EX700i Print Server/Integrated Fiery Color Server

Fiery Graphic Arts Package

efi print to win.

CONTENTS

INTRODUCTION

This document explains the Fiery Graphic Arts Package, Premium Edition features and how they work. Because of the flexibility of the controls Fiery Graphic Arts Package, Premium Edition provides, users in any environment can benefit from the Fiery Graphic Arts Package, Premium Edition features. Novice users can use the default settings to obtain optimal results. Expert users with specific needs and requirements in graphic arts and other markets can also obtain optimal results by customizing the settings.

About this document

This document describes the features that are available through print options and utilities such as Command WorkStation. The features are organized as follows:

- Features accessible from Command WorkStation

  - **Paper Simulation White Point Editing** describes the white point editing feature.

  - **Spot-On with Two-Color Print Mapping** describes the feature used to map document colors with print colors.

  - **Color Setup** describes the following features: Control Bar, Auto Trapping, and Progressives.

  - **ImageViewer** describes how to start the ImageViewer application.

  - **Preflight** describes how to perform the Preflight check of your job.

- Features accessible from utilities other than Command WorkStation

  - **Hot Folders Filters** describes the filters features.

- Other features

  - **Postflight** describes the Postflight feature and its workflow examples.

  - **Ugra/Fogra Media Wedge** describes the color test file called the Ugra/Fogra Media Wedge.

  - **Integrated Altona Visual Test** describes the test integrated in the EX700i Print Server/ Integrated Fiery Color Server to check for PDF/X compatibility as tested by the Altona Test Suite.

Terminology and conventions

The documentation for the EX700i Print Server/Integrated Fiery Color Server uses the following terminology and conventions.

Term or convention	Refers to
Aero	EX700i (in illustrations and examples)
Digital press	Xerox 700 Digital Color Press
EX700i	EX700i Print Server/Integrated Fiery Color Server
Titles in *italics*	Other documents in this set
Windows	Microsoft Windows XP, Windows Vista, Windows Server 2003/2008/2008 R2, Windows 7
	Topics for which additional information is available by starting Help in the software
	Tips and information
WARNING	A warning concerning operations that may lead to death or injury to persons if not performed correctly. To use the equipment safely, always pay attention to these warnings.
CAUTION	A caution concerning operations that may lead to injury to persons if not performed correctly. To use the equipment safely, always pay attention to these cautions.
IMPORTANT	Operational requirements and restrictions. Be sure to read these items carefully to operate the equipment correctly, and avoid damage to the equipment or property.

Fiery Graphic Arts Package, Premium Edition

The following features are included in Fiery Graphic Arts Package, Premium Edition:

Feature	Where to set values or access	Print option name	See
Paper simulation white point editing	Command WorkStation: Paper Simulation	Paper Simulation	Paper Simulation White Point Editing
Spot-On: two-color print mapping	Command WorkStation: Spot-On	Two-Color Print Mapping	Spot-On with Two-Color Print Mapping
Control bar	Command WorkStation: Color Setup	Control Bar	Color Setup Features
Configurable auto trapping	Command WorkStation: Color Setup	Auto Trapping	Color Setup Features
Progressives	Command WorkStation: Color Setup	Progressives	Color Setup Features
ImageViewer	Command WorkStation: ImageViewer		ImageViewer
Preflight	Command WorkStation: Preflight		Preflight
Hot Folders file filters	Hot Folders		Hot Folders filters
Postflight		Postflight	Postflight
Ugra/Fogra Media Wedge			Ugra/Fogra Media Wedge
Integrated Altona Visual Test			Integrated Altona Visual Test

Enabling the feature at the EX700i

The Fiery Graphic Arts Package, Premium Edition option must be enabled at the EX700i before you can access its features from your computer. A service technician enables the option at your site using the Feature Update or Restore/Update Server Software CD and the hardware key (dongle).

To check whether the option is enabled at the EX700i, do one of the following:

• Print the Configuration page (see *Configuration and Setup*).

• Check the information on the General Info tab of the Device Center.

Updating the status of Fiery Graphic Arts Package

If the Fiery Graphic Arts Package, Premium Edition option is enabled at the EX700i, you must update the status of the option on your computer before you can access its features from your computer.

Updating the status on Windows

Use the following procedure to update the status of Fiery Graphic Arts Package, Premium Edition on a Windows computer.

NOTE: Before updating the status on a Windows computer, you must install the printer driver. For information about installing the printer driver, see *Printing*.

TO UPDATE THE STATUS ON A WINDOWS COMPUTER

1   **Open the Printers (or Printers and Faxes) window.**

2   **Right-click the EX700i and choose Properties.**

    The Properties dialog box appears.

3   **Click the Accessories tab.**

4   **Select the Two-Way Communication option.**

5   **Type the IP address or DNS name and click Update.**

    NOTE: If you use the Point and Print method to install the printer driver and printer description file, you must enable Two-Way Communication on the monitor at the EX700i for each connection (print, hold, or direct) before you install them on your computer. For more information about Point and Print, see *Printing*.

6   **Verify that Fiery Graphic Arts Package, Premium Edition appears under Installed Options.**

7   **Click OK to close the dialog box.**

Updating the status on Mac OS X

Use one of the following procedures to update the status of Fiery Graphic Arts Package, Premium Edition on a computer running Mac OS X.

NOTE: Before updating the status on a computer running Mac OS X, you must install the printer driver. For information about installing the printer driver, see *Printing*.

TO UPDATE THE STATUS ON A COMPUTER RUNNING MAC OS X V10.5 OR V10.6

1 **Choose System Preferences from the Apple menu, and then choose Print & Fax.**

   The Print & Fax dialog box appears.

2 **Select the EX700i in the Printer List, and then click Options & Supplies.**

3 **Click the Driver tab.**

4 **Select Fiery Graphic Arts Package, Premium Edition from the GA Package list.**

5 **Click OK to apply changes.**

6 **Quit System Preferences.**

TO UPDATE THE STATUS ON A COMPUTER RUNNING MAC OS X V10.4.X

1 **Start Printer Setup Utility.**

2 **Select the EX700i in the Printer List.**

3 **Choose Show Info from the Printer menu.**

   The Printer Info dialog box appears.

4 **Choose Installable Options.**

5 **Select Fiery Graphic Arts Package, Premium Edition from the GA Package list.**

6 **Click Apply Changes.**

7 **Close the dialog box.**

Setting up your monitor and the monitor profile

Some Fiery Graphic Arts Package, Premium Edition features require that a job be displayed with correct colors on your monitor.

The following features require the correct monitor display:

- Paper Simulation White Point editing (see page 13)

- ImageViewer previewing from Command WorkStation (see page 26)

To display colors correctly on your monitor, you must set up the monitor display according to the manufacturer's recommendations and specify the correct monitor profile for your monitor.

Specify the following settings for the monitor display:

- At the monitor: Brightness, Contrast, and Temperature

- From the control panel of the operating system: Resolution, Refresh rate, and Number of colors

For more information about setting up your monitor and the monitor profile, see the documentation that accompanies the monitor.

PAPER SIMULATION WHITE POINT EDITING

Although an ICC profile contains a definition of "white," the white may not always visually match the human eye, requiring a perceptual adjustment. The Paper Simulation White Point editing feature allows you to perceptually adjust the hue, brightness, and saturation of the simulated paper white defined in the ICC profile.

