

 Roland



Adobe® PostScript® 3



SC-545EXW

Guide to Printing on Transparent Media (Using White Ink)

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About This Guide

This Guide explains how to print images on transparent media using white ink, which feature is a unique benefit of the SC-545EXW. In this Guide you'll find detailed, step-by-step instructions on how to print an image using white ink in combination with CMYK ink on a single sheet of transparent media. For printing operations, you'll use the RIP & Print Management Software "Roland VersaWorks" that comes bundled with the printer.

Before Reading This Guide

Before performing any operations described in this guide, make sure that all the following preparations are complete.

- Assembling and installing the SC-545EXW unit
 - Installing Roland VersaWorks on your computer, and connecting the computer to the SC-545EXW via a network
- Read the following documentation for information about setting up the SC-545EXW unit and Roland VersaWorks.

(1) SC-545EXW Be Sure to Read This First

This flyer includes important information that you need to know in order to use the printer. Be sure to read this before doing anything else.

(2) SC-545EX User's Manual

This manual covers full details about how to use the SC-545EXW, including how to set up the printer and where to locate the printer, etc. Read this next to the above one.

(3) Roland VersaWorks Quick Start Guide

This manual explains basic operations of Roland VersaWorks, including how to set up the program. Be sure to read Chapter 1 of this manual and make necessary setups on your computer. It is also recommended to read Chapter 2 of this manual and become familiar with how to use this program.

Chapters in This Guide

This guide consists of the following two chapters.

Chapter 1: Quick Start

This chapter describes the overview of available methods for printing on transparent media, and briefly explains how to print by using each of the methods.

Chapter 2: Tutorial

By following this chapter, you will learn how to employ two different layers of ink (CMYK and white) in a single print on transparent media. This chapter also explains how to create data for printing using Adobe Illustrator.

Guide Conventions

This guide uses the following conventions when mentioning objects displayed on a computer screen (such as buttons and menus) within text.

- Buttons displayed on a computer screen are indicated using bold characters.
Example: "Click **OK**."
- Names of objects other than buttons (such as windows, dialog boxes, menus, etc.) are enclosed in square brackets.
Example: "Select [Preferences] from the [Edit] menu."

Before You Begin

Read this section before you get started with the following chapters.

Using Queue Folders (Queue Properties)

Roland VersaWorks has two "queue folders", labeled A and B, in its main window. You can assign a set of default print settings (queue properties) to each of these folders, and print files quickly by using the settings you have made within either of the folders.



When you use the printer to print an image that has both CMYK color data and white data, it is recommended to use the queue folders in the following manner.

Queue folder A Use this folder to assign a set of default settings for printing CMYK color data.

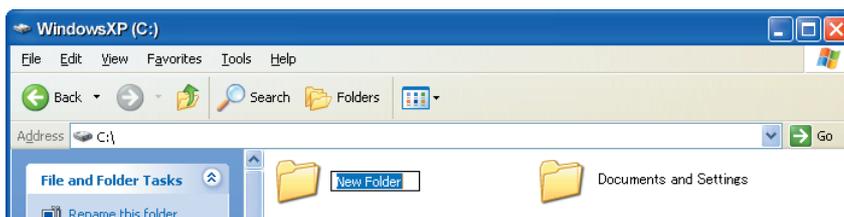
Queue folder B Use this folder to assign a set of default settings for printing white data.

All the operations in this guide assume that you use each of the queue folders in the manner described above.

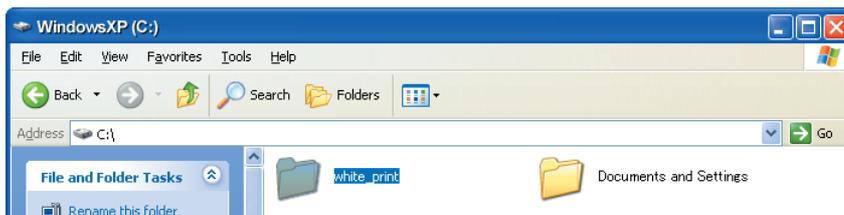
Creating a Folder for Saving PS Files

Before you actually print an image you draw using application software such as Adobe Illustrator, it is necessary to save the image as a PS file(s). And then, you can print the image by loading the PS file(s) on Roland VersaWorks. Because of this, you should create a folder for saving PS files in advance. It is recommended to locate the folder in the root directory on your computer's local disk.

- 1 Open [My Computer], and then open [Local Disk (C:)].
- 2 On the [File] menu, click [New], and then click [Folder].



- 3 Enter the name for the folder, and then press the Enter key.
 - Here you name "white_print", for example.



Chapter 1

Quick Start

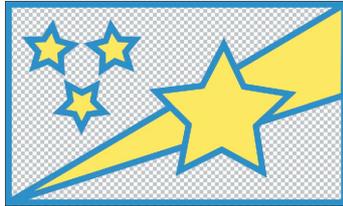
This chapter describes the overview of available methods for printing on transparent media, and briefly explains how to print by using each of the methods.

I-I Transparent Media Print Overview

About Methods for Printing on Transparent Media

In addition to employing only CMYK colors or only white when printing on transparent media, you can employ both of them in a single print.

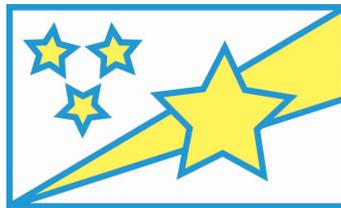
The following is an example image of a CMYK and white double-layered print.



CMYK color data example:
"Flag_Color.ps"



White data example:
"Flag_White.ps"

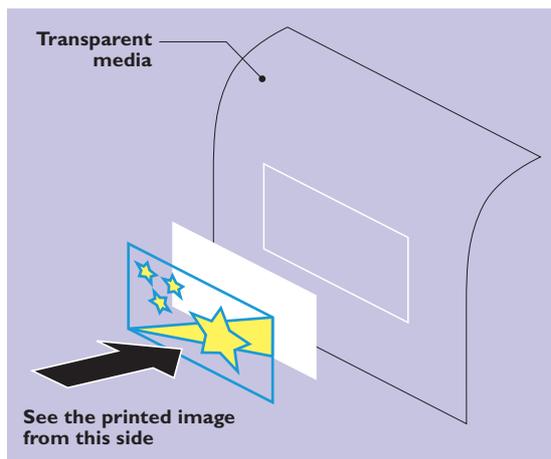


Printed image

When you print a layer on another layer, you need to choose which type of layer (CMYK or white) to print first. It is determined whether you want to have the printed image from the side of the printing surface or the opposite side of the printing surface.

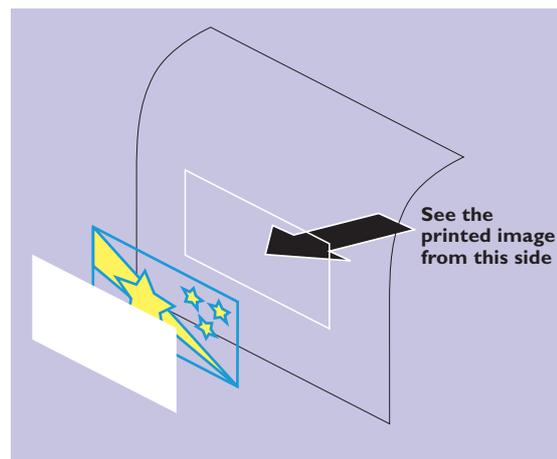
When you want to have the printed image from the printing surface of the media:

Print the white data first, and then the CMYK color data. We call this "CMYK-on-white method".



When you want to have the printed image from the opposite side of the printing surface of the media:

Print the CMYK color data first, and then the white data. We call this "CMYK-under-white method".



You will use the above example image and data examples when you perform the operations in the following section.

Note

This chapter does not cover information about how to create data for a double-layered print. For details, see "2-2 Creating Data for Printing" (page 23) in Chapter 2.

Available Printing Modes

Each time you perform a single print operation (that is, a single print job) is performed using Roland VersaWorks, an appropriate "printing mode" must be selected in accordance with the method you take, which is described on the last page, and the type of ink (CMYK or white) you use.

There are the following six available printing modes:

Printing Mode	Description
CMYK (v)	Select this mode when you print using only CMYK ink.
CMYK (v) onWhite W-PASS	Select one of these modes when you print using CMYK ink with "CMYK-on-white method". The difference is that the "CMYK (v) onWhite W-PASS" mode is better in image quality, and the "CMYK (v) onWhite" mode prints faster.
CMYK (v) onWhite	
CMYK (v) underWhite W-PASS	Select one of these modes when you print using CMYK ink with "CMYK-under-white method". The difference is that the "CMYK (v) underWhite W-PASS" mode is better in image quality, and the "CMYK (v) underWhite" mode prints faster.
CMYK (v) underWhite	
White (v) W-PASS	Select this mode when you print using white ink. This mode is available regardless of using only white ink or using white ink in combination with CMYK ink.

