# ATM & Adobe Type Library





© 2000 Adobe Systems Incorporated and its licensors. All rights reserved.

ATM® (Adobe® Type Manager®) & Adobe Type Library User Guide for Mac OS

This manual, as well as the software described in it, is furnished under license and may be used or copied only in accordance with the terms of such license. The content of this manual is furnished for informational use only, is subject to change without notice, and should not be construed as a commitment by Adobe Systems Incorporated. Adobe Systems Incorporated assumes no responsibility or liability for any errors or inaccuracies that may appear in this book.

Except as permitted by such license, no part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, recording, or otherwise, without the prior written permission of Adobe Systems Incorporated.

Adobe, the Adobe logo, Adobe Type Manager, ATM, Illustrator, Minion, PostScript, SuperATM, and Type Reunion are trademarks of Adobe Systems Incorporated. Apple, Macintosh, Mac OS, Power Macintosh, QuickDraw, ImageWriter, LocalTalk, StyleWriter, and TrueType are trademarks of Apple Computer, Inc., registered in the U.S. and other countries. Microsoft, OpenType, and Windows are either registered trademarks or trademarks of Microsoft Corporation in the U.S. and/or other countries. All other trademarks are the property of their respective owners.

Contains an implementation of the LZW algorithm licensed under U.S. Patent 4,558,302.

Protected by U.S. Patents 5,050,103; 5,200,740; 5,233,336; 5,237,313; 5,255,357; 5,185,818. Patents pending.

Adobe Systems Incorporated, 345 Park Avenue, San Jose, California 95110, USA

Notice to U.S. government end users. The software and documentation are "commercial items," as that term is defined at 48 C.F.R. §2.101, consisting of "commercial computer software" and "commercial computer software documentation," as such terms are used in 48 C.F.R. §12.212 or 48 C.F.R. §227.7202-1 through 227.7202-4, as applicable, the commercial computer software and commercial computer software documentation are being licensed to U.S. government end users (A) only as commercial items and (B) with only those rights as are granted to all other end users pursuant to the terms and conditions set forth in the Adobe standard commercial agreement for this software. Unpublished rights reserved under the copyright laws of the United States.

# **Contents**

Getting Started	About Adobe fonts and ATM			
	ATM system requirements			
	Adobe Type Library system requirements			
	Registration 2			
	About Adobe products and services			
	Installing ATM			
	Manually installing Adobe Type Library fonts			
	Removing ATM4			
Using Adobe Type	Chapter 1			
Manager	Using ATM5			
Using Multiple	Chapter 2			
Master Fonts	About multiple master font designs			
	Creating and removing custom instances			
	Automatic creation of instances			
	Printing files containing multiple master fonts9			
Tips and Troubleshooting	Chapter 3			
	Problems in using ATM11			
	Verifying font locations			
	Printing and display problems			

# Getting Started

his package contains the Adobe® Type
Manager® (ATM®) program for Mac OS.
ATM is a font utility that automatically
generates high-quality screen fonts from outline
font data. With ATM, you can scale any font
without the characters appearing jagged. ATM also
lets you print PostScript® fonts on non-PostScript
printers, and lets you create customized instances
of multiple master fonts.

## About Adobe fonts and ATM

Adobe Type Library typefaces are available in PostScript Type 1 and OpenType® format. A Type 1 PostScript font has two parts: an outline file and a bitmap file. A bitmap file contains spacing information and specific font sizes designed for on-screen display only. An outline file contains PostScript information that creates a smooth font on-screen (for sizes other than those in the bitmap file) and on the printed page (at any size).

Double-byte fonts (such as Chinese, Japanese, and Korean fonts) have different bitmap files containing other information. These fonts may include multiple outline files and fbit (Marukan) files.

ATM uses both outline and bitmap data to generate a high-quality display on-screen. ATM automatically tracks the location of outline files. Without an outline file, however, ATM can still generate a display of most fonts by using multiple master substitution fonts and the ATM font database. See "Enable Font Substitution" on page 6.

Bitmap files and TrueType fonts are commonly referred to as *suitcases*. A suitcase contains one or more individual fonts (in the case of TrueType) or font references (in the case of PostScript). The Minion suitcase, for example, might contain Minion, Minion Bold, Minion Italic, Minion Bold Italic, and other Minion fonts.

