Procedure Guide

English

Staccato 10/20/25

Applying Staccato Screens for Prinergy Workflow

Internal 78-0108B-EN Rev B

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Introduction

This document is intended for operators who use *Kodak Staccato* screens in a *Kodak Prinergy* software workflow. It describes where in the print reproduction process you can apply *Staccato* screens to a job or part of a job.

Use this document with your Staccato User Guide. The Staccato User Guide includes information about selecting the appropriate *Staccato* screen for your printing needs. It also provides general information about screening.

This document assumes that you are familiar with desktop publishing and prepress software, such as *Adobe Photoshop* software, *QuarkXPress* software, and *Kodak Preps* software. This document provides sample procedures; however, the steps involved may vary depending on your software version and platform. For detailed procedures, see the documentation for the particular software that you use in your workflow.

Software Versions and Compatibility

The screening procedures described in this document have been tested with the following software versions:

- *Prinergy* version 2.x
- *Photoshop* version 6.0
- *Adobe Illustrator* version 9.0.2
- *QuarkXPress* version 4.1
- *Preps* version 4.x

Applying Harmony Calibration Curves to Staccato Screens

When printed at standard ink densities from linear plates, *Staccato* screens exhibit greater tone value increase (TVI) or dot gain compared to conventional AM screens printed at typical halftone frequencies such as 150 lpi. As a result, characterization and compensation for TVI is essential for correct tone reproduction.

Kodak Harmony calibration software lets you achieve your target tone reproduction with customized calibration curves created for your particular printing needs and environment. You can build *Harmony* calibration curves to use with *Staccato* as well as conventional screening, and the calibration curves are applied during output. For more information about *Harmony* and tonal calibration, see your *Harmony* documentation.

Using Adobe Photoshop to Apply Screening

You can use *Adobe Photoshop* to screen an individual image with *Staccato* screening. *Adobe Photoshop* lets you specify *Staccato* screens for individual images saved as EPS files as well as mix *Staccato* screens with conventional screens.

For example, you are printing an annual report. One image is to be screened stochastically, and the rest of the report is to be screened conventionally. In this case you use *Adobe Photoshop* to embed the screening instructions in the image. On output, the embedded screening instructions for that specific image can override the screening instructions used for the balance of the annual report, as long as you correctly configure *Prinergy* software—see also "Prinergy Screening and Calibration Options" on page 15.

Screening Preparation for Adobe Photoshop

This section includes information about the *Prinergy* Refiner PPD file and *Staccato* screen sets for *Adobe Photoshop* software.

Prinergy Refiner PPD File and Adobe Photoshop

Desktop printing software, such as *Adobe Photoshop* software, uses the *Prinergy* Refiner PPD file to control the correct definition of *PostScript* files. When *Prinergy* Workshop is installed on a computer running a *Macintosh* operating system, the *Prinergy* Refiner PPD file is placed in the following location:

- On *Mac OS* 9 systems: **system folder/extensions/printer descriptions**
- On *Mac OS* X systems: **Library/Printers/PPDs/Contents/Resources/en.lproj**

When *Prinergy* Workshop is installed on a *Windows*-based computer, the *Prinergy* Refiner PPD file is placed in the **winnt/system32/spool/drivers/w32x86** folder.

If *Kodak* Prepare is installed, the *Prinergy* Refiner PPD file may be replaced with the Prepare PPD file, which contains the same definition information. Either PPD definition may be used to generate *PostScript* files destined for *Prinergy* jobs.

If the *Prinergy* Refiner PPD file is not correctly installed, you can download a self-installer from http://graphics.kodak.com/. Registered users can access software downloads via the *Kodak eCentral* Internet portal (https://ecentral.creo.com/).

Staccato Screen Sets for Adobe Photoshop

Kodak provides *Staccato* screen sets that you can use with *Adobe Photoshop* software. These screen sets work only with *Adobe Photoshop* software; they do not work with other desktop software. You can find these screen sets on the *Staccato*

installation CD in the **Mac Application Support Files\Photoshop Screens** or **PC Application Support Files\Photoshop Screens** folder. Copy these files to the **Photoshop** folder before screening *Adobe Photoshop* images with *Staccato* screening.

Note: The *Staccato* screen sets for *Adobe Photoshop* are not installed with *Prinergy* software, but you can download the software support files from *eCentral* or call a service representative to receive the files free of charge.

Applying Screens to One or More Color Separations

You can use *Adobe Photoshop* software to apply a *Staccato* screen to one or more color separations. You use the Halftone Screens dialog box to select a screen, and then you save the file as an *Adobe Photoshop* EPS file. *Prinergy* software applies the screen to the color separation(s) during output.

To apply screens to one or more color separations:

1. In *Adobe Photoshop* software, with a file open, from the **File** menu, click **Page Setup**.

   The Page Setup dialog box appears.

2. Select **Adobe® Photoshop®**.

   The *Adobe Photoshop* options appear.

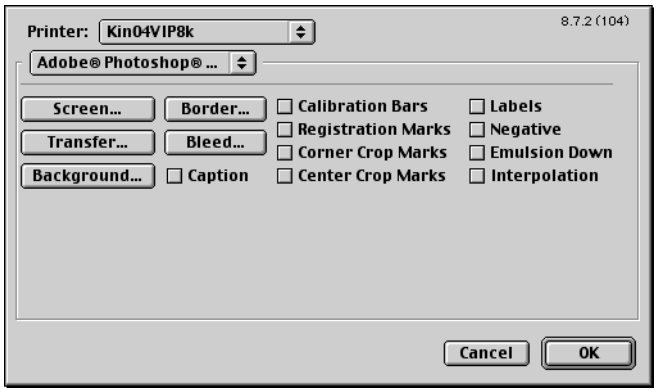


Figure 1: Page Setup dialog box with Adobe Photoshop selected

3. Click **Screen**.

   The Halftone Screens dialog box appears.

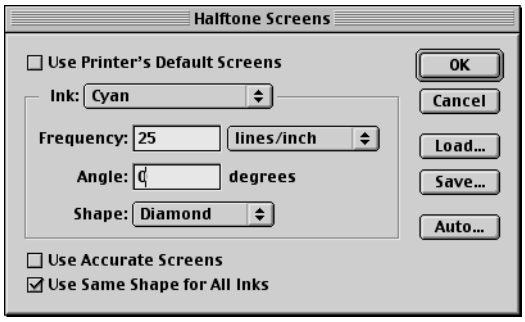


Figure 2: Halftone Screens dialog box

4. Set the following options:
   - Clear the **Use Printer's Default Screens** check box.
   - From the **Ink** list, select a color separation.
   - In the **Frequency** box, type the screen frequency value of a *Staccato* screen for the selected color separation. For example, type 25 for *Staccato* 25.
   - Continue setting the **Ink** and **Frequency** options as necessary.
   - Click **OK**.

     The Halftone Screens dialog box closes, and the Page Setup dialog box appears.
5. Click **OK**.

   The Page Setup dialog box closes.
6. Save the file as an *Adobe Photoshop* EPS file.
   a. From the **File** menu, select **Save as**.

