

 Roland



Adobe® PostScript® 3™



VersaUV
PRINT & CUT

LEC-300A LEC-330

White & Gloss Ink Guide

Roland DG Corporation

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This document is the user's manual for VersaUV series. Also, most of the figures in this document depict LEC-330.

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Chapter 1

Getting Started

1-1 What This Document Assumes and Related Manuals

What This Document Assumes

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

- Assembling and installing VersaUV series printers
- Installing VersaWorks on your computer, and connecting the computer to the VersaUV series via a network

Related Manuals

Read the following documentation for information about setting up the VersaUV series printer and VersaWorks.

(1) Setup Guide

This manual covers details about how to use the VersaUV series, including how to set up the printer and where to locate the printer, etc. Be sure to read this manual.

(2) User's Manual

This manual describes operation methods in detail. After you've read the VersaUV series Setup Guide, be sure to read this manual.

(3) VersaWorks Quick Start Guide

This manual explains basic operations of 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.

1-2 White Ink Features and Printing Methods

Features of White Ink

The exclusive white ink that this printer uses achieves high density and concealment, and is capable of providing attractive results when white and CMYK colors are overprinted. This ink is suited to printing on transparent media, and can be used it to create items for shop interiors and displays, PET bottles and other packages, decals, and more.

Methods of Printing Using White Ink

Printing using white and CMYK ink

When you're printing using white and CMYK color inks, this printer runs the areas that use the white ink and the CMYK color inks simultaneously, in a single pass, so stable, highly intricate printing having no misalignment due to feed is possible. When you're printing using transparent media, you can create results intended to be viewed from the back (the side opposite the printed surface) by reversing the image and changing the sequence in which white and CMYK colors are printed.

☞ P. 18, "Printing White and CMYK ink in a Single-Pass"

Printing White Only or CMYK Colors Only

You can also perform printing using only white ink or only CMYK color inks.

To display the side opposite the printed surface, you can take such action as printing a mirror image of the artwork.

☞ P. 22, "Printing Using Only White Ink," and p. 23, "Printing Using Only CMYK Inks"

1-3 Gloss Ink Features and Printing Methods

Features of Gloss Ink

The exclusive Gloss ink that this printer uses is colorless and transparent, and can impart a glossy feel to the printed item, as well as enhancing weatherability and robustness.* Also, depending on the printing settings, you can even deliberately eliminate glossiness and produce a matte finish, or perform fill overprinting using gloss ink to raise the printed surface and create an embossed finish.

* Glossiness, weatherability, and robustness may vary depending on the media used, the environment, and other printing conditions.

Methods of Printing Using Gloss Ink

Gloss-finish Printing

This printing method imparts a glossy finish to the printed item. When you're overprinting an item already printed using white or CMYK color inks, you pull back the printed item and perform one pass of fill overprinting with gloss ink. Printing using only gloss ink is also possible. Forming a coating of gloss ink imparts a glossy finish and can also achieve high weatherability and robustness.

⇒ P. 24, "Gloss-finish Printing (White or CMYK Colors ⇒ Gloss)," and p. 32, "Printing Using Only Gloss Ink"

Matte-finish Printing

This printing method eliminates glossiness and produces a restful matte finish. When you're overprinting an item already printed using white or CMYK color inks, you pull back the printed item and perform one pass of fill overprinting with gloss ink. Printing using only gloss ink is also possible. Single-pass printing using CMYK and gloss inks is also possible.* This perform fill overprinting of white and CMYK colors with gloss ink, which makes it possible to produce results where glossiness is suppressed while weatherability and robustness are enhanced.

* Single-pass printing of white ink and gloss ink is not possible.

⇒ P. 26, "Matte-finish Printing (White or CMYK Colors ⇒ Gloss)," p. 28, "Matte-finish Printing (Single-pass Printing Using Gloss and CMYK Color Inks)," and p. 32, "Printing Using Only Gloss Ink"

Embossed-finish Printing

This printing method can produce items that have a three-dimensional feel by performing fill overprinting of the item using gloss ink. You determine the height to which the printed surface is raised by setting the number of fill-overprint passes in VersaWorks. After performing fill-overprinting by this specified number of passes, the item is overprinted one last time using gloss ink to produce a gloss finish. When you're overprinting an item already printed using white or CMYK color inks, you pull back the printed item and perform fill overprinting with gloss ink. Printing using only gloss ink is also possible.

⇒ P. 29, "Embossed-finish Printing (White or CMYK Colors ⇒ Gloss)," and p. 32, "Printing Using Only Gloss Ink"

Chapter 2

Getting Ready

2-1 Preparing VersaWorks

Starting VersaWorks

Start VersaWorks on the computer you're using.

Procedure

- 1 From the [Start] menu, click [All programs (or Programs)] - [Roland VersaWorks] - [Roland VersaWorks].
Main window appears.



Check to make sure that "Model (or Nickname) of Your Printer" is displayed on the upper left of the main screen, and that "Status" is set to "Ready to Print."

Creating a Folder for Saving PS Files

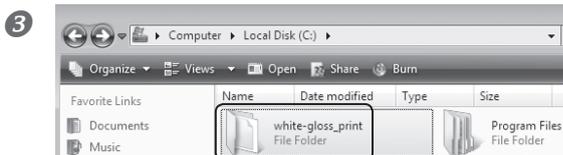
Before you actually print an image you draw using application software such as Adobe Illustrator, it is necessary to save the image as a PS file (s). And then, you can print the image by loading the PS file (s) on VersaWorks. Because of this, you should create a folder for saving PS files in advance.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

Procedure

- 1 Open [Computer] (or [My Computer]), and then open [Local Disk (C:)].



On the [Organize] menu, click [New Folder]. (Or on the [File] menu, click [New], and then click [Folder].)



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

2-2 Preparing Printing Data

Basic Approach for Creating Printing Data

When you want to print using white ink

Apply the spot color named "RDG_WHITE" to the areas you want to print using white ink.

When you want to print using gloss ink

Apply the spot color named "RDG_GLOSS" to the areas you want to print using gloss ink.

Creating Data for Printing

Create the data for printing using white ink and gloss ink.

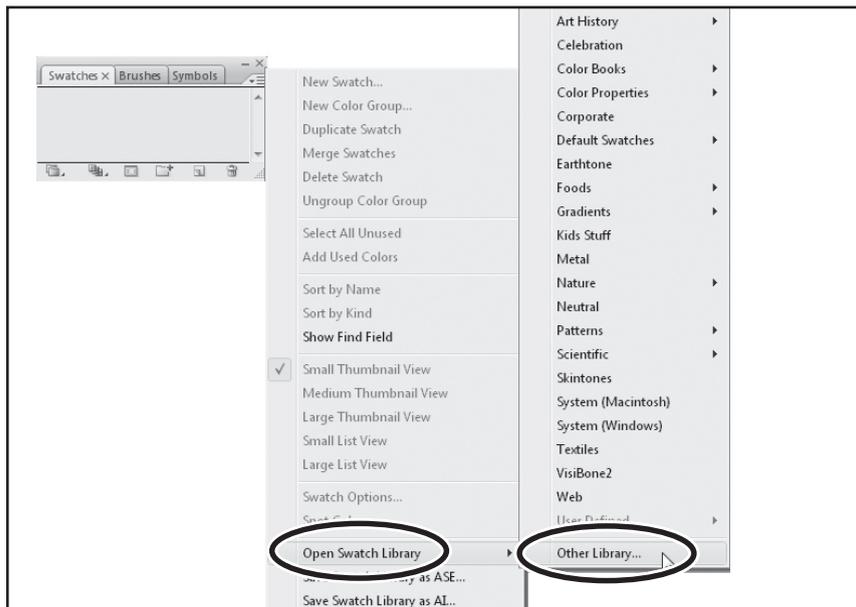
The program used to create the printing data is Adobe Illustrator CS3. For detailed information on drawing methods and how to work with palettes, refer to the documentation or online help for Adobe Illustrator CS3. If you're using another version of Adobe Illustrator, operations may be somewhat different from those explained here.

