



OmniPage Direct

OmniPage Direct adds the power of OCR directly to any Macintosh word-processing, spreadsheet, or communications program. Working within your application, you simply choose OmniPage Direct in the Apple menu. Scanned text then appears in your document just as if you had typed it yourself. Direct is the world's easiest OCR. It is virtually automatic: just point and click to recognize a single paragraph or multiple pages.

Chapter 1 Installation p. 1

After running the Installer program on Disk 1, Direct will appear in the Macintosh Apple menu.

Chapter 2 How to Scan Text p. 7

Scanning text is as easy as pulling down the Apple menu and choosing Direct. The Scan text dialog box lets you scan immediately or set options for special features such as recognizing parts of a page or different languages.

This tutorial guides you through the simplest scan and also explains how to use the Partial Page features.

Chapter 3 Commands and Settings p. 15

This chapter explains every command and setting within Direct. Topics are listed alphabetically.

Chapter 4 How to Improve Performance p. 25

This chapter tells you the tricks for speeding up Direct and for improving text-recognition accuracy. It explains how to recognize text from poor-quality documents such as multiple-generation copies and newspaper pages. Adjusting the Brightness setting is the easiest way to improve text-recognition accuracy.

Chapter 5 Technical Informationp. 31

This chapter includes a list of supported scanners, a list of error messages and solutions and data about AppleEvents commands. A section of special topics explains how Direct works and other technical aspects. Caere Product Support information is also included.

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OmniPage Direct 2.0 Macintosh Version

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Chapter 1

Installation

This chapter describes how to install Direct. The chapter has five sections:

- System Requirements
- What's in the Package
- Installing the Software
- Selecting Your Scanner
- Upgrading to OmniPage Professional

System Requirements

To run Direct, you'll need the following system:

Computer

- Macintosh II (68020) or higher that reads 1.44MB floppies
- Hard disk with at least 4MB available space
- Total System memory of 8MB RAM
- System 7 or higher

Scanner

Direct supports most full-page scanners. For a complete list, see Chapter 5.

Be sure your scanner is installed according to the manufacturer's instructions and is working on your system. Use the scanning software supplied by your scanner manufacturer to be sure the scanner is working on your system before you install Direct.

What's in the Package

Check the Direct package to be sure it contains the following items:

- Direct Release Notes
- Warranty Registration Card
- One or more 1.44MB 3.5" program disks

If any of the above items are missing, contact your dealer for replacement.



For convenience, jot down your warranty registration number (printed on the diskette labels) on the first page of this manual.

Please fill out the warranty registration card and send it to Caere Corporation. Once registered, you'll have access to product support — support is *only* available to registered users.

Installing the Software

Direct is installed in your Apple Menu Items folder. Several Direct files are also installed in the System Folder. Direct must be installed on the startup disk and that startup disk must contain a valid System Folder. The Installer program automatically selects the startup disk when you install from the installation disks.

Installing Chooser Extension(s) for Your Scanner(s)

During installation, you must install the Chooser extension(s) for the scanner(s) you plan to use with Direct. These Chooser extensions, supplied by Caere, are drivers that allow supported scanners to work with Direct. Easy Installation lets you install Chooser extensions to support one type of scanner. For example, if you select *Ricoh*, Chooser extensions required by supported Ricoh scanners will be installed. Custom Installation lets you install Chooser extensions to support as many scanners as you want.



Your scanner and the driver supplied by its manufacturer, if any, must be installed on your system according to the manufacturer's instructions.

After installation, you must select the required extension for your scanner in the Chooser.

Easy Installation

- 1 Disable any virus protection software.
This is often a Control Panel device; refer to your virus protection software manual for more information.
- 2 Insert the OmniPage Direct disk #1 in the disk drive.
- 3 Double-click the Installer icon and click *OK* to continue.
The Easy Install dialog box appears and displays the name of the disk where Direct will be installed.
- 4 Click *Install* to begin installation.

An installation screen displays the progress and you may be asked to insert other disks. A dialog box will ask you to select a scanner.



- 5 Select the type of scanner you plan to use with Direct in the pop-up menu.
Chooser extension(s) for the selected scanner type will be installed.
- 6 Insert the other installation disks when you are requested to do so.
Direct notifies you when installation is complete.
- 7 After installation, *OmniPage Direct* will appear in the Apple menu.

Custom Installation

It is recommended that you install all files using the Easy Installation method. However, if you are an advanced user, you can click the *Customize* button in the Easy Install window and select which items to install.



Use the Custom Installation method if you need to install Chooser extensions for additional scanners.

Selecting Your Scanner

Your scanner and the driver supplied by its manufacturer, if any, must be installed on your system according to the manufacturer's instructions. Before using your scanner with Direct, make sure it's working on your system by using the scanning software supplied by the manufacturer.

During installation, Chooser extension(s) must be installed for the scanner(s) you plan to use with Direct. For information on Chooser extension installation, see page 3.



Before using your scanner with Direct, you must select its required extension in the Chooser. An error message appears if you try to scan a page before selecting it in the Chooser.

To select a scanner for Direct:

- 1 Choose *Chooser* in the Apple menu.
The Chooser appears; icons for each installed scanner extension are displayed.
- 2 Click the icon of the extension that your scanner requires.
Some extensions, such as Apple Scan, support multiple scanners; select your scanner model in the list that appears. Depending on the make of your scanner, you may have to select other scanner driver parameters such as the SCSI ID number.
The *More...* button may appear for some scanners. Click *More...* to display additional information and/or options for your scanner.
- 3 Close the Chooser.
You must close the Chooser in order to complete the scanner selection.

Upgrading to OmniPage Professional

Chooser extensions for a few scanners supported by this version of Direct are not yet included with OmniPage Professional. Your Chooser Extension is already installed on your system. When you subsequently install OmniPage Professional, a scanner installation dialog will appear: if your scanner is not listed, select *None* and then click *Install*.



How to Scan Text

This chapter guides you through the basic steps of using Direct to scan and recognize text.

We assume you have installed Direct according to the instructions in Chapter 1 and that you know how to work in the Macintosh environment. Not all Direct features are described here; for a complete description of any command or setting, see Chapter 3, *Commands and Settings*.

To use Direct, follow these steps:

- 1 Open your word-processing, spreadsheet, or other application.
- 2 Choose OmniPage Direct in the Apple menu.
- 3 Adjust settings and click *Scan* in the Scan Text dialog box.
- 4 Select parts of a page (optional).
- 5 Check the brightness setting.

After recognition, the scanned text appears in your application. Unrecognized characters are represented in your text file with a tilde (~).

Step 1 Open Your Application and Prepare to Scan

To start the scanning process, open your application and prepare to scan a page.