      The Save as dialog box appears.

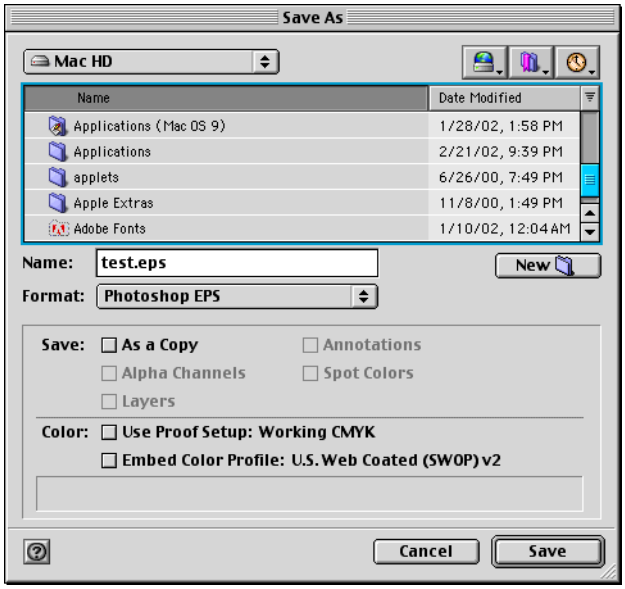


Figure 3: Save as dialog box

   b. In the **Format** list, select **Photoshop EPS**.

c. Click **Save**.

The EPS Options dialog box appears.

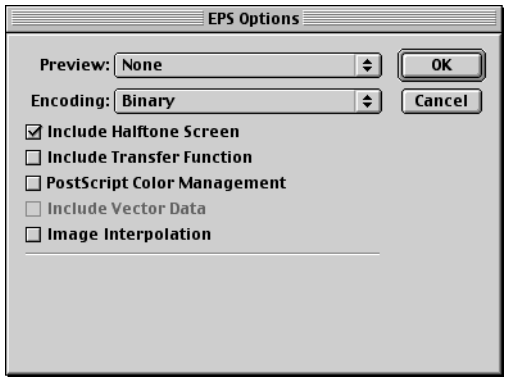


Figure 4: EPS Options dialog box

d. Select the **Include Halftone Screen** check box, and then click **OK**.

The EPS Options dialog box closes, and *Adobe Photoshop* saves the file.

Applying Screens to All Color Separations

You can use *Adobe Photoshop* software to apply a *Staccato* screen to all of the color separations in a file. You use the Halftone Screens dialog box to load a screen set, and then you save the file as an *Adobe Photoshop* EPS file. *Prinergy* software applies the selected screen set to the color separation(s) during output.

To apply screens to all color separations:

1. In *Adobe Photoshop*, with a file open, from the **File** menu, click **Page Setup**.

   The Page Setup dialog box appears.

2. Select **Adobe® Photoshop®**.

   The *Adobe Photoshop* options appear.

3. Click **Screen**.

   The Halftone Screens dialog box appears.

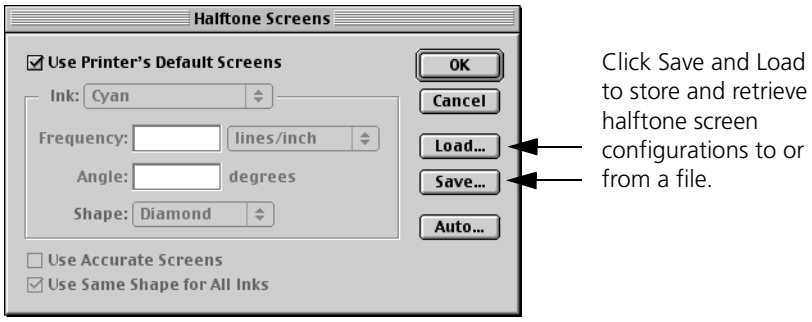


Figure 5: Halftone Screens dialog box (Adobe Photoshop)

4. Set the following options:
   - Select the **Use Printer's Default Screens** check box.
   - Click **Load**.

     The Load dialog box appears.
   - Locate the **Photoshop** folder (see "Staccato Screen Sets for Adobe Photoshop" on page 2), select the desired screen set, and then click **Open**.

     The selected screen set appears in the Halftone Screens dialog box.
   - Click **OK**.

     The Halftone Screens dialog box closes, and the Page Setup dialog box appears.
5. Click **OK**.

   The Page Setup dialog box closes.
6. Save the file as an *Adobe Photoshop* EPS file.
   a. From the **File** menu, select **Save as**.

      The Save as dialog box appears.
   b. From the **Format** box, select **Photoshop EPS**.
   c. Click **Save**.

      The EPS Options dialog box appears.
   d. Select the **Include Halftone Screen** check box, and then click **OK**.

      The EPS Options dialog box closes, and *Adobe Photoshop* saves the file.

For more detail about specific *Adobe Photoshop* software options and procedures, see your *Adobe Photoshop* documentation.

Using Illustrator to Apply Screening

You can use *Illustrator* software to apply a screen to all elements of an Illustrator file.

Screening Preparation for Illustrator

When using *Illustrator* software to generate *PostScript* files for *Prinergy* software, we recommend that you use the *Prinergy* Refiner PPD file or the *Kodak* Prepare PPD file. Desktop software uses the information contained in the *Prinergy* PPD file or the Prepare PPD file to control correct reproduction-quality output of *PostScript* files. For more information, see "Prinergy Refiner PPD File and Adobe Photoshop" on page 2.

Applying Screens to All Color Separations

Using *Illustrator* software, you can apply screens to all color separations in the Illustrator file. You cannot use *Illustrator* software to apply screens to a single color separation.

To apply screens to all color separations:

1. With a file open in *Illustrator* software, from the **File** menu, select **Separation Setup**.

   The Separations dialog box appears.

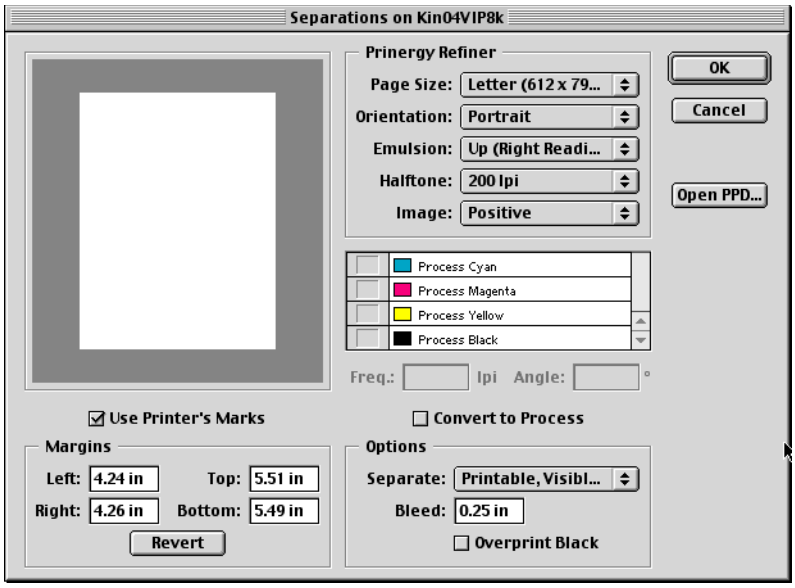


Figure 6: Separations dialog box (Illustrator)

2. Click **Open PPD.**

   The Open PPD File dialog box appears.

