

3 Using RasterPlus95

Getting started

What is RasterPlus95?

RasterPlus95 is a high-performance print manager for Polaroid Palette film recorders. With RasterPlus95 you can:

- Print application files directly from your Windows 95 applications
- Send PostScript, JPEG, TIFF, TARGA, Kodak Photo CD, [Kodak FlashPix](#), and other image files directly to your film recorder without first loading the files into an application (see [page 3-38](#) for a complete list of supported file types)
- Get fast print times and superb print quality
- Preview jobs (in the correct aspect ratio) before printing them, saving time and film

Who can use RasterPlus95?

Service bureaus can use the powerful queuing and reporting features of RasterPlus95 to print PostScript and bitmap files sent by their customers. Corporate imaging centers can use the extensive networking capabilities of RasterPlus95 devices to offer centralized print services to their users. Demanding desktop publishers can get the highest-quality output obtain-

able from their film recorders with significantly reduced print times.

The power of PostScript

RasterPlus95 turns your film recorder into a 100% Adobe-compatible Level II PostScript printer. Recent Windows 95 applications, like PowerPoint and CorelDRAW, have features which only work on PostScript printers. And RasterPlus95 is the most cost-effective way to make these applications see your film recorder as a true PostScript printer.

With the power of RasterPlus95 PostScript you can:

- Print documents with embedded EPS files – a non PostScript printer will only give you a low-resolution black and white preview of the embedded EPS file on your output.
- Print documents with rotated images or bitmaps – Windows does not directly support the rotation of bitmaps; the bitmap will print without rotation or will not print at all on a non-PostScript printer.
- Get the highest quality blends and fountain fills – some applications, like CorelDRAW, send lower quality blends to non-PostScript printers.

PPD files

RasterPlus 95 has PostScript Printer Description (PPD) files that describe the features of all the supported recorders. These PPD files may be needed by some applications like PageMaker and when configuring to print from a network node. The PPD files are created when the printer is installed under Windows and placed in the RasterPlus95\PPD directory.

PPD files	Palette Recorder
ci-5000.ppd	Digital Palette CI-5000
ci-5000s.ppd	Digital Palette CI-5000s
hr6000.ppd	Digital Palette HR6000
p7000.ppd	ProPalette 7000
p8000.ppd	ProPalette 8000

Upgrading?

If you are upgrading to a new version of RasterPlus95, you must remove the older version before installing the new version. See *Chapter 2, Installation* for details.

Please note that your saved queues are not compatible with the newer version of RasterPlus95.

Major new features of RasterPlus95 version 2.0.x:

- **Polaroid ProPalette Block Mode:** RasterPlus95 version 2.0 introduces SCSI block mode support for faster printing on the ProPalette 8000 (firmware version 564 or later) and the ProPalette 7000 (firmware version 704 or later). Imaging data can now be grouped together for faster data transfer to the film recorder.
- **Faster printing from within your application (File-Print):** Version 2.0 introduces on-the-fly file interpretation for faster printing. RasterPlus95 images the file as it is created, saving printing time.
- **Full cross-platform networking:** Version 2.0 is a native Windows 95 print server on Window 95 or NT, so you can print directly from every PC computer on the network. When you install RasterPlus95 on your Windows NT server, you can print directly from Windows 95/NT and Macintosh systems on the network.
- **Multiple device printing:** You can use RasterPlus95 Version 2.0 as an imaging workstation and install all your devices on the same computer. The true 32-bit multitasking design of RasterPlus95 ensures that you can print to each device at the same time.

- SCSI Explorer utility: RasterPlus95 version 2.0 includes SCSI Explorer to manage all of your attached SCSI devices. This utility identifies all the SCSI cards and devices installed on the system, each with a unique Host ID.
- New VisualTransform™ Editor: This feature allows you to create your own custom file transforms. The floating preview page has rulers with page dimensions and page size improvements for accurate sizing and placement of your print images.
- PowerPoint® On-Screen Show page size: Since PowerPoint97 defaults to the on-screen-show page size, slides printed to 35mm film contain white borders. RasterPlus95 version 2.0 has a page size that eliminates white borders and hours of reformatting.
- Improved file support: Version 2.0 adds Kodak FlashPix and improves the TIFF/JPEG support for RasterPlus95's extensive list of file formats, including: PostScript, EPS, JPEG, TIFF, GIF, PCX, BMP, Kodak PhotoCD files and even native Adobe Photoshop files.
- Improved installation and support: Version 2.0 has new installation and support programs to make the use of RasterPlus95 easier than ever. Support programs include a built-in Windows PostScript driver and the latest Adaptec ASPI software for SCSI devices. New security features have also been added to help register and support the software.

System requirements

- | | |
|----------|---|
| Hardware | <ul style="list-style-type: none">• A 486DX or faster PC running Microsoft Windows 95 or Windows NT* operating systems (Windows NT requires a SCSI connection)• 8MB of memory (16MB recommended)• 15MB of free disk space before RasterPlus95 installation, or about 5MB after installation• A Polaroid Palette Film Recorder: CI-5000(S), HR 6000(SE), ProPalette 8000 or ProPalette 7000 |
| Software | <ul style="list-style-type: none">• Polaroid Palette software for Windows 95 and Windows NT (film tables) <p>*If you are using Microsoft Office 97 with Microsoft Windows NT version 4.0, install Service Pak 2 for NT 4.0 before using RasterPlus95. Refer to the Troubleshooting section in this chapter for details.</p> |

Two ways to use RasterPlus95

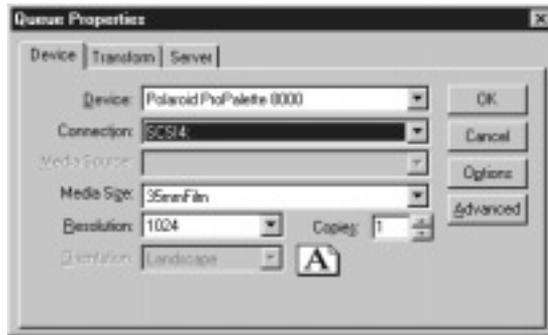
RasterPlus95 software provides two distinctly different printing services. Please refer to the section of this chapter which has the information you need.

To do this	See this section
Print from your Windows 95 application to your film recorder.	<i>Printing from an application</i> (pages 3-8 – 3-15)

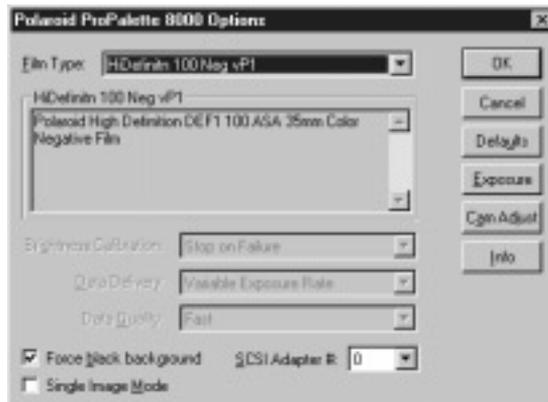
To do this	See this section
Queue and send print-ready files like PostScript, TIFF, and JPEG files directly to your film recorder.	<i>Printing queues of files</i> (pages 3-16 – 3-20)

Testing your setup

- Check communications with the film recorder
- 1 Select Queue Properties on the Edit menu and click the Device tab if necessary.



- 2 Select the recorder you are using from the Device list.
- 3 Select the port to which the device is connected from the Connection list.
- 4 Click the Options button.



5 Click the Info button on the [Device] Options dialog box.

If the software can communicate with the recorder
An information box displays information about the recorder.
This is your confirmation that your recorder is properly connected.