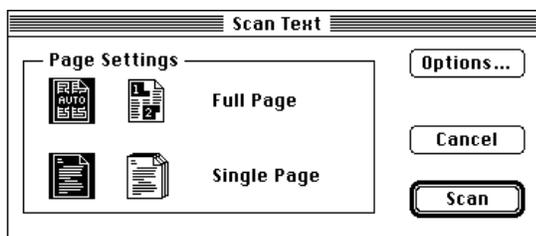
- 1 Open your word-processing, spreadsheet, or other application.
- 2 Place a page in your scanner.

If you don't know how to orient the page correctly, check your scanner's manual. Be sure your scanner is turned on.

Step 2 Choose *OmniPage Direct* in the Apple Menu

If Direct is properly installed, *OmniPage Direct* appears in your Macintosh Apple menu.

- 1 Be sure you have selected your scanner in the Apple Chooser. (See <\$paratext> on page 1-4)
- 2 Choose *OmniPage Direct*. The Scan Text dialog box appears.



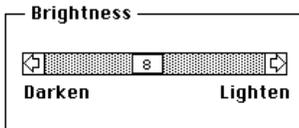
Step 3 Adjust Settings and Click Scan

Direct is designed to automatically determine the best way to scan a page. You can simply click Scan and the default settings will accommodate most scanning situations.

Settings in this dialog box and in the Options dialog box let you customize Direct for scanning your particular documents. This step explains how to use the Partial Page feature, which lets you select parts of a page for recognition. Other settings are described in Chapter 3.



Partial Page



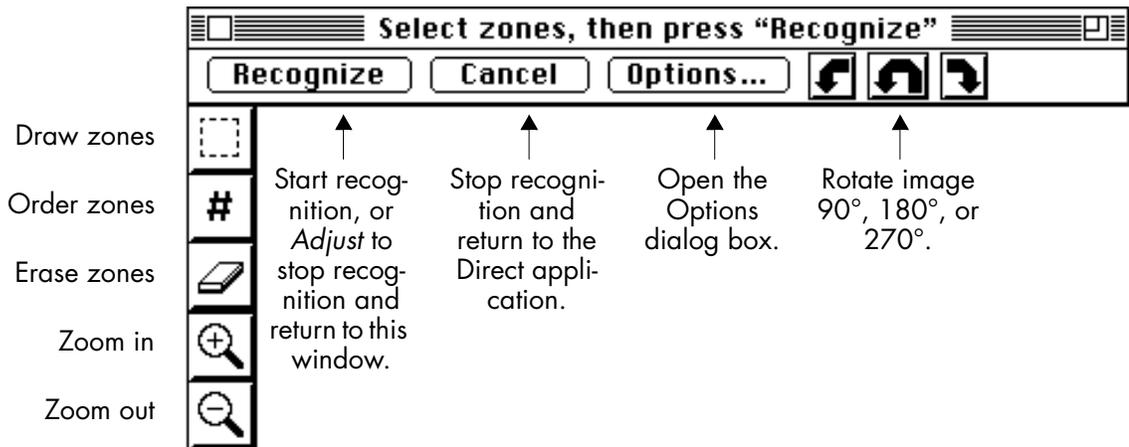
- 1 Highlight the Partial Page icon.
- 2 If you wish to manually adjust the Brightness control, click *Options....* The Options dialog box will appear. If necessary, de-select *Auto Intensity* to activate the brightness control.

Manually adjusting Brightness can improve recognition accuracy and speed; see Chapter 4, Improving Performance.

 - If a page has sharp, distinct characters printed on good-quality non-reflective paper, set the brightness slide to the middle, normal setting.
 - If a page has thin, broken characters, darken the Brightness setting.
 - If a page has thick, run-together characters, if it is printed on porous paper such as newsprint, or if it is printed on glossy paper, lighten the Brightness setting.
- 3 If desired, adjust other settings in the Options dialog box. If you want to save the Options settings for your next scan, click *Save*.
- 4 Click *Scan* in the Scan Text dialog box.

Step 4 Select Parts of a Page

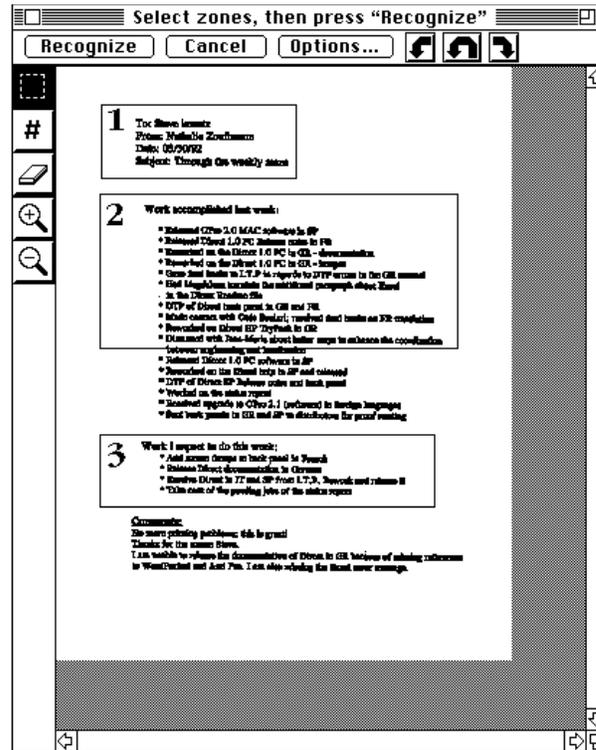
If you highlighted *Partial Page*, an image of your page and a set of tools will appear after the page is scanned. The tools let you draw zones around parts of the page, order the zones for recognition, and zoom in or out.



- 1 Click on the Draw zones tool and then enclose each area you want recognized with a selection box by holding the mouse button down and dragging the mouse.

Zones will be recognized in the order you select them unless you use the Order zones tool (the # symbol). To adjust a zone, first select it by clicking on the Draw zones tool and then clicking on the zone. Then move the mouse pointer to a selection box handle, hold the mouse button down, and move the mouse.

The window will look like this:



A number appears in each zone indicating the order in which the zone will be recognized. You may draw up to 99 separate zones.



- 2 Click on the Order zones tool (the # symbol) to change the order in which the zones will be recognized. The numbers in the zones will disappear.

To reorder the zones, click on the zone you want recognized first. The number 1 will appear in the zone. Then click on the next zone you want recognized; the number 2 will appear. Continue until the zones are appropriately ordered.



- 3 Click on the Erase zones tool and then click on a zone selection box. The contents of the zone will not be removed; only the selection box will go away.

- 4 Click *Recognize* to start recognition.