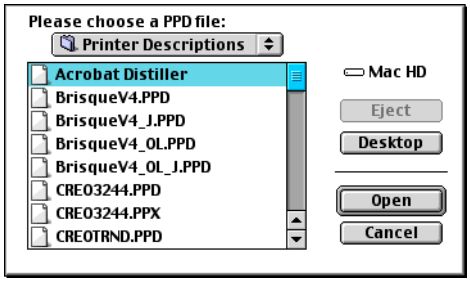


Figure 7: Open PPD File dialog box (Illustrator)

3. Select a PPD file, and then click **Open**.

   The Open PPD File dialog box closes, and the Separations dialog box appears.

4. From the **Halftone** box, select a screen.

   The software reads the selected PPD file (*Prinergy* Refiner PPD or Prepare PPD) to display the list of screens.

5. Click **OK.**

   The Separations dialog box closes.

For more detail on specific *Illustrator* software options and procedures, see your *Illustrator* documentation.

Using QuarkXPress to Apply Screening

You can use *QuarkXPress* software to screen an individual page or group of pages with *Staccato* screening.

QuarkXPress software will not let you select FM screens; however, you can type the screen frequency value for the *Staccato* screen in the Print dialog box, and *Prinergy* software will recognize the value and use the correct *Staccato* screen. For example, to specify *Staccato* 25 in a *QuarkXPress* file, in the **Frequency** box, type **25** lpi and print a *PostScript* file. *Prinergy* software interprets 25 lpi as *Staccato* 25.



Note: *QuarkXPress* software limits the range of numbers that you can type in the Print dialog box. You are limited to typing numbers between 15 and 600. As a result, you can't type 10 for *Staccato* 10. To work around this problem, use *Adobe Photoshop* software to apply *Staccato* 10 to selected images, and then add the images to *QuarkXPress*, or you can specify *Staccato* 10 in a *Prinergy* process plan, and then override the *QuarkXPress* document screening. However, the settings in the process plan will override all screening settings in the *QuarkXPress* file.

When you want to specify an AM screen that uses the same number as a *Staccato* screen, such as 70 lpi, type a number that is very close to 70, such as 69.5, and *Prinergy* software apply a 70 lpi AM screen.

Screening Preparation for QuarkXPress

This section includes information about the *Prinergy* Refiner PPD file and *QuarkXPress* print options.

Prinergy Refiner PPD File and QuarkXPress

When using *QuarkXPress* software to generate *PostScript* files for *Prinergy* software, we recommend that you select **Prinergy Refiner PPD** or **Synapse Prepare PPD** as the printer description on the **Setup** tab in the Print dialog box. Desktop software uses the information contained in the *Prinergy* and/or Prepare PPD file to control correct reproduction-quality output of *PostScript* files. For more information, see “Prinergy Refiner PPD File and Adobe Photoshop” on page 2.

QuarkXPress Print Options

In the Print dialog box, when you select **Prinergy Refiner PPD** as the printer description and clear the **Separations** check box (to create composite *PostScript*), *QuarkXPress* software lets you select **Conventional** or **Printer** from the **Halftoning** box. When you select **Conventional**, the *PostScript* comments include *QuarkXPress* settings. When you select **Printer**, the *PostScript* comments instruct *Prinergy* software to use the settings in the process plan.

However, in the Print dialog box, when you select **Prinergy Refiner PPD** and select the **Separations** check box (to create separated *PostScript*), *QuarkXPress* software only lets you select **Conventional** from the **Halftoning** box. You are limited to using the conventional settings, but you can still select **Other** from the **Frequency** drop-down list to customize settings.

Table 1: *QuarkXPress* print options summarized

Separations Check Box	Halftoning Option	Result
Cleared	**Conventional** selected	*PostScript* includes *QuarkXPress* settings
Cleared	**Printer** selected	*PostScript* instructs *Prinergy* software to use the screening settings in the process plan
Selected	**Conventional** selected	*PostScript* includes *QuarkXPress* settings, but you can use the **Other** option to customize screening options.

Lastly, when you select **Dot** from the **Function** list in the Print dialog box in *QuarkXPress* software, *Prinergy* software uses Euclidian. You are unable to specify a round dot shape in a *QuarkXPress* document. To work around this problem, you can specify a round dot shape in a *Prinergy* process plan and override the *QuarkXPress* screening; however, the settings in the process plan will override all screening settings in the *QuarkXPress* file.

Applying Screens to One or More Color Separations

In *QuarkXPress* software, you can use the Print dialog box to apply a *Staccato* screen to one or more color separations on the page(s).



Note: *QuarkXPress* screening does not affect *Adobe Photoshop* images with embedded screening. The *Adobe Photoshop* images maintain their embedded screening.

To apply a Staccato screen to one or more color separations:

1. With a file open in *QuarkXPress*, from the **File** menu, select **Print**.

   The Print dialog box appears.

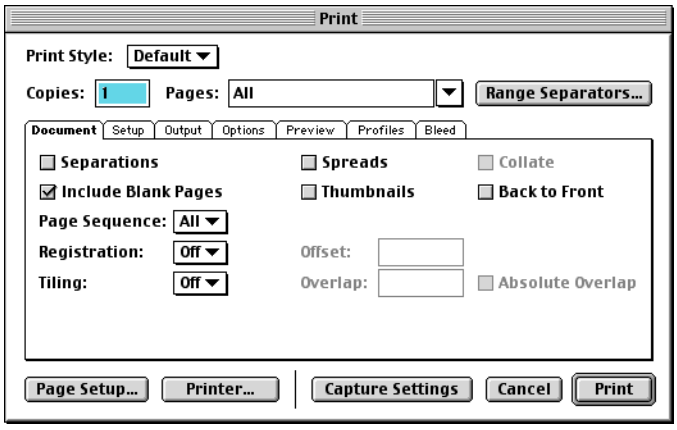


Figure 8: Print dialog box

2. On the **Setup** tab, from the **Printer Description** box, select **Prinergy Refiner PPD** or **Synapse Prepare PPD**.