When the Paper Simulation print option is enabled, the EX700i simulates the white of the paper using CMYK values rather than leaving the paper white areas of the page unprinted. You can print a job with Paper Simulation without customizing paper simulation. Many jobs may print satisfactorily with the fixed default Paper Simulation setting. However, you can customize the paper simulation by editing the white point values with Command WorkStation before printing with Paper Simulation.

Printing with Paper Simulation

You can print a job with Paper Simulation enabled with or without customizing paper simulation first.

TO PRINT A JOB WITH PAPER SIMULATION

1 Print the job from an application and set the print options.

For information about how to set print options with the Adobe and Microsoft PostScript printer drivers for Windows, see *Printing*.

For information about how to set print options with the printer drivers for Mac OS, see *Printing*.

Alternatively, submit the job to the EX700i Hold queue and set print options in Job Properties in Command WorkStation.

2 Click Expert Settings on the Color tab, and then select Paper Simulation.
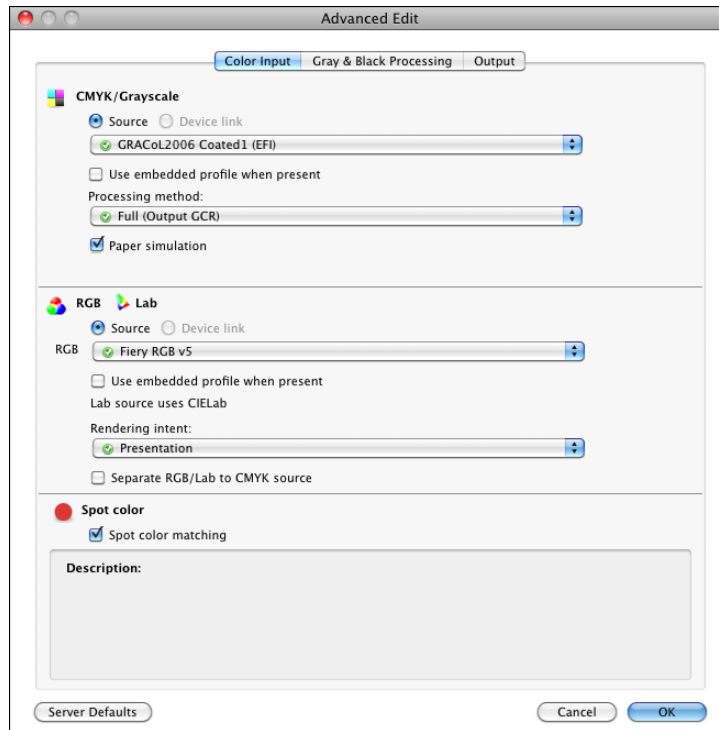
3 If you edited the Paper Simulation White Point values, select the following settings, as well.

- For CMYK/Grayscale Source, select the custom profile that you saved after editing the Paper Simulation White Point values,

- For CMYK/Grayscale Processing Method, select Full (Output GCR).

- On the Output tab, for Output Profile, select the profile that you linked to the custom CMYK Source profile when you edited the Paper Simulation White Point values.

4 Print the job.

If you have not edited the Paper Simulation White Point values with Command WorkStation, your job is printed with the default Paper Simulation values. If you edited the values, your job is printed with the custom Paper Simulation values.

Paper Simulation White Point editing

Your job may print satisfactorily with the fixed Paper Simulation setting. However, you can customize the Paper Simulation setting by editing the Paper Simulation White Point values with Command WorkStation.

To access the Paper Simulation White Point dialog box, see the instructions in Command WorkStation Help.
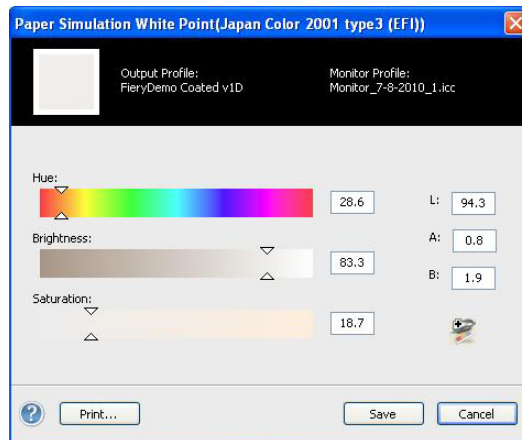
When you edit the Paper Simulation White Point values, you save them in a custom profile, which you create by editing an existing CMYK Source Profile in Color Editor. You must also link the CMYK source profile to an output profile.

NOTE: To display the colors correctly with your monitor, you must set the monitor and monitor settings correctly. For more information, see Command WorkStation Help.

NOTE: If Paper Simulation is set to On, and you have defined a substitute color as C=0, M=0, Y=0, K=0, the values defined in Substitute Colors override those for Paper Simulation. For information about Substitute Colors, see Command WorkStation Help.

SPOT-ON WITH TWO-COLOR PRINT MAPPING

In addition to managing "named" colors, the Spot-On spot color editor in Command WorkStation allows you to assign spot colors and process colors to the generic colors that are used in a job. The Two-Color Print Mapping feature is designed for print shop operators to do the proofing for a two-color press. You can print a two-color job to a two-color device by mapping the colors in a job to the colors that are already created on the device.

NOTE: RGB colors in a document are first converted to CMYK colors and then the Two-Color Print Mapping is applied.

The following limitations apply when you use the Two-Color Print Mapping feature:

• The settings for Two-Color Print Mapping are ignored when the Composite Overprint and Combine Separation features are enabled.

• Postflight does not report on Two-Color Print Mapping, because Postflight reports the source state of a document. The color space that the digital press receives before any conversions is reported in Postflight.

• You cannot select the Two-Color Print Mapping and Substitute Color options at the same time. Also, you cannot select a substitute color to be used in the Two-Color Print Mapping feature.

Two-Color Print Mapping configuration

In the Two-Color Print Mapping feature, the colors that are used in a job are mapped with the colors to print. From Spot-On, you can open the Define 2-Color Print Mapping window, and then reassign the document colors to the named or custom colors to print with.

1 Click to open the Define 2-Color Print Mapping window
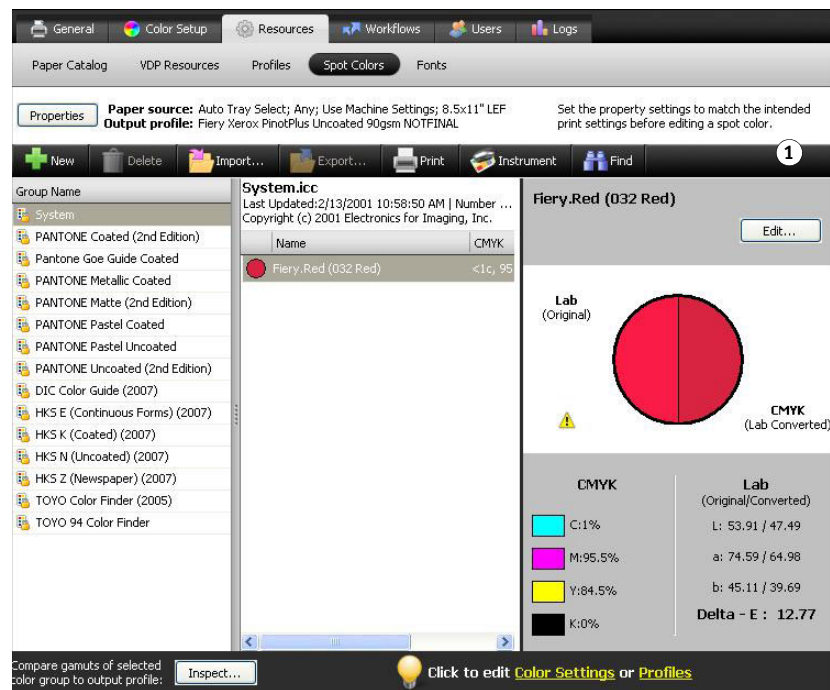
To define the color mappings in the Define 2-Color Print Mapping window, see the instructions in Command WorkStation Help.