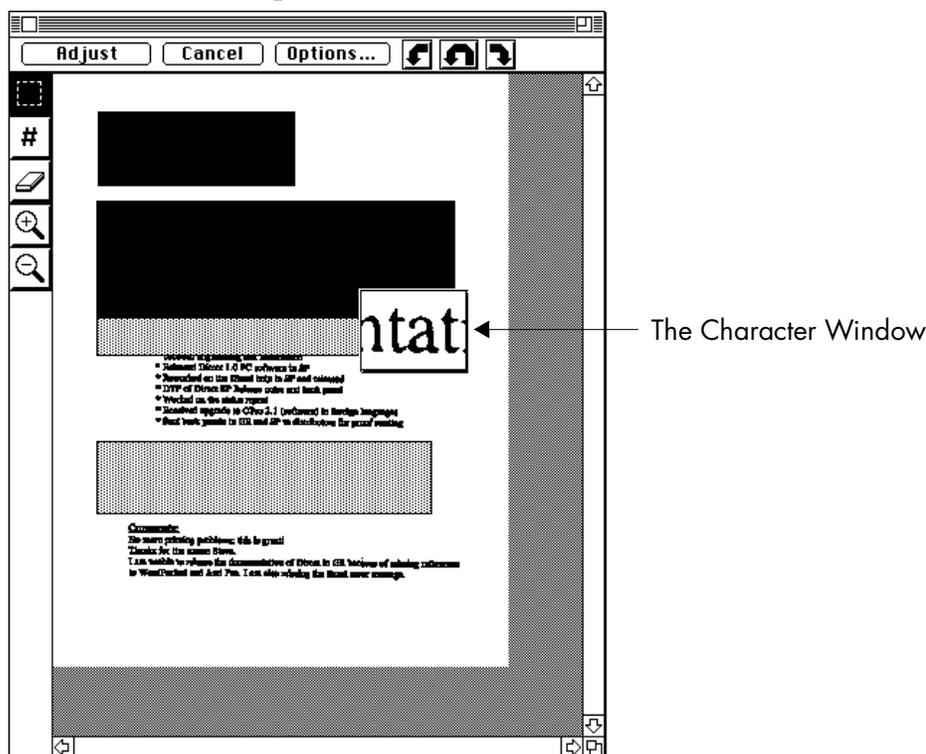
During recognition, text blocks are painted gray and then black on the screen as Direct works.

If, during recognition, you want to change the way you drew or ordered zones, click Adjust. The Partial Page window will reappear and you can use the tools again. After recognition the text will appear in your application just as if you had typed it yourself.

Step 5 Check Brightness

The Character Window appears while Direct performs recognition; it displays small samples of the scanned image. If the Character Window does not appear during recognition, maximize the size of your application's window and the Direct image window.

The Character Window helps you adjust the correct Brightness setting if Auto Intensity is de-selected. It also shows you if you put the page in the scanner skewed or upside-down.



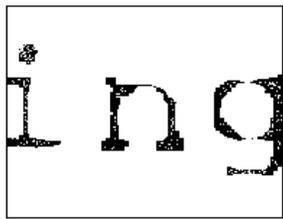
If text characters appear thick and run-together, re-scan the page after adjusting the Brightness control towards Lighten. If characters appear thin and broken, adjust the control towards Darken.

If characters appear at an angle, rescan the document after straightening the page in the scanner.

The following figure shows how well-formed characters appear in the Character Window. No special brightness adjustment is needed.



The following figure shows how thin, broken characters appear in the Character Window. Try adjusting the brightness toward Darken.



The following figure shows how thick, run-together characters appear in the Character Window. Try adjusting the brightness toward Lighten.





Commands and Settings

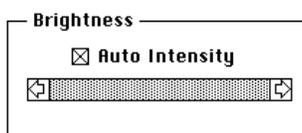
This chapter explains how to use Direct commands and settings. It is organized alphabetically. Settings within a Direct selection box are explained under the title of the selection box. For example, you can find descriptions of Letter and Legal page-size settings under the Size heading.

Adjust

Clicking *Adjust* lets you change settings after a scan has started but before recognition is complete.

For example, imagine you selected several parts of a page for recognition and clicked Recognize. During recognition, you notice that you forgot to select a particular part and that the Recognize button has turned into the Adjust button. You click *Adjust*; recognition stops and you can select parts correctly without having to re-scan the page.

Auto Intensity



Select this to let Direct automatically set an optimal brightness setting using Caere AnyPage or HP AccuPage technology. This feature is available with grayscale scanners.

This feature is especially useful when you scan text printed on a colored background. It also works well when you scan “copies of copies” that have large gray areas.

Recognition is faster with this option turned off. If you scan high-quality documents with crisp, black letters printed on white paper, deselect Auto Intensity and use the manual Brightness control.

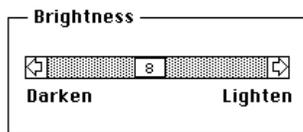
The manual Brightness control is available only when Auto Intensity is deselected.

Balloon Help

Balloon help is available by clicking Show Balloons in the Macintosh ? menu. When you move the mouse pointer to a command or setting, a short explanation of the command or setting appears. To turn off Balloon help, click Hide Balloons in the Macintosh ? menu.

Brightness

Select different brightness settings to lighten or darken a scanned image. This manual control is available in the Options dialog box if Auto Intensity is deselected.



The Brightness setting is the most important means you have to affect the accuracy of text recognition. It's needed to account for variations in paper quality, print quality, and scanner peculiarities. It acts like the brightness setting on a copier.

Set brightness by moving the mouse arrow to the square in the slide, holding the mouse button down, and moving the square toward the desired setting. Or, click on the arrows to the left or right of the slide. Use the numbers in the square as references for future documents.

If a page has sharp, distinct characters printed on good-quality non-reflective paper, set the brightness slide to the middle, normal setting.



If a page has thin, broken characters, darken the brightness setting.



If a page has thick, run-together characters or if it is printed on porous paper such as newsprint, or if it is printed on glossy paper, lighten the brightness setting.



To evaluate brightness settings, watch the Character Window as Direct performs text recognition. For a description of the Character Window, see Chapter 4, How to Improve Performance.

<CR> at end of line

Select this if you want a hard carriage return inserted at the end of each line of text.

Use this setting if you're scanning lists, lines of code, or other text where you want each line to be an individual paragraph when it appears in your word processor.

When this is deselected, Direct will look for extra space between lines of text on the scanned page and interpret space as a paragraph break. It will insert a hard carriage return at the paragraph break. If text is continuous, it will assume that the continuous text is one paragraph.

File Menu

The File menu contains the Quit command. Select Quit to exit the Direct program and remove the program from memory.

Full Page



Full Page

Click the Full Page icon to let Direct recognize all the text on a scanned page. Direct will determine column structure according to the Page Layout setting in the Options dialog box.

If you want Direct to only recognize parts of a page, click the Partial Page icon. After the scan, you'll be able to select specific parts you want recognized. See Chapter 2, How to Scan Text.

Help

See the Balloon Help topic in this chapter.

Languages

Select this to choose one or more languages for text recognition.

Direct will recognize additional characters (such as circumflexes, umlauts, etc.) unique to a particular language. You may select more than one language by Shift-clicking on different selections; however, for faster recognition, select only the minimum number of languages you need.