Note

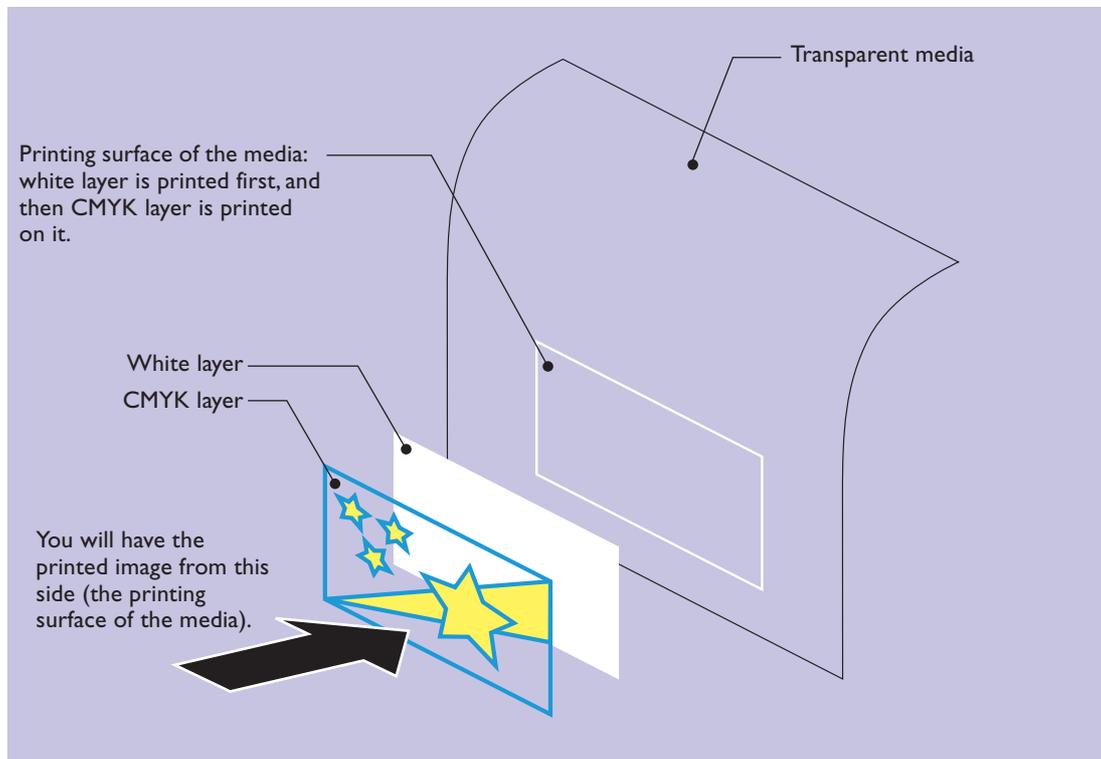
You may select "CMYK (v) onWhite" instead of "CMYK (v) onWhite W-PASS", or "CMYK (v) underWhite" instead of "CMYK (v) underWhite W-PASS" as necessary, when you want to save printing time. Note, however, that the quality of the printed image may be slightly reduced. In this guide, all the relevant operations are explained as selecting "CMYK (v) onWhite W-PASS" or "CMYK (v) underWhite W-PASS".

I-2 Printing on Transparent Media

This section explains how to print on transparent media by using each of four different methods.

Printing White Data and then CMYK Color Data (CMYK-On-White)

Use the CMYK-on-white method when you want to have a printed image as illustrated below.



1. Prepare the printer.

① Press the [MENU] key and make the following settings.

- Set "EDGE DETECTION" to "DISABLE".
- Set "PREFEED" to "ENABLE".

② Load transparent media into the printer.

- When the media you are loading into the printer warps or partially floats from the platen, load it into the printer so that its front end goes about 20 cm (8 in.) from the starting edge of the print area.
- Be sure to use the media clamps when you load media.

2. Prepare the image files for printing.

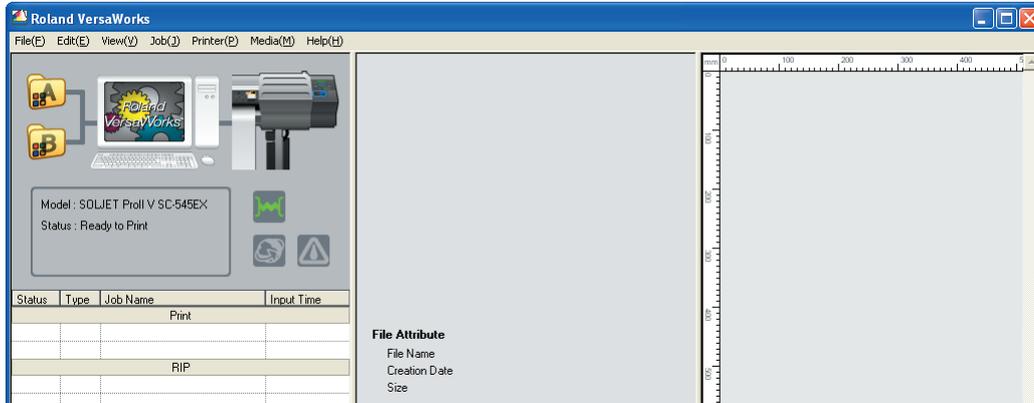
After drawing an image using application software such as Adobe Illustrator, you need to create two PS files - one for printing the white layer of the image, and the other for printing the CMYK layer of the image. In the following procedures, it is assumed that you use the following files for printing: "Flag_Color.ps" which contains CMYK layer of the image, and "Flag_White.ps" which contains white layer of the image.

Notice on drawing white layer of the image

Make sure that you set the color of any objects in the white layer of the image between K0% and K100% in the CMYK mode. This rule also applies when you want to use gradient colors.

3. Start up Roland VersaWorks on your computer.

Check the printer model and status in the main window.

**4. Assign the settings for printing the white layer of the image to queue folder B.**

① Double-click .

② In the [Queue B Properties] dialog box that appears, make the following settings. Make sure that all the settings for the setup items other than listed below are left as their initial defaults.

Icon	Setup item	Setting
Quality	Media Type	"Clear PET Film" or "PET Clear Film, Adhesive"
	Mode	White (v) W-PASS
Printer Controls	Use Custom Settings	On
	Dry Time*	15 Minutes
Cut Controls	Operation Mode	Print Only
	Return to Origin After Print	On

* It is recommended that you use the optional media drier. The dry time setting here (15 minutes) applies when you use the media drier.

③ Click **OK** to close the [Queue B Properties] dialog box.

5. Assign the settings for printing the CMYK layer of the image to queue folder A.

1 Double-click .

2 In the [Queue A Properties] dialog box that appears, make the following settings.
Make sure that all the settings for the setup items other than listed below are left as their initial defaults.

Icon	Setup item	Setting
Quality	Media Type	"Clear PET Film" or "PET Clear Film, Adhesive"
	Mode	CMYK (v) onWhite W-PASS
Printer Controls	Use Custom Settings	On
	Dry Time*	15 Minutes
Cut Controls	Operation Mode	Print Only
	Return to Origin After Print	Off

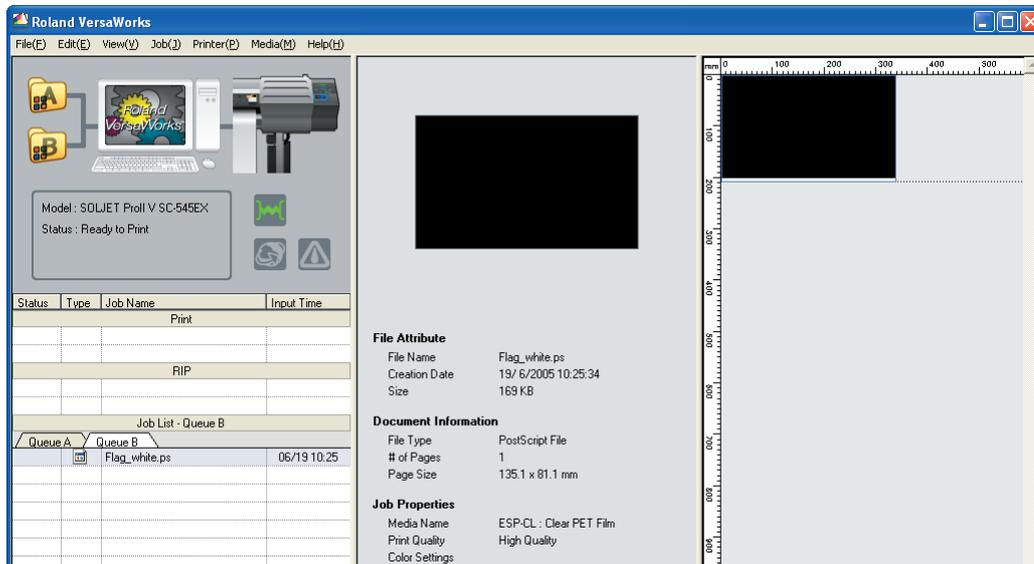
* It is recommended that you use the optional media drier. The dry time setting here (15 minutes) applies when you use the media drier.

