

# *PerfectImage*

IIgs ImageWriter Drivers

(*Harmonie*<sup>™</sup> PRINTER DRIVER SOFTWARE)

Installation Guide



Fast, Smooth, Uncomplicated

## **INSTALLING AND USING THE PERFECTIMAGE IIGs IMAGEWRITER DRIVERS**

Better ImageWriter printer drivers (formally available only with Harmonie™ IIGs printer driver software).

### **Installation - 'Quick & Dirty'**

Experienced users only need to be aware that each PerfectImage driver comprises two files. One of them has a '.PER' suffix and the other has a '.FL' suffix. These files are installed into the \*/System/Drivers folder of your boot disk. You may use a good copy utility to copy these files yourself. However, if you are not comfortable in doing this, we suggest that you use the Installer program.

### **Installation - Using the Installer**

To use the Installer, run the GS/OS program launcher you prefer (for instance, Salvation-Wings) and launch Installer. You'll see a screen which lists the PerfectImage drivers. Click the mouse once to highlight the printer driver that you would like to install. Next, click the 'Disk' button until the name of the volume you want to install files on appears after the 'Disk to update:' entry at the top left. Then click the 'Install' button.

If you prefer to copy the files yourself instead of using the Installer, copy both of the applicable printer driver files from the /Perfect/Drivers folder to the /System/Drivers folder of your boot disk. Remember that you will need to copy two files, one with a '.PER' suffix, and one with a '.FL' suffix, to the \*/System/Drivers folder.

### **Selecting the PerfectImage Drivers**

The IIGs is set up to use the PerfectImage printer drivers while running a typical application and accessing the Control Panel NDA's "DC Printer" option to select the printer/port drivers from a pair of scroll lists.

Click the mouse to highlight the PerfectImage driver you wish to have recognized in the lower scroll list, (don't forget to select the 'Printer' port in the upper scroll list). Click the Close button in the upper left hand corner to close the Control Panel NDA.

### **Checking the Printer**

Once the driver and font list files are installed and the hardware is connected, the next step is to be sure that your printer is communicating with the IIGs. If you've already used the printer with your computer, this step isn't really necessary, but if this is the first time for a new printer, it's worth the time to do it.

Using a capable program launcher, run the Printer.Test program that's on the PerfectImage disk. Respond to the simple prompts and verify that your printer responds. If it does, then you're all set. However, if it doesn't, you'll have to check over your printer hookup to find the problem.

### **PerfectImage Controls**

It is customary for GS/OS application print jobs to use two dialogues to allow the user to set the many parameters that affect how a print job is carried out. The first dialogue is usually called Page Setup, though some applications call it Printer Setup. It's normally found under the File menu bar entry, just above the Print entry. PerfectImage adds some other controls, accessed by clicking "Other Menu" at the bottom of the dialog.

### **Settings**

**Paper Type:** This setting identifies the nominal page size that will be used by the printer. Click and hold on the 'default' entry to pop up the choices.

**Aspect Ratios:** Click and hold on this window to pop up a selection of 'standard' aspect ratios (relation of picture width to height) for the image to be printed on the page. When one of the choices is made, the aspect ratio scroll bars' settings change to show the exact values for horizontal and vertical 'picture dots per inch.'

**Please Note:** Since Apple, Inc. manufactures both the IIGs and the ImageWriter printer, there is a convenient correlation between what one sees on a IIGs monitor and how the ImageWriter prints it out. In general, selecting the ImageWriter Normal aspect ratio setting will give a printed image that fills the page and is about the same aspect ratio as the image on the screen. For some printers this may be slightly off, but it gives a good starting point.

Keep in mind that the horizontal and vertical aspect ratio number mean how many pixels of the image on the screen will be printed in one inch on the paper. So, as the horizontal and vertical aspect ratio setting numbers get smaller, the image will be bigger on the page. Conversely, as these numbers get larger, the printed image becomes smaller.

**Orientation:** Click and hold to allow selection of Portrait orientation (image upright along the length of the page) or Landscape orientation (image upright across the page).

**Top Margin:** Click and hold to select either no margin or an automatic 1/2-inch top.

**Horizontal/Vertical DPI:** Click/drag two scroll buttons to set desired aspect ratio.

**Quality:** Click and hold this item to select the printer resolution desired. In general, smaller printer resolution settings result in less detailed printing, though the print may be finished in less time. Conversely, the higher printer resolution settings give more detail but result in longer times needed to get a final product.

**Shading:** Click and hold to select the number of discrete 'tones' the printer is to use to print an image. In general, 2 tones is satisfactory for text-oriented printing, and 16 tones is best for graphic printing.

**Contrast:** Click and hold to select the desired degree of 'darkness' for the print.

**Rendering:** Click and hold to select the location where the image to be printed will be 'assembled.' Internal means that the image will be assembled in your IIGs's memory; External means that the image data will be sent to your printer and assembled there. The Internal setting is usually the one to select if you're printing a pure graphic image, such as one created with a paint program. Internal rendering is usually slower than external rendering, but it's common for a user's IIGs to have more system memory available than his/her printer does, and that may make the difference between being able to print a graphic image and not. Internal rendering is also the setting to select for images that have text that is to be printed with IIGs.