Multiple Pages



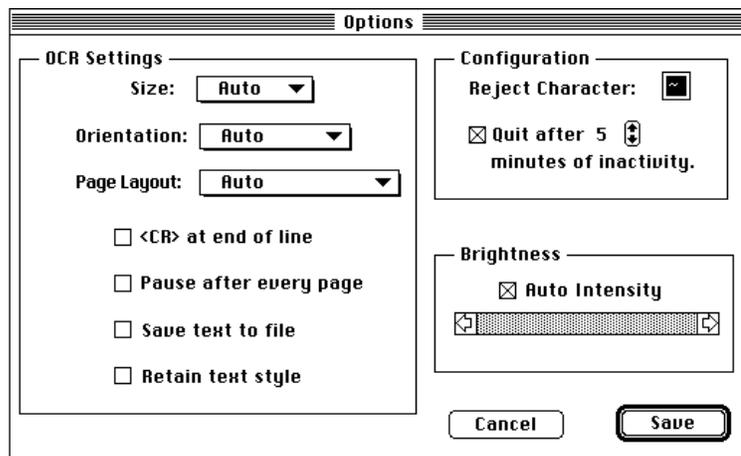
Multiple Pages

Select this icon if you want to scan more than one page.

After a flatbed scanner scans a page, a prompt will appear asking you if you want to scan more pages. If you use an automatic document feeder (ADF), the prompt will appear when the ADF is empty.

Options

Click this to display the Options dialog box. This dialog box lets you indicate the size page you're scanning, the column structure, the type of characters printed on your page, and other options. Usually, you won't need to use these advanced features; Direct will automatically handle most of your documents. However, manually adjusting these settings may speed up recognition.



Look up any of the settings in the Options dialog box in this chapter. They are arranged alphabetically.

Orientation

Orientation:

The Orientation selection box lets you select the orientation of the document you are scanning.

Auto

Select this if you want Direct to automatically determine page orientation. Direct will automatically flip the image if text-recognition accuracy is very poor; it assumes you placed the page wrongly in the scanner.

Portrait

Select this if vertical is the long dimension as with a business letter.

Landscape

Select this if horizontal is the long dimension as with a spreadsheet.

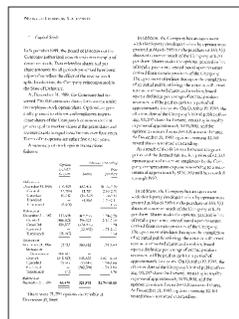
When scanning landscape-oriented pages, be sure you load them in your scanner correctly. See your scanner's manual for instructions on how to place landscape pages.

Flipped

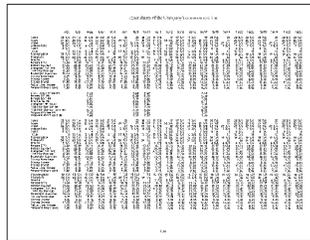
Select this if a portrait-oriented page is placed upside down in the scanner.

Flipscape

Select this if a landscape-oriented page is placed upside down in the scanner.



Portrait



Landscape

If Portrait, Landscape, Flipped, or Flipscape is selected, Direct will not automatically flip an image if text-recognition accuracy is very poor.

Page Layout

Page Layout: Single Column ▾

Page layout modes describe how blocks of text on a page will be ordered for recognition. For text recognition, Direct usually divides a page into a series of text blocks and strips out graphics. For example, if two text blocks are separated by white space (gutters), Direct will assume there are two

columns of text. The left column will appear first in your word processor and then the right column will appear.

Auto

Select this if you want Direct to automatically determine column structure.

Direct will look for regular vertical separations of text (gutters) to define columns. It then recognizes column-wide text blocks. It starts at the top of the first column, moves to the bottom, and then continues to the top of the next column, snaking through the text. The resulting text file displays the text in one column from beginning to end.

Do not use this setting for tables and financial forms. Although these kinds of documents have multiple columns, snaking will destroy their spreadsheet format.

Single column

Select this when there is one column on a page as with correspondence such as business letters.

Direct will treat the entire page as one column. It starts at the top of the page and moves to the bottom outlining page-wide text blocks. If there are tables, Direct will use spaces as delimiters between columns.

Spreadsheet/Tables

Select this when scanning a table or financial form and you are putting the text into a spreadsheet. Direct will insert tabs instead of spaces as delimiters between columns and each column of text will go into a different column of cells.

No parsing

Select this to have Direct recognize the entire document as a single text block.

Direct will not divide the text into separate text blocks or strip out graphics. The document will be recognized as one text block; if there are graphics on the page, Direct will attempt to recognize them as text elements.

This feature is useful if you are scanning pleading pages or small text that might appear as graphics to Direct: for example, telephone book pages. Also, use No parsing if you are scanning very small or narrow zones.

Partial Page



Partial Page

Highlight this icon when you want specific sections, or areas, of a page recognized. If the Full Page icon is highlighted, the entire page will be recognized.

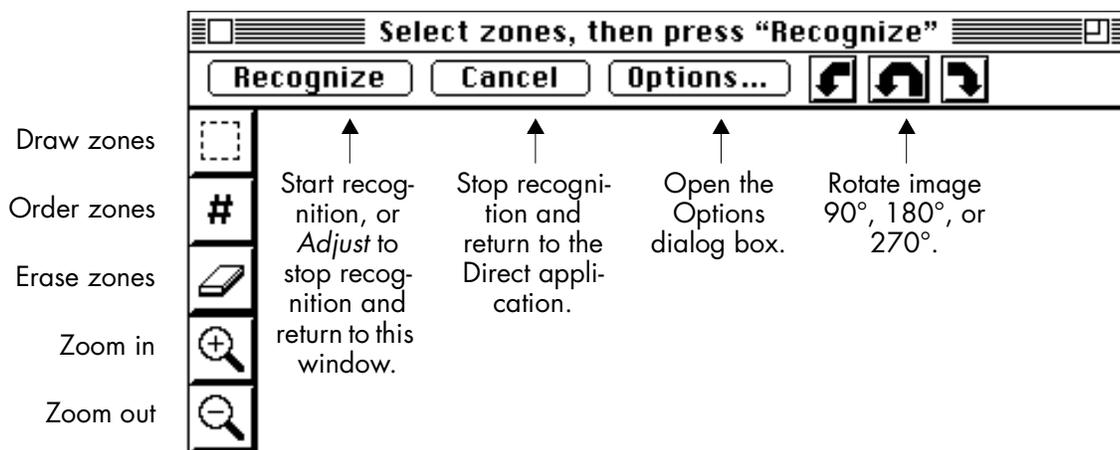
After Direct scans your page, you'll be able to draw selection boxes around specific parts of the page that you want recognized. You can also specify the order in which you want the zones' text to appear in your word processor, zoom your view of the page in or out, and rotate the image if you placed it incorrectly in the scanner.

For tutorial-like instructions on how to use the Partial Page feature, see Chapter 2, How to Scan Text.