3 Click **OK** to close the [Queue A Properties] dialog box.

6. In the Queue B Job List, drag and drop the white data PS file (Flag_White.ps).

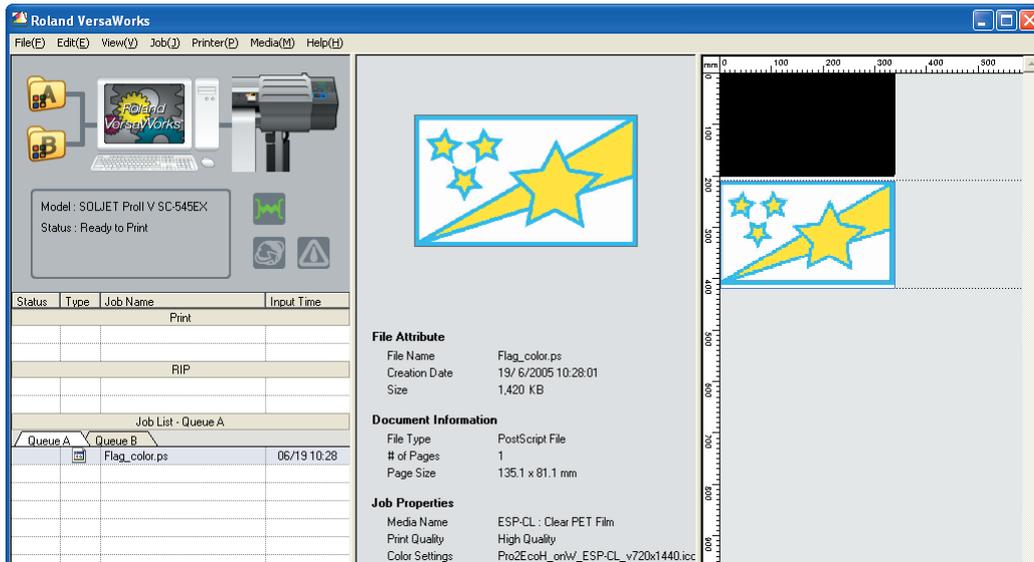
1 Click the [Queue B] tab in the main window so that the title above the tab changes to "Job List - Queue B".

2 Click the file "Flag_White.ps" that you created in step 2, drag it in the job list, and then drop it (release the mouse button).



7. In the Queue A Job List, drag and drop the CMYK color data PS file (Flag_Color.ps).

- ① Click the [Queue A] tab in the main window so that the title above the tab changes to "Job List - Queue A".
- ② Click the file "Flag_Color.ps" that you created in step 2, drag it in the job list, and then drop it (release the mouse button).



Observe that both the white image and CMYK color image are displayed in the same size in the layout window (the right part of the Roland VersaWorks window).

8. Print the white data.

- ① Click the [Queue B] tab in the main window.
- ② In the job list, click "Flag_White.ps" so that it is selected.
- ③ Click  to start printing.
 - After printing is complete, it takes approximately 15 minutes to dry out the media.
 - When the media is dried out, it will return to the original position automatically.

9. Print the CMYK color data.

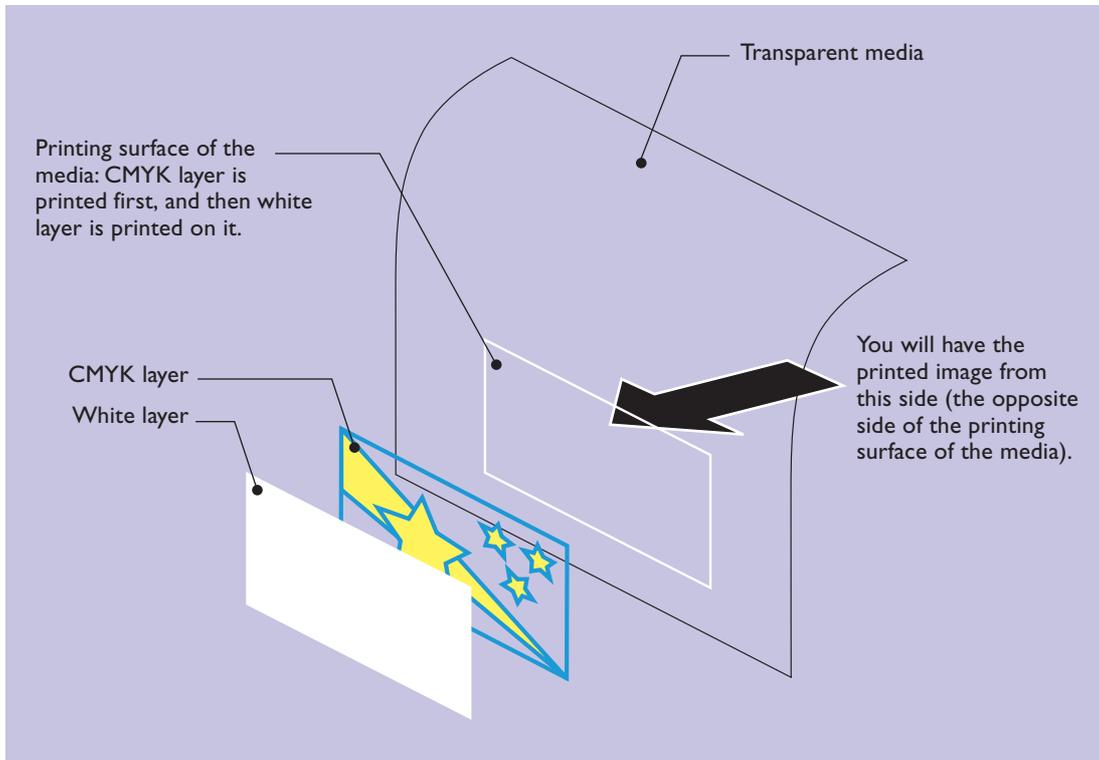
- ① Click the [Queue A] tab in the main window.
- ② In the job list, click "Flag_Color.ps" so that it is selected.
- ③ Click  to start printing.
 - After printing is complete, it takes approximately 15 minutes to dry out the media.

Printing another double-layered image in the same way

When you complete the above procedures, you can use another set of white data and CMYK color data by performing steps 6 through 9 to print another image.

Printing CMYK Color Data and then White Data (CMYK-Under-White)

Use the CMYK-under-white method when you want to have a printed image as illustrated below.



- When printing by using this method, it is necessary to print the mirror image of the original, because you will look at the printed image from the opposite side of the printing surface.

1. Prepare the printer.

① Press the [MENU] key and make the following settings.

- Set "EDGE DETECTION" to "DISABLE".
- Set "PREFEED" to "ENABLE".

② Load transparent media into the printer.

- When the media you are loading into the printer warps or partially floats from the platen, load it into the printer so that its front end goes about 20 cm (8 in.) from the starting edge of the print area.
- Be sure to use the media clamps when you load media.

2. Prepare the image files for printing.

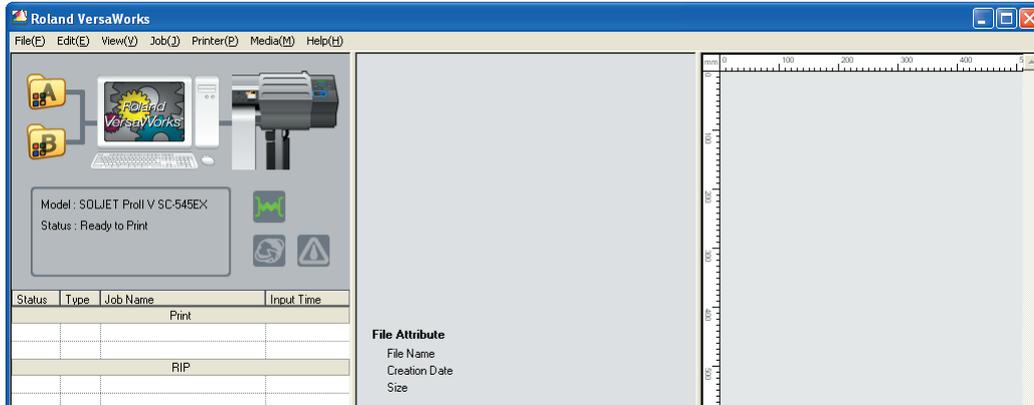
After drawing an image using application software such as Adobe Illustrator, you need to create two PS files - one for printing the white layer of the image, and the other for printing the CMYK layer of the image. In the following procedures, it is assumed that you use the following files for printing: "Flag_Color.ps" which contains CMYK layer of the image, and "Flag_White.ps" which contains white layer of the image.

Notice on drawing white layer of the image

Make sure that you set the color of any objects in the white layer of the image between K0% and K100% in the CMYK mode. This rule also applies when you want to use gradient colors.

3. Start up Roland VersaWorks on your computer.

Check the printer model and status in the main window.

**4. Assign the settings for printing the CMYK layer of the image to queue folder A.**

- 1 Double-click .
- 2 In the [Queue A Properties] dialog box that appears, make the following settings. Make sure that all the settings for the setup items other than listed below are left as their initial defaults.