1. Open the exclusive swatch library

1 At the swatch palette menu, select [Open Swatch Library], then [Other Library].

The "Select a Library to open" window appears.

*The swatch palette is displayed by going to the menu and selecting [Window], then [Swatch].



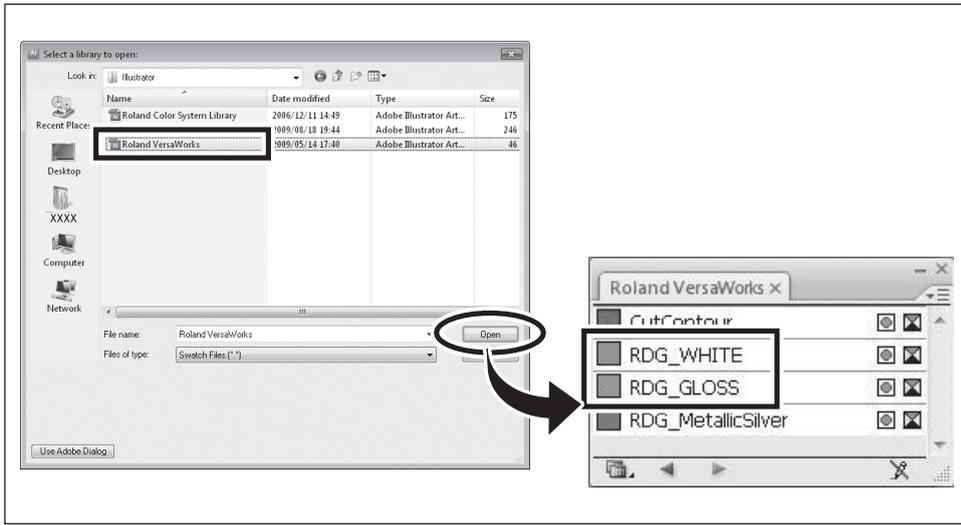
2-2 Preparing Printing Data

- ② ① **Open folder in the order of [Computer] (or [My Computer]) → [Local Disk (C:)] → [Program Files] → [Roland VersaWorks] → [Swatch] → [Illustrator], then select "Roland VersaWorks.ai."**

Depending on the settings of your computer, the extension ".ai" might not be shown.

- ② **Click [Open].**

The swatch library containing "RDG_WHITE" and "RDG_GLOSS" is displayed.



Note: By saving the "Roland VersaWorks.ai" file into the folder below, you can register each swatch library to the Adobe Illustrator's library.

C:\Program Files\Adobe\Adobe Illustrator CS3\Preset\Swatch
("C" is the name of your computer's local disk.)

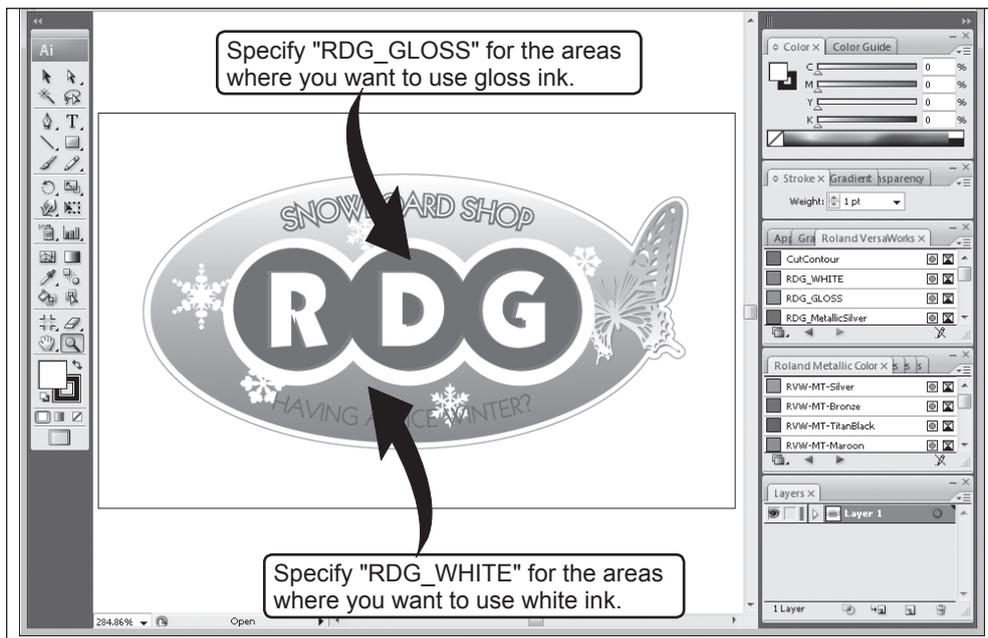
2 Create the illustration, and specify the spot color that matches the color you want to print.

1 Create the illustration.

Note: Be sure to draw the illustration in the CMYK mode.

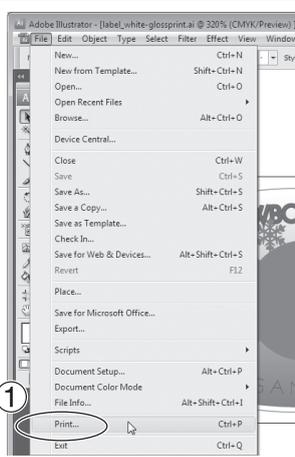
2 Specify each spot color that matches the color you want to print.