3. On the **Output** tab, select a color separation, click the **Frequency** drop-down box, and then select **Other**.

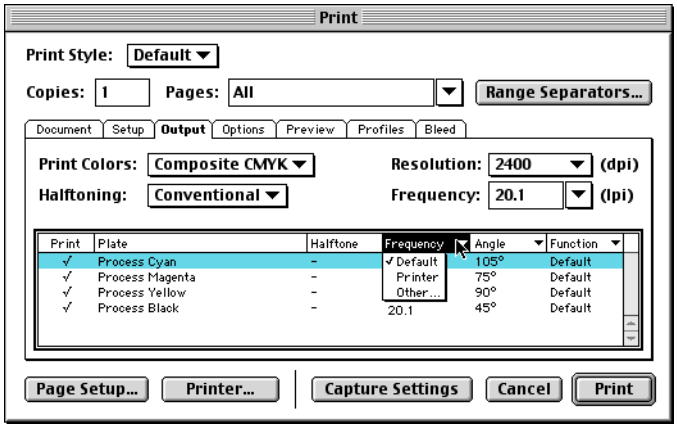


Figure 9: Print dialog box—Output tab with Frequency drop-down list

A dialog box appears, letting you specify a frequency.

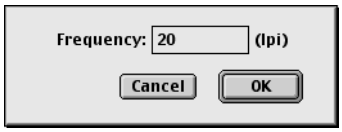


Figure 10: Frequency dialog box

4. In the **Frequency** box, type the *Staccato* screen value for the screen that you want to apply, and then click **OK**.

   The dialog box closes, and the *Staccato* screen value appears in the **Frequency** column for the color separation.

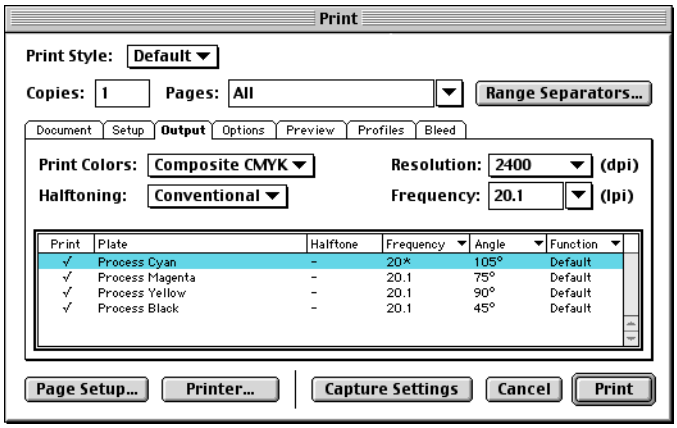


Figure 11: Print dialog box with Cyan color separation set to Staccato 20

5. Specify a frequency for individual color separations as necessary, and then continue printing the file as you normally would.

Applying Screens to All Color Separations

In *QuarkXPress*, you can use the Print dialog box to apply a *Staccato* screen to all color separations on the page(s) at once.

Note: *QuarkXPress* screening does not affect *Adobe Photoshop* images with embedded screening. The *Adobe Photoshop* images maintain their embedded screening.

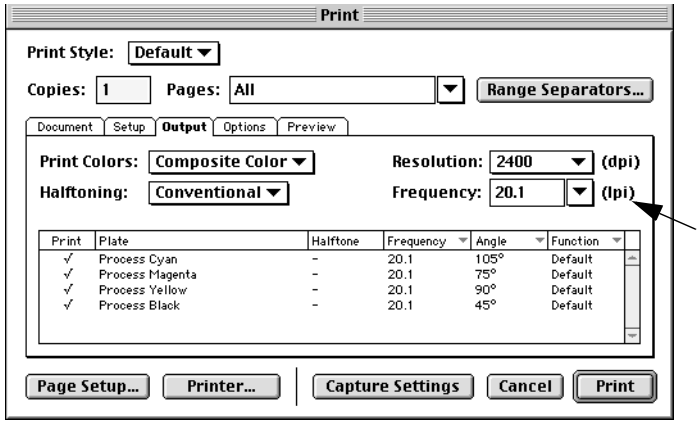
To apply a Staccato screen to all color separations:

1. With a file open in *QuarkXPress*, from the **File** menu, select **Print**.

   The Print dialog box appears.

2. On the **Setup** tab, from the **Printer Description** box, select **Prinergy Refiner PPD** or **Synapse Prepare PPD**.

3. On the **Output** tab, in the **Frequency** box, type the *Staccato* screen value for the screen that you want to apply.



In the Frequency box, type the Staccato screen value for the Staccato screen that you want to apply.

Figure 12: Print dialog box (QuarkXPress)

4. Continue printing the file as you normally would.

Using Preps With Prinergy

In a *Prinergy* workflow, *Preps* software is typically not used to apply screens; it is typically used to create job tickets for use with *Prinergy* software. You import the *Preps* job ticket into *Prinergy* software, and use *Prinergy* software to assign pages to page positions. You also use *Prinergy* process plans to apply screening and calibration to the job—see "Configuring Screening and Calibration Options in Prinergy Process Plans" on page 14.

Using a Print Console PPD File With Preps

Before you create *Preps* job tickets, you must use *Kodak* Print Console to generate a PPD file, and then copy the PPD file to the correct location for *Preps*. For *Preps* on a computer running the *Mac OS*, the correct location is **Preps/Printer/PPD**. For more information about generating PPD files, see your device control documentation.

A PPD file generated by Print Console software communicates to imposition software, such as *Preps* software, media information associated with a specific output device. The Print Console PPD file doesn't contain any screening information, because Print Console doesn't contain a RIP from which to gather screening information.

Whenever you change a media configuration in Print Console—for example, add a new plate size—you must generate a new PPD file and copy the file to the correct location for *Preps* software. It is good practice to back up the existing PPD file before copying the new version to *Preps* software.

For details about setting up screening parameters in *Preps* software, see your *Preps* documentation.

Generating Preps Job Tickets

See your *Preps* documentation for information about generating job tickets.

Using Variable Marks With Prinergy

You can include variable marks in an imposition plan, create a job ticket, and import the job ticket into a *Prinergy* job. In *Prinergy* software, when you apply a process plan to a signature, which is based on the imposition plan, the system executes the process plan and populates the variable marks in the signature.

To make use of this feature, add the variable marks to the imposition before you create a job ticket and import it into *Prinergy* software. For a list of all the variable marks supported by *Prinergy* software, see the Prinergy Workshop online help.

See also “Using Prinergy to Output Jobs With Mixed Screening” on page 19 for information about using AM marks files with a signature of FM content.

Using Prinergy to Apply Screening and Calibration

You use *Prinergy* Workshop process plans to set up and apply *Staccato* screens and *Harmony* calibration curves. Screening and calibration options are set in the **Calibration & Screening** section of the following process plans: loose page output, imposition proof output, and final output. After you configure a process plan, apply it to the job files that you want to process.

For more information about *Prinergy* Workshop, see the Prinergy Workshop online help.



Note: Custom spot functions may cause two problems in a *Prinergy* workflow. They may cause performance problems, depending on the complexity of the pages, or they may result in incorrect spot functions being applied, if more than one custom spot function is used on a single page.

Configuring Screening and Calibration Options in Prinergy Process Plans

This section describes how to configure screening and calibration options in a *Prinergy* process plan.

To set calibration and screening:

1. In *Prinergy* Workshop, from the **Tools** menu, select **Process Plan Editor**.

   The Process Plan Editor appears.