OpenType is a new font format created jointly by Adobe and Microsoft\* that can contain either PostScript or TrueType font outlines. OpenType fonts may contain an expanded character set that offers richer linguistic support and advanced typographic capabilities. OpenType fonts consist of one cross-platform font file.

# **ATM system requirements**

ATM requires the following hardware and software:

- An Apple Power Macintosh computer
- 8 MB of RAM
- A hard disk with at least 2 MB of free space
- Mac OS 8.1 or later

ATM is compatible with most PostScript Type 1 and OpenType fonts and with nearly all Mac OS applications. ATM is also compatible with almost all PostScript language printers and many non-PostScript printers. See the ATM Read Me file for compatibility information.

# Adobe Type Library system requirements

The Adobe Type Library is compatible with Mac OS 7.6 or later and all Macintosh systems, including Power Macintosh computers.

You can use PostScript Type 1, OpenType, and TrueType fonts in the same document. However, the use of the same font (a font with the same name) in multiple formats is not recommended. For instructions on removing duplicates, see "Removing duplicate fonts" on page 4. If you are not sure of the format of a font, consult your font vendor.

# Registration

To continue receiving the highest quality software, technical support, and information about new ATM developments, please return the warranty registration card (if one is enclosed in your package) or follow the on-screen instructions during installation to register online. If you purchased and downloaded your software online, you are automatically registered and do not need to register again.

Note: Adobe Type Manager Deluxe offers features that are not included with this version of ATM. With ATM Deluxe, you can manage PostScript, OpenType, and TrueType fonts and add them to sets that are automatically activated as you need them. ATM Deluxe also mimics missing fonts, helps you remove redundant fonts, and provides font verification reports.

# About Adobe products and services

If you have an Internet connection and a Web browser installed on your system, you can access the Adobe Systems home page on the World Wide Web (at http://www.adobe.com) for information and tips on Adobe products and services. From the Adobe Web site, you can purchase and download fonts and certain other Adobe products.

For more information on Adobe technical support resources, see the notice in your software package.

# Installing ATM

This package includes an Installer for ATM, which is installed in the Control Panels folder within the System Folder. If you are using an earlier version of ATM, the Installer removes the earlier version.

**Note:** The Installer sets up ATM to run in any language it supports, as determined by the language in use on your system. If you are using an unsupported language, ATM defaults to English. See the ATM Read Me file for a list of supported languages.

### To use the Installer:

- 1 Turn off all virus-protection software and restart your computer.
- 2 Insert the CD or locate the ATM Installer on your hard drive.
- 3 Double-click the Installer icon. Select the country where you are located, and click OK.
- 4 Read the ATM end user license agreement, click Accept, and then click Continue.
- **5** Review the ATM Read Me file, and then click Continue.
- **6** From the pop-up menu, choose an installation option:
- Choose Easy Install to copy the listed software onto the selected disk. Then click Install.
- Choose Custom Install to select the items you want to install. Click the Information icon (the small *i*) for information about each component. Then click Install.
- 7 Follow the on-screen instructions, inserting diskettes if prompted, to complete the installation.

# **Manually installing Adobe Type Library fonts**

If you want to install the Adobe Type Library fonts manually, follow the instructions in this section. You may also install Adobe Type Library fonts using a font management utility, such as ATM Deluxe.

# **Installing fonts manually**

You can install Adobe Type Library fonts manually from a diskette, CD, or decompressed file archive.

### To install fonts manually:

- 1 Quit all applications, and close all open windows.
- 2 Display the icon for your closed System Folder.
- 3 Insert the diskette or CD containing the fonts or locate the fonts you want to install on your hard drive.
- 4 Drag the bitmapped fonts and the outline fonts onto the closed System Folder. If you are installing a multiple master font, drag the Primary Fonts folder and the Outline Fonts folder onto the closed System Folder. A confirmation message states where the fonts will be placed.
- 5 Follow the on-screen instructions to complete the installation.

## Removing duplicate fonts

Although you can use PostScript Type 1, OpenType, and TrueType fonts in the same document, using fonts with the same name may produce undesirable results, such as uneven character spacing and unexpected line and page breaks.

When you install Mac OS, TrueType and Apple bitmap fonts are installed in the Fonts folder within the System Folder, replacing any Adobe bitmap fonts with the same name. Before you manually install Type 1 fonts, you should remove from the Fonts folder any TrueType fonts that have the same names as fonts from the Adobe Type Library that you are installing. You will need to remove duplicates from the Fonts folder each time you reinstall or upgrade Mac OS.