Desired ink or color	Spot color name
White ink	RDG_WHITE
Gloss ink	RDG_GLOSS



3. Create the PS (PostScript) file.

1

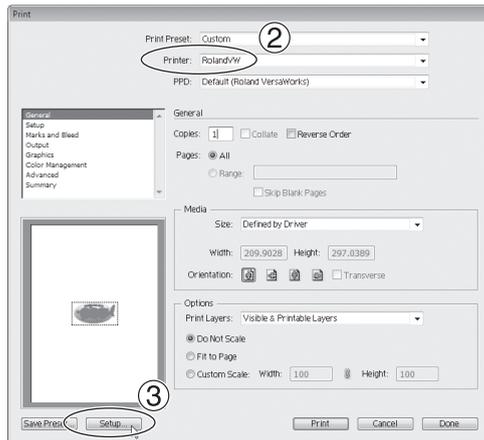


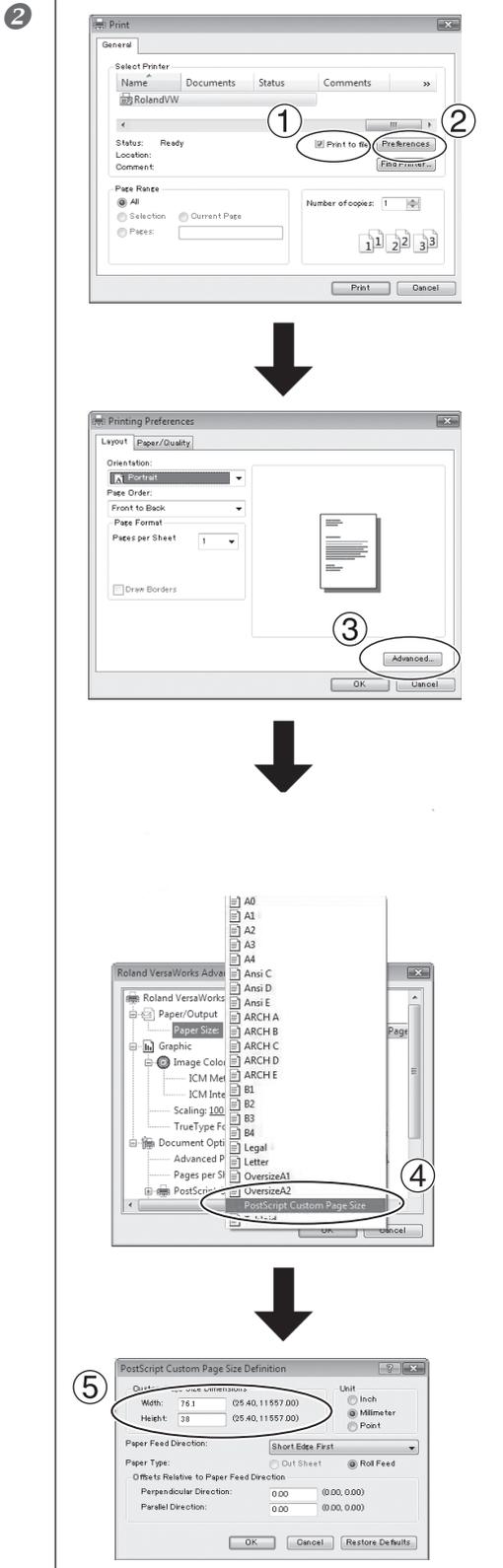
1 Select [Print] from the [File] menu.

2 Select [Roland VW].

3 Click [Setup].

4 Click [Continue].





① Turn on the [Print to file] option.

② Click [Preferences].

③ Click [Advanced] in the [Layout] tab.

For Windows 2000: In the "Print" dialog box (the window at the very top of this page), go to the "Layout" tab and click [Advanced].

④ Click the down arrow to the right of the [Paper Size] box, and then click [PostScript Custom Page Size] from the list that appears.

⑤ For "Custom Page Size Dimensions," enter the values in the "Width" and "Height" fields.

Enter values for the same size as the illustration you created in step 2.

2-2 Preparing Printing Data

- 3 Click [OK] three times to close the "PostScript Custom Page Size Definition," "Roland VersaWorks Advanced Options," and "Printing Preferences" dialog boxes.

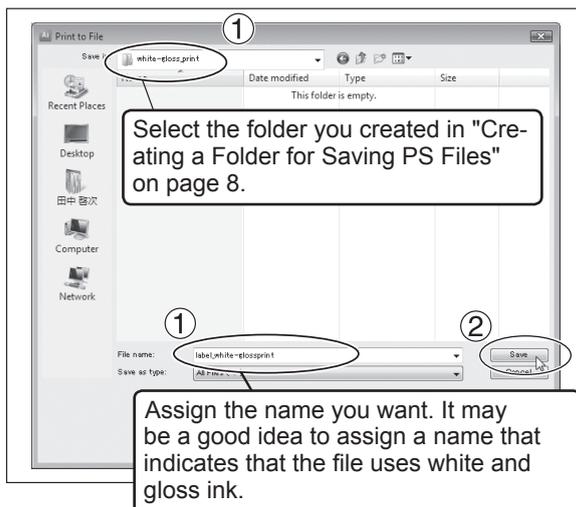
The "Print" dialog box returns.

4



① Click [Print].

② Click [Print].



① Specify the destination and file name for saving, then save the file.

Example: " C:\white-gloss_print " for the folder to save to, and " label_white-glossprint.ps " as the file name

② Click [Save].

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

- 6 Open the folder you saved to and make sure the file has been created.

2-3 Printer Preparations

Making the Printer Settings and Loading Media

When Using Transparent Media

When you're using transparent media, make the necessary printing settings on the printer and load the media accordingly.

Procedure

- 1 Press **MENU** on the printer and make the following settings.
[EDGE DETECTION] 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.

When Using Media Other Than Transparent Media

Load the media using the method described in the User's Manual of your printer.

Chapter 3

Printing

3-1 Printing Using White or CMYK Color Inks

Printing White and CMYK Color Inks in a Single-Pass

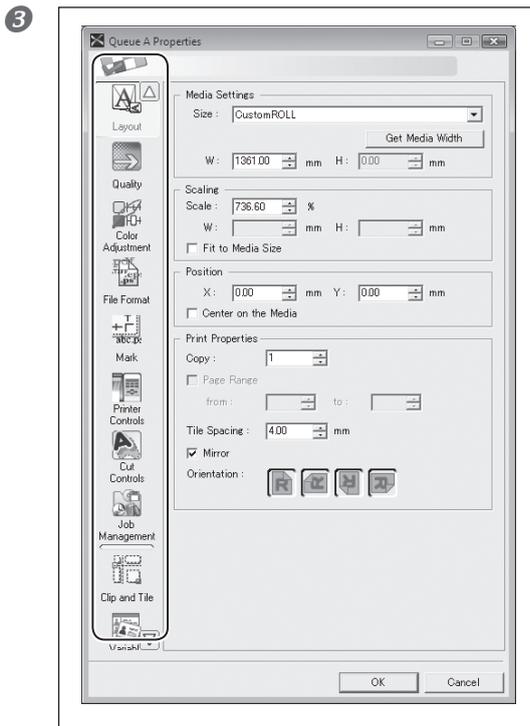
This section describes how to perform printing using both white ink and CMYK color inks. This method prints CMYK color data and white data in a single pass, but you vary the printing settings depending on how the finished results are you be viewed (the printed surface or the side opposite the printed surface) and on which type of ink is the undercoat.