Icon	Setup item	Setting
Layout	Mirror	On
Quality	Media Type	"Clear PET Film" or "PET Clear Film, Adhesive"
	Mode	CMYK (v) underWhite W-PASS
Printer Controls	Use Custom Settings	On
	Dry Time*	15 Minutes
Cut Controls	Operation Mode	Print Only
	Return to Origin After Print	On

* It is recommended that you use the optional media drier. The dry time setting here (15 minutes) applies when you use the media drier.

- 3 Click **OK** to close the [Queue A Properties] dialog box.

5. Assign the settings for printing the white layer of the image to queue folder B.

① Double-click .

② In the [Queue B Properties] dialog box that appears, make the following settings.
Make sure that all the settings for the setup items other than listed below are left as their initial defaults.

Icon	Setup item	Setting
Layout	Mirror	On
Quality	Media Type	"Clear PET Film" or "PET Clear Film, Adhesive"
	Mode	White (v) W-PASS
Printer Controls	Use Custom Settings	On
	Dry Time*	15 Minutes
Cut Controls	Operation Mode	Print Only
	Return to Origin After Print	Off

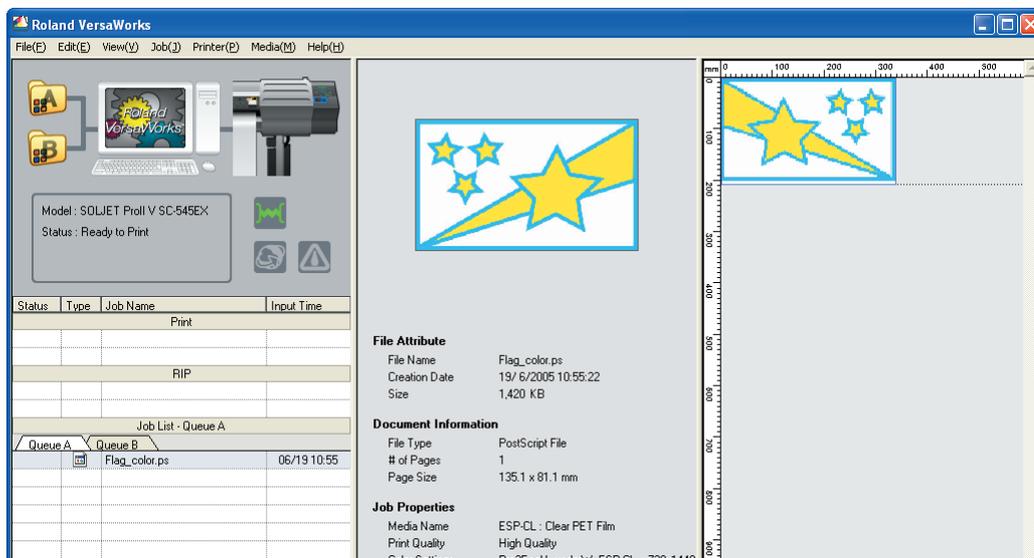
* It is recommended that you use the optional media drier. The dry time setting here (15 minutes) applies when you use the media drier.

③ Click **OK** to close the [Queue B Properties] dialog box.

6. In the Queue A Job List, drag and drop the CMYK color data PS file (Flag_Color.ps).

① Click the [Queue A] tab in the main window so that the title above the tab changes to "Job List - Queue A".

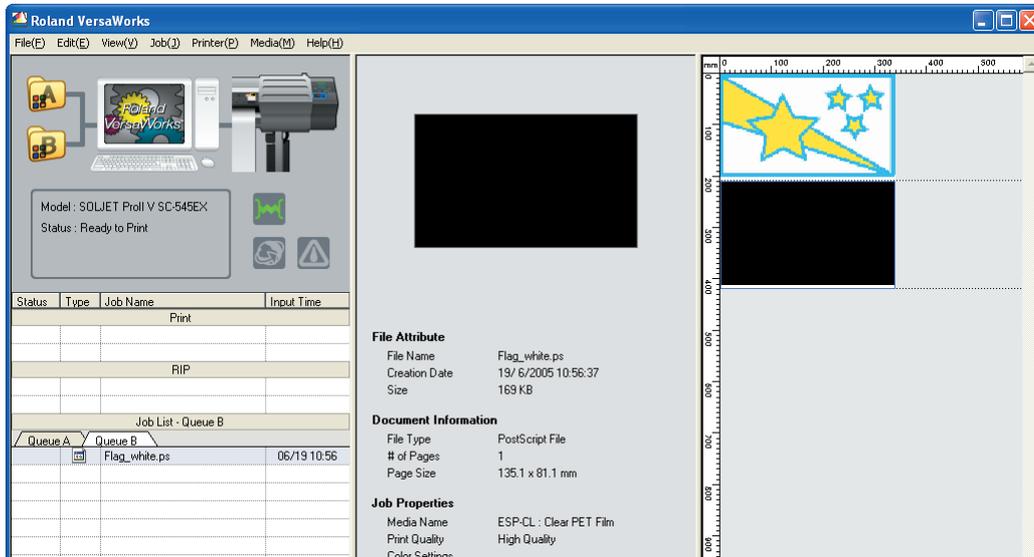
② Click the file "Flag_Color.ps" that you created in step 2, drag it in the job list, and then drop it (release the mouse button).



The preview image of the file itself is displayed in the preview window, and the mirror image of the original is displayed in the layout window (to the right of the preview window).

7. In the Queue B Job List, drag and drop the white data PS file (Flag_White.ps).

- ① Click the [Queue B] tab in the main window so that the title above the tab changes to "Job List - Queue B".
- ② Click the file "Flag_White.ps" that you created in step 2, drag it in the job list, and then drop it (release the mouse button).



Observe that both the white image and CMYK color image displayed in the layout window are the same size.

8. Print the CMYK color data.

- ① Click the [Queue A] tab in the main window.
- ② In the job list, click "Flag_Color.ps" so that it is selected.
- ③ Click  to start printing.
 - After printing is complete, it takes approximately 15 minutes to dry out the media.
 - When the media is dried out, it will return to the original position automatically.

9. Print the white data.

- ① Click the [Queue B] tab in the main window.
- ② In the job list, click "Flag_White.ps" so that it is selected.
- ③ Click  to start printing.
 - After printing is complete, it takes approximately 15 minutes to dry out the media.

Printing another double-layered image in the same way

When you complete the above procedures, you can use another set of CMYK color data and white data by performing steps 6 through 9 to print another image.

Printing Only White Data

1. Prepare the printer.

- ① Press the [MENU] key and make the "EDGE DETECTION" item to "DISABLE".
- ② Load transparent media into the printer.
 - When the media you are loading into the printer warps or partially floats from the platen, load it into the printer so that its front end goes about 20 cm (8 in.) from the starting edge of the print area.
 - Be sure to use the media clamps when you load media.

2. Prepare the image files for printing.

Draw an image using application software such as Adobe Illustrator, and then save the image as a PS file.

Important!

- Make sure that you set the color of any objects in the image between K0% and K100% in the CMYK mode.
- The above rule also applies when you want to use gradient colors.

3. Start up Roland VersaWorks on your computer.

Check the printer model and status in the main window.

4. Make necessary settings for printing the image to queue folder B.

- ① Double-click .
- ② In the [Queue B Properties] dialog box that appears, make the following settings.
Make sure that all the settings for the setup items other than listed below are left as their initial defaults.

Icon	Setup item	Setting
Quality	Media Type	"Clear PET Film" or "PET Clear Film, Adhesive"
	Mode	White (v) W-PASS
Printer Controls	Use Custom Settings	On
	Dry Time*	15 Minutes

* It is recommended that you use the optional media drier. The dry time setting here (15 minutes) applies when you use the media drier.

- ③ Click **OK** to close the [Queue B Properties] dialog box.

5. In the Queue B Job List, drag and drop the PS file.

- ① Click the [Queue B] tab in the main window so that the title above the tab changes to "Job List - Queue B".
- ② Click the PS file that you created in step 2, drag it in the job list, and then drop it (release the mouse button).

6. Click to start printing.

- After printing is complete, it takes approximately 15 minutes to dry out the media.

Printing Only CMYK Color Data

1. Prepare the printer.

- ① Press the [MENU] key and make the "EDGE DETECTION" item to "DISABLE".
- ② Load transparent media into the printer.
 - When the media you are loading into the printer warps or partially floats from the platen, load it into the printer so that its front end goes about 20 cm (8 in.) from the starting edge of the print area.
 - Be sure to use the media clamps when you load media.

2. Prepare the image files for printing.

Draw an image using application software such as Adobe Illustrator, and then save the image as a PS file.

3. Start up Roland VersaWorks on your computer.

Check the printer model and status in the main window.

4. Make necessary settings for printing the image to queue folder A.

① Double-click .

② In the [Queue A Properties] dialog box that appears, make the following settings.
Make sure that all the settings for the setup items other than listed below are left as their initial defaults.