If you highlight Partial Page, the tools window will appear after the scan.

The Partial Page Tools

These tools let you select and order zones and zoom the view in or out. The buttons on the button bar let you start and cancel the recognition process and adjust settings in the Options dialog box.



Draw zones



Click this tool and then enclose each area you want recognized with a selection box by holding the mouse button down and dragging the mouse. Zones will be recognized in the order you select them unless you use the Order zones tool (the # symbol).

A number appears in each zone indicating the order in which the zone will be recognized. You may draw up to 99 separate zones.

Once you have drawn a zone, you can adjust its size. First, click on the zone to select it. Handles will appear on the edge of the selection box. Then

move the mouse pointer to a handle, hold the mouse button down, and move the mouse. To move the entire zone, move the pointer inside the zone, hold down the mouse button, and move the mouse.

Order zones



Normally, zones are recognized in the order you select them. To change the order in which the zones will be recognized, click on the Order zones tool. The numbers in the zones will disappear.

To reorder the zones, click on the zone you want recognized first. The number 1 will appear in the zone. Then click on the next zone you want recognized; the number 2 will appear. Continue until the zones are appropriately ordered.

Erase zones



If you want to remove a selection box, click on the Erase zones tool and then click on the box you want removed. The contents of the zone will not be removed; only the selection box will go away.

Zoom in/out



If you want a close-up view of an area, click the Zoom in tool and then click on the area of the page you want enlarged. Click the Zoom out tool and then click on the area to zoom to a wider view.

The levels of zoom are Fit in Window, 25%, 50%, and 100%. The 100% view gives you a pixel-for-pixel view of the scanned image.

Recognize

Recognize

Click this button to start recognition.

If you highlighted the *Multiple Pages* and *Partial Page* icons (and you did not select *Pause after every page* in the Options dialog box) the same zones will be recognized on each page that is scanned. For example, if you select a zone on a form, and then scan five forms, the same zone will be recognized on each form. If you selected *Pause after every page*, you'll be able to draw different zones for each page.

This turns into the Adjust button after recognition has started.

Adjust

Adjust

Click this button to change settings after a scan has started but before recognition is complete. The Recognize button turns into the Adjust button after recognition has started.

For example, imagine you selected several zones on a page for recognition and clicked Recognize. During recognition, you notice that you forgot to

select a particular zone. You click Adjust; recognition stops and you can select zones correctly or adjust settings without having to re-scan the page.

Cancel

 Click this button to stop a scan and return to the Direct application.

Options

 Click this button to display the Options dialog box so you can change settings. All settings are explained in alphabetical order in this chapter.

Rotate Tools



Click these tools if you placed a page incorrectly in your scanner. You can rotate the image 180⁰ or 90⁰ clockwise or counter-clockwise. You don't need to replace the page in your scanner; Direct will recognize the text if it appears correctly oriented in the image window.

Pause after every page

Select this if you are scanning multiple pages and you may want to change settings for different pages.

For example, imagine you are scanning a magazine article that stretches over several pages. You select Partial Page because you don't want to recognize all the advertisements that are on the page. You also select Pause after every page because each page has a different text/ad layout and you will have to select different parts of each page. After each page is scanned, you'll be able to draw different zones or change settings in the Options dialog box.

Quit

Select this to exit the Direct program and remove the OCR portion of the program from memory.

Quit after n minutes of inactivity

Select this if you want to automatically exit the Direct program when Direct is not used for a period of time. This will free memory for other applications if you are not using Direct often. "n" stands for a number of minutes from 1 to 99.

Recognize

Click this button to start the recognition process after you have selected zones.

This turns into the Adjust button if you want to change the zones or settings after recognition has started.

Reject character

This edit box lets you choose a character to mark unrecognized characters in your text. For example, if Direct could not recognize the J in REJECT, and the tilde (~) was the reject character, the characters RE~ECT would appear in your text.

Retain text style

Select this to keep text character attributes such as size, bold, italic, and underlined when recognized text is pasted into an application. The text will be pasted as plain ASCII with no formatting if this is not selected. Direct does not retain formatting when you save text to a file.

Save text to file

Select this to save recognized text as a text file rather than having the text pasted into an application. A dialog box will appear after recognition allowing you to name the text file and save it in an appropriate folder. Direct does not retain formatting when you save text to a file.

Single Page



Single Page

Highlight this icon if you are scanning a single page. Highlight Multiple Pages if you're scanning more than one page with an automatic document feeder or by changing pages in the scanner by hand.

Size

Size:

This selection box lets you select the dimensions of the page you are scanning.

Auto Select this to allow Direct to automatically determine the size of the page.

Letter Select this for standard US 8.5" by 11" size pages.

A4 Select this for 21cm by 29.7cm European-size pages.

Legal Select this for US 8.5" by 14" size pages.

Tilde Character

The tilde character appears in your text file if Direct could not recognize a character. You can change the tilde to another character by choosing a different "reject" character in the Options dialog box. To display this window, click *Options* in the Scan Text window.



How to Improve Performance

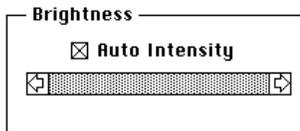
You can make Direct run faster and recognize text more accurately by learning how to use a few different settings.

- Speed up Direct by deselecting *Auto Intensity* and by manually adjusting other options instead of using the default Auto settings.
- Improve text-recognition accuracy by using the Character Window (described later in this chapter) to adjust the Brightness setting and by taking into account scanning angle and paper transparency.

Improving Speed

Direct is designed to run automatically — making text recognition easy and effortless. However, the automatic features take longer to work. Deselecting *Auto Intensity* and manually setting other options will make Direct run much faster.

Auto Intensity



The Auto Intensity feature uses Caere AnyPage or HP AccuPage technology to improve accuracy considerably if your page is dirty, if text is printed on a colored background, or if the page has shading from a copy machine. This feature is available on grayscale scanners.

However, if you scan high-quality documents with crisp, black letters printed on white paper, recognition is much faster with this setting turned off. Deselect *Auto Intensity* to activate the manual Brightness control in the Options dialog box.

Page Layout

Page Layout:

Select *Single column* when there is one column on a page as with correspondence. Select *Spreadsheet/Tables* when scanning a table, financial form, or spreadsheet.

Partial Page



Partial Page

The Partial Page feature lets you draw selection boxes around just the parts of a page you want recognized. Using this feature, you don't need to wait while Direct recognizes unnecessary text.

For tutorial-like instructions on how to use the Partial Page feature, see Chapter 2, How to Scan Text.

Improving Accuracy

If you scan typeset, high-quality printed pages, you will probably find that Direct recognizes text perfectly: the text that appears in your word processor matches the text in the scanned page letter-for-letter.