Procedure

- 1 **Make sure that you have finished making the preparations for VersaWorks, creating the printing data, and getting the printer ready (⇨ page 7, "Chapter 2 Getting Ready").**



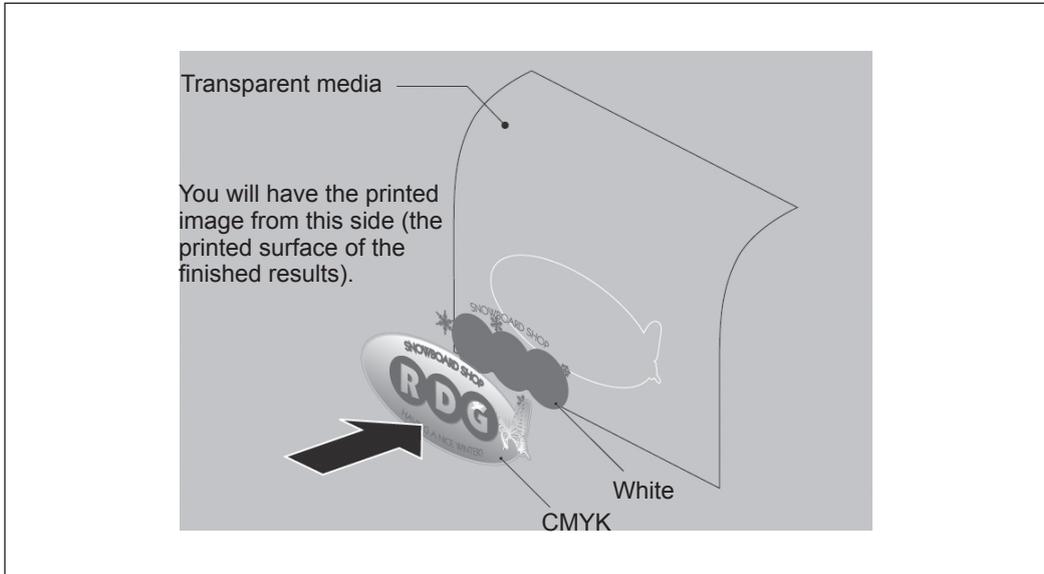
Double-click . "Queue A Properties" window appears.



At the "Queue A Properties" window, make the basic settings for printing.

Clicking an icon on the left side of the window switches what is displayed on the right side. Refer to the table following and make the settings for the respective items.

When You Want to Display the Printed Surface of the Finished Results (White Ink Undercoat)



Note: The white and the CMYK color inks are printed in a single-pass, but are shown here as separate layers in order to indicate the printing sequence.

Icon	Setting Item	Setting
 Layout	Mirror	Off
 Quality	Media Type	Generic or Generic High-opacity White(*1)
	Mode	White -> CMYK, or White -> CMYK (v)(*2)
 Cut Controls	Operation Mode	Print Only
	Return to Origin After Print	Off

(*1)

About "Generic High-opacity White"

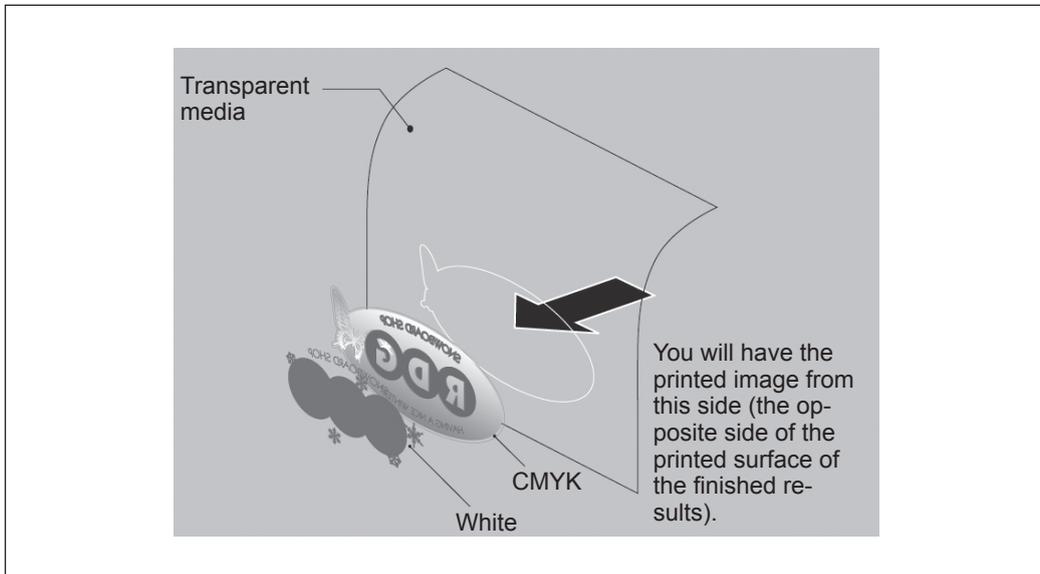
- It makes possible output of white of higher opacity than "Generic."
- This option can be selected only in the ink mode (CMYKWW) that uses two white ink cartridges. This option cannot be selected on LEC-300A.

(*2)

When you want to make CMYK color inks the undercoat, even in cases you want to display the printed surface of the finished results to be the surface displayed, select the "CMYK -> White" or "CMYK -> White (v)" setting.

After making the settings, click [OK] to close the "Queue A Properties" window.

When You Want to Display the Side Opposite the Printed Surface of the Finished Results (CMYK Undercoat)



Note: The white ink and the CMYK color inks are printed in a single-pass, but are shown here as separate layers in order to indicate the printing sequence.

Icon	Setting Item	Setting
 Layout	Mirror	On
 Quality	Media Type	Generic or Generic High-opacity White (*1)
	Mode	CMYK -> White, or CMYK -> White (v) (*2)
 Cut Controls	Operation Mode	Print Only
	Return to Origin After Print	Off

(*1)

About "Generic High-opacity White"

- It makes possible output of white of higher opacity than "Generic."
- This option can be selected only in the ink mode (CMYKWW) that uses two white ink cartridges. This option cannot be selected on LEC-300A.

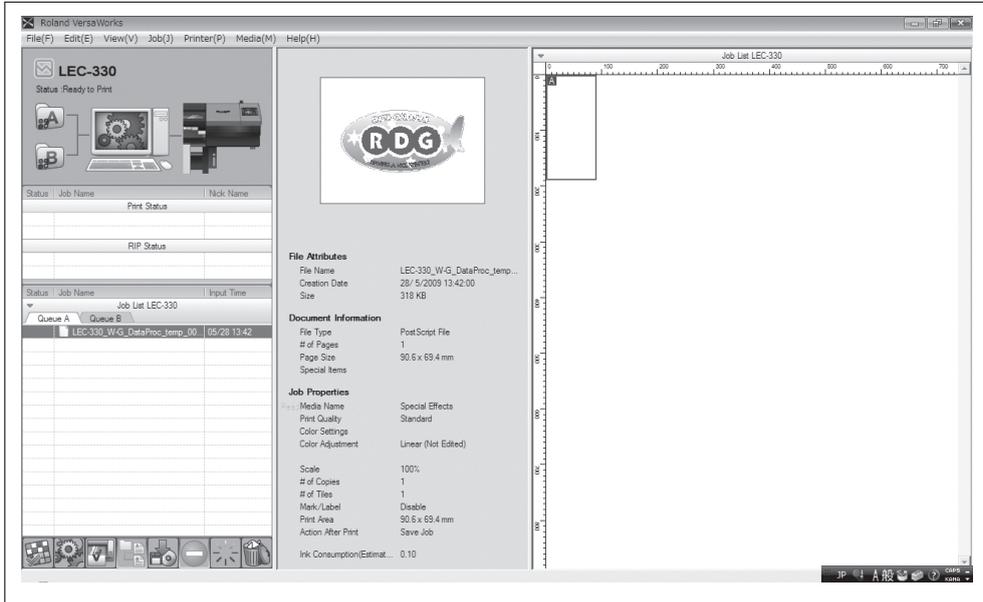
(*2)

When you want to make the white ink undercoat, even in cases the side opposite the printed surface of the finished results is to be the surface displayed, select the "White -> CMYK" or "White -> CMYK (v)" setting.