Icon	Setup item	Setting
Quality	Media Type	"Clear PET Film" or "PET Clear Film, Adhesive"
	Mode	CMYK (v)

③ Click **OK** to close the [Queue A Properties] dialog box.

5. In the Queue A Job List, drag and drop the PS file.

① Click the [Queue A] tab in the main window so that the title above the tab changes to "Job List - Queue A".

② Click the PS file that you created in step 2, drag it in the job list, and then drop it (release the mouse button).

⑥ Click  to start printing.

I-3 Cutting the Media After Printing

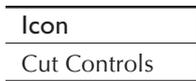
After printing is complete, it is possible to let the printer cut the media automatically along the "contour lines" you have drawn in the image. This feature is useful, for example, when you want to make stickers using adhesive film media. For information about how to draw contour lines, see "Roland VersaWorks Quick Start Guide".

Cutting the Media After Printing White Data and then CMYK Color Data

Perform the same operations under "Printing White Data and then CMYK Color Data" (page 8), except for the following changes.

- In step 2, draw the contour lines in the image you want to print, along with the CMYK layer of the image. When you save the CMYK layer of the image as a PS file, make sure that the contour lines are also included. Save the white layer of the image as a PS file without contour lines.
- Perform the following operations instead of step 9.

- 1 Click the [Queue A] tab in the main window.
- 2 In the job list, double-click "Flag_Color.ps" (the PS file which contains the contour lines data along with the CMYK color data).
- 3 In the [Job Settings] dialog box that appears, make the following settings, and then click **OK**.

Icon	Setup item	Setting
	Operation Mode	Print & Cut

- 4 Click  to start printing.

Cutting starts automatically after printing and dry-out operations are complete.

Cutting the Media After Printing CMYK Color Data and then White Data

Perform the same operations under "Printing CMYK Color Data and then White Data" (page 12), except for the following changes.

- In step 2, draw the contour lines in the image you want to print, along with the white layer of the image. When you save the white layer of the image as a PS file, make sure that the contour lines are also included. Save the CMYK layer of the image as a PS file without contour lines.
- Perform the following operations instead of step 9.

- 1 Click the [Queue B] tab in the main window.
- 2 In the job list, double-click "Flag_White.ps" (the PS file which contains the contour lines data along with the white data).
- 3 In the [Job Settings] dialog box that appears, make the following settings, and then click **OK**.

Icon	Setup item	Setting
	Operation Mode	Print & Cut

- 4 Click  to start printing.

Cutting starts automatically after printing and dry-out operations are complete.

Cutting the Media After Printing Only White Data or CMYK Color Data

Perform the same operations under "Printing Only White Data" (page 16) or "Printing Only CMYK Color Data" (page 17), except for the following changes.

- In step 2, draw the contour lines in the image you want to print, and then save the image as the PS file with the contour lines data included.
- Perform the following operations instead of step 6.
 - 1 In the job list, double-click the PS file that you want to use for printing and cutting.
 - 2 In the [Job Settings] dialog box that appears, make the following settings.

Icon	Setup item	Setting
	Operation Mode	Print & Cut

- 3 Click  to start printing.

Cutting starts automatically after printing and dry-out operations are complete.

Chapter 2

Tutorial

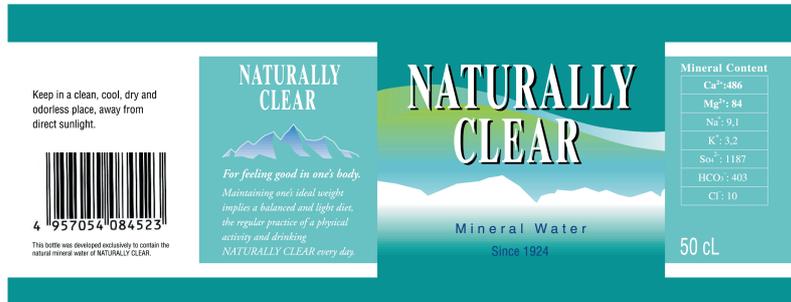
This chapter describes detailed information about how to print two layers (CMYK layer and white layer) on a single sheet of transparent media, starting with drawing an image that consists of two layers using Adobe Illustrator.

2-1 Tutorial Overview

Getting through this tutorial, you will learn basic concepts and detailed operations on how to print an image, which consists of CMYK layer and white layer, on a single sheet of transparent media.

Example Image for This Tutorial

As an example, you will use a label for mineral water package like the one shown below in this tutorial.



To make the most of transparent media, here you print the image so that you will have the printed image from the opposite side of the printing surface of the media. See "About Methods for Printing on Transparent Media" (page 6) for more information.

Basic Flow

There are the following three sections, or groups of procedures you will follow in this tutorial.

2-2 Creating Data for Printing

page 23

To print an image like the above example, you have to draw the image first, and then create two separate PS files for CMYK color and white. In this section you will draw the original image using Adobe Illustrator and create PS files for printing.

2-3 Making Default Settings for Printing (Using Queue Properties)

page 30

You will use Roland VersaWorks from this section. In this section, you will make two sets of default settings for printing - settings in [Queue A Properties] and [Queue B Properties].

2-4 Making Job Settings and Printing the Image

page 33

In this section, you will print CMYK color data and white data using Roland VersaWorks. You will also learn relationship between the [Queue A (B) Properties] dialog box and the [Job Settings] dialog box, and perform actual settings in the [Job Settings] dialog box under "Operational Procedures".

2-2 Creating Data for Printing

Basic Ideas of Creating Data

You will use two layers (CMYK and white) to print a single image, so keep the following things in mind:

- Make the two layers precisely form the image you expect when you create data for each layer.
You can use any application software as far as it can save files in a format that can be loaded into Roland VersaWorks. Commonly, it is recommended that you use Adobe Illustrator, because you can create multiple drawing layers in a single file.
- Save each of the layers as a PS file before you actually print the image.
You will print each of the layers separately, so it is necessary to create two separate PS files.

Spelling out the obvious about white...

- Usually, you use white paper for printing an image. When the image has white part, it means that the part has no color (C=0%, M=0%, Y=0%, K=0% in CMYK). When printed on the paper, of course, no color of ink is on it where the image is white. If you use transparent media for printing the image, this "white" part of the image becomes transparent, because no ink is on the media. If you want to have white part printed white on transparent media, you simply need to use white ink. A PS file that contains white layer of the image, or white data, is necessary for printing with white ink.
- When you create data for white layer of the image on your computer, you have to use solid black (K=100%) for drawing objects in it. Solid black is interpreted as solid white when the data is printed.

Basic Flow

Roughly design or draw your image which contains white part as an element of the image.



Draw the image you have designed on your computer using Adobe Illustrator or other graphic application software.

- If you use Adobe Illustrator, draw the CMYK color part of the image in one layer, and the white part of the image in another layer.
- If you use other application software, it is necessary to think about how to draw each of the layers. You may be able to draw both layers in a single file just as you can do using Adobe Illustrator, or you may have to create a file for each layer. It depends on the application software you use.



Save the file(s) that contains the image you have drawn as PS files.

- If you use Adobe Illustrator, save each of the layers (CMYK layer and white layer) in the file you draw as a PS file. As a result, you will have two separate PS files - one for the CMYK layer of the image, and the other for the white layer of the image.
- The above rule also applies when you use other application software. Make sure that you create one PS file per each of the layers of the image.

Operational Procedures

In this example you will use Adobe Illustrator CS to create data for printing.

Important!

- For details about how to use Adobe Illustrator such as drawing objects or handling layers, see the manual or online help that come with it.
- The following operations apply only Adobe Illustrator CS. If you use one of the other versions of Adobe Illustrator, operations may be somewhat different from those explained here.

To draw an image using two layers (step 1 through 4):

1. First, draw a full-color image (like the one shown below) in the CMYK mode.

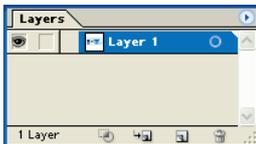


Note the following when drawing:

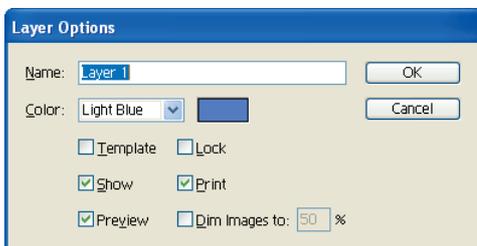
- Make sure that you use the CMYK mode of the application software.
- Draw all the objects in a single layer. If you use multiple layers while drawing, be sure to move all the objects to a single layer before proceeding. In the following steps, it is assumed that all the objects are in "Layer 1".

2. Rename the name of the layer "Layer 1" to "Color".

- 1 Select [Layers] from the [Window] menu so that the Layers palette is displayed. The above operation is not necessary if the Layer palette is already displayed.



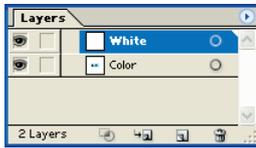
- 2 On the Layers palette menu which is displayed by clicking  on the palette, click [Options for "Layer 1"].



