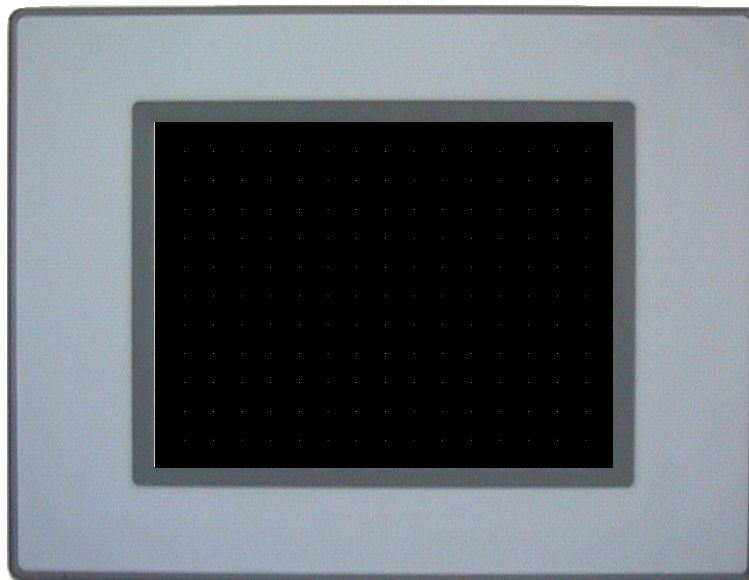

Physical OIP

*Direct*Touch Panel

Multiple Screens

ScreenCreator Basics
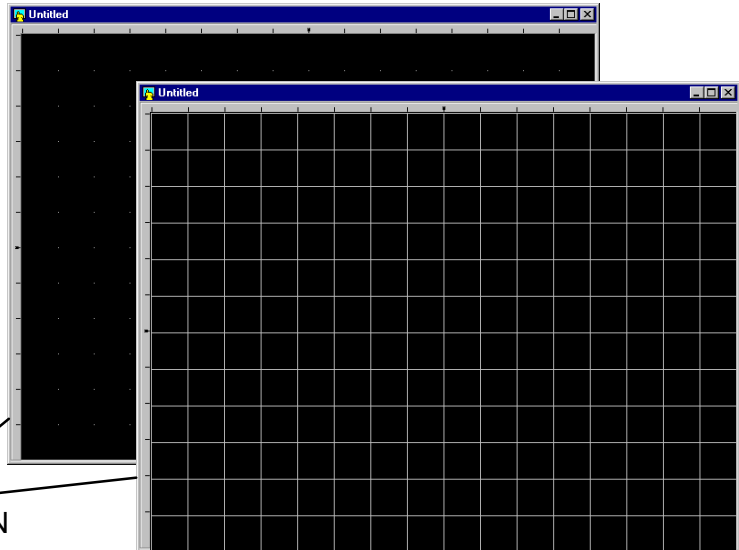
**The *Direct*Touch
Panel**

The *Direct*Touch Panel is a 320x240 pixel display. Each touch-cell is a 20-pixel square, and there are sixteen horizontally and twelve vertically (16x12).

Grid Lines and Dots

The *Direct*Touch Panel has barely-visible lines and tiny white dots marking the touch-cells.
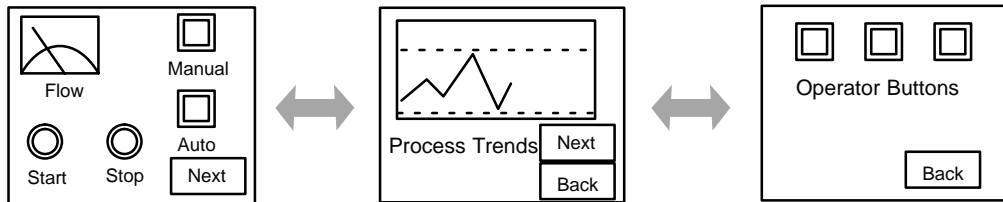
In ScreenCreator, a screen window, on the right, can be displayed with or without grid lines and with or without the small dots. The Snap Grid itself may be turned ON or OFF apart from the grid dots or grid lines, but the grid lines are the size of the Snap Grid.
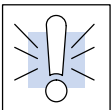
Ruler (may be ON or OFF also)

The Screens

The screens that you build in ScreenCreator are essentially identical to the actual screens displayed on the *Direct*Touch panel. In addition to having parts, text and graphics, screens are usually configured with pushbuttons which bring up other screens. You can even have a main menu screen with many screen select pushbuttons, like the homepage on a website. Below is an example of each screen having a "Next" button to access the next screen and/or a "Back" button to return to the previous screen.

Multiple Screens

Warning: Be aware that the *Direct*Touch panel, as with any external device, can write to PLC registers and bits. You must be careful in using the panel to write to any PLC address. **It is a good idea to use PLC ladder logic to call screens and to write to PLC outputs based on prescribed conditions.**

Introduction

Installing ScreenCreator ™

Requirements   Before installing ScreenCreator, make sure that you have the following:

- CPU: 486SX or better (A Pentium is recommended)
- RAM: 8MB (16 or more is recommended)
- Windows® 95/98 or NT (will not work under DOS or Windows 3.1)
- 30MB of free disk space
- CD-ROM drive
- Monitor: VGA 640x480 (800x600 or better is recommended)

Installation Procedure

Follow these steps to correctly install ScreenCreator:

3. Start Windows 95/98 or NT.
4. Insert the ScreenCreator CD into your CD-ROM drive.
5. **Setup** will launch automatically.
6. The InstallShield Wizard will guide you through the installation process.
7. Choose Typical, if installing for the first time.
8. The default folder will be C:\SC\. You may choose another folder or click 'Next'.
9. Click 'Next' again to the installation files listed.
10. The installation will begin. When it is finished, click 'Finish'.
11. Please see the Note below, before launching ScreenCreator!

The Installation Options are: Typical, Compact and Custom....

NOTE: We strongly recommend that you refer to the Project Tutorial (Chapter 2) before starting ScreenCreator for the first time.

Windows®   If this is your first time using Windows 95/98 or NT, and you are not familiar with opening, closing, minimizing, etc., please refer to your Windows documentation. Once you can find your way around the Windows environment, you'll be ready to return to ScreenCreator.