### To check for and remove duplicate fonts:

- 1 Open the Fonts folder in the System Folder and choose View > By Name.
- **2** Refer to the Adobe Type Library package to see whether any fonts duplicate those in the Fonts folder; note all duplicate font names.
- **3** If you wish to save the duplicate fonts, create a new folder called De-installed Fonts.
- 4 Select every filename in the Fonts folder that duplicates those in the Adobe Type Library package. (Also select any duplicate Adobe bitmap fonts so that you can install the latest versions of these fonts.)

- 5 If you wish to save the fonts, drag the files to the De-installed Fonts folder you created. If you do not need to save the fonts, drag them to the Trash.
- **6** Close the Fonts folder and the System Folder. You are ready to install the new fonts manually.

# **Removing ATM**

You can remove ATM from your system easily. Removing ATM does not delete any font files from your system, but it may prevent fonts from displaying and printing properly.

### To remove ATM:

- 1 Start the ATM 4.6 Installer.
- **2** Choose Remove from the pop-up menu in the Installer window, click Remove, and then follow the on-screen instructions.

**Note:** You can also remove Adobe Type Manager by removing the ~ATM control panel from the Control Panels folder and the Adobe Type Manager folder from the Preferences folder in your System Folder.

# Chapter 1: Using Adobe Type Manager

his chapter describes how to use the ATM Control Panel.

# **Using ATM**

ATM runs in the background on your system, automatically improving font display. To turn ATM on or off, or to set preferences for the character cache size or the display and printing of fonts, you need to open the ATM Control Panel.

### To open the ATM Control Panel:

Double-click the ~ATM icon in the Control Panels folder in your System Folder, or choose Apple > Control Panels > ATM.



### To set preferences:

In the ATM Control Panel, select from the following options.

**On/Off** By default, ATM is turned on when installed. If turned off, ATM does not automatically improve font display or smooth font edges. Changes to this setting take effect after you restart your computer.

Character Cache Size ATM uses a *cache*—a portion of system memory used to store font data created by ATM. A large font cache may speed up scrolling and other screen displays of fonts but can limit the memory available to other applications. The default cache size is 512K; the suggested size varies with other options you select, such as font substitution and precision character positioning. If you typically use many fonts on a single page, you may want to try a larger cache size.

**Preserve** Choose the attributes that ATM preserves when displaying or printing fonts:

- Line Spacing keeps all line spacing intact. ATM may compress uppercase letters with accents or other diacritical marks. This option is the default.
- Character Shapes increases the size of each character's bounding box so that each character prints in its entirety. Selecting this option may affect line spacing.

**Smooth Font Edges On-Screen** ATM improves the appearance of Type 1 fonts on-screen by smoothing the jagged edges inherent in video displays. To smooth edges, ATM uses antialiasing—blending colors to provide a smoother, softer edge to your Type 1 fonts on-screen.

Anti-aliasing for color text is available only when monitor colors are set to thousands (16-bit) or millions (24-bit) of colors. If colors are set to 256 (8-bit), then only black-and-white text can be anti-aliased.

Using this feature can slow down type-intensive displays on some systems. In that case, try increasing your character cache.





Smoothing off and Smoothing on

**Precision Character Positioning** ATM positions characters at the subpixel level to display more accurate spacing, especially at small point sizes. Selecting this option may slow down typeintensive display on some systems. Only applications that support fractional widths support precision character positioning.

**Enable Font Substitution** This option is only available if you previously installed ATM Deluxe, which includes a font substitution database.

If font substitution is on and you open a document that needs a font ATM cannot find, ATM uses the special multiple master fonts Adobe Sans MM and Adobe Serif MM, in combination with the font database, to mimic the font. The substitute provides the same spacing and line breaks, but may not appear identical to the missing font. If this option is off, the application you are using or system software may attempt to perform font substitution. ATM font substitution is available only for fonts listed in the ATM font database.

# Chapter 2: Using Multiple Master Fonts

ultiple master fonts let you create custom renditions by varying typeface attributes such as width, height, weight, or optical size. You can use multiple master fonts as you would any other PostScript Type 1 fonts.

# About multiple master font designs

In Mac OS, a multiple master font consists of one or more instances of the font. An *instance* is a particular rendition of the font that varies from other instances in one or more attributes. The manufacturer of each multiple master font provides a set of ready-to-use *primary instances* that constitute a complete typeface family.