If the software can't find the recorder
An error message will be displayed that the recorder is not connected or is off. Check to be sure that your recorder is properly connected and turned on (refer to your hardware manual); check to be sure the correct port is selected on the Device tab of Queue Properties; [check your SCSI ID number \(see *Troubleshooting* in this chapter for details\)](#).

Set the mode of
your LPT port

If your Palette recorder is connected to an LPT port, the port mode should be set to ECP in the BIOS Setup, especially if your computer is faster than 166 MHz.

- 1 Restart your PC and press the key indicated on the screen to enter setup *before* Windows 95 starts up.
- 2 Once in BIOS Setup, look for the LPT port mode and select ECP. Refer to your computer manual for details on using the Setup program.
- 3 Save the change and exit Setup.

Print a sample file

To verify that RasterPlus95 is installed correctly and that your film recorder is working properly, print a sample file. See [Printing the sample files](#) on [page 3-36](#).

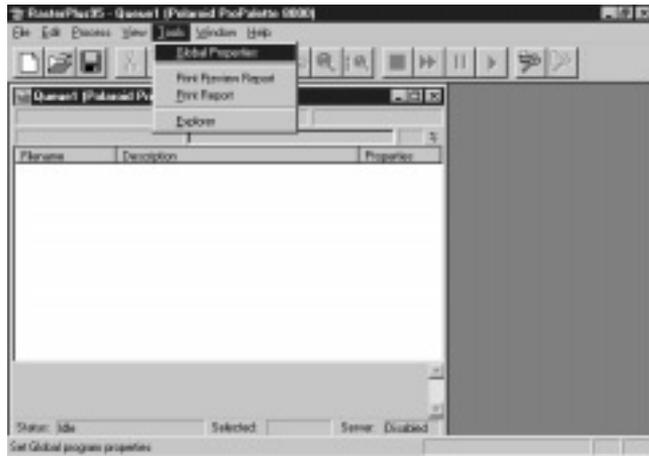
Printing from an application

Note: Many tasks can be selected from the toolbar; see [page 3-37](#) for a description of the toolbar shortcuts.

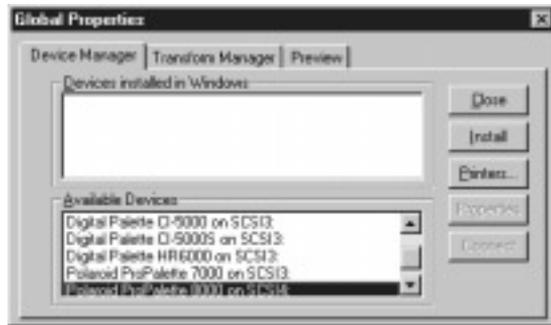
The following is a description of how to print from Microsoft PowerPoint 97. Use these instructions as a general guideline for printing from any Windows application.

Adding the direct print driver to Windows 95

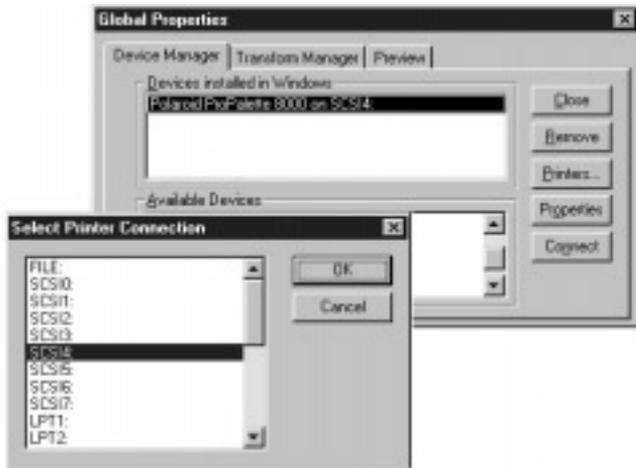
1 In RasterPlus95, select Global Properties on the Tools menu.



- 2 Click the Device Manager tab. Select your recorder from Available Devices and click Install.



- 3 Highlight your recorder and click the Connect button. Select the port to which your recorder is connected and click OK.

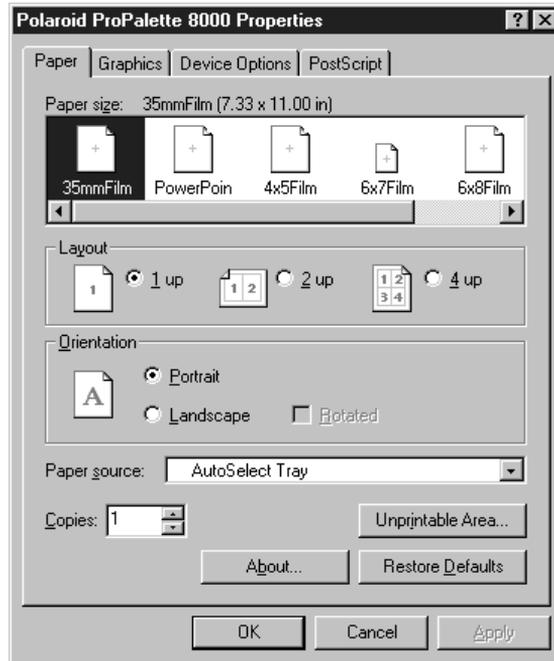


Setting up the properties

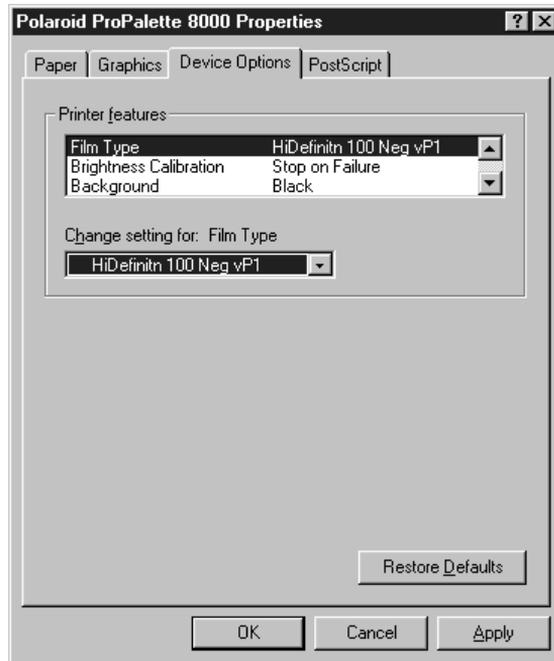
- 1 Highlight your recorder and click the Properties button on the Device Manager tab.



- 2 On the Paper tab, select the appropriate page size. For example, select PowerPoint if you are using that application, or 35mm if you are using a 35mm camera back in another application.

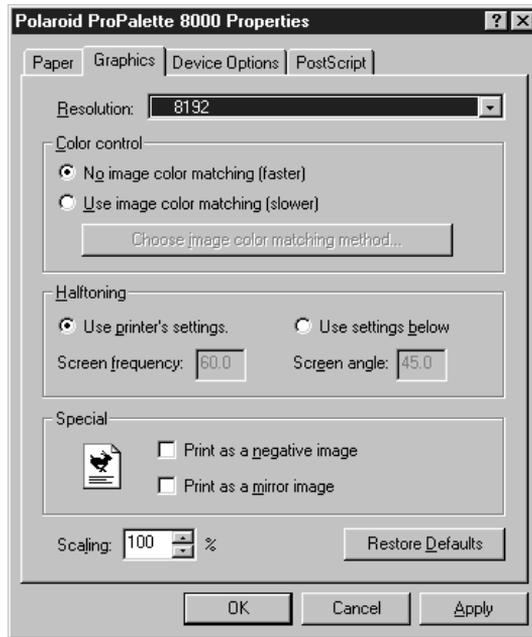


3 Click the Device Options tab and select the appropriate film type.*



* Note: For best results, the film type selection must *match exactly* the film type loaded in the camera back.