After making the settings, click [OK] to close the "Queue A Properties" window.

- 4 Go to "Job List" and click the "Queue A" tab, and drag the print job you created in "Creating Data for Printing" on page 9 to the queue A job list.

The contents of the file are displayed in the preview window, and the layout on the media is displayed in the layout window. Areas using "RDG_WHITE" are displayed with shading in transparent magenta.



- 5 Carry out printing.

Click the print job in the job list on the Queue A tab to select it, then click .

Printing Using Only White Ink

Procedure

- 1 Make sure that you've finished making the preparations for VersaWorks and getting the printer ready** (☞ page 7, "Chapter 2 Getting Ready").
- 2 Prepare the printing data.**
Using a program such as Adobe Illustrator, create the data for printing white only. When creating the data, remember to specify "RDG_WHITE" as the color.
☞ P. 7, "Creating Data for Printing"
- 3 Make the settings in the "Queue A Properties" window.**
Double-click , and in the "Queue A Properties" window that appears, make the basic settings for printing as shown following.

Icon	Setting item	Setting
 Layout	Mirror	On (*1)
 Quality	Media Type	Generic or Generic High-opacity White (*2)
	Mode	White, or White (v)
 Cut Controls	Operation Mode	Print Only
	Return to Origin After Print	Off

(*1)

Change the setting depending on whether you want to display the printed surface of the finished results or the side opposite the printed surface.

(*2)

About "Generic High-opacity White"

- It makes possible output of white of higher opacity than "Generic."
- This option can be selected only in the ink mode (CMYKWW) that uses two white ink cartridges. This option cannot be selected on LEC-300A.

After making the settings, click [OK] to close the "Queue A Properties" window.

- 4 Go to the job list and click the "Queue A" tab, and drag the white-only print job to the queue A job list.**
- 5 Carry out printing of white data only.**
Click the print job in the job list on the Queue A tab to select it, then click .

Printing Using Only CMYK Inks

Procedure

- 1 **Make sure that you've finished making the preparations for VersaWorks and getting the printer ready** (see page 7, "Chapter 2 Getting Ready").
- 2 **Prepare the printing data.**
Using a program such as Adobe Illustrator, create the data for printing CMYK colors only.
- 3 **Make the settings in the "Queue A Properties" window.**
Double-click , and in the "Queue A Properties" window that appears, make the basic settings for printing as shown following.

Icon	Setting item	Setting
 Layout	Mirror	On (*1)
 Quality	Media Type	Generic or Generic High-opacity White (*2)
	Mode	CMYK, or CMYK (v)
 Cut Controls	Operation Mode	Print Only
	Return to Origin After Print	Off

(*1)

Change the setting depending on whether you want to display the printed surface of the finished results or the side opposite the printed surface.

(*2)

About "Generic High-opacity White"

➤ The output results are the same whether "Generic" or "Generic High-opacity White" is selected.

➤ This option can be selected only in the ink mode (CMYKWW) that uses two white ink cartridges. This option cannot be selected on LEC-300A.

After making the settings, click [OK] to close the "Queue A Properties" window.

- 4 **Go to the job list and click the "Queue A" tab, and drag the CMYK-only print job to the queue A job list.**
- 5 **Carry out printing of CMYK color data only.**
Click the print job in the job list on the Queue A tab to select it, then click .

3-2 Printing Using Gloss Ink

Gloss-finish Printing (White or CMYK Colors ⇒ Gloss)

This section describes the printing method that produces a glossy finish on the printed item. After performing printing using white and CMYK color data, it pulls back the media, then performs fill over-printing using gloss ink. This means that the setting must be made to pull back the media after printing the white and CMYK color data.

Procedure

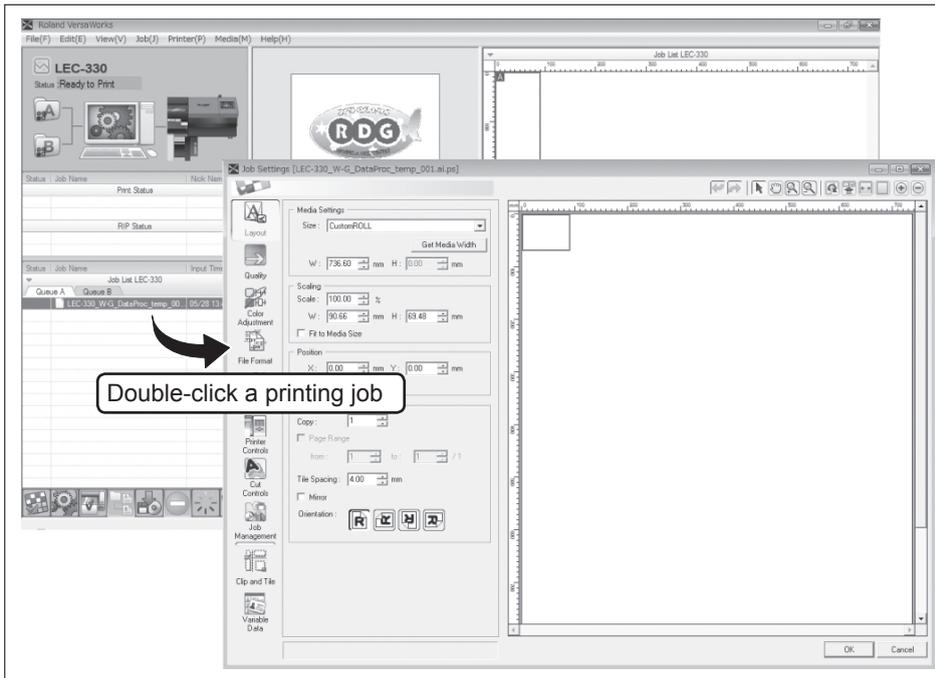
- 1 Make the setting to pull back the media after printing, then perform printing of the white and CMYK color data.**

Carry out printing according to the procedure for printing white or CMYK color data described in "3-1 Printing Using White or CMYK Color Inks" on page 18. At this time, in addition to the settings described, also make the setting to pull back the media after printing.