Each multiple master font includes one or more design axes. A *design axis* is a variable attribute, such as weight, width, style, or optical size.



You can vary attributes in each design axis available in the multiple master font.

To find out which design axes are included with a multiple master font, see your multiple master font package. If you have already installed the font, you can see the design axes available for it in ATM. For information on viewing the axes and modifying multiple master fonts, see "Creating and removing custom instances" on page 8.

The convention for naming multiple master instances is Family design coordinates, where Family is the name of the typeface and design coordinates identifies a particular instance by a string of numbers and letters.

The design coordinates are alphanumeric combinations for each design axis in the font. If the font has a single design axis, there is a single alphanumeric combination (for example, 240 RG for Regular weight). If there are two design axes, there are two alphanumeric combinations, and so on.





Instance names, like VivaMM 250 LT 1500 XE (left) and VivaMM\_385 RG 400 CN (right), indicate each font's design attributes.

Within a design coordinate name, numbers indicate the position of the instance along the design axis. Letters indicate style (such as regular, bold, or condensed) for a primary instance, or the design axis (such as weight or width) for a custom instance. Abbreviations for primary instances use uppercase letters (for example, XL for Extra-Light). Abbreviations for custom instances use lowercase letters (for example, wt for weight and wd for width).

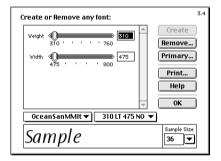
**Note:** Some Font menus and font lists in applications are limited in width. Longer instance names may appear clipped.

# Creating and removing custom instances

You create custom instances by using ATM design axis controls to modify the attributes of primary instances. ATM stores information about each custom instance you create in the multiple master font file on your hard disk, so the custom instance will appear in your applications' Font menus.

### To create a custom instance:

1 In the ATM Control Panel, click the Create MM Instances button.



- 2 Select a multiple master font from the pop-up list on the left.
- 3 Select a primary instance or a previously created custom instance from the pop-up list on the right.
- 4 Enter in the text box one or more words to use as the sample display, and then select a point size for the sample.
- **5** Use the slider controls to modify the instance. Each slider control corresponds to a design axis in the multiple master font. The sample text changes as you move the sliders.

**6** Once you are satisfied with the new instance, click Create. The custom instance appears in the

list of fonts for the specified multiple master font.

7 To close the Edit Multiple Master Instances window, click Done.

### To remove a primary or custom instance:

1 In the Edit Multiple Master Instances window, select the instance using the pop-up lists, and then click Remove. The instance is removed from ATM and from the font file on the hard disk.

**Note:** If you removed a primary instance from the font list, you can restore all primary instances by clicking Restore.

2 To close the Edit Multiple Master Instances window, click Done.

# **Automatic creation of instances**

When you open a document that contains a primary instance that you do not have on your system or a custom instance that you have not created, ATM automatically creates the instance if your application supports this feature and the correct multiple master font is installed.

The instance is available globally (to all applications) until your system restarts. ATM does not store instances that have been created automatically, except for use with the document that contains them. To store these instances permanently for global use, you must create them yourself (see "Creating and removing custom instances" on page 8).

Applications vary in the way they handle automatic instances. Some add the instance names to the application Font menu, some display and print the instances correctly but do not add their names to the Font menu, and some alert you to the presence of the instances in a document so that you can create them yourself.

# **Printing files containing multiple** master fonts

It is not necessary to open a file to print it. You can save a document containing a multiple master font as a PostScript file (most applications that allow saving as a PostScript file also allow saving the font with the file).

If you are using a service bureau that needs to open a file to print it, the service bureau must have the same version of the application that you used to create the document, as well as have the multiple master font and ATM 3.6 or later installed.

Some applications, like Adobe Illustrator<sup>®</sup>, can regenerate the custom instances automatically; other applications cannot. If in doubt, check with the manufacturer; also make sure that you are using the latest version of the application.

If your application can't regenerate custom instances on other computers, you must provide a copy of the multiple master font file you used when creating your document. Make sure that you have the multiple master font and ATM 3.6 or later installed on the computer you are using to print the document.

**Note:** If you supply your service bureau with your version of the multiple master font, make sure that the service bureau owns a license for the font. (See the license agreement included with your font.)