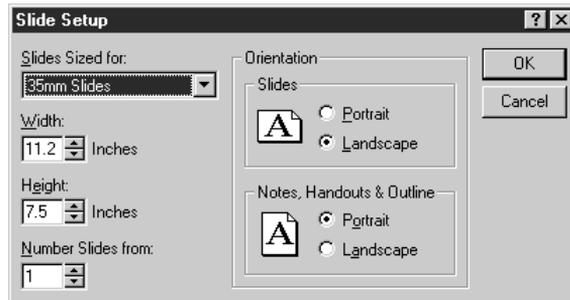
4 Click the Graphics tab and set resolution. Click OK.



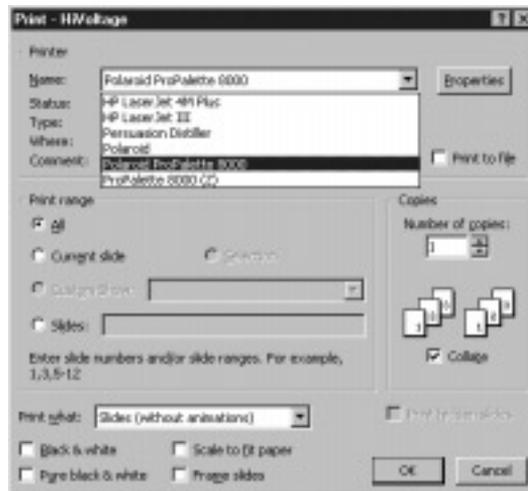
5 When you're finished making changes to Properties, click Apply, then click OK. Close the window.

Printing to the film recorder

- 1 Launch your application from the Start menu and load or create an image or presentation.
- 2 For example, in Microsoft PowerPoint, select **Slide Setup** on the File menu and select 35mm Slides in the Slides Sized For box. Click OK.



- 3 Select Print on the File menu and select the recorder you just installed. Click OK.



Your document will now be printed to your film recorder.

Future printing

Once the software is configured properly for your film recorder, film type, resolution and so on, you don't need to launch RasterPlus95 first to print from your application. Simply select the device in your application and choose File, then Print. RasterPlus95 is launched and the document you've selected appears in a new queue. RasterPlus95 processes the file and prints it to the film recorder.

The printer properties you specified when printing in your application are used when printing the file. If you change properties in your application and print again, the file is inserted into the same queue, but different properties are used when printing. You can review the properties of any file in the queue by selecting the file and choosing File Properties on the Edit menu (see page 3-20).

Previewing before printing

RasterPlus95 gives you WYSIWYG previews of your print files. These previews:

- Accurately reflect the layout of the image on the selected media in the target device.
- Show fonts and colors as they will appear on the output.

To preview files that you print directly from your application:

- 1 Launch RasterPlus95, highlight the new queue and select Queue Properties on the Edit menu.
- 2 Click the Server tab, change the status to Enabled, and click OK. This makes the queue a non-active server queue.
- 3 Without closing RasterPlus95, launch or switch to the Windows application(s) from which you wish to print.
- 4 Print all your documents.

Switch back to RasterPlus95. The documents you printed will now be listed in the server queue.

To preview all files in the queue, select Preview Queue on the File menu. To preview some files in the queue, select the files and select Preview Selected Files on the File menu.

Once you have finished previewing the files, you can print them by selecting Print Queue or Selected Files on the File menu.

Printing queues of files

Note: Many tasks can be selected from the toolbar; see page 3-37 for a description of the toolbar shortcuts.

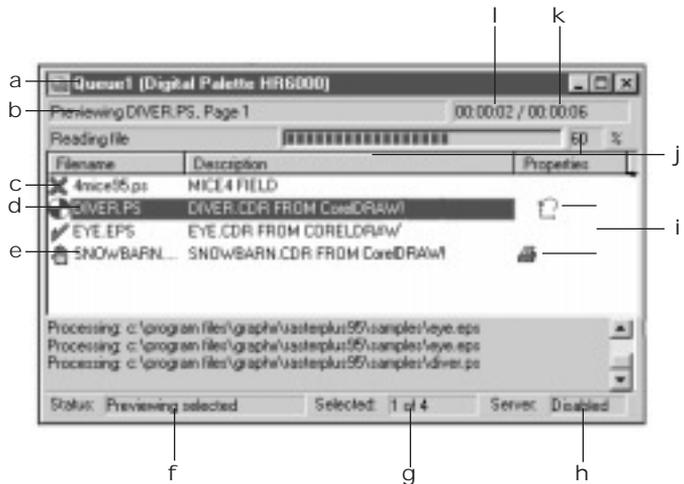
What is a queue?

A queue is a list of references to image files. Before you can print or preview image files, you must first insert them into a queue. When RasterPlus95 first loads, a blank queue is created. You can load and manipulate several queues at once. You can even print or preview multiple queues at the same time.

To	Choose the following item on the File menu:
Create a new queue	New
Open an existing queue	Open
Save a queue	Save
Save a queue and prompt for a new filename	Save As

Elements of a queue

The various elements of a typical queue are shown here:



- a queue name and target device: The name of the queue file and the name of the device to which the queue will print
- b Printing status: The current status of the file being printed
- c Image result:



File is ready to be imaged



File did not image OK



File imaged OK



File is imaging



File imaged OK but was deleted by the server

- d File description: A description of the file (usually the name of the original document)
- e Filename: The actual name of the file in the queue
- f Last selected print action: The print action you last selected from the RasterPlus95 File menu
- g Number of files selected: The number of files selected along with the total number of files in the queue
- h Server status: The server status of this queue (see the server section for more information)
- i File Properties:
 -  The device properties of this file differ from those of the queue
 -  The transform properties of this file differ from those of the queue
- j Completion status: A visual and percentage representation of the completion status of the current imaging process
- k Elapsed time (queue): The elapsed processing time for all files that have been printed
- l Elapsed time (file): The elapsed processing time for the file being currently printed

Adding, deleting, moving, and copying files in queues

You can add image files to a queue in a number of ways:

- Select Add Files on the Edit menu. Choose one or more files from the dialog box.
- Press the Insert key and choose one or more files from the dialog box
- Drag and drop files from other queues or from the Windows Explorer
- Click the Add Files toolbar icon and choose one or more files from the dialog box

To delete files from a queue, select the files and press the Delete key or select Cut on the Edit menu. Note that this operation only deletes the reference to the file from the queue, not the image file itself.

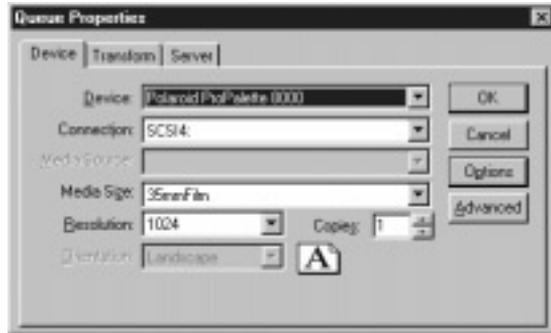
To move files within a queue or from one queue to another, select the files you wish to move, and select Cut from the Edit menu (or click the Cut icon in the Toolbar). Click the spot in the queue where you wish to insert the files and select Paste on the Edit menu (or click the Paste icon in the toolbar). You can also simply click the file(s) and drag them to the desired position.

If you want to copy files within a queue or from one queue to another, select the files you wish to move, and select Copy on the Edit menu (or click the Copy icon in the Toolbar). Click the spot in the queue where you wish to insert the files and select Paste on the Edit menu (or click the Paste icon in the toolbar). You can also simply click the file(s), hold down the Ctrl key, and drag them to the desired position.