2. If necessary, click **Process Plans** to display the types of process plans.

3. Double-click one of the following types of process plans: **loose page output**, **imposition proof output**, or **final output**.

   The selected process plan opens.

4. Click the **Calibration & Screening** horizontal bar.

   The Calibration & Screening options appear.

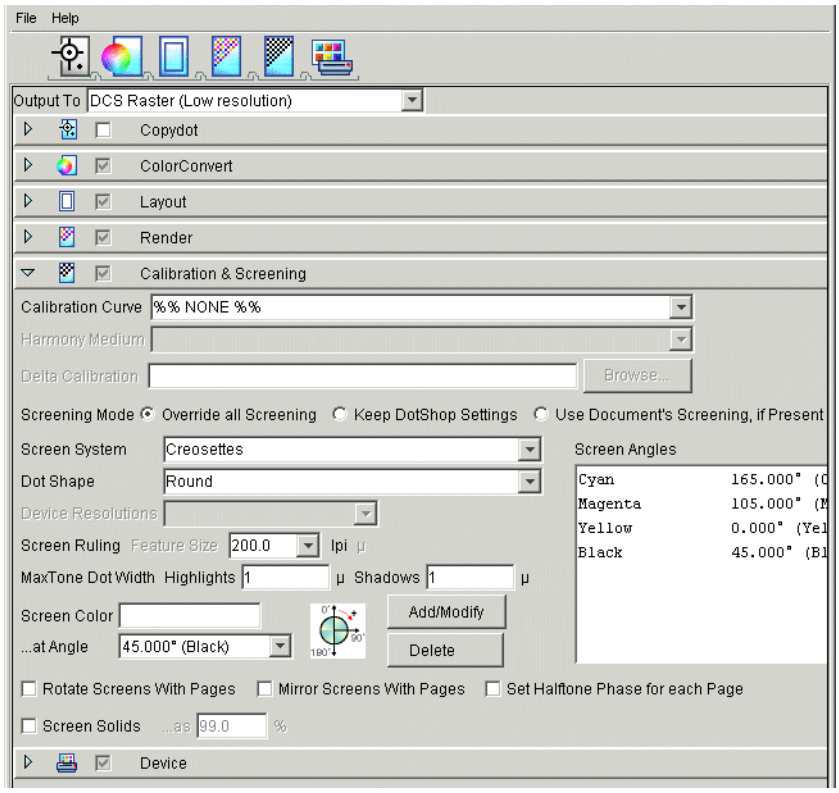


Figure 13: Loose page output process plan—Calibration & Screening section

5. Set the options as desired.

   For a description of the options, see "Prinergy Screening and Calibration Options" on page 15. See also the Prinergy Workshop online help.

6. From the **File** menu, select **Save**.

   The process plan closes, and the changes are saved.

Prinergy Screening and Calibration Options

This section describes the screening and calibration options available in *Prinergy* process plans. It also describes the hierarchy of the screening options.

Table 2 on page 16 describes the screening options, starting from the top of the hierarchy—that is, starting from the override option that is most powerful.

Note: The *Prinergy* screening engine does not process prescreened, raster, 1-bit images such as copydot files and certain DCS files. For this reason, the *Prinergy* screening override hierarchy does not affect these files.

Table 3 on page 16 lists and describes the *Harmony* calibration options available with *Prinergy* software. See also "Using Mixed Tonal Calibration Curves" on page 24.

Table 2: Prinergy screening override hierarchy

Priority	Option selected	Result
1	**Override all Screening**	*Prinergy* software applies the screening settings in the process plan to all surfaces selected for output. *Prinergy* software ignores all screen information embedded in the input files.
2	**Keep DotShop Settings**	*Prinergy* software uses the screening settings specified by the *Kodak Dotshop* screening plug-in for *Adobe Acrobat*. For pages without *Dotshop* settings, *Prinergy* software uses the settings in the process plan. When the screening plug-in is not used, selecting this option produces the same result as the **Override all Screening** option.
3	**Use Document's Screening, if Present**	*Prinergy* software honors all valid screening information contained in input pages and/or images. For all other input files—for example, input files lacking embedded screening information—*Prinergy* software applies the screening options enabled in the process plan.

Table 3: Harmony calibration options for Prinergy

Option	Description
Specific calibration curve selected from the *Harmony* database	*Prinergy* software applies the selected calibration curve. It ignores all screen information in the elements in the file it is processing. **Note:** You can't use mixed calibration with this option. Only one calibration curve can be specified per *Prinergy* process plan.
%%AUTO%%	*Prinergy* software looks at all the enabled curves in the *Harmony* database. It then matches the medium index number specified in the process plan to the medium index numbers for the enabled calibration curves. Next it matches the screening attributes (resolution, dot shape, and line screen) for the elements in the file it is processing with the properties of each of the enabled curves. When *Prinergy* software can't find a match, it fails the process with an error message. **Note:** *Prinergy* software can select two or more calibration curves. Use this option for jobs with mixed screening.
%%NONE%%	Calibration is turned off, and *Prinergy* software uses the tint values specified in each element in the file it is processing.

Graphical Summary of Screening Hierarchy

Figure 14 on page 17 summarizes the screening hierarchy described in this document. All the elements of the graphic are color-coded and are best viewed on-screen, unless you can use a color printer to print the diagram.

Applying Screens and Calibration

You use process plans to apply screening and calibration settings to jobs. Configure process plans as desired, and then apply the process plan to one or more files in your *Prinergy* job. For details, see the Prinergy Workshop online help.