# Chapter 3: Tips and Troubleshooting

his chapter contains tips for using ATM and Adobe Type Library fonts with different Mac OS applications. For additional troubleshooting information and information on specific applications, see the Read Me files included with the ATM and Adobe Type Library software. See also the support information at www.adobe.com.

# **Problems in using ATM**

If you encounter problems using ATM or the Adobe Type Library fonts, check that you have properly installed the software. Make sure that the following are true:

- ATM is installed in the Control Panels folder in the System Folder.
- You restarted your system after installing ATM.
- ATM is turned on. If ATM was previously turned off, you must restart your computer after turning it on (see "On/Off" on page 5).
- You have not changed the names of the utilities.
- You do not have duplicate versions of ATM installed. Remove any duplicate versions.

# **Verifying font locations**

After installation, fonts should be in the following locations:

- For PostScript Type 1 fonts, both the bitmap and outline files should be in the Fonts folder within the System Folder.
- If you are using ATM Deluxe or another font management utility, the outline fonts must be in the same folder as the open suitcase. For more information, see the ATM Deluxe or utility documentation.

If the outline fonts are properly installed but the system cannot find them, you may have to rebuild the desktop to re-create links in the file folder.

### To rebuild the desktop:

- 1 Hold down Option+Command while you restart the computer.
- **2** When the Rebuilding Desktop dialog box appears, release the keys and click OK.

# **Printing and display problems**

You can resolve several printing and display problems by making sure ATM has the proper settings.

# Characters appear incorrectly on-screen or when the document is printed.

Make sure of the following:

• You have checked the items listed in "Problems in using ATM" on page 11.

• You are using a PostScript Type 1 font that has been properly installed. This requires installation of a PostScript outline file and a suitcase containing at least one bitmap version of the font. In addition, you may be using a font, such as a display or an expert set font, that does not contain a complete character set. To determine which characters are included in a font, choose Apple > Key Caps, or refer to the key cap chart included

# Characters appear incorrectly on-screen but print properly to a PostScript printer.

Try the following solutions:

with your fonts.

- Make sure the font's outline file is accessible on your hard disk. ATM uses both the outline file and the bitmap file (contained in the suitcase) to render PostScript Type 1 fonts on-screen. If you choose a font size not available in the bitmap file, and the outline file is missing, then the font will appear jagged on-screen.
- If the outline file is properly installed but ATM cannot find it, try rebuilding the desktop to recreate links in the file folder (see "Verifying font locations" on page 11).
- If the required outline file exists in the printer, then the font will print properly. To add the font's outline file to your hard disk, reinstall the font.

• If you cannot obtain the font's outline file, ATM can attempt to mimic the font on-screen by using the multiple master substitution fonts Adobe Sans MM and Adobe Serif MM, provided the fonts are installed and you have previously installed ATM Deluxe (which adds the ATM font database to your system). Make sure Enable Font Substitution is selected in the ATM Control Panel (see "Enable Font Substitution" on page 6).

# Characters don't appear on-screen, or computer or printer performance is slow.

Try the following solution:

• Increase the size of the character cache. The default setting is 512K. For graphic arts applications or when using font smoothing, you may want to use a larger cache (see "Character Cache Size" on page 5).

# Line and character spacing on-screen don't match the printout; character spacing is uneven.

Try the following solutions:

- Make sure Preserve Line Spacing is selected in the ATM Control Panel (see "Preserve" on page 5).
- If you are using an application that provides fractional-width spacing or lets you specify its use, be sure to select the fractional-width option when printing to a PostScript printer. Applications that use only integer-width spacing may display spacing evenly on-screen, but they will print with incorrectly spaced characters.

- The document may be corrupt. Try copying the problem text and pasting it into a new document to see whether the fonts print correctly.
- You may have a damaged bitmap or outline file. Try removing and reinstalling the font on your hard disk

# **Descenders (bottoms) of characters are** clipped slightly when printing the document.

To prevent this clipping, select Preserve Character Shapes in the ATM Control Panel. However, using this option may affect line and page breaks (see "Preserve" on page 5). You can minimize inaccurate line and page breaks by using the line spacing (leading) options within your application.

# Printed characters are jagged or disappear.

Try the following solutions:

- Make sure that the Best Quality option in the Print dialog box is selected (if you are using a QuickDraw printer).
- If you are printing fonts at very large point sizes, make sure that the font cache is large enough (see "Character Cache Size" on page 5). Depending on the application, if the font cache is large enough, ATM can generate on-screen characters up to 8000 points or 255 times the size of the largest bitmap font installed, whichever is smaller.