Selecting files in a queue

Some operations, like printing, previewing and deleting, allow you to work on single or multiple files in the queue. To select a file, just click the file with the mouse. To select multiple files, hold down the Ctrl key and click the files you wish to select. To select a range of files, click a file, hold the Shift key down, and click another file; all files inclusively between these two files will be selected.

Setting queue properties To set the device, transform, and server properties for the entire queue, select Queue Properties on the Edit menu.



You can set the properties which will be used for every image file in the queue. The queue property tabs are:

- Device: Configure the target printing device (for details, see [page 3-21 – 3-22](#))
- Transform: Alter the size or placement of the image on the device media (for details, see [page 3-23 – 3-25](#))
- Server: Set server properties (for details, see [pages 3-26 – 3-27](#))

Any time you set queue properties, these properties become the default properties for any new queue that you create. When you save a queue, the queue properties are saved with the queue. These properties will be restored when you open this queue.

Setting individual file properties

To view general information about the files in the queue, or to alter the properties of individual files in the queue, select the file(s). Select File Properties on the Edit menu. The file properties tabs are:

- General: Review file information
- Device: Configure the target printing device (for details, see page 3-21 – 3-22)
- Transform: Alter the size or placement of the image on the device media
- Notes: Review or attach notations to the file

Note: Setting File Properties overrides any default queue properties for the file(s) selected.

Printing files in a queue

To print all files in the queue, select Print Queue on the File menu. To print some files in the queue, select the files and select Print Selected Files on the File menu.

Previewing files in a queue

To preview all files in the queue, select Preview Queue on the File menu. To preview some files in the queue, select the files and select Preview Selected Files on the File menu.

RasterPlus95 will display each previewed file in a separate window until the maximum number of preview windows (set in the Preview page of Global Properties) has been created. When the maximum number is reached, RasterPlus95 starts reusing the preview windows beginning with the first one displayed. RasterPlus95 preview windows remain on the screen until you close them by clicking on the close icon of the preview window, exit the program, or select Close All Previews on the Window menu.

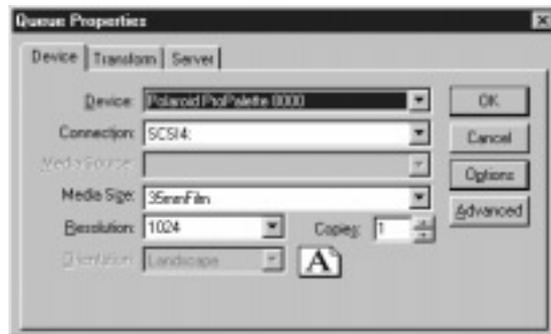
Highlight queue

Please note that any actions on a queue like printing, previewing, or canceling, can only be made when the queue is the active window in RasterPlus95. If a non-queue window (like a preview window) is active, the menu selections and toolbar icons for these actions will be dimmed and unavailable. To make a queue active, simply click the title bar of the queue.

Device properties

Standard device properties

All RasterPlus95-supported devices are configured using the same basic Device tab, found in Queue Properties or File Properties on the Edit menu. If a particular field is not applicable to the selected device, the field is dimmed.



- Device: Set the target device
- Connection: Specify the port to which the device is connected (e.g.: LPT1:, SCSI4:, etc.)
- Media Source: The location of the media
- Media Size: The actual size and/or description of the media (e.g.: 35mm)
- Resolution: The resolution the printer should use to print the job (e.g.: 372 dpi, 4096)
- Orientation: The orientation of the output media. Note that this field is only available if a device can receive data in portrait or landscape mode. It is only applicable if the Transform is set to None, or if you are printing pure bitmap files (TARGA, TIFF, etc.) which cannot be rotated. Otherwise, a PostScript file printed with the SmartFit or SmartCrop transform (or a derivation thereof) will always be rotated to fit the selected media, regardless of the orientation setting.

Options

If you click the Options button on the Device tab of Queue Properties or File Properties, a dialog box is displayed which lets you review and alter device-specific options. (For details, see [pages 3-28 – 3-30.](#))

Advanced

All RasterPlus95-supported devices use the same Advanced Device dialog box which you access by clicking the Advanced button on the Device tab of File Properties or Queue Properties. If a particular field is not applicable to the selected device, the field is dimmed. (For details, see [pages 3-34 – 3-35.](#))

Transform properties

What is a Transform?

A Transform is a set of values you apply to queues or files which are used to size and place images on the print media. Transforms are sometimes needed when the size of the original image does not match the size of the media in the printer.

To set a transform:

- 1 Select Queue Properties or File Properties on the Edit menu. The same basic Property page is displayed.
- 2 Click the Transform tab.



Defining a Custom Transform

Select <<Custom>> from the Current Transform list.

This Custom Transform is used only for the queue (if you are doing Queue Properties) or the selected file(s) (if you are doing File Properties), however, you can save the Custom Transform to a named Transform which you can apply to other queues or files.

Editing a Custom Transform

- 1 Click the Edit button on the Transform tab.



- 2 Click Repaint to see the image. Use your mouse or the spin buttons to move and rotate the image on the screen. The target device and file that you are using when defining the transform are indicated on the screen.
- 3 Select Load to load an existing Transform.
- 4 Select Save As to save this Custom Transform to a named Transform.

The sizing values you can set:

- **Starting Transform:** The initial Transform to use before applying the sizing values.
- **X, Y Zoom:** 1.0 is no zoom; fractions will make the image smaller and values greater than 1.0 will make the image larger.
- **X, Y Offset:** Offset the image in the horizontal or vertical direction. The values are in picas.
- **Rotation:** Rotate the image counterclockwise in 90 degree increments. You will need to Repaint after setting rotation.
- **Measurement units:** Select the unit of measurement to be used in the X, Y Offset boxes.

- Snap to Margins: If set, the image will “snap” to the margins of the printable area when you drag it around.
- Retain Aspect: Retain the aspect ratio of the image when zooming.

Pre-built Transforms

RasterPlus95 comes with several pre-built Transforms which can be applied to files or queues:

- None: No Transform; the image is printed with its original size and position. This will work if the page size in the application, the page size in the driver used to create the print file, and the page size in the selected RasterPlus95 all are exactly the same.
- SmartFit: Use this to best fit the image into the device space; possibly resulting in borders on the top and bottom or sides. RasterPlus95 uses the PostScript bounding box, or bitmap image extents to compute the fit.
- SmartCrop: Use this to expand the image to completely fill the media; possibly resulting in part of the image being cut off. RasterPlus95 uses the PostScript bounding box, or bitmap image extents to compute the cropping.
- Flip (None): Flip the image 180 degrees after originally using no transform for initial sizing.
- Flip (SmartFit): Flip the image 180 degrees after originally using a SmartFit transform.

Other default transforms may also be available; they are described in the Description box on the Transform Page when you select them.

Server properties

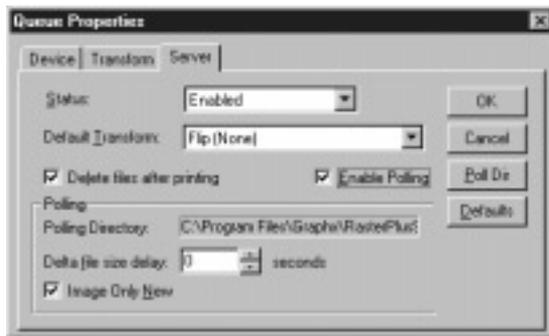
What is a server?

A server is a queue which has either enabled or active properties. When a queue has enabled or active properties, it can accept print files from two sources:

- Files created by selecting Print on the File menu of an application.
- Print-ready files which RasterPlus95 finds by polling a directory on your hard disk.