- 3 On the [Layer Options] dialog box that appears, enter "Color" in the [Name] box, and then click **OK**.

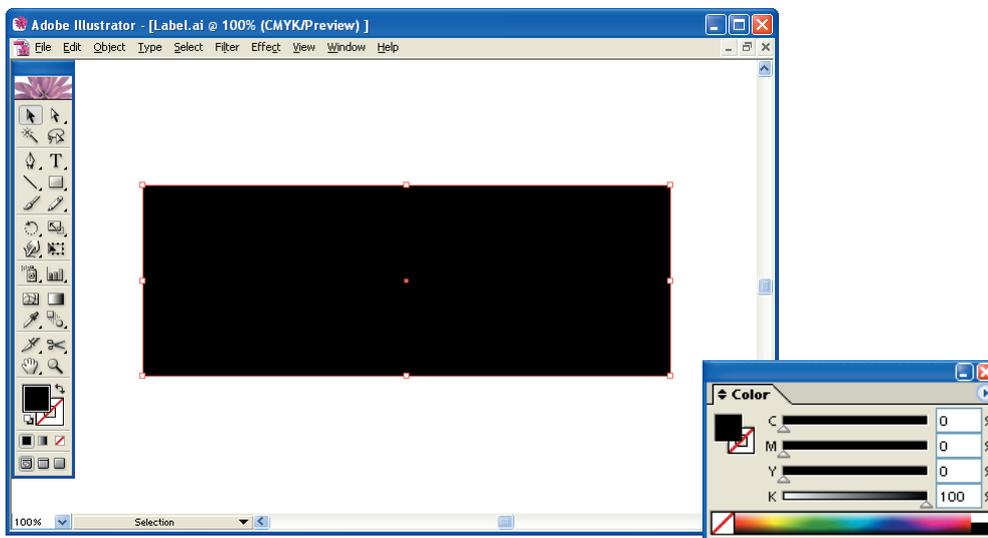
3. Insert a new layer named "White".

- ① On the Layers palette menu, click [New Layer].
- ② On the [Layer Options] dialog box that appears, enter "White" in the [Name] box, and then click **OK**.



This inserts the "White" layer above the "Color" layer, and the "White" layer becomes active for drawing.

4. Draw the white layer of the image in the layer "White".



Note the following when drawing:

- Make sure that you draw any objects in solid black (K100%). Otherwise the image may not be printed correctly.
- Draw objects carefully so that the image in the white layer and image in the CMYK layer are aligned precisely. You can easily draw two objects precisely aligned, each of which is in different layers. The following is an example of operations for the sample image of this tutorial.

- ① Select the outline rectangle object in the "Color" layer, and then select [Copy] from the [Edit] menu.
- ② Activate the "White" layer for drawing.
- ③ Select [Paste in Front] from the [Edit] menu.
This pastes the copied rectangle object right in front of the original object in the "White" layer.
- ④ Set the fill color of the pasted object to K100%.

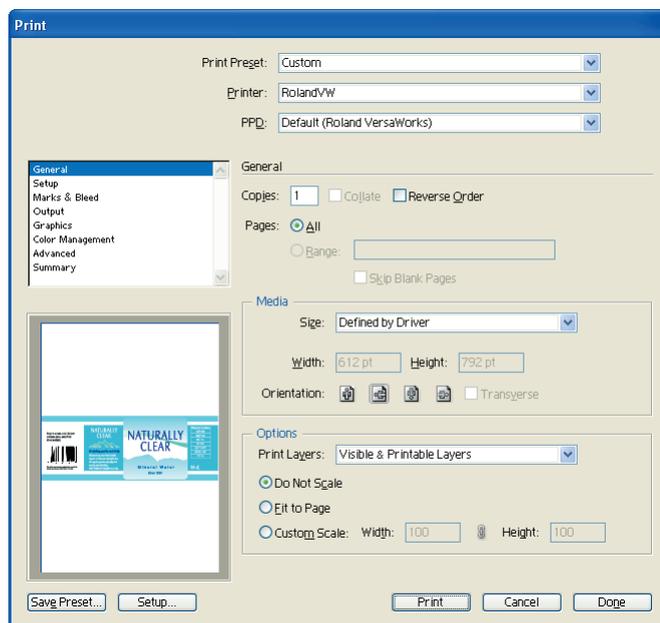
To save the **CMYK** layer of the image as a **PS** file (step 5 through 12):

5. By using the Layers palette, hide the "White" layer and display only the "Color" layer.



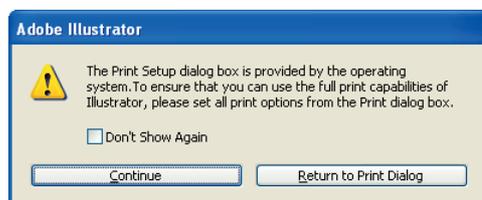
6. Select **[Print]** from the **[File]** menu.

The Adobe Illustrator's own [Print] dialog box is displayed.



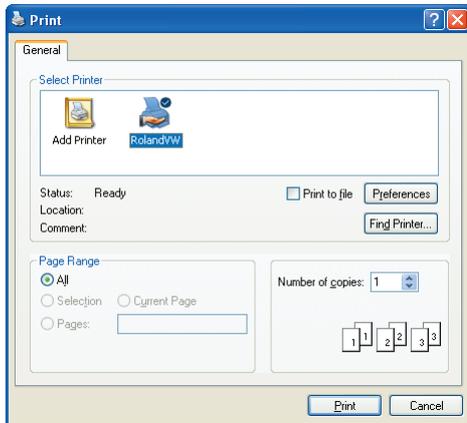
7. Click the down arrow to the right of the [Printer] box, click [RolandVW] from the list that appears, and then click **Setup** in the lower left corner of the dialog box.

A dialog box like the one shown below appears.



8. Click **Continue**.

The Windows general [Print] dialog box is displayed.

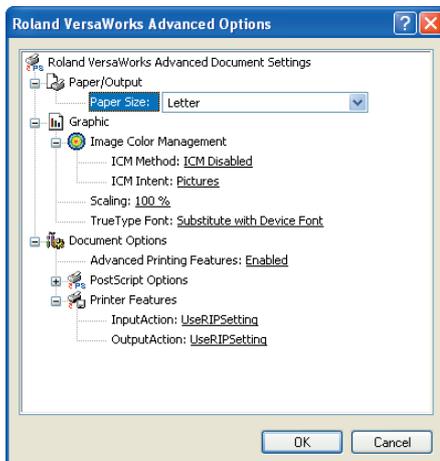


9. Perform the following operations in the Windows [Print] dialog box.

- 1 Turn on the [Print to file] option.
- 2 Click **Preferences**, and then click **Advanced** in the [Layout] tab.

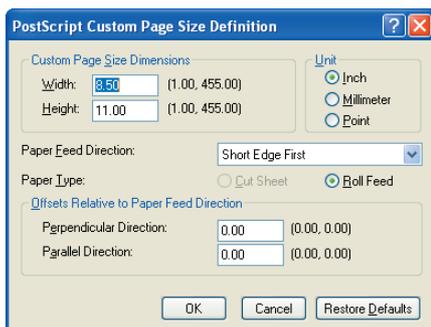
If you're using Windows 2000, click the [Layout] tab on the [Print] dialog box, and then click **Advanced** instead of the above operation.

The [Roland VersaWorks Advanced Options] dialog box appears.



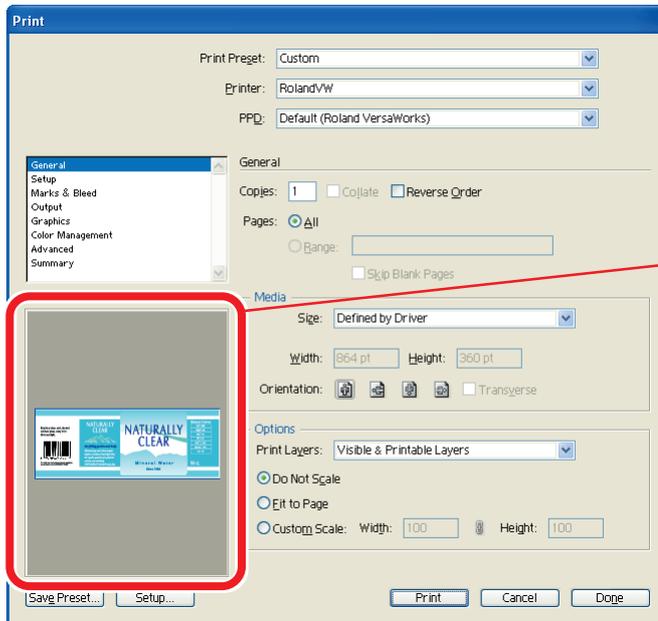
- 3 Click the down arrow to the right of the [Paper Size] box, and then click [PostScript Custom Page Size] from the list that appears.

The [PostScript Custom Page Size Definition] dialog box is displayed.