# The installed font looks incorrect when printed.

Try the following solution:

• Make sure that you choose the font from the application Font menu rather than choosing a style (such as italic) from the Style menu.

# Fonts do not display or print properly after document is copied from a Mac OS to a Windows system.

You probably selected a font style by choosing the font name. Before copying a document from the Mac OS to the Microsoft® Windows® platform, be sure to select a font style from the Style menu, not the Font menu. Otherwise, Windows may not recognize the font name, and fonts may not display or print in the specified style.

# Fonts don't appear in an application Font menu.

Try the following solutions:

- Restart the application.
- Reinstall the font.
- Restart the computer and rebuild the desktop (see "Verifying font locations" on page 11).

# Duplicate fonts appear in a Font menu.

You have more than one version of a font installed on your system. Remove all sizes and styles of the font, and reinstall it. If you are using Adobe Type Reunion® software, drag the Type Reunion Data file from the Preferences folder in the System Folder to the Trash, and restart the computer.

# A virtual memory (VM) or PostScript error occurs when printing, or Courier replaces the selected font.

The printer may not be able to find the outline file for the selected font, or may not have enough memory to print downloaded fonts and graphics. Try one of the following solutions:

- In the Chooser, turn off Background Printing.
- Reduce the number of graphics or fonts used in the document.
- If you are using a large paper size, use letter-size paper.
- Make sure the font is not damaged. If necessary, reinstall the font from the original source.
- Add memory to the printer.
- In the Chooser, select a different printer driver and try printing again. To add printer drivers, consult your Mac OS documentation.

# A system error occurs on start-up, or you see this alert message: "Adobe Type Manager requires more memory or additional software resources."

Try the following solutions:

- If you are using ATM Deluxe or another font management application, make sure that you are using the latest version of the software.
- Your system may have insufficient RAM; if so, either remove or turn off some of the current extensions or install more RAM.

• An extension or control panel may be in conflict with ATM. If you suspect a conflict, restart your computer without extensions and control panels or use Extensions Manager to remove all extensions and control panels except for ATM. Then restart your computer. (You may need to remove extensions from the System Folder as well as the Extensions folder.)

If the computer restarts properly, add one extension or control panel at a time to isolate the conflict. You must restart your computer each time you restore an extension or control panel to make the change take effect.

### To restart the computer without extensions or control panels:

Hold down the Shift key and choose Special > Restart. Continue to hold down the Shift key until you see the message "Extensions Off."

# ATM has turned itself off because of an internal error.

This usually indicates a bad memory manager in system software. Try each of the following solutions:

- Restart the system.
- Make sure fonts are properly installed.
- Reinstall ATM.

# STANDARD ROMAN CHARACTER SET

Character Access Chart for Mac OS

KEY CAP	CHAR	SHIFT CHAR	OPTION CHAR	SHIFT OPTION CHAR	KEY CAP	CHAR	SHIFT CHAR	OPTION CHAR	SHIFT OPTION CHAR
Α	a	Α	å	Å	Υ	у	Υ	¥	Á
В	b	В	ſ	1	Z	z	Z	$\Omega$	<b>غ</b>
C	С	C	Ç	Ç	1	1	!	i	/
D	d	D	9	Î	2	2	@	TM	¤
E	e	Ε		,	3	3	#	£	<b>‹</b>
F	f	F	f	Ϊ	4	4	\$	¢	>
G	g	G	©	"	5	5	%	∞	fi
Н	h	Н	•	Ó	6	6	٨	§	fl
1	i	I		^	7	7	&	$\P$	‡
J	j	J	$\Delta$	Ô	8	8	*	•	0
K	k	Κ	٥	É	9	9	(	а	
L	I	L	¬	Ò	0	0	)	o	,
M	m	M	μ	Â	`	`	~		`
N	n	Ν		~	-	-	_	_	_
0	0	0	Ø	Ø	=	=	+	≠	±
Р	р	Р	$\pi$	Π	[	[	{	"	"
Q	q	Q	œ	Œ	]	]	}	,	,
R	r	R	®	‰	١	١		<b>«</b>	»
S	S	S	ß	ĺ	;	;	:		Ú
T	t	Т	†	•	ı	1	ıı	æ	Æ
U	u	U			,	,	<	$\leq$	-
V	V	V	$\sqrt{}$	$\Diamond$			>	$\geq$	~
W	w	W	$\sum$	"	/	/	?	÷	خ
X	х	Χ	≈	ć	space bar				