When the Two-Color Print Mapping print option is enabled for a job, the EX700i replaces the document colors with the colors you defined in the Define 2-Color Print Mapping window.

Printing a job with Two-Color Print Mapping

After you map the colors in the Define 2-Color Print Mapping window in Spot-On, you can print a two-color job using Two-Color Print Mapping.

NOTE: When you print a job, select the same output profile from the printer driver as you selected when you set up Two-Color Print Mapping in Spot-On. Otherwise, print mappings that are defined in Spot-On have no effect.

TO PRINT A JOB WITH TWO-COLOR PRINT MAPPING

1 Print the job from an application and set the print options.

For information about how to set print options with the Adobe and Microsoft PostScript printer drivers for Windows, see *Printing*.

For information about how to set print options with the printer drivers for Mac OS, see *Printing*.

Alternatively, submit the job to the EX700i Hold queue, and then set print options in Job Properties in Command WorkStation.

2 On the Color tab, select 2-Color Print Mapping.
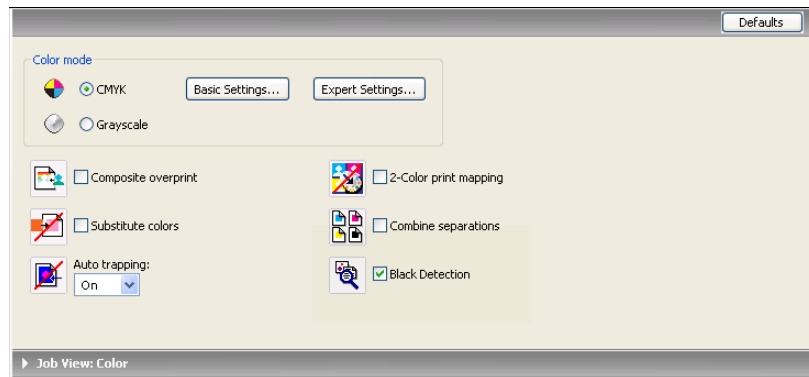
3 Select the same print settings, including the Output Profile setting, that you selected when you set up Two-Color Print Mapping in Spot-On.

4 Print the job.

The job is printed with the mapping that you defined in Spot-On.

COLOR SETUP FEATURES

With Fiery Graphic Arts Package, Premium Edition, Color Setup in Command WorkStation offers the following features:

- Control Bar (see page 19)

- Auto Trapping customization (see page 21)

- Progressives (see page 23)

Control Bar

Control Bar allows you to add a static color bar and dynamic job information to each printed page at a user-defined location.

The default Control Bar is designed to fit the EX700i default paper size, Letter/A4, or larger. You can create Control Bars for other paper sizes.

NOTE: If a Control Bar does not fit on the page, it will be clipped.

NOTE: If a background color is defined as "white" for a user-defined Control Bar, it must be defined in the CMYK color space for the Paper Simulation feature to take effect. For more information about Paper Simulation, see page 13.

The default Control Bar provides a color bar and dynamic job information. Many jobs print satisfactorily with the default Control Bar, but if you require your own Control Bar, create it by defining custom values in the Control Bar tab in Color Setup.

Printing with a Control Bar

You can print a job with a Control Bar by setting the Control Bar print option to On.

**TO PRINT A JOB WITH A CONTROL BAR**

1 **Print the job from an application and set the print options.**

For information about how to set print options with the Adobe and Microsoft PostScript printer drivers for Windows, see *Printing*.

For information about how to set print options with the printer drivers for Mac OS, see *Printing*.

Alternatively, submit the job to the EX700i Hold queue, and then set print options in Job Properties in Command WorkStation.

2 On the Job Info tab, under Reporting, select On for the Control Bar print option.

3 Print the job.

If you have not set up a custom Control Bar with Command WorkStation, your job is printed with the default Control Bar. If you set up a custom Control Bar, your job is printed with the custom Control Bar.

1 Static color bar

2 Job information

Custom Control Bar

The custom Control Bar feature is on the Control Bar tab under Color Setup in Device Center. For more information about creating a custom Control Bar, see Command WorkStation Help.
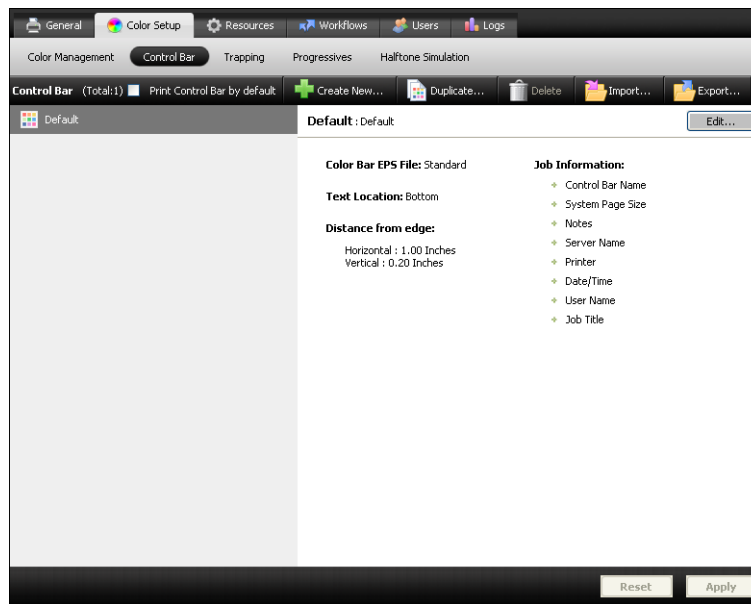
Auto Trapping customization

Trapping is a technique where some objects are printed slightly larger or smaller than you specify in an application, in order to prevent white edges around the objects. These white edges, or "halos," can be caused by factors such as misregistration, the physical properties of the dry inks, and the stiffness of the media.

The Auto Trapping customization feature provides you with advanced trapping settings and gives you full control over their values. The EX700i is shipped with values that are optimized for the print device using regular paper, but if these values do not provide the results necessary for the media that you use, modify the values to meet your requirements.

Printing with Auto Trapping

You can print a job with Auto Trapping enabled with or without customizing the trapping values first.

TO PRINT A JOB WITH AUTO TRAPPING

1 Print the job from an application and set the print options.

For information about how to set print options with the Adobe and Microsoft PostScript printer drivers for Windows, see *Printing*.

