

# About This Book

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This book, *Inside Macintosh: Devices*, describes the parts of the Macintosh Operating System that allow you to directly control, manage, and communicate with internal and external hardware devices. It contains information you need to know to write applications and device drivers that interface with the Device Manager, Slot Manager, SCSI Manager, SCSI Manager 4.3, ADB Manager, Power Manager, and Serial Driver.

If you are new to programming for Macintosh computers, you should read the book *Inside Macintosh: Overview* for an introduction to general concepts of Macintosh programming. You should also read other books in the *Inside Macintosh* series for specific information about other aspects of the Macintosh Toolbox and the Macintosh Operating System. In particular, to benefit most from this book, you should already be familiar with the run-time environment of Macintosh applications, as described in the two books *Inside Macintosh: Processes* and *Inside Macintosh: Memory*.

## Format of a Typical Chapter

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Most of the chapters in this book include the following four sections:

- “About the ... Manager.” You should read this section for a general understanding of the manager and what tasks you can use it for.
- “Using the ... Manager.” This section provides detailed instructions on using the manager. You should read this section if you need to use the services provided by that manager.
- “Reference.” This section provides a complete reference to the constants, data structures, and routines provided by the manager. Each routine description also follows a standard format, which presents the routine declaration followed by a description of every parameter of the routine. Some routine descriptions also give additional information, such as circumstances under which you cannot call the routine.
- “Summary.” This section provides the C, Pascal, and assembly-language interfaces for the constants, data structures, routines, and result codes associated with the manager.

In addition, most chapters contain additional sections that provide background information about a topic, or advanced information for specific types of programs.

## Conventions Used in This Book

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*Inside Macintosh* uses various conventions to present information. Words that require special treatment appear in specific fonts or font styles. Certain information, such as parameter blocks, appears in special formats so that you can scan it quickly.

### Special Fonts

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All code listings, reserved words, and the names of actual data structures, constants, fields, parameters, and routines are shown in Courier (`this is Courier`).

Words that appear in **boldface** are key terms or concepts and are defined in the glossary at the end of this book.

### Types of Notes

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There are several types of notes used in *Inside Macintosh*.

#### **Note**

A note like this contains information that is interesting but possibly not essential to an understanding of the main text. (An example appears on page 1-27 in the chapter "Device Manager.") ◆

#### **IMPORTANT**

A note like this contains information that is essential for an understanding of the main text. (An example appears on page 1-10 in the chapter "Device Manager.") ▲

#### ▲ **WARNING**

Warnings like this indicate potential problems that you should be aware of as you design your application. Failure to heed these warnings could result in system crashes or loss of data. (An example appears on page 1-15 in the chapter "Device Manager.") ▲

### Assembly-Language Information

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*Inside Macintosh* provides information about the registers for specific routines like this:

#### **Registers on entry**

A0     Contents of register A0 on entry

#### **Registers on exit**

D0     Contents of register D0 on exit

In addition, *Inside Macintosh* presents information about the fields of a parameter block in this format:

**Parameter block**

↔	inAndOut	Handle	Input/output parameter.
←	output1	Ptr	Output parameter.
→	input1	Ptr	Input parameter.
✕	trashed	long	Affected field.

The arrow in the left column indicates whether the field is an input parameter, output parameter, or both. You must supply values for all input parameters and input/output parameters. The routine returns values in output parameters and input/output parameters.

The ✕ symbol designates fields that may be affected by the execution of the routine. Any value you store in one of these affected fields may be lost. Also, the meaning of these fields upon completion of the routine is undefined; your application should not depend on these values.

The second column shows the field name as defined in the MPW C or Pascal interface files; the third column indicates the C or Pascal data type of that field. The fourth column provides a brief description of the use of the field. For a complete description of each field, see the discussion that follows the parameter block or the description of the parameter block in the reference section of the chapter.

## Development Environment

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The system software routines described in this book are available using C, Pascal, or assembly-language interfaces. How you access these routines depends on the development environment you are using. This book shows the interface to system software routines provided by the Macintosh Programmer's Workshop (MPW).

Code listings in this book show methods of using various routines and illustrate techniques for accomplishing particular tasks. All code listings have been compiled and, in most cases, tested. However, Apple Computer does not intend that you use these code samples in your application.

## For More Information

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APDA is Apple's worldwide source for hundreds of development tools, technical resources, training products, and information for anyone interested in developing applications on Apple platforms. Customers receive the *APDA Tools Catalog* featuring all current versions of Apple development tools and the most popular third-party development tools. APDA offers convenient payment and shipping options, including site licensing.

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