Setting server properties To set server properties:

- 1 Select Queue Properties on the Edit menu.
- 2 Click the Server tab.



The first field in the Server Properties page is Status. This field can be set to:

- Disabled: No Server services. This is the default when you load a new queue. Images will be printed immediately.
- Enabled: If you print from an application using the same RasterPlus95 device as this queue's default device, the print job will appear in the queue but will not be immediately imaged. Also, if polling is enabled, RasterPlus95 will poll for files, insert them into the queue, but will not image them

immediately.

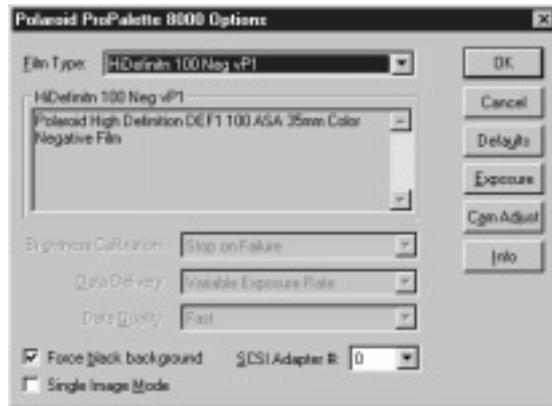
- **Active:** If you print from an application using the same RasterPlus95 device as this queue's default device, the print job will appear in the queue and will be immediately imaged. Also, if polling is enabled, RasterPlus95 will poll for files, insert them into the queue, and will image them immediately.

The other fields are:

- **Default Transform:** Select the default transform that is inserted into the queue by the Server.
- **Delete files after printing:** If checked, RasterPlus95 deletes print files after they are successfully printed.
- **Enable Polling:** If checked, RasterPlus95 continuously looks for print files in the Polling Directory you specify. If any files are found, they are inserted into the queue. If the queue status is active, they are immediately printed.
- **Polling Directory:** The directory in which RasterPlus95 searches for print files.
- **Delta file size delay:** RasterPlus95 cannot work on partially completed print files. Some networks unlock the files during the printing stage which causes RasterPlus95 to think that the file is complete. This delay is the amount of time that RasterPlus95 waits before rechecking the file size of the print file. If the file size is different, RasterPlus95 assumes that the file is not yet complete and does not insert it into the queue.
- **Image Only New:** If checked, RasterPlus95 does not insert the files it finds in the Polling Directory when the Server is launched; only new files which appear in the Directory are inserted into the queue.

[Device] Options

- 1 Select Queue Properties or File Properties on the Edit menu.
- 2 Select the Device tab.
- 3 Click the Options button. The [Device] Options dialog box is displayed.

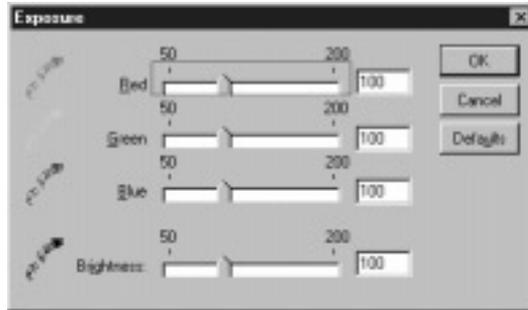


- **Film Type:** Select the type of film you've loaded in the camera; a description of the film will be displayed in the edit box below.
- **Brightness Calibration:** Specify what to do when the camera reports a calibration error; only change this on the advice of a Polaroid technician (not **applicable** on the ProPalette 8000 or 7000).
- **Data Delivery:** Specify the way that data is sent to the color film recorder; only change this on the advice of a Polaroid technician (not **applicable** on the ProPalette 8000 or 7000).
- **Data Quality:** Fast is the default and will result in faster imaging. Fine will result in slower, marginally-higher quality imaging (not **applicable** on the ProPalette 8000 or 7000).

- **Force black background:** Fill all non-object areas of the image with black. This is especially useful when imaging 35mm slides where the default white background may cause lines at the edges of the slide.
- **Single Image Mode:** Check film supply before starting the next exposure and report “out of film” when no exposures are left. This is useful if you want to shoot a queue that may require more film frames than are currently loaded in your camera back. When prompted, you can reload film and click Retry to resume imaging. (If the box is not checked and you run out of film, you may lose images in the queue.) *Note:* Imaging is slower when the box is checked.
- **SCSI Adapter #:** The SCSI ID of the host SCSI board. *Note:* When multiple SCSI adapters are used in a system, they are assigned unique adapter numbers. These should not be confused with the numbers 1-7 that are assigned to devices connected to an adapter. Frequently, CD ROM interface cards are seen by the system as adapters and are assigned #0. In this case, assign the number 1 to your adapter card (or another number if you have more than one adapter card).
- **Defaults:** Reset all items to their defaults.
- **Exposure:** Set exposure levels on the [film recorder](#) (see below).
- **Cam Adjust:** Alter the camera adjust values of the current camera back (see below).
- **Info:** Display a dialog box which displays information about your film printer.

Setting Exposure Levels

Click the Exposure button on the Device Options dialog box to display the Exposure dialog box.



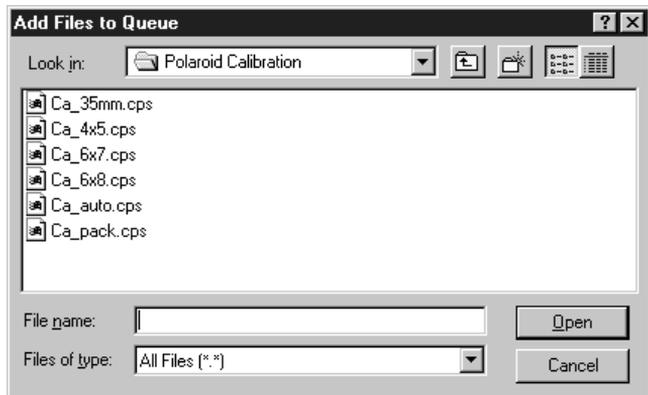
Move the sliders in the Exposure dialog box to change the overall or relative color levels of the images you produce on the Palette.

Click the Defaults button to return to the original exposure values.

Calibrating your camera

Your recorder has been electronically calibrated at the factory. If your images are not filling the printing area of the film or the edges are cropped off, you can use this option to recalibrate the camera back to the recorder. *Note:* Once you have calibrated the unit for a particular film type, the adjustment is applied across all film types. No further adjustments should be necessary for images made with that camera back.

- 1 Add one of the following calibration files to your active queue based on your current camera back. The files are located in the Polaroid Calibration subdirectory of your RasterPlus95 installation directory.