With lesser-quality pages, text-recognition accuracy will be poorer. These factors most affect text-recognition accuracy:

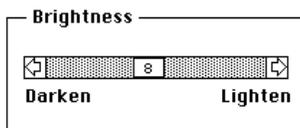
- Document Quality
- The Brightness Setting
- Scanner Glass Clarity
- Paper Transparency

Document Quality

Direct recognizes characters in almost any font from 6 to 72 points in size. However, keep the following in mind when using Direct:

- The print should be reasonably clean and crisp. Characters must be distinct: separated from each other and not blotched together or run-on.
- The document should be free of notes, lines, or doodles. Anything that is not a printed character will slow Direct considerably, and any character distorted by a mark will be unrecognizable.
- The document font must be non-stylized; for example, the Zapf Chancery font is too fancy for Direct.
- It's hard to recognize underlined text accurately; the underline changes the shape of descenders on the letters q, g, y, p, and j.

The Brightness Setting



The Brightness setting is your most powerful means to improve text-recognition accuracy. It is available in the Options dialog box if you de-select *Auto Intensity*.

Manually adjusting the Brightness control allows for differences in paper and print quality for all kinds of pages: newsprint, glossy paper, thickly inked, etc. The following image shows a lower-case e printed on glossy paper as it might appear to Direct. Notice the thin, horizontal line in the middle. Is this character an e or a c? It may be hard for Direct to tell.



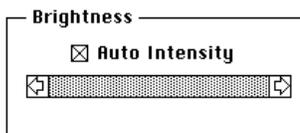
The following image shows the same character, as it appears to Direct, when the brightness control is set to Darken.



Direct will always read this character as an e.

To adjust the Brightness control, either click on the left or right arrows or move the mouse pointer to the box, hold the mouse button down, and slide the control left or right. The number in the control's box is a reference you can use when you scan other documents. If you find that a particular brightness setting is effective with a certain quality of document, use that setting the next time you scan that type of page.

Auto Intensity



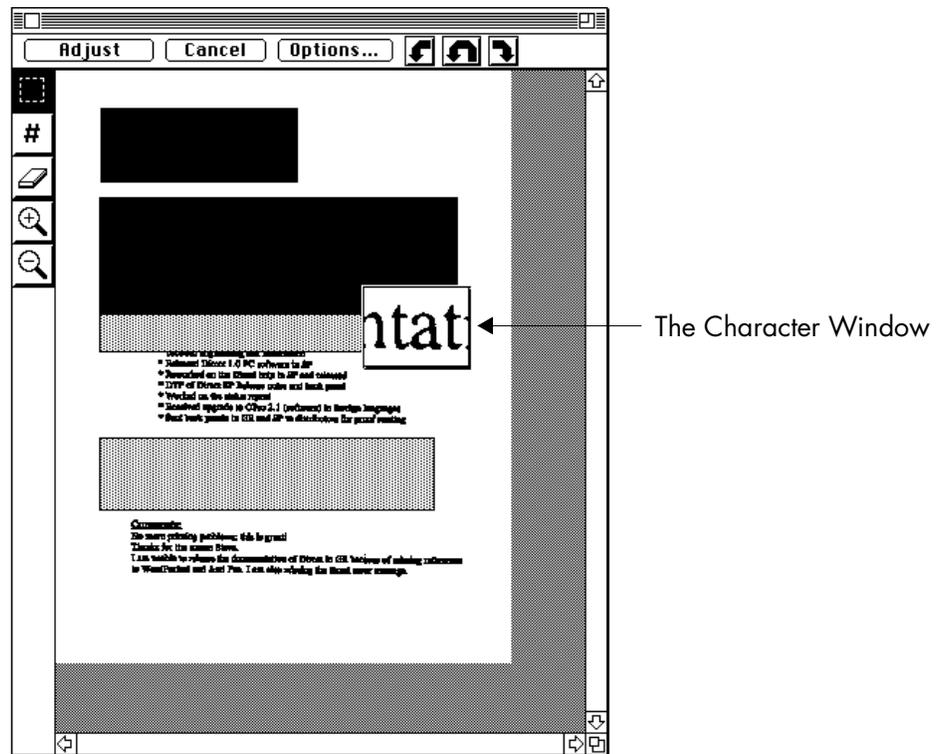
Select this to let Direct automatically set the optimal brightness using Caere AnyPage or HP AccuPage technology. This feature is especially useful if your page is dirty, if text is printed on a colored background, or if the page has shading from a copy machine.

Direct will use HP AccuPage if you select HP AccuPage as the scanner extension in the Apple Chooser. Direct will use Caere AnyPage if you choose other grayscale scanner extensions.

The Character Window

The Character Window appears while Direct performs text recognition on a page; it displays small portions of the scanned image. If text characters appear thick and run-together, adjust the Brightness setting towards Lighten. If characters appear thin and broken, adjust the setting towards

Darken. If characters appear at an angle, rescan the document after straightening the page in the scanner.



If the Character Window does not appear during recognition, maximize the size of your application's window and the Direct image window.

The following figure shows how well-formed characters appear in the Character Window. No special brightness adjustment is needed.



The following figure shows how thin, broken characters appear in the Character Window. Try adjusting the Brightness control toward Darken.



The following figure shows how thick, run-together characters appear in the Character Window. Try adjusting the Brightness control toward Lighten.



Scanner Glass Clarity

The sheet of glass on the flatbed of the scanner must be clear. If it gets dirty, wipe it gently with a soft, damp, lint-free cloth or tissue. Be sure it is completely dry before you put pages on it.

Paper Transparency

Some paper is thin enough that the scanner sees text printed on the opposite side of the scanned page. This is often the case with telephone-book pages. To correct this problem, put a black piece of paper behind the page between the page and the lid of the scanner.



Technical Information

This chapter has five sections:

- Supported Scanners — a list of scanners that will work with this version of Direct.
- Error Messages — a list of Direct error messages and solutions.
- AppleEvents — information about how to integrate Direct with the System 7 AppleEvents capability.
- Special Topics — general information about how Direct works and special problems you may encounter.
- Caere Product Support — how to contact and what information to have ready.

Supported Scanners

The following is a list of supported scanners for Direct and their required Chooser extensions. This list is subject to change; other scanners may also work with Direct but have not been tested by Caere. If your scanner is not on the list, call and ask your scanner manufacturer if they have tested the scanner with OmniPage Direct.



Your scanner and the driver supplied by its manufacturer, if any, must be installed on your system according to the manufacturer's instructions.