For information about how to set print options with the printer drivers for Mac OS, see *Printing*.

Alternatively, submit the job to the EX700i Hold queue, and then set print options in Job Properties in Command WorkStation.

2 On the Color tab, select On for the Auto Trapping print option.
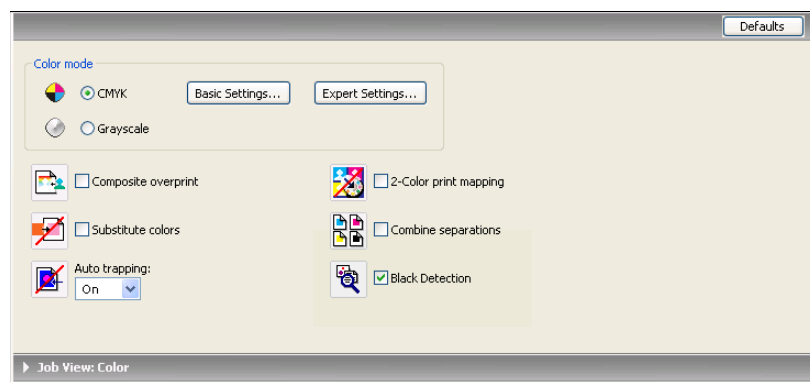
3 Print the job.

If you have not customized the trapping values with Command WorkStation, your job is printed with the default trapping values. If you edited the values, your job is printed with the custom trapping values.

Auto Trapping customization

In Command WorkStation, the Auto Trapping customization feature is on the Trapping tab under the Color Setup tab in Device Center. For more information about using Trapping, see Command WorkStation Help.

Progressives

The term "progressives" refers to printing variations in a multi-color document. The variations may use from one to all of the available color channels in a print device. The 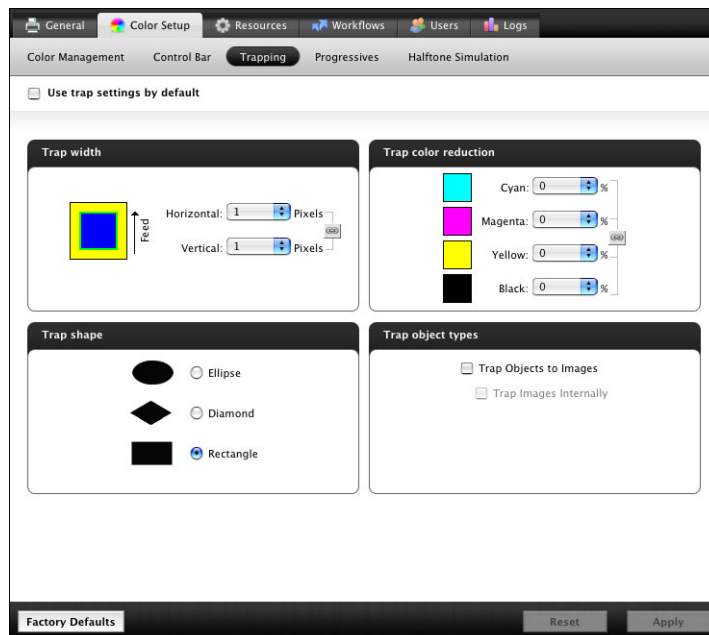majority of printing processes that involve more than one or two colorants apply the colorants sequentially. Traditionally, progressives are the intermediate states after some and before all colorants have been applied. The Progressives feature is more flexible, because it allows you to select which color is printed, using up to four sheets per original document page.

NOTE: Progressives show the separations that the EX700i sends to the print device, not the separations contained in the job source file.

The Progressives feature is designed to show you the dry ink separations used by the job on the digital press. The feature is not intended to be used to proof for another non-Fiery driven print device.

Progressives is a "reporting" feature. It is not designed to be used with production features such as Variable Data Printing (VDP) and Imposition. Progressives is offered for diagnostic situations. With high-volume applications or production environments, use Progressives only on the individual pages that need testing.

You can inspect the result of each channel with the default values for color channels in Progressives. You can also customize the selection of color channels or number of sheets to print in Color Setup in Command WorkStation.

You cannot use the Progressives and Postflight features at the same time. A constraint is set for these print options.

NOTE: Clearing plates in ImageViewer has no effect on a Progressives job printed from ImageViewer. The job prints with the values specified in the Progressives pane. For more information about ImageViewer, see "ImageViewer" on page 26.

Printing with Progressives

Print a job with the default Progressives by setting the Progressives print option to On from the printer driver.

TO PRINT A JOB WITH PROGRESSIVES

1 **Print the job from an application and set the print options.**

For information about how to set print options with the Adobe and Microsoft PostScript printer drivers for Windows, see *Printing*.

For information about how to set print options with the printer drivers for Mac OS, see *Printing*.

Alternatively, submit the job to the EX700i Hold queue, and then set print options in Job Properties in Command WorkStation.

2 **On the Job Info tab, select Progressives.**

3 **Print the job.**

If you have not customized the Progressives settings with Command WorkStation, your job is printed with the default Progressives settings. If you edited the settings, your job is printed with the custom Progressives settings.

Progressives customization

The Progressives feature is on the Progressives tab under Color Setup in Device Center. For more information about setting up custom Progressives, see Command WorkStation Help.
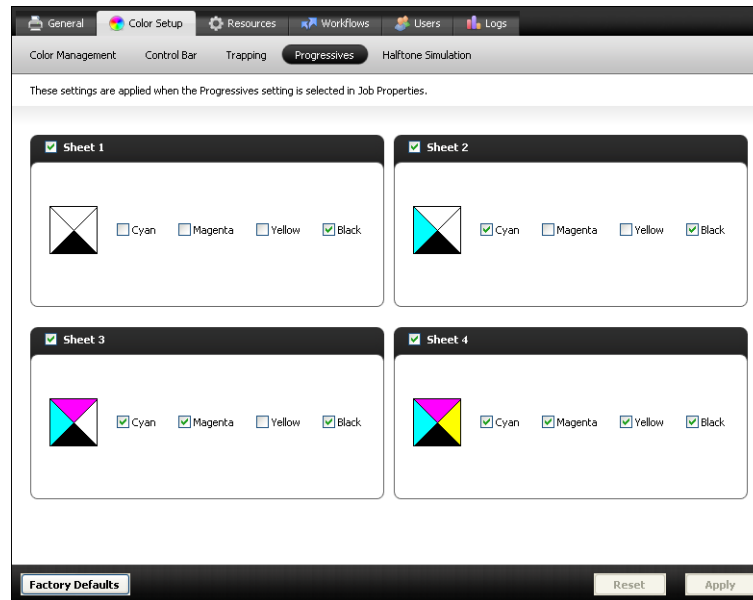
IMAGEVIEWER

ImageViewer allows you to soft proof and adjust colors in a job before it is printed. You can use the preview in ImageViewer to verify job placement, orientation, and content, as well as general color accuracy. If the job contains halftone screened settings, the preview shows a composite view of all separations at the dot level. You can select to display the plate data for each process color independently or in combination with the other colors, allowing inspection of individual plate data or a combination of any range of plates.

Accessing ImageViewer

Start ImageViewer from the Actions menu or Preview window of Command WorkStation.