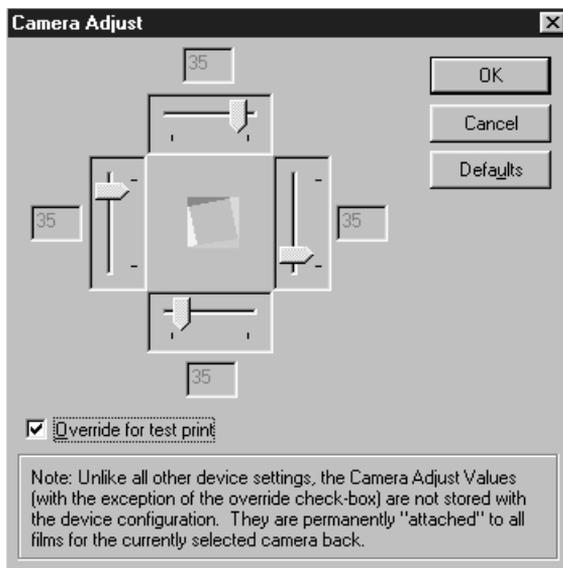


Choose:

CA_35MM.CPS	for a 35mm camera back
CA_AUTO.CPS	for an Auto camera back
CA_4X5.CPS	for a 4x5 camera back
CA_PACK.CPS	for a Pack camera back
CA_6x7.CPS	for a 6x7 camera back
CA_6x8.CPS	for a 6x8 camera back

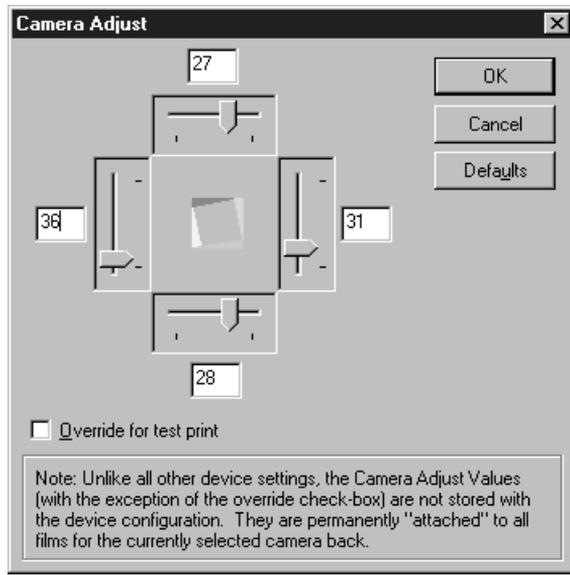
- 2 Choose Queue Properties on the Edit menu. Choose the Server tab.

- 3 Select Enabled in the Status list, and be sure the Delete Files After Printing box is unchecked, so the calibration file is not deleted from the system after printing.
- 4 Choose the Device tab. Click the Options button to display the Device Options dialog box.
- 5 Click the Cam Adjust button to display the Camera Adjust dialog box.



- 6 Check the Override For Test Print box. Keep clicking OK to close all the dialog boxes.
- 7 Print the calibration file to the Palette recorder. A calibration wedge picture will be imaged.
- 8 Examine the resulting photograph. Measure each of the four wedges along each edge by counting the number of ticks that the wedge occupies. We recommend that you add five ticks to the total on each side. This will ensure that images fill the entire frame; however, oversizing the image in this way may cause you to lose a small amount of visual information along the edges of your image.

- 9 Follow steps 2 through 4 and uncheck the Override For Test Print box. Enter the wedge values that you counted in step 7. For example:



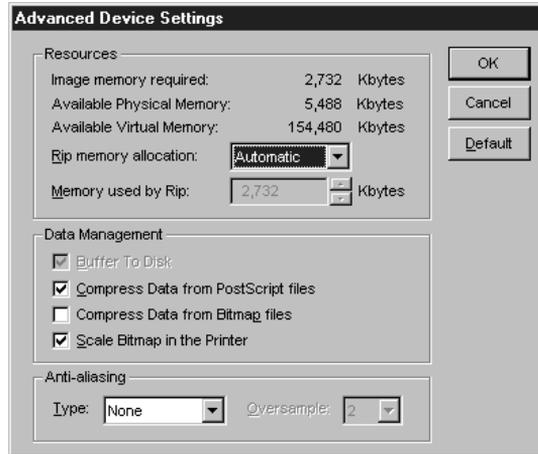
- 10 Keep clicking OK to close all the dialog boxes.

Defaults

Click the Defaults button to return to the original settings.

Advanced device settings

- 1 Select Queue Properties on the Edit menu.
- 2 Click the Device tab.
- 3 Click the Advanced button to display the Advanced Device Settings dialog box.



Resources

- **Image memory required:** The amount of memory required to rip an image to the current device based on the resolution, page size, etc. If this amount of memory is not available, the image will be broken down into bands and ripped in smaller pieces.
- **Available Physical Memory:** The amount of actual installed RAM in your system.
- **Available Virtual Memory:** The amount of total memory, including virtual memory, available to RasterPlus95.
- **Rip Memory Allocation:** The “load” RasterPlus95 will place on your system’s memory resources.
- **Memory used by Rip:** The actual amount of memory used by RasterPlus95. If the Rip memory allocation is set to Custom,

you can alter this.

Data Management

- **Buffer to Disk:** Buffer the printer data to disk prior to sending. If a “banding” rip is required, and buffering to disk is appropriate for your device, this field will be accessible. You should check this box if your device is data-delivery sensitive so that the data is delivered more smoothly (most film recorders produce best results when you check this box).
- **Compress Data from PostScript Files:** Compress the image data produced by a PostScript file prior to sending to the device. Generally you should leave this checked, as most PostScript files produce data that compresses well. However, you should disable compression if you are compressing images with large continuous tone images or with a significant number of blended or ramped backgrounds.
- **Compress Data from Bitmap files:** Compress the image data prior to sending to the device. If this field is accessible, you should generally check it unless you are printing files with *very* large bitmaps (> 25MB) which don’t compress especially well. Note that if you don’t check this field, and Buffer to Disk is set, the image data will be buffered *without* compression to disk, resulting in very large temporary disk files.
- **Scale Bitmap in the Printer:** Some devices do bitmap scaling, allowing RasterPlus95 to send nonscaled bitmap data, which in turn means faster printing times. RasterPlus95 will print bitmap files (Targa, TIFF, JPEG) using the lowest device resolution possible, allowing the device to do its own internal scaling. Normally enabling or disabling this feature has no impact on the quality of your output. However, check this if you don’t want to rely on the printer’s internal bitmap scaling algorithms.

Anti-aliasing

- **Type:** Specify the type of anti-aliasing you wish to use. Anti-aliasing an image forces RasterPlus95 to rip a file at a higher resolution and sample down to the device resolution. This results in smoother images. Select None for no anti-aliasing and Box for simple anti-aliasing.
- **Oversample:** The oversampling factor. For example, if you set this to 3, the image will be ripped at three times normal resolution and sampled down.

Printing the sample files

To verify that RasterPlus95 is installed correctly and that your film recorder is working properly, we recommend that you print one or more of our sample files to your film recorder. To do this, you'll need to have installed the sample files (the Typical installation does this). If you did not elect to install the sample files, you can run the RasterPlus95 setup program again to install the sample files by selecting the Custom installation method, checking the Sample files and unchecking the RasterPlus95 field.

To print the sample files:

- 1 Make sure that RasterPlus95 is active and that a blank queue (called Queue1) is on the screen.
- 2 Select Queue Properties on the Edit menu and click the Device tab.
- 3 Set the device, connection, and the appropriate media. You may also want to set the resolution to the maximum.
- 4 Click OK.
- 5 With the right mouse button, click the queue and select Add files from the context menu. Highlight the DIVER.PS file and click Open.
- 6 Select Print Queue on the File menu.

The DIVER.PS file will now be printed to the film recorder.

The RasterPlus95 toolbar

The toolbar at the top of the RasterPlus95 screen provides a one-click shortcut for many common tasks. The toolbar can be repositioned; just double-click the toolbar window (but not on a button) to release it and use the mouse to drag it anywhere on the screen. The toolbar also has tool-tips which are small yellow help boxes which pop-up when your mouse is positioned over one of the toolbar buttons.



Create a new, blank queue.



Open an existing queue.



Save the active queue to disk.



Delete selected files from the queue and store the data in the clipboard.



Copy selected files to the clipboard.



Paste files from the clipboard to the queue.



Add files to the active queue.



Print all the files in the active queue.



Print selected files in the active queue.



Preview all the files in the active queue.



Preview selected files in the active queue.



Cancel the current printing process completely.



Stop printing the file now being printed and start printing the next selected file.



Pause the printing process.