Scanner Model

Abaton Scan 300GS*
Abaton Transcribe 300*
Agfa Arcus, II
Agfa StudioScan I, II
Apple Scanner*
Apple OneScanner, Color OneScanner*
Canon IX-3010, -4015
Epson ES-300C, ES-600C, ES-800C
Epson 4000 GT
Fujitsu 3096G, 3097G
Fujitsu ScanPartner 10, ScanPartner Jr.
HP ScanJet
HP ScanJet IIc, IIcx, IIp, Plus
Microtek MSF-300GS, -300ZS*
Microtek ScanMaker 600ZS*
Microtek ScanMaker IIhr, IIg, IIsp
Microtek ScanMaker III
Nikon Scantouch AX-1200
Panasonic FX-RS506, -RS307*
Relisys VM 3530/RELI 2400*
Relisys VM 4530/AVEC 4800*
Relisys VM 6530/RELI 9600, 9624*
Ricoh IS-410
Ricoh IS-50
Ricoh IS-60
Umax UG 80, UC300

Chooser Extension

Apple Scan
Apple Scan
Agfa Scan
Studio Scan
Apple Scan
Apple Scan
Canon Scan
Epson
Epson
Fujitsu Scan
Fujitsu Scan
HP Scan 2
HP Scan 2, HP AccuPage**
Microtek Scan
Microtek Scan
Microtek Scan
Microtek Scan
Nikon Scan
Apple Scan
Apple Scan
Apple Scan
Apple Scan
Ricoh 410 Scan
Ricoh 50 Scan
Ricoh 60 Scan
Umax Scan

* ADF support may not be available for these scanners.

** Select the HP Scan 2 extension to scan with AnyPage. Select the HP AccuPage extension to scan with HP AccuPage.

Apple Scanners

If you have difficulty scanning, first check that you turned on your scanner before starting your Macintosh and that the extension "Scanner" version 3.0 is in your extensions folder. If you still have difficulty, download a different "Apple Scan" chooser extension from the Caere sections of CompuServe or America Online or from the Caere BBS. If you don't have access to one of these services, contact Caere product support.

Microtek Scanners

ScanMaker 600ZS When using an automatic document feeder (ADF), Direct will prompt you to insert each page rather than scan until empty.

ScanMaker IIIhr If images scanned in grayscale mode with an ADF appear distorted, please contact Microtek and upgrade your scanner ROMs to version 1.2.

Power Macs and ScanMaker IIIhr, III The ScanMaker IIIhr will run on a Power Mac if you select the *Microtek Scan* chooser extension rather than the *Microtek III&hr* chooser extension. Chooser extensions are installed during the Direct installation process and then selected in the Chooser before scanning. The ScanMaker III running with a Power Mac will only work with *Auto Brightness* (the default) selected in the Direct Options dialog box. Please check with Caere product support for an updated chooser extension.

Scanners Soon to be Supported

Agfa's Focus, Arcus Plus and II, and Microtek's MS-II scanners are not supported in this release. Please check with Caere product support for updated chooser extensions.

Error Messages

There are many scanner-related error messages, although resolving scanner problems usually involves the same procedures. This section discusses scanner problems and then provides a list of error messages and solutions in alphabetical order.

Scanner-related Errors

Make sure that the correct scanner Chooser extension is installed and that you have chosen that scanner in the Chooser. See *Selecting Your Scanner* in Chapter 1.

Most scanner-related problems occur because of loose cable connections or SCSI ID number conflicts. Check the following:

- All connections between the scanner and your Macintosh are tight.
- The scanner is turned on.
- The SCSI ID number of your scanner does not conflict with the SCSI ID number of another device connected to your Macintosh.

All peripheral SCSI devices such as scanners and external hard disks have an assigned SCSI ID number. Usually, there is a small indicator on the back of the SCSI device that shows a number. This is the device's SCSI ID number. SCSI ID numbers 0-6 are "legal;" internal hard disks are often set at 0.

To find your scanner's SCSI ID number, look for the indicator on the back of the scanner near the cable connections. If you can't find it, consult your scanner's documentation.

All SCSI devices must have a unique ID number. If you receive an error message when you try to scan that indicates a conflict, check to make sure that your SCSI devices do not have the same ID number.

Make sure that your scanner is working with the imaging software that came with the scanner. If the scanner works with other applications, the scanner is selected in the Chooser, and Direct still fails to scan, please call product support.

Other Error Messages

The following section explains error messages that may appear while using Direct.

Cannot create the Direct Preferences file. Please restart your Macintosh.

Direct creates a "Preferences" file to save information about your setup. This data includes information such as the last scan settings. If there is no Preferences file, Direct will create one. Rarely, an existing Preferences file is opened or used by another application. In this case, it's easiest to simply restart your Macintosh so the file is freed.

Direct requires System 7.0 or above.

Direct does not run on any version of System 6.

Not enough memory for recognition. Try increasing the amount of memory allocated to the Direct program by your Macintosh.

Direct needs at least 2.5MB of system RAM to run; very densely printed pages may require more. Your text-handling application needs RAM also.

To check the amount of memory allocated to Direct, highlight the OmniPage Direct application icon in your Apple Menu Items folder. Then click Get info... in the System File menu. See the Memory section at the bottom of the Get info... window; Current size: shows the amount of RAM allocated for Direct. Edit this figure so that it is above the Suggested size: amount directly above it.

Not enough memory for recognition.

Try increasing the amount of memory allocated to the Direct program by your Macintosh; scanning a higher-quality copy or original of the page; or, selecting Partial Page and recognizing smaller parts of the page.

You may not be able to recognize all of a legal-size page or a page that has very small, dense type. If you have more than 5MB RAM, you can try increasing the amount of memory allocated to Direct. (See the instructions for the preceding error message.) Or, reduce the memory requirement by breaking the job up and recognizing smaller parts of the page at time.

Not enough memory for recognition. You need at least 8MB of physical RAM.

Direct needs 2.5MB of system RAM to run; your text-handling application needs RAM also. Virtual memory will not lessen the basic requirement for 8MB of physical RAM. Physical RAM is memory in the form of single in-

line memory modules (SIMMs). See your Apple dealer for instructions on how to add memory to your Macintosh.

Not enough memory to keep formatting information. Try increasing the amount of memory allocated to the Direct program by your Macintosh.

Direct can pass on formatting information such as font size and style of a scanned page to some applications. However, if memory is at a premium, this formatting information will not be saved, and only the text will be pasted into your application.

To check the amount of memory allocated to Direct, highlight the OmniPage Direct application icon in your Apple Menu Items folder. Then click *Get info...* in the System File menu. See the Memory section at the bottom of the Get info... window; Current size: shows the amount of RAM allocated for Direct. Edit this figure so that it matches or exceeds the Suggested size: amount directly above it.

Please close all Direct windows before changing the scanner type.

To change scanner or SCSI ID number information, first close the Scan Text, Options, and Partial Page windows.

Please unlock your system volume.

This message will appear if you try to run Direct from a locked Syquest™ or Bernoulli™ drive. These cartridges have write-protection devices that must be open; Direct must be able to write to the Direct Preferences file.

You cannot scan more than 100 pages.

If you scan multiple pages, break the job down into portions smaller than 100 pages such as 20-25 pages.

AppleEvents

This section describes the AppleEvent hooks into Direct. AppleEvents is a protocol embedded within System 7 allowing applications to communicate with each other. Any System 7-savvy application that supports AppleEvents can talk to Direct, allowing users to scan text directly into their target application.