TO START IMAGEVIEWER FROM THE ACTIONS MENU

1   **In Job Center in Command WorkStation, select the job that you want to preview.**

    NOTE: ImageViewer recognizes only jobs that show processed/held (dark yellow) status. Processed/held jobs are also indicated by the raster job icon (page icon ringed with a halo).

2   **If needed, choose Process and Hold from the Actions menu to move the job to processed/ held status.**

3 To start ImageViewer, do one of the following:

- Choose ImageViewer from the Actions menu.

- Right-click the selected job and choose ImageViewer from the menu that appears.

The ImageViewer main window appears.
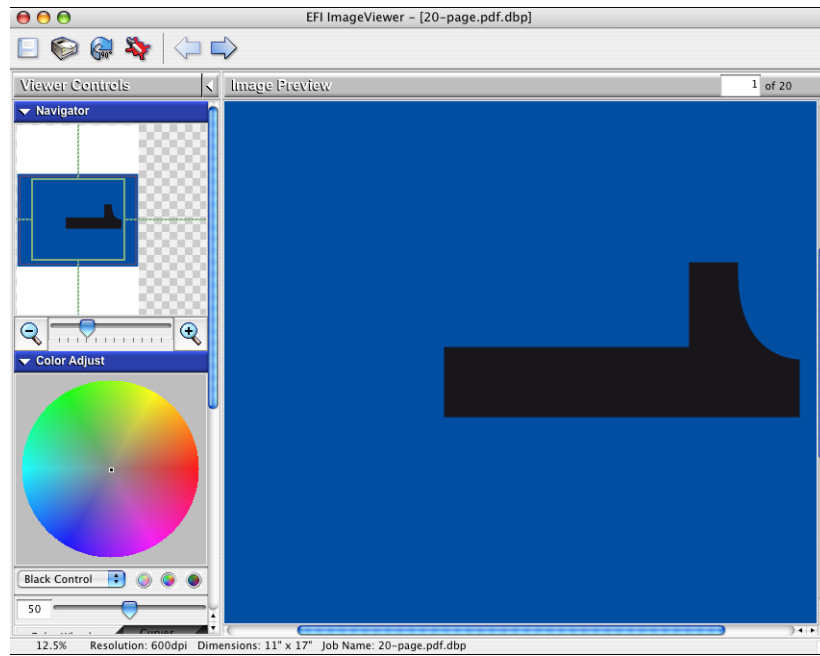
TO START IMAGEVIEWER FROM THE PREVIEW WINDOW

1 In Job Center in Command WorkStation, select the job that you want to preview.

NOTE: ImageViewer recognizes only jobs that show processed/held (dark yellow) status.

2 If needed, choose Process and Hold from the Actions menu to move the job to processed/held status.

3 Choose Preview from the Actions menu.

Page thumbnails appear in the Preview window.

1   ImageViewer button
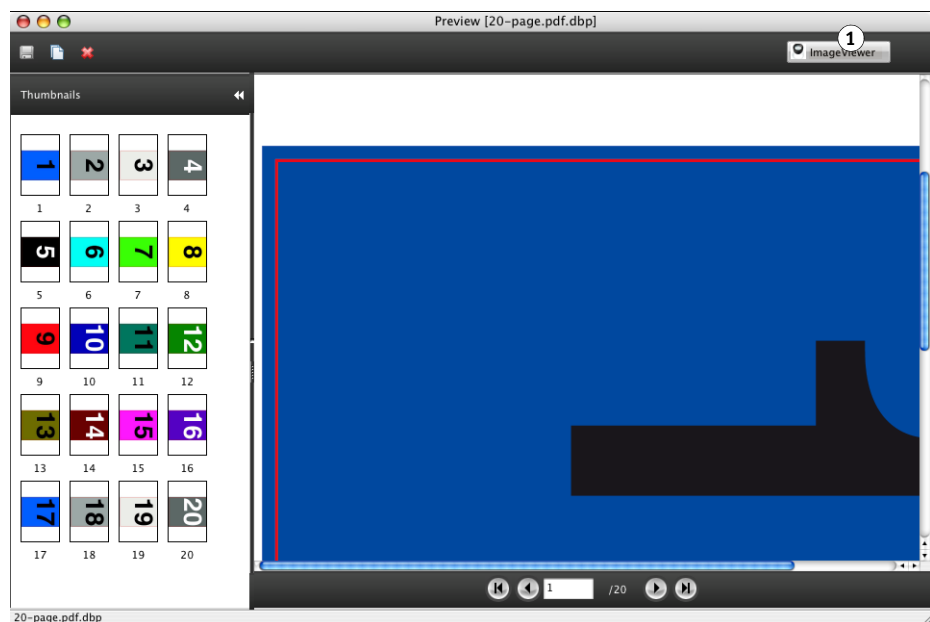
4 To start ImageViewer, select the thumbnail of the page that you want to soft proof, and click the ImageViewer button.

The ImageViewer main window appears.

For information about using ImageViewer, see Command WorkStation Help.

PREFLIGHT

The Preflight feature performs a simple check of the most common areas of error to ensure that the job prints successfully and to the expected quality on the selected printing device.

The categories of errors that Preflight checks are:

- Fonts

- Spot Colors

- Image Resolution

- VDP Resources

- Hairlines

- Overprint

- PostScript

This feature is accessible from Command WorkStation. For more information about Preflight, see Command WorkStation Help.

NOTE: In addition to the file formats listed in Command WorkStation Help, the VIPP file format is supported for Preflight.

HOT FOLDERS FILTERS

This chapter describes the Hot Folders filters that convert various files to PostScript or PDF (Portable Document Format), or preflight certain files. Some of these filters are included in Fiery Graphic Arts Package, Premium Edition and are available if Fiery Graphic Arts Package, Premium Edition is enabled.

Hot Folders filters allow you to convert certain file formats to PostScript or PDF or to preflight files for conformity. File conversion and preflighting take place on your computer in the Hot Folders application, which saves EX700i resources. You can print files directly from Hot Folders filters without starting the applications from which they were created.

The filters included with Fiery Graphic Arts Package, Premium Edition are:

- General

    - EPS

    - JPEG

    - PDF

    - TIFF

- Color Separated

    - DCS

    - TIFF/IT-P1

- Special

    - CT/LW

    - ExportPS

    - PDF2Go

NOTE: These filters are included as standard features: Microsoft filters, PS filter, VDP filter, and TIFF/IT-P1 filter.

For information about using the filters in the Hot Folders application, see Hot Folders Help.

For information about operating systems that support Hot Folders, see *Welcome*.
For information about installing the Hot Folders application, see *Utilities*.

POSTFLIGHT

The Postflight feature helps you determine why some printed jobs may not deliver expected color. Acting as a diagnostic and training tool for all users, it provides helpful global and object-specific information about how a job is actually received and processed by the EX700i.

Use Postflight to troubleshoot color problems with a previously printed job or as a preventive measure. You can print the original document (or RIPped and previewed) with all objects (images, graphics, and text) color-coded. A report explains what color spaces are used in the job and what print options affect those spaces. The report also provides information about the printing environment, such as calibration date, time, and method. Print a Test Page to verify the condition of the printing environment.