Resume the printing process.



Modify the properties of the entire queue.



Modify the properties of selected files in the queue.

Supported file formats

You can print or preview the following file formats in RasterPlus95 queues:

File type	File Extensions	Notes
PostScript	ps; .prn; .cps	from any application or platform
EPS	.eps	from any application or platform
Truevision Targa	.tga	all color models and formats are supported
TIFF	.tif	all color models and formats are supported
CALS	.cals	1 bpp
MacPaint	.mac	1 bpp
GEM Image	.img	1 bpp
Microsoft Paint	.msp	1 bpp
Kodak Photo CD	.pcd	all color models and formats are supported
Kodak FlashPix	.fpx	all color models and formats are supported
SUN Raster	.ras	all color models and formats are supported
Macintosh PICT	.pct	all color models; only bitmap files are supported
Windows & OS/2 BMP	.bmp	all color models and formats are supported
ZSoft PCX	.pcx	all color models and formats are supported
Compuserve GIF	.gif	all color models and formats are supported
JPEG	.jpg; .jff; .jtf	all color models and formats are supported
Photoshop	.pcd	1, 8, and 24 bpp version 3.0 formats
Portable Network Graphics	.png	all color models and formats are supported

RasterPlus95 as a network print server

RasterPlus95 can be set up as a native Windows print server so the Palette recorder can be shared with others on the network. This allows any Windows or Macintosh user on a network to print to the recorder using the usual Print command from within the application.

RasterPlus95 must be installed on the server, and the Palette recorder must be connected to the server. Although RasterPlus95 can be installed on either a Windows 95 or Windows NT server, the print-sharing services in each operating system may limit who can print to RasterPlus95. The following table outlines what operating systems are supported by a RasterPlus95 server.

If RasterPlus95 is installed on:	You can print from:
Windows 95 computer	Windows 95 Windows NT workstation Windows NT server
Windows NT 4.0 workstation	Windows NT workstation Windows NT server
Windows NT 4.0 server	Macintosh System 7 Macintosh OS8 Windows 95 Windows NT workstation Windows NT server

Windows 95 as a print server

If you install RasterPlus95 on a Windows 95 computer, you can print from any other Windows 95 or Windows NT computer to the configured RasterPlus95 recorder.

To install RasterPlus95 with network printing on Windows 95:

- 1 Install RasterPlus95 on the Windows 95 computer, and install the Palette recorder in Windows. Make sure that the recorder is directly connected to this computer.
- 2 Enable printer sharing under Windows 95. Go the the

Windows Control Panel (Start, Settings, Control Panel) and select the Network icon. On the Configuration tab, click on the File And Print Sharing button. Enable Print Sharing and click OK until all windows are closed.

- 3 Select Global Properties on the Tools menu and click the Device Manager tab. Click Printers and use the right mouse button to click the icon for the Palette recorder you wish to share in the Windows Control Panel.
- 4 Select the Sharing page.
- 5 Give the recorder a name which you wish others on the network to see. Now you can add the Palette recorder from any computer on the network.

To add a printer to a Windows 95 network node:

- 1 Select Add Printer from the Windows Printer Control Panel and select Network Printer.
- 2 Browse the network and select the recorder you created on the Windows 95 printer server.
- 3 Continue with the installation by selecting Next on every page.

To add a printer to a Windows NT network node:

- 1 Select Add Printer from the Windows Printer Control Panel and select Network Printer.
- 2 Browse the network and select the recorder you created on the Windows 95 printer server. Select Next.
- 3 When asked for the printer disk, browse the network and select the RasterPlus95\CrossPlatform\NT directory. Otherwise, the contents of this directory can be copied to a floppy disk and used.
- 4 Continue with the installation by selecting Next on every page.

Windows NT as a
print server

If you need a complete cross-platform imaging system, you can install RasterPlus95 on a Windows NT 4.0 server. This will enable you to print from a Macintosh computer using the Chooser and the usual Print command, or to use File and Print from any Windows computer.

Note: If RasterPlus95 is installed on a Windows NT workstation, you will only be able to print from other Windows NT computers. For cross-platform support of both Macintosh and Windows 95 computers, you must use a Windows NT server.

To install RasterPlus95 with network printing on a Windows NT server:

- 1 Install RasterPlus95 on the Windows NT server, and install the recorder in Windows. Make sure that the printer is directly connected to this computer. *Note:* If you want to print from a Macintosh network, you must install RasterPlus95 on a Windows NT Macintosh Volume. Alternatively, you can copy the RasterPlus\ppd directory to the Macintosh Volume.
- 2 Enable Printer Sharing under Windows NT. Go to the Windows Control Panel and select the Network icon. On the Configuration tab, click the File And Print Sharing button. Enable Print Sharing and click OK until all windows are closed.
- 3 Select Global Properties on the Tools menu and click the Device Manager tab. Click Printers and use the right mouse button to click the icon for the Palette recorder you wish to share in the Windows Control Panel.
- 4 Select the Sharing page.
- 5 Give the printer a name you wish others on the network to see. Now you can add the Palette recorder from any computer on the network.

To add a printer to a Windows 95 or Windows NT network node:

- 1 Select Add Printer from the Windows Printer Control Panel and select Network Printer.
- 2 Browse the network and select the recorder you created on the Windows NT server. Select Next.
- 3 When asked for the printer disk, browse the network and select the RasterPlus95\CrossPlatform\NT directory if you are on a Windows NT computer, or the RasterPlus95\CrossPlatform\95 directory if you are on a Windows 95 computer. Otherwise, the contents of the appropriate directory can be copied to a floppy disk and used.
- 4 Continue with the installation by selecting Next on every page.

To add a printer to a Macintosh network node:

- 1 Copy the appropriate printer PPD file from the NT server in the C:\Program Files\Graphx\rasterplus95\PPD directory to the Macintosh System:Extensions:Printer Descriptions folder. See the description of PPD files in the *Getting started* section of this chapter.
- 2 From the Macintosh Chooser, select the Laserwriter 8.
- 3 Select the desired RasterPlus95 configured printers shown under Select A PostScript Printer.
- 4 Click Setup and click Select PPD. [Browse the RasterPlus95\PPD directory and select the appropriate PPD file. There is a description of the PPD files on page 3-2. Click OK and exit the Chooser. Now you can print to the RasterPlus95 driver from any Macintosh computer.](#)

It is best to copy the PPD file to the Macintosh first and not to select the PPD file over the network, to prevent problems if the network is unavailable.

Note: You must have Services for Macintosh installed in order to network print and use file services from any Macintosh on the network.

SCSI devices

SCSI under Windows 95

RasterPlus95 uses the Windows 95 built-in ASPI manager, so no additional software is needed. To properly configure the driver, you should connect your printer, power-on your printer (as well as any other devices connected to the SCSI board), and then power up your PC. Windows 95 may prompt you for a Windows 95 driver for the SCSI device at start up. If this happens, simply select Next and click OK.

SCSI under
Windows NT 4.0

Windows NT does not have a built-in ASPI manager. To install the ASPI manager, you need to either:

- Install EZ_SCSI (included with Adaptec SCSI cards), or
- Install the NT ASPI manager found on the RasterPlus 95 setup disk under the \ASPI directory, or
- Download the NT ASPI manager setup program, ASP1342.EXE from the Adaptec web page (www.adaptec.com).

RasterPlus 95
SCSI Explorer

RasterPlus 95 has a built-in SCSI explorer to help you manage all of your attached SCSI devices. To use the SCSI Explorer, you must first install the appropriate SCSI software under Windows 95 or Windows NT as described above. The SCSI explorer tool can then be activated from the Tools menu.



The SCSI Explorer identifies all the SCSI cards and devices installed on your system. Each card is identified by a unique HostID. If devices are attached to a SCSI card, they will be shown by a DevID.