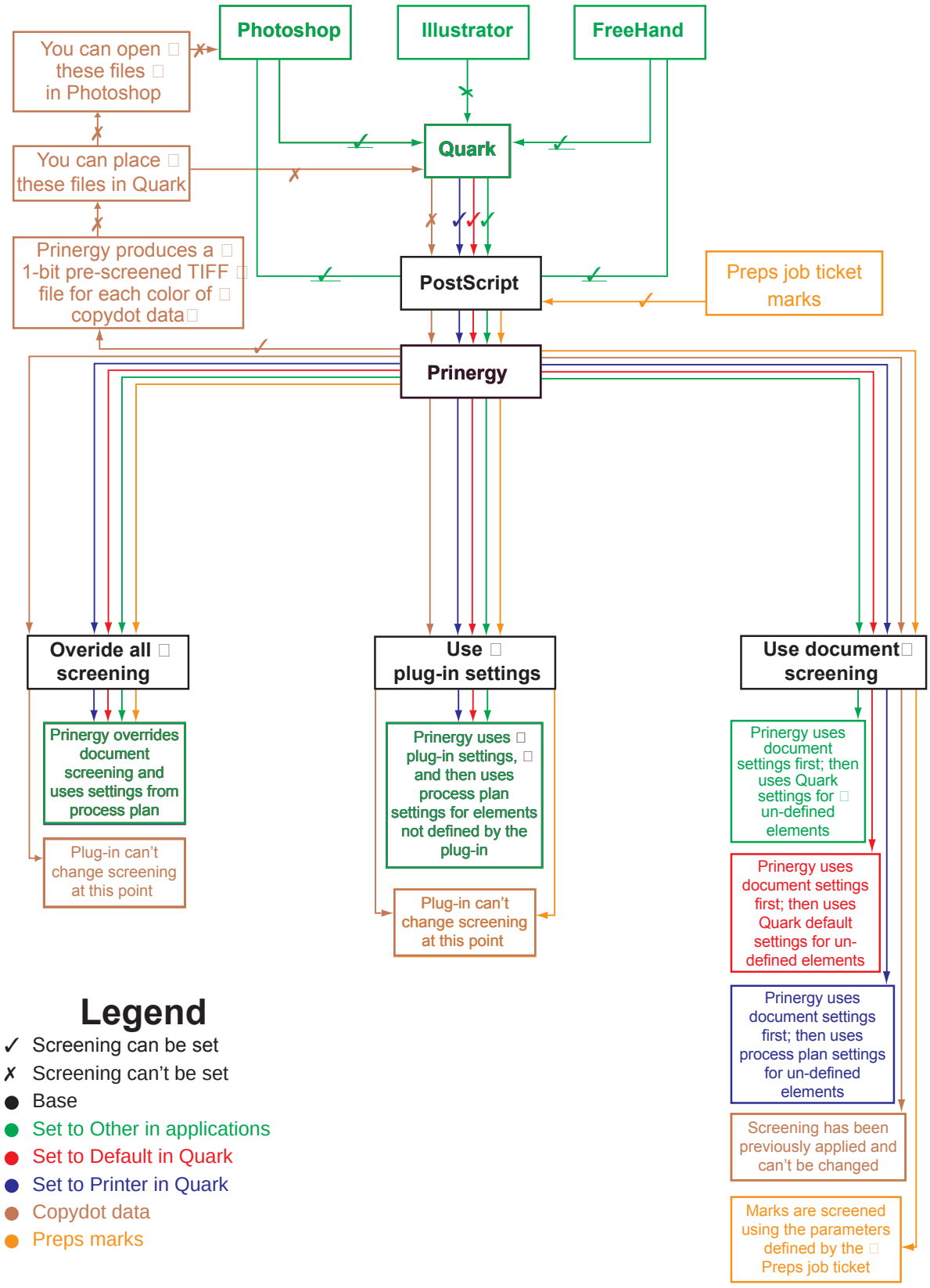


Figure 14: Graphical summary of screening hierarchy

Using Mixed Screening With Prinergy

A file with mixed screening contains a variety of different halftone screening definitions, for example, a *PostScript* file that contains both AM and FM screening definitions.

Mixed screening jobs can be complex, and they require planning. If you want to generate final output with mixed screening, you must first decide which global screen system to apply to the entire flat using a process plan, and then embed the alternate screening in the input files.

Using Adobe InDesign to Create Pages With Mixed Screening

When using *Adobe InDesign* software to generate *PostScript* files for *Prinergy* software, we recommend that you use the *Prinergy* Refiner PPD file or *Kodak* Prepare PPD file. Desktop software uses the information contained in the *Prinergy* PPD file and/or Prepare PPD file to control correct reproduction-quality output of *PostScript* files. For more information, see "Prinergy Refiner PPD File and Adobe Photoshop" on page 2.

When placing an EPS file that contains screening information in *Adobe InDesign* version 1.5 or *Adobe InDesign* version 2.0, the software retains the screening information in that EPS when outputting *PostScript*. However, when using *Adobe InDesign* CS 1 or *Adobe InDesign* CS 2, the software does not retain the screening information for pre-screened images when generating *PostScript*. This affects images that may have had screening applied to them in Adobe *Photoshop* software, for example, before being placed in *Adobe InDesign* files. Instead of retaining the screening information for the images, *Adobe InDesign* CS uses Adobe_AGM format to rewrite image files. Because Adobe_AGM format does not preserve screening information, screening information for these images is lost. Use one of the following methods to work around this problem:

- Use a thin image workflow. In other words, place low-resolution images in *Adobe InDesign* CS and use *Prinergy* OPI to replace the low-resolution image with the pre-screening high-resolution image.
- Use *Kodak Dotshop* software to apply screening to images. See "Using DotShop for Mixed Screening" on page 25.
- Use a version of *Adobe InDesign* lower than CS, or use *QuarkXPress* software.

Using QuarkXPress to Create Pages With Mixed Screening

This section describes the *QuarkXPress* software options that you can use to create a file with mixed screening. To create a file with mixed screening, use the three options on the **Output** tab in the Print dialog box in *QuarkXPress*: **Frequency**, **Angle**, and **Function**—see Figure 15. Table 4 on page 19 outlines the result of each selection.

Note: When you select **Dot** from the **Function** list, a Euclidian dot shape, not a round dot shape, is used. Also, when a *QuarkXPress* layout includes an *Adobe Photoshop* image with embedded screening, this screening is automatically included in the *PostScript* files generated by *QuarkXPress* software.

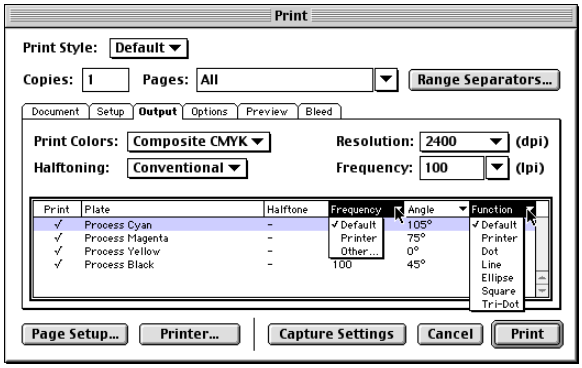


Figure 15: Frequency and Function options in the QuarkXPress Print dialog box

Table 4: QuarkXPress screening settings on the Output tab in the Print dialog box

Screening Option	Result
Default	*QuarkXPress* software includes its defaults in the *PostScript*.
Printer	*QuarkXPress* software includes instructions in the *PostScript* to use the settings from the *Prinergy* process plan.
Other	Lets you specify a custom setting, which is included in the *PostScript*.

Using Prinergy to Output Jobs With Mixed Screening

This section provides an example of how to control mixed screening in imposed *Prinergy* output to film, plate, or proofs.

For example, you want to output a signature with FM page content and AM marks files. Since many marks *PostScript* files contain locked AM screening references, you may need to use *QuarkXPress* software to generate pages with FM screening, and then output the imposition using a final output process plan that contains the following options selected: AM screening and **Use Document's Screening, if**

Present. You find these options in the **Calibration & Screening** section of the process plan. The resulting output will be AM screens, except for the page content, which will be FM screens.

Using Mixed Screening for a Flat of Non-PostScript and PostScript Files

Sometimes pages are not *PostScript* files, and sometimes pages are generated by applications that lack screening options. The result is non-*PostScript* files or *PostScript* files that lack screening information. When you have a flat of these files mixed with *PostScript* files that contain embedded screening information, you have to carefully plan your screening.