Icon	Setting item	Setting
 Cut Controls	Return to Origin After Print	On

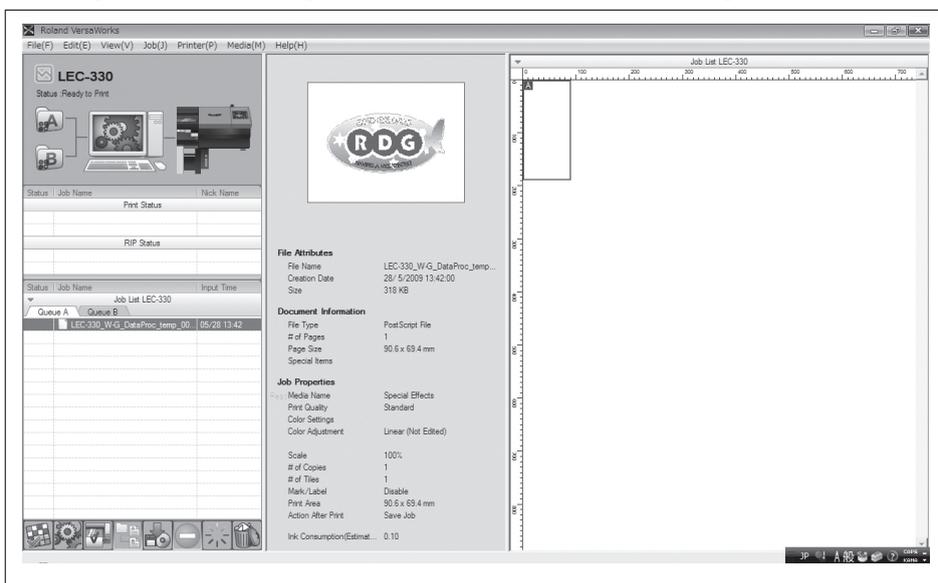
- 2 At "Job Settings," make the settings for printing using gloss ink.**

Double-click the print job in the job list on the Queue A tab, and in the "Job Settings" window that appears, make the settings as shown following.



Icon	Setting item	Setting
 Quality	Media Type	Special Effects
	Mode	GlossVarnish (v)
 Cut Controls	Operation Mode	Print Only
	Return to Origin After Print	Off

After making the settings, click [OK] to close the "Job Settings" window. The contents of the file are displayed in the preview window, and the layout on the media is displayed in the layout window. Areas using "RDG_WHITE" are displayed with shading in transparent magenta, and areas using "RDG_GLOSS" are displayed with shading in transparent cyan.



3 Carry out gloss-finish printing using gloss ink.

Click the print job in the job list on the Queue A tab to select it, then click .

This prints only the gloss-ink areas of the print job.

Matte-finish Printing (White or CMYK Colors ⇨ Gloss)

This section describes the printing method that produces a matte finish on the printed item. After performing printing using white and CMYK color data, it pulls back the media, then performs overprinting using gloss ink. This means that the setting must be made to pull back the media after printing the white and CMYK color data.

Procedure

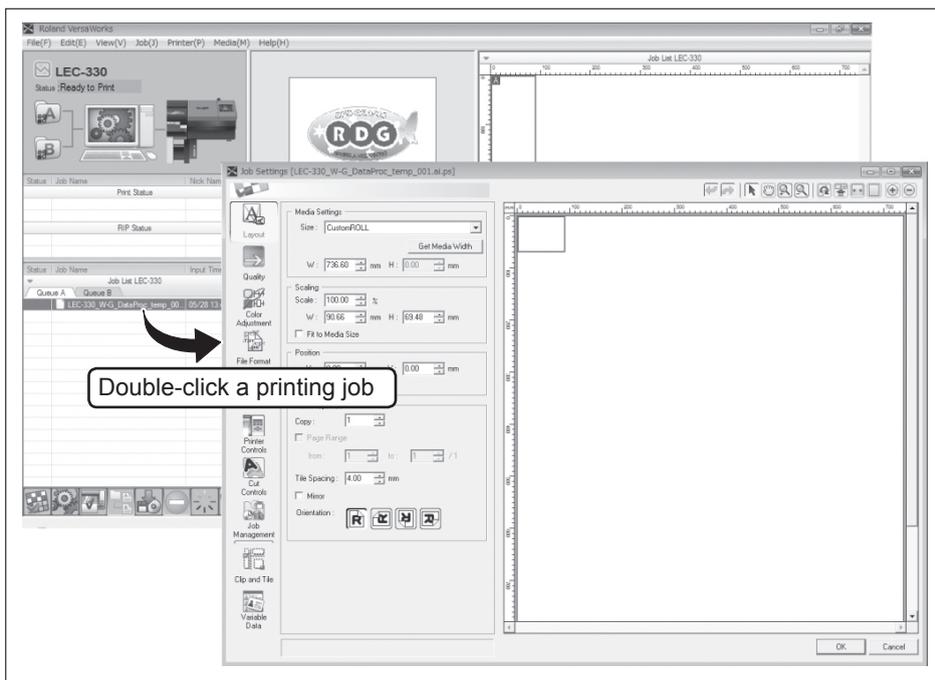
- 1 Make the setting to pull back the media after printing, then perform printing of the white and CMYK color data.**

Carry out printing according to the procedure for printing white or CMYK color data described in "3-1 Printing Using White or CMYK Color Inks" on page 18. At this time, in addition to the settings described, also make the setting to pull back the media after printing.

Icon	Setting item	Setting
	Return to Origin After Print	On

- 2 At "Job Settings," make the settings for printing using gloss ink.**

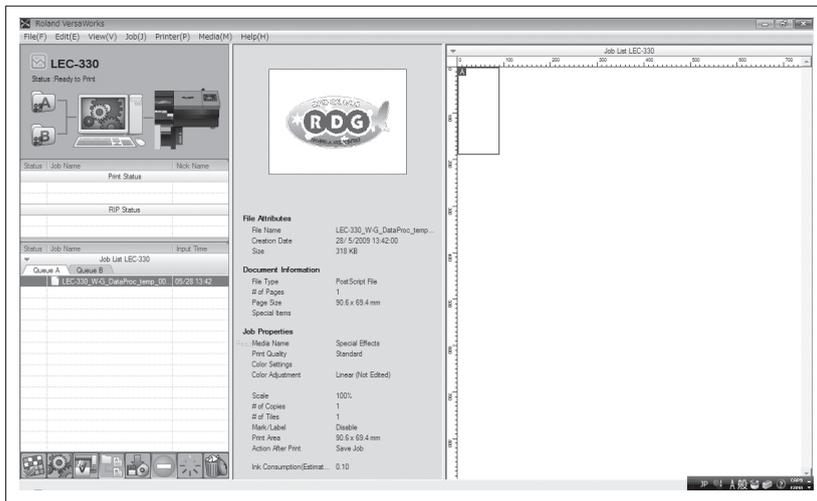
Double-click the print job in the job list on the Queue A tab, and in the "Job Settings" window that appears, make the settings as shown following.



Icon	Setting item	Setting
 Quality	Media Type	Special Effects
	Mode	MatteVarnish (v)
 Cut Controls	Operation Mode	Print Only
	Return to Origin After Print	Off

After making the settings, click [OK] to close the "Job Settings" window.

The contents of the file are displayed in the preview window, and the layout on the media is displayed in the layout window. "RDG_WHITE" are displayed with shading in transparent magenta, and areas using "RDG_GLOSS" are displayed with shading in transparent cyan.



3 Carry out matte-finish printing using gloss ink.

Click the print job in the job list on the Queue A tab to select it, then click .

This prints only the gloss-ink areas of the print job.

Matte-finish Printing (Single-pass Printing Using Gloss and CMYK Color Inks)

This section describes how to perform single-pass printing using gloss and CMYK color inks. This printing method produces only a matte finish. Single-pass printing using white ink is not possible.