**Compression:** Click and hold to select the the degree to which image data are compacted before they are sent to the printer.

**Paper Feed:** Click and hold to select automatic or manual paper feed.

**Page Range and Copies:** Click the appropriate radio button to indicate if all or only part of a multi-page document is to be printed. Enter the number of copies desired and a specific range of pages to be printed.

**Unidirectional:** Select this option to cause the printer to print only while the print head is moving left to right.

**Color: *Important!*** Click this option box to enable color printing on capable printers. If it is not clicked, a color printer will print in monochrome only.

**Other Menu: *Important!*** Click this button to get access to the rest of the PerfectImage controls, which are explained a little further on in this section.

**Cancel:** Click this button to cancel all selections made and quit the Print menu.

**OK:** Click this button to begin the print job...but don't do it until you've check the settings in the 'Other Menu'.

#### **\*Other Menu\* Controls:**

**Shading:** Click and hold to select the number of discrete tones the printer is to use to print an image. In general, 2 tones is satisfactory for text-oriented printing, and 16 tones is best for graphic printing.

**Contrast:** Contrast controls how 'dark' the dark tones in a graphic print are, compared to the light ones. Think of this control as letting you bring out the details of a graphic. The darker Contrast is, the more the dark parts of the graphic will be accentuated; conversely, the lighter Contrast is, the more the print will take on a uniform look. We've found that it's more common to want to reduce Contrast, so we've picked the default setting as the third of the four possible.

**Brightness:** Unlike Contrast, Brightness affects the lightness or darkness of all the tones of a graphic equally. We find that this control is very effective in compensating for the quality of the paper that's being used and how it reacts to a specific printer. Brightness gives a means to compensate for the fact that dot-matrix printer ribbons give lighter prints as time goes by.

**Dithering:** Although many IIGs users don't realize it, most printers don't print in shades of grey; they print in black only. The way that an image is printed on a page to look like what's on the screen is to select certain patterns for any part of an image that's not solid black or solid white. (Of course, color printers have the added dimension of color.) With the ImageWriter, it's sometimes better to print 'intermediate' (not all-black or all-white) parts of graphics with different patterns of dots, so that the final print looks as close to the screen image as possible. We've found that a checkerboard pattern of dots seems to give a final print of a color screen graphic that looks eye-pleasing. On the other hand, we think that images that are predominantly done in shades

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of grey on the screen (as is typical of true-grey scans from our Quickie hand scanner) look better when they're printed with a 'halftone' pattern. This is the technique that is used in newsprint, by the way. So, we've given you both means for printing, and you can use whichever one seems to be best for what you're printing at the time. Try them both...you'll see the difference.

Please keep in mind that printing an image is a rather complex process; it's not just the printer that controls the printing process, or any other single element. Your IIGs, your ImageWriter printer, and the specific application you are using all work intimately whenever you print a document. The PerfectImage drivers play a role in translating print 'commands' so they can be interpreted, but they don't act alone. The point to this 'disclaimer' is that it's in your interest to try different control settings to find what works best for the specific document you're printing from the application you're using at the time. Another example is selecting a 'Condensed' aspect ratio setting for printing of text in a desktop publishing application. Some programs make special provisions for allowing text to be printed in a compressed fashion without affecting graphics, while others may not.

PerfectImage uses a special font reduction technique to print text selected from a Font folder on a GS/OS volume in the smoothest way it can. If you select a certain font, say Wombat.12, and you also have the Wombat.24 or Wombat.48 font in the folder, PerfectImage will select the larger font and reduce the characters that are called for. This can yield excellent results under most conditions... with print quality nearly that of printer-resident fonts. There are hundreds of fonts available in the public domain, so if you have favorite fonts, it can be to your advantage to get double and quadruple sized fonts of the same family.

#### Special Notes for the ImageWriter II

One can engage the ImageWriter II's built-in 'de-bug' mode, in which all characters are printed in hexadecimal form—by holding down the Select button while pressing the On/Off button to turn the printer on. Since the On/Off and Select buttons are very close, it's possible to press them both at the same time without intending to.

**Watch out!!** If you should enter 'de-bug' mode, then, unless you turn the printer off—then on again—without holding the Select button down, all subsequent printing will be in hexadecimal form, whether you want it or not.

## Technical Support

We want you to be completely satisfied with PerfectImage. Our Technical Support staff is available to help you when things have gone beyond your control.

Write to:

...or call:

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Attn: Technical Support  
P.O. Box 929  
La Puente, CA 91747-0929

818-813-1274  
Monday-Friday  
12:00 - 4:00 P.M.  
(Pacific Time)



Also accessible from America OnLine and GENie  
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