2-2 Creating Data for Printing

- 4 Enter appropriate values to [Width] and [Height] under [Custom Page Size Dimensions]. Make sure that you specify the values to fit the image you draw in step 1 through 4.
- 5 Click **OK** three times to close each of the dialog boxes and return to the Windows [Print] dialog box.
- 6 Click **Print**.
This returns to the Adobe Illustrator's [Print] dialog box.



The print preview image will be shown here. Check if the image fits the page size that you specified in step 4.

10. Click **Print**.

The [Print to File] dialog box appears.

11. Specify a location and a file name for saving the **CMYK** layer of the image as a **PS** file.

- For the location to save the PS file, specify "C:\white_print\" here. See "Creating a Folder for Saving PS Files" on page 3 for more information.
- For the file name, specify such a name as you can easily recognize the image and the layer (CMYK) contained in the file, for example, "label_color.ps".

12. Click **Save**.

The CMYK layer of the image is saved as a PS file.

To save the white layer of the image as a PS file (step 13 and 14):

13. By using the Layers palette, hide the "Color" layer and display only the "White" layer.



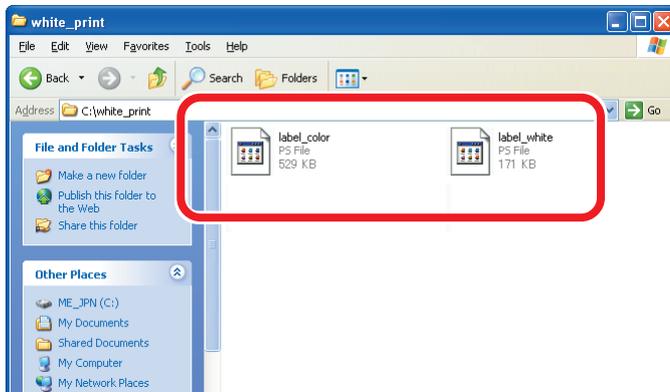
14. Perform the same operations as steps 6 through 12.

Important!

- Make sure that you specify the values for [Width] and [Height] under [Custom Page Size Dimensions] identical to those of the values you specify in step 9-4 for the CMYK layer of the image. If you specify wrong values, the white layer of the image won't be aligned precisely with the CMYK layer of the image when printed.
- When saving the white layer of the image as a PS file, locate it in the folder "C:\white_print\", which is the same one as you saved the PS file for the CMYK layer of the image in. Also, name the PS file like "label_white.ps", which name is easily recognized as the white layer of the image.

15. Open the folder that you specified for saving the PS files, and check if the PS files are correctly saved.

The following screen shows an example when you saved the PS files under "C:\white_print\".

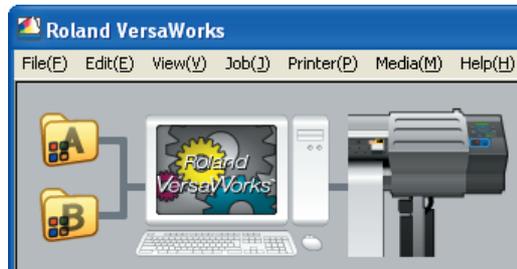


2-3 Making Default Settings for Printing (Using Queue Properties)

Queue Properties Overview

Before you start printing the PS files you saved under "2-2 Creating Data for Printing", you can make default settings such as selecting the media and mode for printing in the Roland VersaWorks program.

Roland VersaWorks has two "queue folders", labeled A and B, in its main window. You can assign a set of default print settings to each of these folders using the [Queue A (B) Properties] dialog box, which is displayed by double-clicking either of the queue folders.



In the following operations, you will use the queue folders as described below.

Queue folder A Use this folder to assign default settings for printing CMYK color data (that is, CMYK layer of the image).

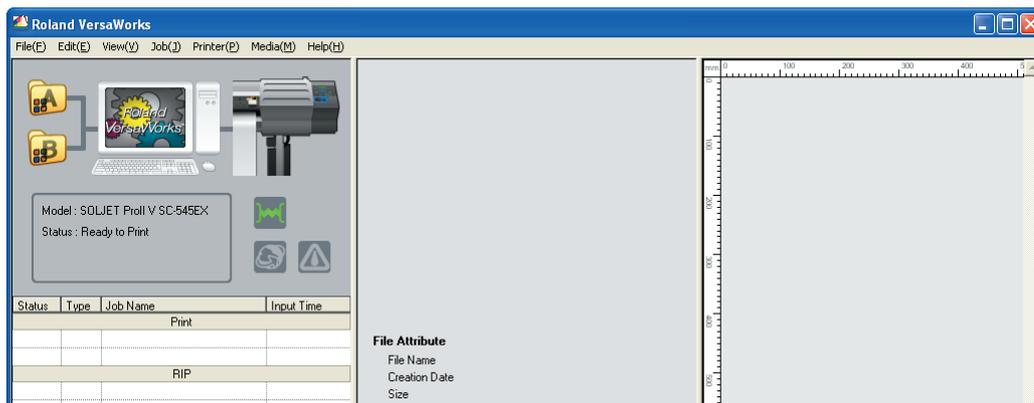
Queue folder B Use this folder to assign default settings for printing white data (that is, white layer of the image).

Note

It is possible to make changes to the default settings independently before printing each file by using the [Job Settings] dialog box for each of print jobs. Concepts and Operations of the [Job Settings] dialog box will be mentioned later under "2-4 Making Job Settings and Printing the image".

Operational Procedures

1. Start up Roland VersaWorks on your computer.



Check the printer model and status in the main window.

Printer model : SOLJET ProII V SC-545EX

Status : Ready to Print

For details about how to connect the printer to the computer that the Roland VersaWorks program installed, see "Roland VersaWorks Quick Start Guide" or the online help.

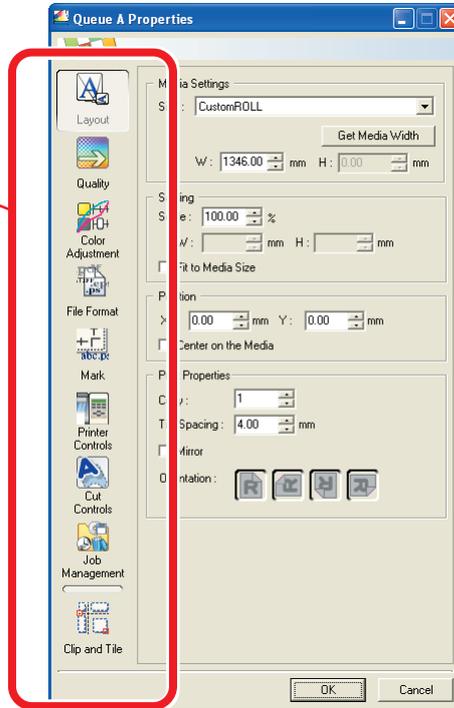
To assign default settings for printing CMYK color data to the Queue folder A (step 2 through 4):

2. Double-click .

The [Queue A Properties] dialog box is displayed.

Each of the icons shown in the left of the dialog box represents a group of related setup items.

By clicking one of the icons, the setup items contained in corresponding group are displayed in the right of the dialog box.



3. In the [Queue A Properties] dialog box, make the following settings.

Make sure that all the settings for the setup items other than listed below are left as their initial defaults.

Icon	Setup item	Setting
Layout	Mirror	On
Quality	Media Type	"Clear PET Film" or "PET Clear Film, Adhesive"
	Mode	CMYK (v) underWhite W-PASS
Printer Controls	Use Custom Settings	On
	Dry Time*	15 Minutes

* It is recommended that you use the optional media drier. The dry time setting here (15 minutes) applies when you use the media drier.

The following shows an example steps to change the settings included in the [Printer Controls] icon.

- 1 Click . The setup items displayed to the right changes to those related to controlling the printer.
- 2 Click the [Use Custom Settings] check box to turn this option on.
- 3 Select 15 (Minutes) for [Dry Time].

4. Click **OK to close the [Queue A Properties] dialog box.**

To assign default settings for printing white data to the Queue folder B (step 5 through 7):

5. Double-click .

The [Queue B Properties] dialog box is displayed.

6. In the [Queue B Properties] dialog box, make the following settings.

Make sure that all the settings for the setup items other than listed below are left as their initial defaults.

Icon	Setup item	Setting
Layout	Mirror	On
Quality	Media Type	"Clear PET Film" or "PET Clear Film, Adhesive"
	Mode	White (v) W-PASS
Printer Controls	Use Custom Settings	On
	Dry Time*	15 Minutes

* It is recommended that you use the optional media drier. The dry time setting here (15 minutes) applies when you use the media drier.