Procedure

- 1 **Make sure that you've finished making the preparations for VersaWorks and getting the printer ready** (see page 7, "Chapter 2 Getting Ready").
- 2 **Prepare the printing data.**
Using a program such as Adobe Illustrator, create data for single-pass printing using gloss and CMYK color inks. When creating the data, remember to specify "RDG_GLOSS" as the color.
see P. 7, "Creating Data for Printing"
- 3 **Make the settings in the "Queue A Properties" window.**
Double-click , the "Queue A Properties" window that appears, make the basic settings for printing as shown following.

Icon	Setting item	Setting
 Quality	Media Type	Generic with Special Effects
	Mode	CMYK -> MatteVarnish, or CMYK -> MatteVarnish (v)
 Cut Controls	Operation Mode	Print Only
	Return to Origin After Print	Off

After making the settings, click [OK] to close the "Queue A Properties" window.

- 4 **Go to Job List and click the "Queue A" tab, and drag the print job for gloss and CMYK color inks to the queue A job list.**
- 5 **Carry out single-pass printing using gloss and CMYK color inks.**
Click the print job in the Job list on the Queue A tab to select it, then click .

Embossed-finish Printing (White or CMYK Colors ⇒ Gloss)

This section describes the printing method that produces an embossed finish by raising the printed surface through fill overprinting using gloss ink. After performing printing using white and CMYK color data, it pulls back the media, then performs fill overprinting using gloss ink. This means that the setting must be made to pull back the media after printing the white and CMYK color data.

You use VersaWorks to set the number of fill-overprinting passes using gloss ink. The unit performs matte-finish fill overprinting for the specified number of passes, then performs overprinting one additional time to give the surface a glossy finish. This means that the number of fill-overprint passes using gloss ink is equal to the number set using VersaWorks plus one.

Procedure

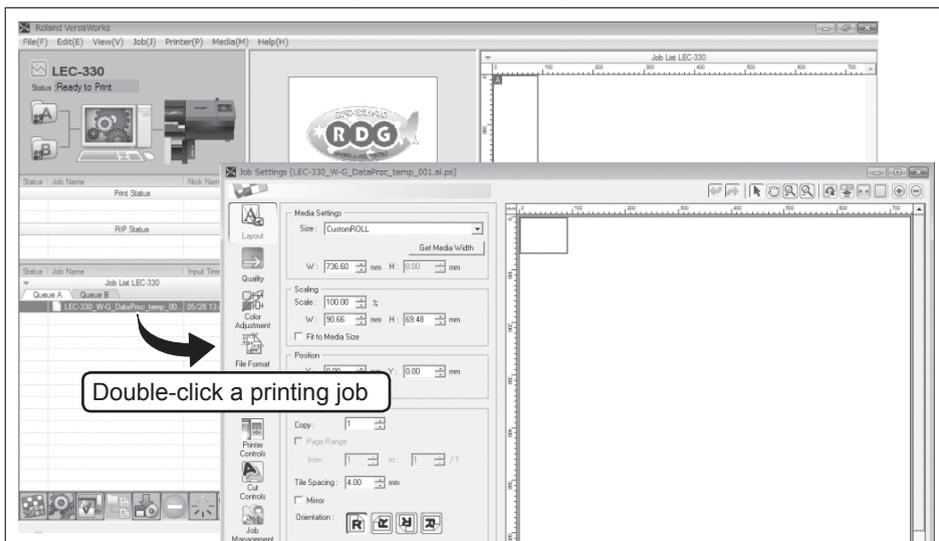
- 1 Make the setting to pull back the media after printing, then perform printing of the white and CMYK color data.**

Carry out printing according to the procedure for printing white or CMYK color data described in "3-1 Printing Using White or CMYK Color Inks" on page 18. At this time, in addition to the settings described, also make the setting to pull back the media after printing.

Icon	Setting item	Setting
	Return to Origin After Print	On

- 2 At "Job Settings," make the settings for printing using gloss ink.**

Double-click the print job in the job list on the Queue A tab, and in the "Job Settings" window that appears, make the settings as shown following.



3-2 Printing Using Gloss Ink

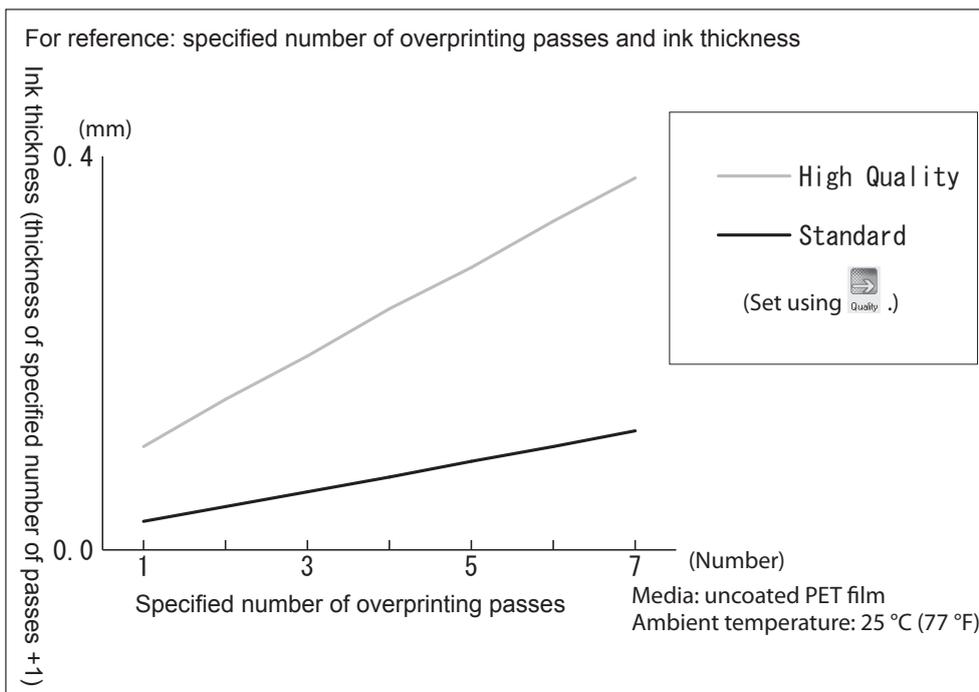
Icon	Setting item	Setting
 Quality	Media Type	Special Effects
	Mode	Embossing (v)
 Printer Controls	Use Custom Settings	On
	Overprint*	<For LEC-330> 1 to 7 times <For LEC-300A> 1 to 10 times
 Cut Controls	Operation Mode	Print Only
	Return to Origin After Print	Off