There are two portions of an AppleEvent link: one resides within the Direct application and the other within the target application such as Microsoft Word, Microsoft Excel, MacWrite II, etc. Direct supports specific AppleEvent messages and commands required to scan and perform OCR.

The following sections describe the various AppleEvent messages that are supported by Direct and the AppleEvent commands (embedded within the AppleEvent Execute message) that set various scanning and recognition parameters.

A knowledge of the AppleEvents protocols is required to fully understand these messages and commands. You may want to review the AppleEvents chapter in Inside Macintosh Volume VI before proceeding.

AppleEvent Messages

There are a number of AppleEvent interchange messages. Only three are processed by Direct since they are the only ones that apply to an OCR session. The next section describes actual commands that are embedded within these messages.

The supported messages are:

Initiation of an AppleEvent conversation

The Finder determines if an application is AppleEvent aware from the application resource information. If an application wants to converse with Direct, it can send the standard "core" AppleEvents which will automatically be understood by Direct. To launch Direct, the application sends the AppleEvent Launch Application command.

Execution of AppleEvent commands

Since Direct is now active, applications can send AppleEvent messages to it. See the AppleEvent Commands section for a description of the supported commands.

Termination of an AppleEvent conversation

To end the link, an AppleEvent Quit Application message is sent to Direct indicating that the link needs to be terminated.

AppleEvent Commands

AppleEvent_Launch_Application

Initiates the AppleEvent conversation with Direct and makes Direct the active application.

AppleEvent_Quit_Application

Tells Direct to exit to the Finder.

Special Topics

Direct works as a standalone application; it is not a DA or an INIT.

After recognizing text, Direct fills the Clipboard and then pastes the Clipboard contents to the application that was open before Direct was invoked. Anything in the Clipboard when Direct was invoked is lost.

Direct saves formatting information such as font size and style for Microsoft Word, MacWrite, Acta, and WordPerfect 2.0.

Applications Without the Command-V

Direct relies on the Command-V mechanism to paste text into a document. Applications that don't use this keyboard equivalent won't automatically receive scanned text from Direct. With these applications, use the mouse to invoke the application's Paste command after recognition is complete.

If an application has no paste capability, it will not work with Direct.

Using Direct with Foreign Operating Systems

Each translated version of Direct is designed to work with the operating system for that language. If you use Direct with an operating system for which it was not intended, make sure that whatever keyboard equivalent used in the operating system matches the one used by Direct.

For example, the US version of Direct uses the Command-V keyboard equivalent to paste text. If you use the US version with a French operating system, you'll need to change the operating system's Paste command to respond to Command-V. If you are a programmer or experienced Macintosh user, you can use a program editor such as ResEdit to do this. Naturally, you should obtain a localized version of Direct.

AccuPage and Caere AnyPage

AccuPage and AnyPage are special recognition technologies that automatically compute the ideal brightness settings for different parts of a page. AccuPage and AnyPage are available with some HP and grayscale scanners. With these scanners, an Auto Intensity checkbox is available next to the Brightness control.

Direct will use HP AccuPage if you select an HP scanner with AccuPage as the scanner extension in the Apple Chooser. Direct will use Caere AnyPage if you choose other grayscale scanner extensions.

This feature is especially useful when you scan text printed on a colored background. It also works well when you scan "copies of copies" that have large gray areas.

Recognition is faster with this option turned off. If you scan high-quality documents with crisp, black letters printed on white paper, deselect *Auto Intensity* and use the manual Brightness control.

Upgrading to OmniPage Professional

Chooser extensions for a few scanners supported by this version of Direct are not yet included with OmniPage Professional. Your Chooser Extension is already installed on your system. When you subsequently install OmniPage Professional, a scanner installation dialog will appear: if your scanner is not listed, select *None* and then click *Install*.

If No Text Appears...

If text does not appear in your document after recognition, choose *Paste* in your application's Edit menu. You may have accidentally clicked on the desktop before you scanned; Direct places text in the Clipboard if your application was not active immediately before you scanned.

Scanning Long Documents

If you scan more than 15-20 pages at a time, you may need to allocate more memory to your word-processing application. You'll know that memory is a problem if, after scanning many pages, no text transfers to your application.

To solve this problem, increase your application's memory size. Highlight your application's icon and choose *Get info...* in the Macintosh File menu. In the *Memory* box at the bottom, increase the number to 4000 (4000K). If you don't have enough RAM to increase the memory allocation, you may be unable to scan long documents all at once; try scanning five or six pages at a time into your application. Or, use the *Save Text to File* feature.

Scanning Text into Graphics Applications

You can scan one page at a time into a graphics application such as Adobe Illustrator, MacDraw, SuperPaint, etc.

MacPaint 2.0

Direct will not automatically paste text into this application. After you scan and recognition is complete, select the MacPaint text tool, place the cursor, and choose *Paste* in the MacPaint Edit menu.

Excel 3.0

Direct will replace any highlighted data in your spreadsheet. To prevent this, click outside a highlighted area, deselecting the data, before you scan text in with Direct.

Caere Product Support

Product support is available if you need help. This chapter describes common problems you may encounter. Check the index or table of contents to find the information you need.

Dial-up Services

Product support and information are available through the following services:

Service	How to Contact	Service Provided
CompuServe	GO CAERE	forum/updates
America Online	Keyword CAERE	forum/updates
Caere BBS	408-395-1631	text/help files/updates
Internet	support@caere.com	email help

You must be registered in order to receive Product Support!

Complete and send in the registration card included in your OmniPage package. If you need to call before you have registered, be sure to have your serial number ready.

Registered users in North America who need further assistance can also call Caere Product Support at 408-395-8319. See the next page for international support numbers.

Information We Need From You

For the most efficient response, please have the following information on hand and be near your computer when you call:

- The error message text if there was an error message.
- Details about what you were doing before the problem occurred.
- Direct software serial number.
Locate this information on Program Disk 1.
- Direct software version number.
Single-click the OmniPage icon in the Apple Menu Items folder and choose *Get Info* in the File menu in the Finder.
- Devices attached to the SCSI port of your Macintosh.
- Scanner driver version if there is one.
Consult your scanner manual.

- Amount of free disk space.
Check the number in the upper right corner of your hard drive window in the Finder. You may need to choose *By Icon* or *By Small Icon* in the View menu.
- Your system version number, your Macintosh model, and the amount of memory installed: choose *About This Macintosh...* in the Apple menu in the Finder.

International Support

These numbers are for registered international users.

United Kingdom only

(44) 01-442-22-7411 — Phone

(44) 01-442-22-7412 — Fax

(44) 01-442-22-7413 — BBS

Belgium, the Netherlands, and Luxembourg

(49) (0) 2208 71491 — Phone

(49) (0) 2208 71737 — Phone

(49) (0) 2208 71731 — Fax

Other International

Please contact your local distributor or dealer.