Postflight is a powerful analysis tool that enumerates in its reports not only those color spaces that are used by visible objects, but any color space called by a job. This can be very useful in diagnosing puzzling situations that may require correction. For example: using one specific combination of a printer driver, an OS, and a desktop publishing application emitting separations for plates, you *might* find that: 1) the Postflight color-coded pages show the Cyan, Magenta, and Yellow separations in the "DeviceGray" color space, while the Black separation is shown in the "DeviceCMYK" color space and 2) the Postflight report enumerates: DeviceGray, DeviceCMYK and DeviceRGB. What once required a PostScript expert to decipher can now be interpreted in minutes using Postflight reports. The Cyan, Magenta, and Yellow pages are defined in "DeviceGray," the Black page is using the "K" channel of DeviceCMYK, and the job is calling for the RGB color space, without applying it on any user-visible object.

About Postflight

When the Postflight print option is set to values other than Off, it provides the following information to help you identify possible problems: Postflight Test Page, Postflight color-coded pages, and Postflight reports.

Postflight Test Page

You can print the Postflight Test Page alone or in combination with the color-coded pages. The Test Page is printed using the exact same media and global settings (such as calibration) as your job. However, color objects on this page are printed independently of the user-specified source color definitions (such as CMYK simulation and RGB).

If the color on this page is not accurate, the problem lies with the printing environment (such as the calibration, output profile, or print device).

If the color on this page prints correctly but objects in your job do not print in expected colors, it is likely that the problem lies with the color setting specific to these objects. Problems with objects can be: wrong color values for text and graphics, bad quality images, or out-of-gamut colors.

Postflight color-coded pages

With this option, Postflight prepares a color-coded version of the original document that displays each object with a color corresponding to the color space that the EX700i received for the object.

The colors used to represent the color spaces for objects are as follows:

- Gray objects: Gray

- CMYK objects: Cyan

- RGB objects: Red

- Device-Independent objects: Indigo

- Spot color objects: Yellow

By reviewing the colors for all objects, you can identify the print option settings that affect the color conversion of the objects and make appropriate modifications.

Types of Postflight reports

You can print reports on color-coded pages, either alone or combined with the color-coded document. These reports are printed on the EX700i default paper size (Letter for US, A4 for metric) and use the default calibrated color mode.

The reports provide a document header with information (such as job name, date and time printed, and user name), a ColorWise global settings page, and object-specific settings pages. All pages include the job name, postflight date/time, and pagination in the bottom margin.

- **ColorWise global settings page** provides information that affects every object in a job, such as Calibration Set, the date the EX700i was calibrated, the method used for calibration, and the output profile that was used.

- **Object-specific settings pages** provide a list of the settings that were used to process every object in each color space, thus suggesting the locations to correct problems. For example, if you see a problem with an object that is displayed in Cyan in a color-coded page, review the settings listed in the CMYK Objects page and try changing those settings.

- **Spot colors page** lists all spot colors.

  For spot colors, the Postflight report lists the colors that are used in a job. It also indicates whether these colors are defined in the EX700i. When a spot color is defined in the EX700i, a patch is printed next to the color name. When a color is not defined in the EX700i, a white patch with an X is printed.

Understanding Postflight reports

The main purpose of Postflight is to help you detect, diagnose, and prevent color-related problems. In contrast to generic preflight software, which attempts to predict how a job would be processed, a postflighted job is fully processed by the EX700i, allowing accurate reporting on the settings with which the job is processed.

This Postflight feature is especially useful in cases where a workflow that was used to submit a job inadvertently converts colors. This conversion occurs with some printer drivers, printing options, and conversions to PDF.

This report focuses on color processing and does not list every printing option that affects your job. For more information about the ColorWise print options, see *Color Printing*.

NOTE: Postflight reports list only those color spaces that were submitted to the EX700i with your job. You may occasionally find that a job produces a Postflight report that includes information about color spaces that you cannot locate in the job's color-coded pages. This occurs when an object in the color space is used in the job but is masked by another object, when an object is very light (for example, 0% of a spot color), or when the specific application or printer driver asks the EX700i to process a particular color space but does not use it for user-visible objects.

NOTE: A Postflight report contains only one page on global settings, and it can include only one Test Page. Therefore, Postflight cannot describe an entire job accurately unless all pages are printed with the same options and on the same media. This is the case, for instance, with Mixed Media jobs, because they can use multiple output profiles, up to one profile per media in the job. If the page range is set to the pages that use one media only, Postflight produces reliable results for the specified range.

NOTE: Postflight is a "reporting" feature that is designed for diagnostic purposes. It is not designed for use with production features such as VDP and Imposition. For high-volume applications in production environments, use Postflight only on the individual pages that need testing.

Postflight print option

Access the Postflight feature through the Postflight print option. The following values are available for the Postflight print option:

- Off (Default)

- Concise Report

- Test Page

- Color-Coded Pages

- All Components (Color-Coded document pages, Test Page, and Concise Report)

Select a portion of a job to print the Postflight pages by selecting the appropriate page range of a job from the printer driver.

Postflight is a procedure performed after you print a document and receive unexpected or inadequate color. If you have access to Command WorkStation, Postflight also helps you catch color problems before you actually print. Postflight processes your job and collects information about the color objects throughout. The information is then displayed in Color-Coded document pages, a Test Page, and a Concise Report.

NOTE: The background defined in the Paper Simulation is not indicated as a CMYK object in the Postflight reports. For more information about Paper Simulation, see page 13.

NOTE: You cannot use Postflight at the same time that you use the following features: Progressives, Substitute Colors, or Combine Separations. Constraints are set for these print options from the printer driver.

Postflight examples

The following scenarios show how Postflight can be helpful to users who demand high color quality.

To diagnose an unexpected color (see page 36)

Use Postflight to diagnose unexpected color in a job, or determine which print or calibration settings apply to a job.

To check the calibration status prior to printing a job (see page 38)

Consider the following before printing a job:

- The EX700i may include many Calibration Sets. Which Calibration Set applies to my job?

- When was the EX700i last calibrated?

- Which instrument was used for the last calibration?

To check the quality of the output profile (see page 39)

If you are considering using a new paper for which you do not have a custom profile, or if you suspect that the output profile for your print device may not precisely describe its color behavior, check your output profile by printing the Postflight Test Page.

To diagnose a color problem of a specific object (see page 40)

When experts have verified that the calibration is correct and that the global settings, including the output profile, are correct, but the color of a specific object is still not as intended, you can print a color-coded document and diagnose the problem.

The detailed procedures of these scenarios are described in the following sections.

NOTE: For each of the following procedures, instead of printing the report to the EX700i, you can also send it to the Hold queue of the EX700i and preview the information (of a job with raster data) in ImageViewer. For more information about ImageViewer, see ImageViewer. To view the color of a job correctly, you must set your monitor and monitor profile correctly. For more information about the monitor and monitor profiles, see page 12.

NOTE: The procedures for printing a job from a Windows and a Mac OS computer are similar.

Scenario 1: Diagnose an unexpected color

Use the following procedure to print a job with Postflight set to Off.

TO PRINT A JOB

1 Print the job from an application and set the print options.

For information about how to set print options with the Adobe and Microsoft PostScript printer drivers for Windows, see *Printing*.

For information about how to set print options with the printer drivers for Mac OS, see *Printing*.