For a flat with a mix of *PostScript* files with embedded screening and *PostScript* files that lack screening, you can use a final output process plan to control screening. In the final output process plan, select the **Use Document's Screening, if Present** option, and set the screening options in the process plan as desired. Apply the process plan to the flat. In the flat, the *PostScript* pages that contain embedded screening information use the embedded screening, and the pages that lack embedded screening information use the screening instructions from the process plan.

For a flat with a mix of non-*PostScript* files and *PostScript* files with embedded screening information, you can use a loose page output process plan to create prescreened raster DCS files of the non-*PostScript* pages—see “Configuring a Process Plan That Creates Prescreened Raster DCS Files” on page 21. The resulting DCS files are similar to copydot files, and like copydot files, the screening is set in the DCS pages. (You can't change the screening in the DCS pages, because the screening engine doesn't process 1-bit data such as these DCS files and copydot files.) Add the DCS pages to the *Prinergy* job, and use them in the flat. The flat now contains a mix of prescreened raster DCS pages and *PostScript* pages with embedded screening. In the final output process plan, select the **Use Document's Screening, if Present** option. There's no need to set any other screening options in the process plan. Apply the process plan to the flat. In the flat, the DCS pages and *PostScript* pages use their embedded screening information.

Mixed Screening Example

For example, you want to output a flat of four pages with mixed screening. Pages one and two are either CT/LW pages that have been converted to PDF using the CEPS JTP, or they are *PostScript* files that lack screening information. Pages three

and four are *PostScript* pages with screening information embedded in the *PostScript* files, and the screening information was set using the source software. You have two screening choices when processing these files:

- Use a *Prinergy* process plan to set screening for the pages. In the process plan, select the **Use Document's Screening, if Present** option, and set the screening options in the process plan as desired. Apply the process plan to the flat. Pages one and two use the screening instructions from the process plan, and pages three and four use the screening embedded in the *PostScript* files.

  Or:

- Configure a loose page output process plan with the DCS raster JTP and desired screening options selected—see "Configuring a Process Plan That Creates Prescreened Raster DCS Files" on page 21. Apply the process plan to pages one and two. *Prinergy* creates prescreened raster DCS files of pages one and two. The screening information is effectively embedded in DCS files, and you can't change it. Add the DCS files to the job, and use them as pages in the flat. In a final output process plan, select the **Use Document's Screening, if Present** option, and apply the process plan to the flat. Pages one and two use the screening information embedded in the DCS files, and pages three and four use the screening embedded in the *PostScript* files.

Configuring a Process Plan That Creates Prescreened Raster DCS Files

This section describes how to configure a loose page output process plan that creates prescreened raster DCS files.

To configure a loose page output process plan:

1. In *Prinergy* Workshop, from the **Tools** menu, select **Process Plan Editor**.

   The Process Plan Editor appears.

2. If necessary, click **Process Plans** to display the types of process plans.

3. Double-click the **loose page output** process plan.

   A list of loose page output process plans appear.

4. Open a loose page process plan, or from the **File** menu, select **New Process Plan**.

   A loose page output process plan opens.

5. From the **Output To** box, select **DCS Raster (Low resolution)**.

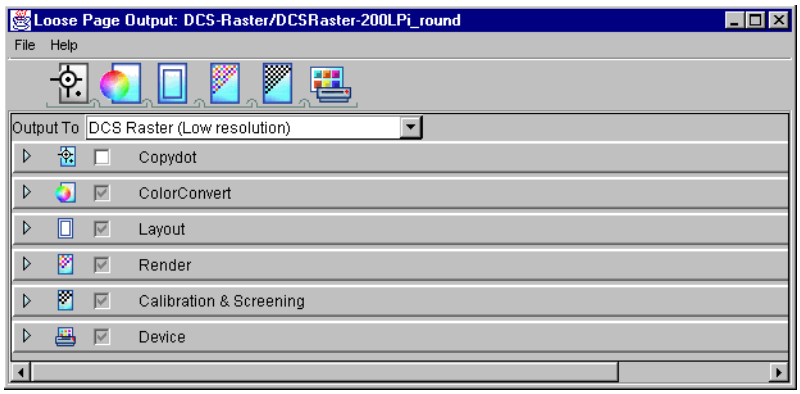


Figure 16: Loose page output process plan

6. Click the **Render** horizontal bar.

   The Render options appear.

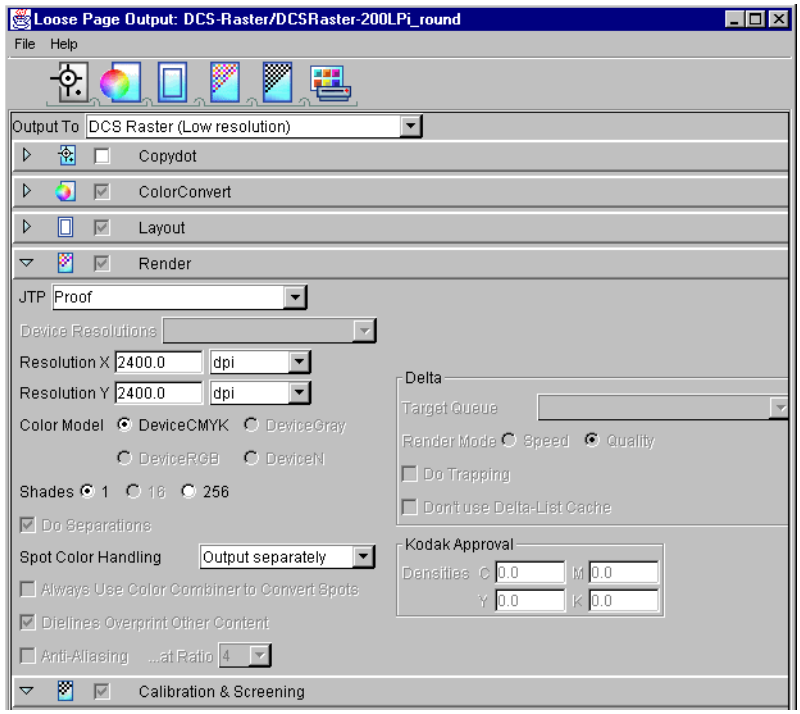


Figure 17: Loose page output process plan—Render options

7. Set the following options:

   - In the **Resolution X** box, type **2400**.
   - In the **Resolution Y** box, type **2400**.
   - Beside **Color Model**, select **DeviceCMYK**.
   - Beside **Shades**, select **1**.
   - From the **Spot Color Handling** box, select **Output separately**.

8. Click the **Calibration & Screening** horizontal bar.

   The Calibration & Screening options appear.