7. Click **OK to close the [Queue B Properties] dialog box.**

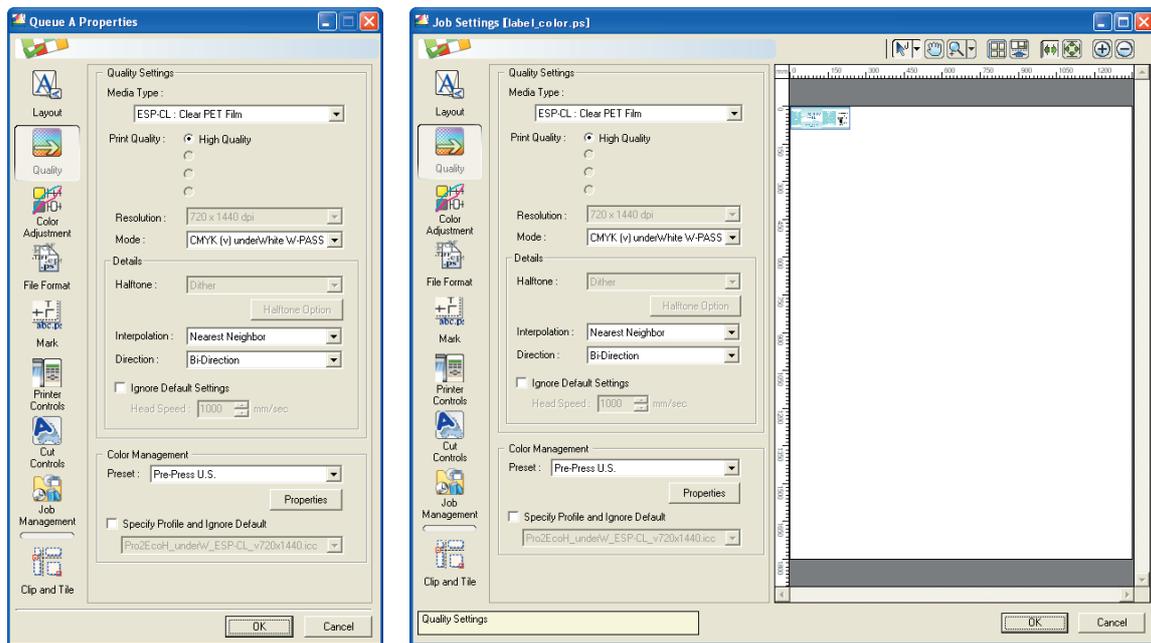
2-4 Making Job Settings and Printing the Image

Job Settings Overview

As described in "Queue Properties Overview" on page 30, you can make default settings for printing using the [Queue A (B) Properties] dialog box. By using the [Job Settings] dialog box, you can change the default settings independently for each of print jobs, before printing.

Registering default settings to the queue folders is a smart way especially when you print a large number of files that you can print in almost the same settings. Even if some of the files need slight changes to the default settings, you can easily make it by using the [Job Settings] dialog box for each of the files.

The following screens show examples of the [Queue A Properties] dialog box and the [Job Settings] dialog box. You can find that the contents of these two dialog boxes are identical except that the preview image for the corresponding job is indicated only in the [Job Settings] dialog box, in the right side of it.



[Queue A Properties] dialog box

[Job Settings] dialog box

You don't have to open the [Job Settings] dialog box when the file you print needs no change to the default settings you use to print it. Open the [Job Settings] dialog box as you think it's necessary to check or change the settings.

Setting Up the Printer (Do This Before You Print!)

Be sure to perform the following operations on the printer before you print. See the manual that comes with the printer for detailed information about how to operate the printer.

1. Press the [MENU] key and make the following settings.

- Set "EDGE DETECTION" to "DISABLE".
- Set "PREFEED" to "ENABLE".

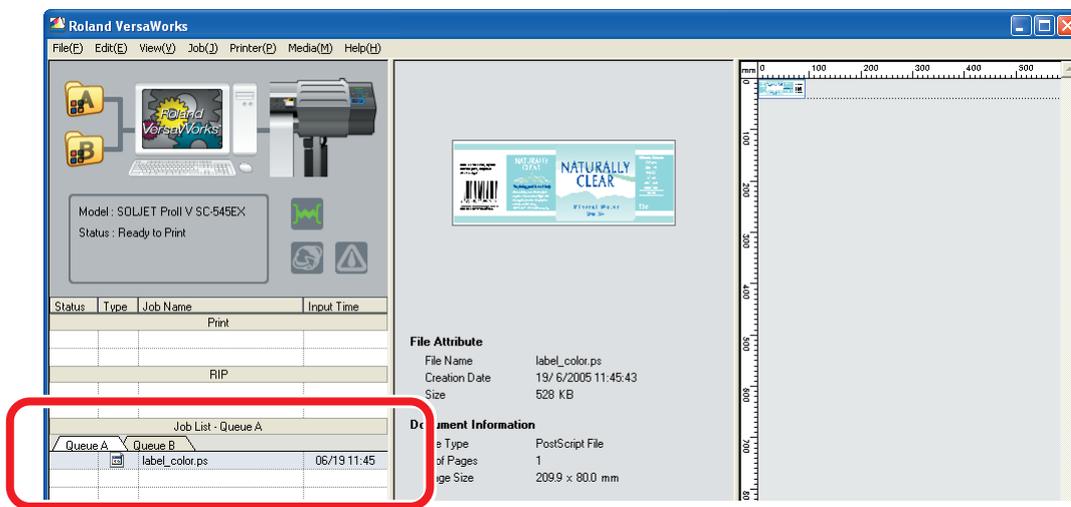
2. Load transparent media into the printer.

- When the media you are loading into the printer warps or partially floats from the platen, load it into the printer so that its front end goes about 20 cm (8 in.) from the starting edge of the print area.
- Be sure to use the media clamps when you load media.

Printing CMYK Color Data

To add the PS file that contains the CMYK layer of the image to the Queue A Job List (step 1 through 3)

1. Click the [Queue A] tab in the main window so that the title above the tab changes to "Job List - Queue A".
2. Hold down the PS file "label_color.ps", which you have created by following the operations under "2-2 Creating Data for Printing" on page 23.
3. Drag the file in the job list, and then drop it (release the mouse button).



The file "label_color.ps" appears in the Queue A Job List, which means the file is added to the job list as a new print job.

To change the print settings for the job (step 4 through 7)

4. In the Queue A Job List, double-click the file "label_color.ps".

The [Job Settings] dialog box for the file is displayed.

5. Click .

The setup items displayed to the right changes accordingly.

6. Select [Print Only] from the [Operation Mode] box, and then turn the [Return to Origin After Print] option on.

7. Click **OK** to close the [Job Settings] dialog box.

To print the **CMYK** layer of the image (step 8)

8. Click  to start printing the file.

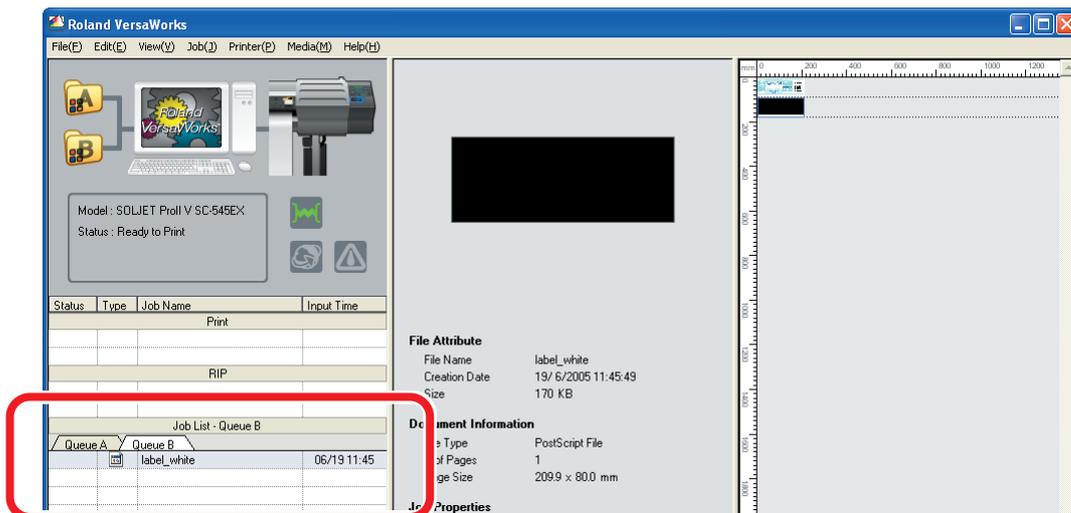
- After printing is complete, it takes approximately 15 minutes to dry out the media.
- When the media is dried out, it will return to the original position automatically, according to the settings you made in step 4 through 7. This makes it possible to print white data on the media successively.

Printing White Data

1. Click the [Queue B] tab in the main window so that the title above the tab changes to "Job List - Queue B".

2. Hold down the PS file "label_white.ps", which you have created by following the operations under "2-2 Creating Data for Printing" on page 23.

3. Drag the file in the job list, and then drop it (release the mouse button).



The file "label_white.ps" appears in the Queue B Job List with it is highlighted.

Note

You can use the default settings stored in Queue B Properties as they are. Because of this, it's not necessary to open the [Job Settings] dialog box here.

4. Click  to start printing the file.

- After printing is complete, it takes approximately 15 minutes to dry out the media.

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