Alternatively, submit the job to the EX700i Hold queue, and then set print options in Job Properties in Command WorkStation.

2 On the Job Info tab, choose Off from the Postflight menu.

3 Print the job.

The job is printed to the EX700i.

After you print a job, use the following procedure to diagnose an unexpected color and print the job with edited color settings.

TO DIAGNOSE AN UNEXPECTED COLOR AND PRINT WITH EDITED COLOR SETTINGS

1 Print the same job and choose All Components from the Postflight menu.

The Postflight Test Page, Color-Coded document pages, and Concise Report are printed.

For information about the components of Postflight, see page 32.

2 Review all Postflight pages.

For information about the Postflight pages, see page 32.

3 Make appropriate changes based on all Postflight pages.

Depending on your printing environment, the condition of the print device, and the color settings, possible changes are as follows:

- Correct problems with the print device (see the documentation that accompanies the print device).

- Calibrate the EX700i (see *Color Printing*).

- Edit the colors of the output profile with Command WorkStation (see Command WorkStation Help).

- Change the default settings in Command WorkStation (see Command WorkStation Help).

Change the job specific print option settings using Command WorkStation Job Properties.

4 Print the job and choose Off from the Postflight menu.

The job with the edited color settings is printed to the EX700i.

5 Repeat these steps, if needed.

Repeat the steps until you get satisfactory color results.

Scenario 2: Check the calibration status

Use the following procedure to check the calibration status prior to printing a job.

TO CHECK THE CALIBRATION STATUS AND PRINT WITH THE OPTIMUM CALIBRATION CONDITION

1 Print the job from an application and set the print options.

For information about how to set print options with the Adobe and Microsoft PostScript printer drivers for Windows, see *Printing*.

For information about how to set print options with the printer drivers for Mac OS, see *Printing*.

Alternatively, submit the job to the EX700i Hold queue, and then set print options in Job Properties in Command WorkStation.

2 On the Job Info tab, choose Concise Report from the Postflight menu.

For information about Postflight reports, see page 33.

3 Print the job.

The Concise Report page is printed.

4 Review the information in the ColorWise global settings page.

5 Perform calibration, if needed.

If service has been performed on the print device since the last calibration, or calibration has not been performed, perform calibration using the Calibration Set specified in the Postflight report.

For more information about calibration, see *Color Printing*.

6 Print the job and choose Off from the Postflight menu.

The job is printed to the newly calibrated EX700i.

Scenario 3: Check the quality of the output profile

Use the following procedure to check the quality of the output profile of the print device.

TO CHECK THE QUALITY OF OUTPUT PROFILE AND PRINT WITH THE OPTIMUM OUTPUT PROFILE

1 Print the job from an application and set the print options.

For information about how to set print options with the Adobe and Microsoft PostScript printer drivers for Windows, see *Printing*.

For information about how to set print options with the printer drivers for Mac OS, see *Printing*.

Alternatively, submit the job to the EX700i Hold queue, and then set print options in Job Properties in Command WorkStation.

2 On the Job Info tab, choose Test Page from the Postflight menu.

3 Print the job.

The Postflight Test Page is printed to the EX700i.

4 Review the quality of the color on the Postflight Test Page.

NOTE: Make sure that this page was printed with the same media and print option settings as the job.

5 Review the instructions on the Postflight Test Page.

6 Edit the color of the output profile, or create a profile, if needed.

It may be necessary to customize the output profile or create one to get optimal results on the media the job is using.

7 Print the job and choose Off from the Postflight menu.

The job is printed to the EX700i with the edited or newly created output profile.

Scenario 4: Diagnose a color problem of a specific object

Use the following procedure to diagnose a color problem.

TO DIAGNOSE A COLOR PROBLEM OF A SPECIFIC OBJECT AND PRINT WITH THE EDITED COLOR SETTINGS

1 Print the job from an application and set the print options.

For information about how to set print options with the Adobe and Microsoft PostScript printer drivers for Windows, see *Printing*.

For information about how to set print options with the printer drivers for Mac OS, see *Printing*.

Alternatively, submit the job to the EX700i Hold queue, and then set print options in Job Properties in Command WorkStation.

2 On the Job Info tab, choose Color-Coded Pages from the Postflight menu.

For information about Postflight color-coded pages, see page 32.

3 Print the job.

Postflight color-coded pages are printed to the EX700i.

NOTE: Alternatively, you can send the Postflight color-coded pages to the Hold queue of the EX700i and preview them using ImageViewer. To preview the pages using ImageViewer, make sure that your monitor is set up according to the manufacturer's recommendations and that the correct monitor profile is specified for your monitor. For information about monitor profiles, see page 12.

4 Review the Postflight color-coded pages.

5 Make changes to the color settings, if needed.

For information about the ColorWise print options for various color spaces, see *Color Printing*.

NOTE: Use the Color-Coded Pages Only setting to send a job to another print device that has a specific color-space requirement. For example, a document targeted to a CMYK-only press must have only Cyan-colored objects.

6 Print the job and choose Off from the Postflight menu.

UGRA/FOGRA MEDIA WEDGE

Ugra (the Graphic Technology Research Association of Switzerland) and Fogra (the Graphic Technology Research Association of Germany) are organizations that support standardization and quality control of graphics technology. Together, they developed the Ugra/Fogra Media Wedge CMYK v2.0, a control device used to evaluate hard copy proofs. One version of the Ugra/Fogra Media Wedge, which is supported by the EX700i with Fiery Graphic Arts Package, Premium Edition enabled, is customized for the ES-1000 spectrophotometer.

The Ugra/Fogra Media Wedge, as printed on the EX700i, includes the standard color patches as well as the digital press resolution, EX700i model name, and other static information required by Ugra/Fogra.
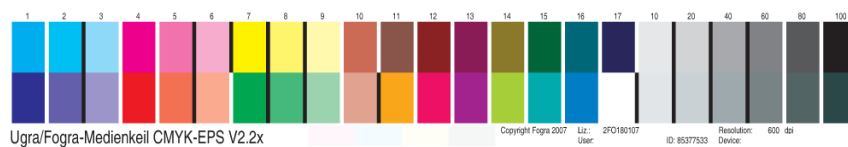
Adding the Ugra/Fogra Media Wedge to any job allows you to check the color accuracy and consistency of the digital press by measuring the colors in the Ugra/Fogra Media Wedge with the ES-1000 and supporting software, and comparing the measurements to reference values.

Printing the Ugra/Fogra Media Wedge

There are two ways to include the Ugra/Fogra Media Wedge in a job:

- By incorporating the Ugra FOGRA-MediaWedge V2.2x.EPS file or the Ugra FOGRA-MediaWedge V3.0a.EPS file in the source document. These files are available on the User Software DVD, in the Color Bars folder inside the Windows Color Files folder or Mac Color Files folder.

- By enabling the Control Bar print option. The Ugra/Fogra Media Wedge is the default Control Bar image.

  For more information about the Control Bar print option, see "Control Bar" on page 19.

NOTE: This version of the Ugra/Fogra Media Wedge is different from the Ugra/Fogra Media Wedge used in the Integrated Altona Visual Test. For more information about the Integrated Altona Visual Test, see Integrated Altona Visual Test.