Both the HostID and the DevID are critical in configuring RasterPlus95 to correctly print to the desired device. The appropriate DevID number should be entered under Queue Properties, Device, Connection. The appropriate HostID should be entered under Queue Properties, Device, Options, SCSI Adapter #.

Getting help

RasterPlus95 has an extensive Windows 95 help system. To access the Contents, Index, or to find items in this help file, press the F1 key when the cursor is positioned outside of a dialog box, or select Help Topics from the Help menu.

To get help on any dialog item, use the right mouse button to select the item. Click What's This on the context menu which appears. You can also press F1 and context help will appear with help for the dialog item which is currently selected.

Technical Support

If you need additional help with your Polaroid Palette system, call Polaroid Technical Support toll-free from within the Continental United States at (800) 432-5355, Monday through Friday, 8 a.m. to 8 p.m., Eastern Time. Polaroid offers a variety of Customer Support Services; call for details and applicable fees. You may also write to Digital Imaging Technical Support, Polaroid Corporation, 201 Burlington Road, 1-2A, Bedford, MA 01730. In Canada, call toll-free at (800) 268-6970. Outside the U.S.A. and Canada, please consult the Polaroid office nearest you (see pages S-1 – S-2).

Polaroid also offers support on the Internet. Visit our world wide web site at:

<http://www.polaroid.com>

Troubleshooting

SCSI problems

When you start up Windows 95 with a Palette film recorder connected via SCSI to your PC, a blue screen appears and Windows 95 fails to start up.

There is a known bug in the Windows 95 IOS.VXD system file which prevents Windows 95 from starting up with a SCSI printer connected.

In the Drivers, Patches and Sample files section of the Microsoft web site, look for “Microsoft SAME IDE Channel N CDROM & Hard Drives”. Selecting this will download a file IOSUPD.EXE. Execute this file to upgrade the virtual driver IOS.VXD and this will fix the problem.

When you start up Windows 95 with a Palette film recorder connected via SCSI to your PC, Windows fails to start up.

Your low-level SCSI card driver needs to be updated. Obtain an updated driver from your SCSI card manufacturer.

RasterPlus95 does not “see” the Palette

- 1 You may have multiple SCSI adapters or an EIDE card (which appears like a SCSI Adapter to Windows). You must change the Adapter ID from 0 to another ID. You do this from RasterPlus95 by selecting Queue Properties, clicking on the Device tab, and selecting Options. Change the “SCSI Adapter #:” setting to another number, usually 1. *Note:* Do not confuse this number with the 0 - 7 settings that identify the devices connected to each SCSI adapter.
- 2 Make sure that the SCSI ID (e.g.: SCSI1:, SCSI2:, etc.) that you set in the print driver or in RasterPlus95 Queue Properties matches the SCSI ID of the Palette. Please consult your hardware manual for more information on setting the SCSI ID on the Palette.

- 3 Make sure that you power on each SCSI device starting with the device furthest from the PC and work toward the PC. For example, if your PC is connected to the Palette and the Palette is connected to a SCSI ZIP drive, power up the ZIP drive, the Palette and the PC, in that order.
- 4 Make sure that the last SCSI device in the chain is terminated.
- 5 If you have internal SCSI devices (e.g.: a SCSI hard disk or SCSI CD-ROM), the SCSI card should have Host Adapter termination disabled. If you do not have internal SCSI devices, your SCSI card should have Host Adapter termination enabled. You can enable or disable Host Adapter termination at PC boot time with some Adaptec SCSI cards using the SCSISelect utility. The latest Adaptec SCSI cards can actually automatically enable/disable internal termination. Please refer to your SCSI documentation for more information on internal termination.

You receive the message: " A new device has been found, insert . . . " the first time you run Windows 95 after connecting the Palette:

Windows has found a new SCSI device. Select "Do not install a driver (Windows will not prompt you again)", and click OK. The prompt will not come up again. *Note:* In newer version of Windows, you must click Next and Finish up to eight times before you will not be prompted again.

A fault occurs when you launch RasterPlus95 in Windows NT 4.0:

You don't have the ASPI SCSI driver for Windows NT installed. Unlike Windows 95, Windows NT 4.0 does not have a built-in ASPI manager. Refer to *SCSI devices* in this chapter for details on installing the ASPI manager.

Image location Your images are not centered in the picture, or they are slightly undersized or are being cropped off
Calibrate your camera or film back to the recorder. (See the detailed instructions in *Calibrating your camera* on pages 3-31 – 3-33.)

Losing images in the queue You lose images in your queue when you run out of film while imaging the queue
If you want to shoot a queue that requires more film frames than are currently loaded in your camera back, check the Single Image Mode option on the [Device] Options dialog box. The system prompts you when you are out of film, and keeps the unexposed images in the queue. For details, see page 3-29.

NT 4.0 conflict with Microsoft Office 97 Microsoft has identified a problem with Microsoft Office 97 and the PostScript driver that ships with NT 4.0, which RasterPlus95 uses. Service Pack 2 for NT 4.0 fixes the problem. Install the Service Pack before installing a driver with Global Properties in RasterPlus95, if you intend to use Microsoft Office 97 with RasterPlus95.

Dark horizontal or vertical lines in your images The flow of data from the host computer may be too slow. The appearance of this artifact varies depending on the type of film and the type of image. When this condition is detected by the ProPalette 7000 and 8000 recorders, one of the following symbols appears in the LCD panel, in front of the line counter, to alert you that you may get this artifact on the image that is currently printing.

Symbol	Probability of artifact in image
_ (underscore):	Low probability
- (minus):	Moderate probability
= (equals):	High probability

To avoid this artifact, try the following:

- Shut down other applications, to speed the transfer of data to the recorder.
- Check the Transform settings in Queue Properties or File Properties, accessed from the Edit menu. The transform SmartFit as well as Custom transforms that use Rotation can slow down data delivery. To avoid the use of these transforms, rotate or size your image in your imaging application.
- Be sure Buffer to Disk in Advanced Device Settings is turned on (the default setting). To access this dialog box, select Queue Properties on the Edit menu, click the Device tab, then click the Advanced button.
- If your image is very large, resize it in your application so that the size does not exceed the maximum resolution of the recorder. See the table in the next section for the maximum size that can be reproduced by each film recorder, by film type.
- Increase Pacing using the ProPalette keypad (see your hardware manual for details).

Images have unwanted borders

If you want to print an image with no borders, it must have the same proportions (aspect ratio) as the film type to which you are printing. Refer to the following table for the aspect ratio of each film type.

Note: The Polaroid Palette recorders have continuously variable resolution, which means that the recorder and software drivers work together to determine how best to fill the film's format, by analyzing the image file and adjusting the resolution of the film recorder appropriately. You need not adjust your image size to match the resolution of the recorder. However, if you want to print an image with no borders, the aspect ratio must match that of the film

For example: If your image is 2,500 dpi wide and you are printing on 35mm film, the vertical measurement of the image must be 1,666 dpi in order to fill the 35mm frame with no borders ($2,500 \times 2 \div 3 = 1,666$).

Aspect ratio and maximum resolution for each film type and recorder model

Film type	Aspect ratio	CI-5000(S) HR6000(SE)	ProPalette 7000	ProPalette 8000
35mm	3:2	4096 × 2732 dpi	4096 × 2732 dpi	8192 × 5462 dpi
Pack	39:30	4096 × 3150	n/a	n/a
4x5	54:42	4096 × 3186	n/a	8192 × 6371
AutoFilm	4:3	4096 × 3072	n/a	n/a
6x7	11:9	n/a	n/a	8192 × 6702
6x8	4:3	n/a	n/a	8192 × 6144