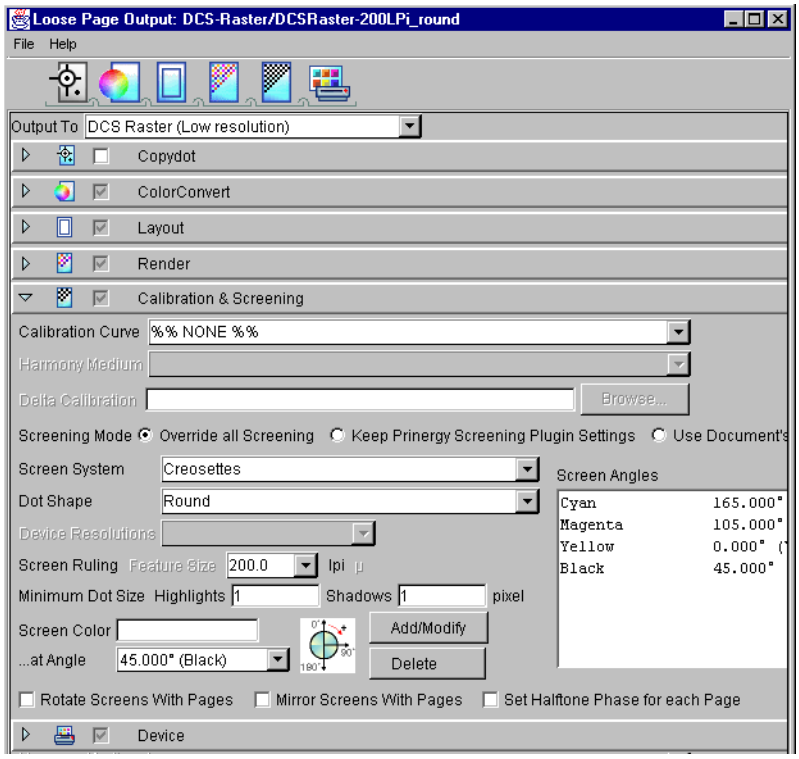


Figure 18: Loose page output process plan—Calibration & Screening options

9. Set the following options:

   - In the **Calibration Curve** list, select **%%NONE%%**, **%%AUTO%%**, or select a calibration curve.
   - Beside **Screening Mode**, select **Override all Screening**.

10. Click the **Device** horizontal bar.

    The Device options appear.

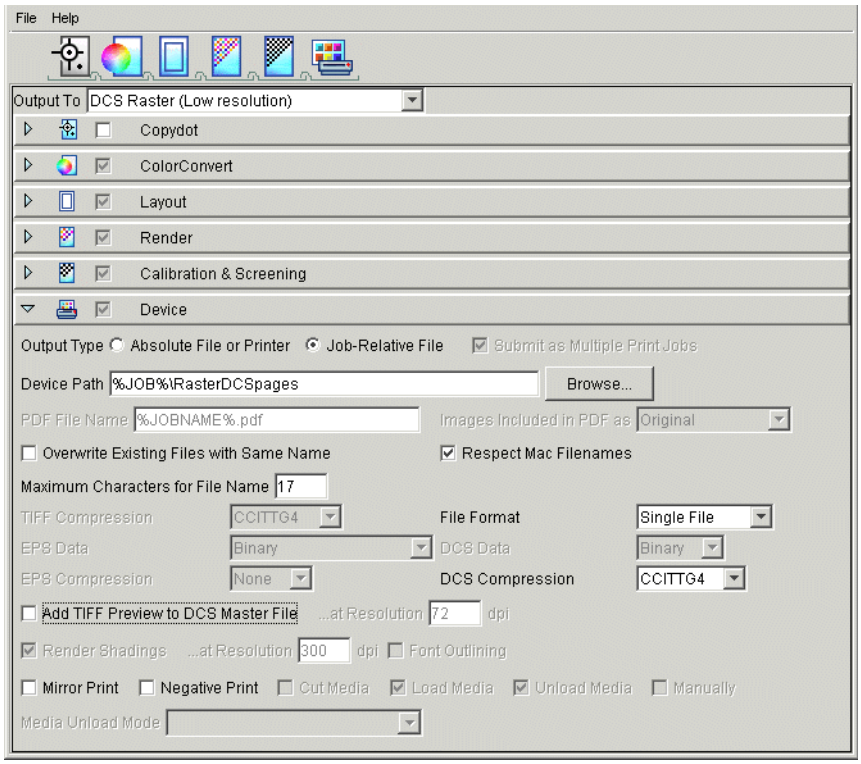


Figure 19: Loose page output process plan—Device options

11. Set the following options:
    - In the **Device Path** box, type **%JOB%\RasterDCSpages**.
    - From the **File Format** box, select **Single File**.
    - From the **DCS Compression** box, select **CCITTG4**.
12. From the **File** menu, select **Save**.

    The process plan closes, and the changes are saved.

Using Mixed Tonal Calibration Curves

Tonal calibration curves control tonal reproduction on press, and they are created and managed using *Harmony* software. *Harmony* software is integrated with *Prinergy* software, and *Prinergy* software applies *Harmony* calibration curves when it renders digital files. For more information about *Harmony* software, see the Harmony User Guide.

When using *Prinergy* software to process a flat that has mixed screening, you may want to use mixed calibration too. To enable *Prinergy* software to select multiple calibration curves, turn on automatic calibration. In the output process plan, in the **Calibration & Screening** section, from the **Calibration Curve** box, select **%%AUTO%%**, and then from the **Harmony Medium** box, select the desired medium index number. Automatic calibration lets *Prinergy* software select from the *Harmony* software database of enabled calibration curves the most appropriate curve(s) for the screening it encounters in the files it is processing. Enabled curves

are calibration curves in the *Harmony* software database with a check mark beside their name. *Prinergy* software selects the calibration curve by matching the medium index number in the process plan to the medium index numbers of the enabled *Harmony* calibration curves; then *Prinergy* software matches the screening properties of the elements in the file with the specified screening properties of the enabled *Harmony* calibration curves. When a match is found, *Prinergy* software selects and applies the calibration curve.



Note: For *Prinergy* software to automatically select a calibration curve, it must match a medium index number and screening properties. In other words, the medium index number in the process plan must match the medium index number of an enabled calibration curve, and the screening properties of the elements in a file must match the screening properties specified in an enabled calibration curve. When no match is found, the *Prinergy* software process fails.

Using DotShop for Mixed Screening

DotShop software is a software plug-in for *Acrobat*. It is an extra feature that you can purchase for a *Prinergy* software workflow.

You can use *DotShop* software to build screen sets, and then select elements in PDF files and apply screening. It provides an easy way to apply mixed screening. For details, see the *DotShop* documentation.

Dotshop software gives you greater control of your screening because it does not rely on screening set in desktop software. Because of this, many people prefer to use *Dotshop* software instead of desktop software to specify screening information for pages.

Overview of a DotShop workflow:

1. You don't need to set screening in *Adobe Photoshop*, *Illustrator*, or *QuarkXPress*. Instead, add input files to a *Prinergy* job, and refine the files to create PDF files.
2. Use *Kodak Dotshop* Composer software to define sets of screening information.
3. Open the PDF files in *Acrobat* software, and use the *DotShop* plug-in to apply screening.
4. Configure a *Prinergy* process plan with the **Keep DotShop Settings** option selected, and use the process plan when outputting files.

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