# STANDARD ROMAN CHARACTER SET

Accent Character Access Chart for Mac OS

CHAR	KEY SEQUENCE	NAME	CHAR	KEY SEQUENCE	NAME
Á	option-e + A	Aacute	Ñ	option-n + N	Ntilde
À	option-`+A	Agrave	ñ	option-n + n	ntilde
Â	option-i + A	Acircumflex	Ó	option-e + O	Oacute
Ä	option-u+ A	Adieresis	Ò	option-`+O	Ograve
Ã	option-n + A	Atilde	Ô	option-i + O	Ocircumflex
á	option-e + a	aacute	Ö	option-u+ O	Odieresis
à	option-`+a	agrave	Õ	option-n + O	Otilde
â	option-i + a	acircumflex	ó	option-e + o	oacute
ä	option-u + a	adieresis	ò	option-`+o	ograve
	option-n + a	atilde	ô	option-i + o	ocircumflex
ã É È Ë Ë	option-e + E	Eacute	ö	option-u + o	odieresis
È	option-` + E	Egrave	õ	option-n + o	otilde
Ê	option-i + E	Ecircumflex	õ Ú	option-e + U	Uacute
Ë	option-u+ E	Edieresis	Ù	option-` + U	Ugrave
é	option-e + e	eacute	Û	option-i + U	Ucircumflex
è	option-` + e	egrave	Ü	option-u+ U	Udieresis
ê	option-i + e	ecircumflex	ú	option-e + u	uacute
ë	option-u+ e	edieresis	ù	option-` + u	ugrave
ĺ	option-e + I	lacute	û	option-i + u	ucircumflex
Ì	option-`+I	Igrave	ü	option-u+ u	udieresis
Î	option-i + I	Icircumflex	Ϋ	option-u + Y	Ydieresis
Ϊ	option-u+ I	Idieresis	ÿ	option-u + y	ydieresis
ĺí	option-e + i	iacute	,	shift-option-i	circumflex
ì	option-` + i	igrave	^	shift-6	asciicircum
î	option-i + i	icircumflex	~	shift-option-n	tilde
ï	option-u + i	idieresis	~	shift-`	asciitilde
,	shift-option-e	acute	_	shift-option	breve
`	shift-option-`	grave	-	shift-option-,	macron
	shift-option-u	dieresis		option-h	dotaccent
~	shift-option-t	caron	۰	option-k	ring
	shift-option-z	cedilla	"	shift-option-g	hungarumlaut
3	shift-option-x	ogonek			
<b>'</b>	Jint option x	ogorick			

# Index

duplicate fonts 4

A	E	K
Adobe Type Manager. See ATM	error message 14	Key Caps 12
anti-aliasing 6	extensions conflict 14	
ATM		L
Control Panel 5	F	line spacing 5, 12
Deluxe version 2, 11, 14	font mapping 13	
described	Font menu, problems 13	M
installing 3	font smoothing 6	multiple master fonts 7-10
removing 4	font substitution, enabling 6	automatic creation 9
using 5	fonts	design axes 7
verifying installation 11	display problems 11	naming conventions 8
	duplicate 4	portability 9
В	installing 3	removing 9
background printing 14	multiple master 7	using on other computers 9
bitmap file 1	OpenType 1	
	TrueType 4	0
C	Type 1 1	OpenType fonts 1
cache, character 5, 12	types of 1	outline file 1
character positioning 6	verifying installation 11	
character shapes 5	fractional-width spacing 12	P
custom instance		PostScript error 14
automatic creation 9	1	Preserve Character Shapes option
creating 8	Installer, running the 3	13
removing 8	installing	primary instance 7
	ATM 3	
D	fonts 3, 11	R
De-installed Fonts folder 4	instance 7	removing
design axis 7	custom 8	ATM 4
design coordinates 8	primary 7	duplicate fonts 4
desktop, rebuilding 11		

# \$ smoothing font edges 6 style linking 13 suitcases 1 system requirements Adobe Type Library 2 ATM 1 \$ troubleshooting 11 TrueType fonts 4 Type 1 fonts 1, 4

### ٧

verifying installation 11 virtual memory error 14