The Ugra FOGRA-MediaWedge V2.2x.EPS file and the Ugra FOGRA-MediaWedge V3.0a.EPS file are not ordinary EPS files. Printing these files is supported only on a EX700i with the Fiery Graphic Arts Package, Premium Edition enabled. The file will not print if modified and saved as another version. You cannot currently use Compose, Impose, or QDM to embed the Ugra/Fogra Media Wedge image in a PDF file.

Reading the Ugra/Fogra Media Wedge

This version of the Ugra/Fogra Media Wedge is optimized for the ES-1000. Other strip-reading or spot-reading spectrophotometers may be used, if supported by their applications. EFI Color Verifier (part of Fiery Color Profiler Suite) is the quality control application officially supported to measure the Ugra/Fogra Media Wedge as printed by the EX700i.

Reference measurements are not supplied with the Ugra/Fogra Media Wedge. With the appropriate software, such as Fiery Color Profiler Suite, you can create your own reference measurements, extract them from reference ICC profiles, or load them from standards.

Using the Ugra/Fogra Media Wedge for quality control

You can use the Ugra/Fogra Media Wedge to compare digital proofs with print standards, print runs with print standards, and digital proofs with print runs. It was originally designed to check the accuracy and consistency of CMYK values when compared to the international ISO 12642 standard, but this is not its exclusive usage: when the Ugra/Fogra Media Wedge is printed in a job, you can measure the color accuracy and consistency of the output device for any printing condition, whether CMYK simulation or device CMYK color.

INTEGRATED ALTONA VISUAL TEST

The Altona Test Suite is a project of the European Color Initiative (ECI). The test suite is suited for evaluating RIPs as well as other components in composite PDF workflows for print proofing or print production. Even if you are not yet using PDF/X3, you can use the Altona Test Suite to identify the weaknesses and limitations of a PDF workflow.

The Integrated Altona Visual Test feature of the Fiery Graphic Arts Package, Premium Edition allows you to verify the level of PDF/X support provided by the software and hardware used in a composite PDF workflow. You perform this test by printing the free version of the Altona Visual Test document on the EX700i using the PDF workflow you want to verify. The EX700i adds information to the printed output that can be used to determine:

- If the workflow used to send PDF documents to the EX700i is PDF/X compatible.

- If a PDF/X workflow is compatible with the limited interpretation of PDF/X by Altona.

- If the color quality of a PDF/X workflow meets a standard.

The Integrated Altona Visual Test simplifies the setup and verification of PDF workflows. You can verify Altona PDF/X compliance without having to purchase the Altona Test Suite Application Kit.

Altona Visual Test file

You can obtain the free version of the Altona Visual Test file that you need for the Integrated Altona Visual Test at the ECI website (www.eci.org). Go to the Downloads area a download altona_visual_1v2a_x3.pdf.

This PDF file must be imported to the EX700i using Command WorkStation or Hot Folders, not printed through the printer driver. The printer driver converts a PDF file to PostScript, and therefore some PDF/X embedded information is lost. A PDF/X workflow cannot include printing through a printer driver.

For PDF/X compliance as tested by Altona, set the following settings for the Altona Visual Test job in Command WorkStation Job Properties:

Print option	Setting	Location in Job Properties
PDF/X Output Intent	Enabled	Expert Color Settings (in Color)
Composite Overprint	Enabled	Color
Use Embedded Profile When Present (RGB)	Enabled	Expert Color Settings (in Color)
Separate RGB/Lab to CMYK Source	Enabled	Expert Color Settings (in Color)
Scale	100% (no scaling)	Layout

Scaling the Altona Visual Test file and any file designed with resolution-dependent objects often leads to artifacts such as moirés.

For more information about these print options, except for Scale, see *Color Printing*. For more information about Scale, see *Printing*.

If you use all of these settings, the Altona Visual Test File output indicates PDF/X compliance as tested by Altona.

Interpreting test results

The Altona Visual Test file produces the following printed page. The EX700i inserts the test results in the bottom-left area.

1   Test result area

The following table indicates how to read the test results:

Test result	Indicates
Blank	File printed to a EX700i without the Integrated Altona Visual Test feature or workflow is not PDF/X compatible.
A message indicating that the test file was not processed with optimal settings for Altona	Workflow is not compatible with PDF/X as tested by Altona.
Ugra/Fogra Media Wedge (a standard set of color bars)	Workflow is compatible with PDF/X as tested by Altona.

If the Ugra/Fogra Media Wedge, shown in the following figure, is printed in the test result area, the workflow is PDF/X compatible for Altona testing. It is therefore correct to visually and colorimetrically inspect the page. If you have a spectrophotometer, such as the ES-1000, and quality control software, such as EFI Color Verifier, you can proceed with measurements to evaluate the degree of color matching. The version of the Ugra/Fogra Media Wedge inserted by the EX700i is scaled and positioned for easy reading by a strip-reading instrument.

Ugra/Fogra-Medienkeil CMYK-EPS V2.2x
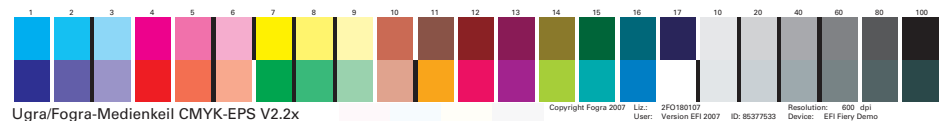
NOTE: Be sure to use the free version of the Altona Visual Test file, not the purchased one. The purchased version always includes a version of the Ugra/Fogra Media Wedge in the bottom- left area, whether the workflow is valid or not. In addition, the version of the Ugra/ Fogra Media Wedge printed by the purchased version cannot be read conveniently by a strip-reading instrument.

The Integrated Altona Visual Test confirms if your workflow maintains PDF integrity and if it produces valid output that can be used for further analysis and interpretation. To formally determine the level of PDF/X compliance, refer to Adobe published documentation. For information on how to interpret printed Altona pages, refer to the documentation available from the European Color Initiative (ECI).

For information on the Ugra/Fogra Media Wedge and how to use it for quality control in user designed workflows, see Ugra/Fogra Media Wedge.

Using a PDF/X workflow not compatible with Altona

If text appears in the test result area instead of the Ugra/Fogra Media Wedge, you cannot use the page for further Altona testing because the workflow is not PDF/X compatible as tested by Altona. However, the EX700i is not limited to the Altona interpretation of PDF/X. In particular, if you are using the EX700i for production printing rather than proofing, you might choose job settings that are not PDF/X compatible as tested by Altona. For example, you might choose to:

- Disable the Separate RGB/Lab to CMYK Source option in production PDF/X workflows, to exploit the maximum gamut of the digital press.

- Scale down the document to increase margins or scale it up to reduce margins.

- Use EX700i-specific options, such as Image Smoothing, that would alter the images in the Altona Visual Test file but would enhance your production output.

To get the best possible output from the Altona Test Suite, refer to the information about the Altona Visual Test File at

http://www.efi.com/support/production/fiery/production/how-to/sys8/

Altona helps verify PDF/X compliance, with some bias towards ISO color standards. We recommend that you do not limit yourself to ISO color. PDF/X lets you define your own color spaces and take advantage of the wider color gamut often possible with digital printers.

For more information about PDF/X and how to create compliant documents, refer to documents and information available from Adobe.

INDEX