Note: The specified number of overprinting passes and ink thickness

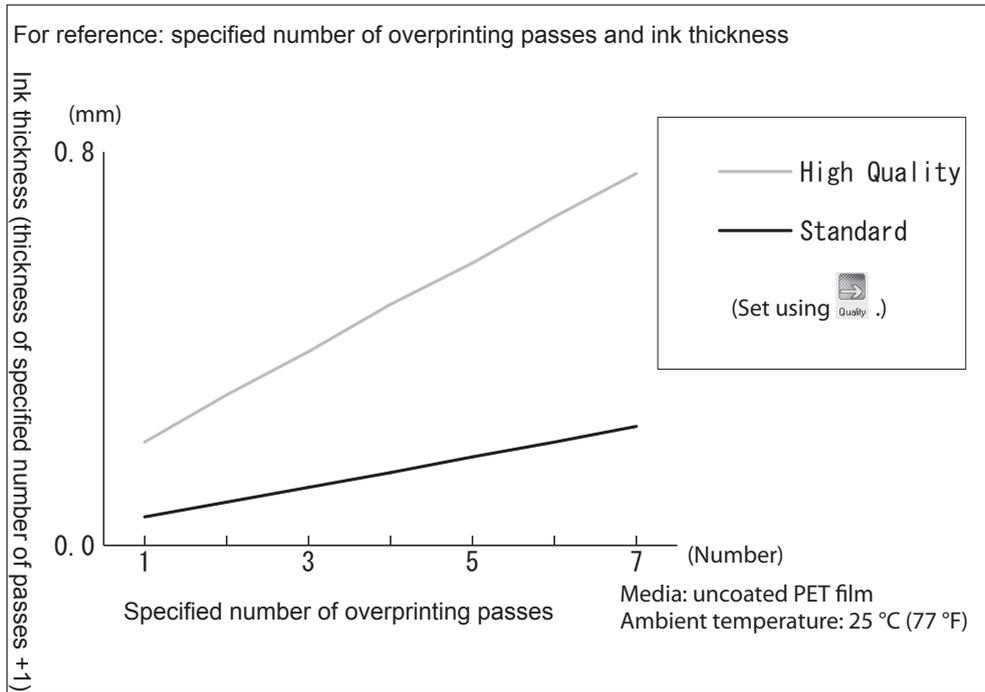
Refer to the graph below.

- The number of overprint passes for an embossed finish is the specified number of passes plus one.
- The ink thickness based on the specified number of overprint passes varies according to the type of media used and the printing environment.
- Depending on the specified number of overprint passes and the type of media used, the print heads may scrape the printed surface, or media jams may occur. Exercise caution.

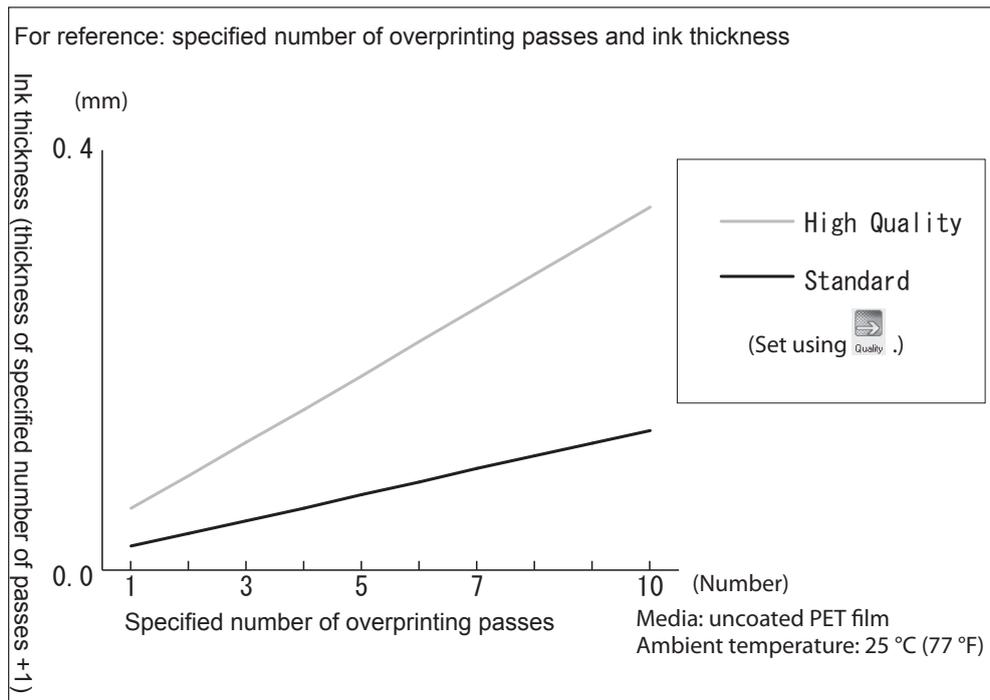
For LEC-330 (Cyan, Magenta, Yellow, Black, Gloss, White (CMYKGIW))



For LEC-330 (Cyan, Magenta, Yellow, Black, Gloss, Gloss (CMYKGIGI))



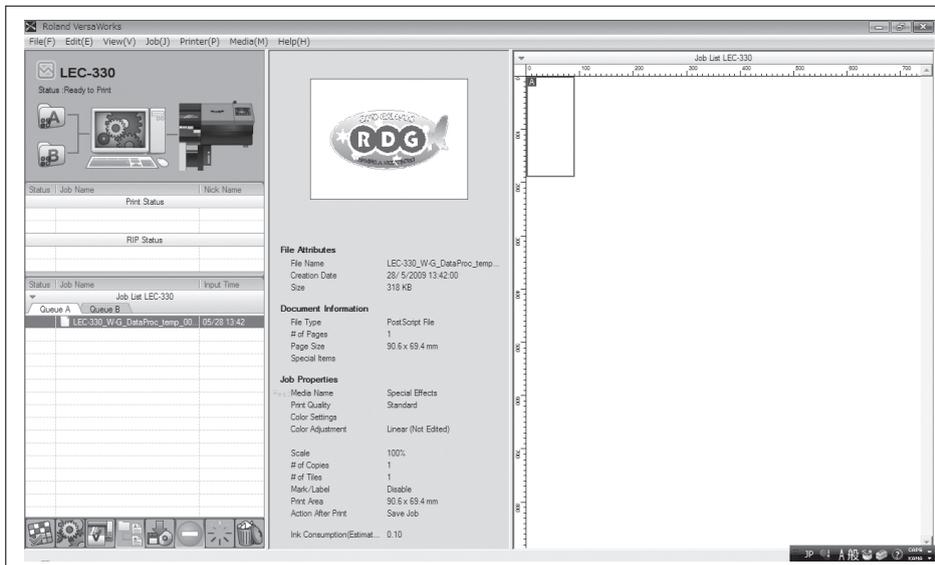
For LEC-300A



3-2 Printing Using Gloss Ink

After making the settings, click [OK] to close the "Job Settings" window.

The contents of the file are displayed in the preview window, and the layout on the media is displayed in the layout window. Areas using "RDG_WHITE" are displayed with shading in transparent magenta, and areas using "RDG_GLOSS" are displayed with shading in transparent cyan.



3 Carry out embossed-finish printing using gloss ink.

Click the print job in the job list on the Queue A tab to select it, then click .

This prints only the gloss-ink areas of the print job.

Printing Using Only Gloss Ink

Gloss finish, matte finish, and embossed finish can also all be printed using only gloss ink.

Procedure

1 Make sure that you've finished making the preparations for VersaWorks and getting the printer ready (see page 7, "Chapter 2 Getting Ready").

2 Prepare the printing data.

Using a program such as Adobe Illustrator, create the data for printing gloss only. When creating the data, remember to specify "RDG_GLOSS" as the color.

see P. 7, "Creating Data for Printing"

3 Make the settings in the “Queue A Properties” window.

Double-click , the “Queue A Properties” window that appears, make the basic settings for printing as shown following.

Icon	Setting item	Setting
	Media Type	Special Effects
	Mode	<For gloss finish> GlossVarnish (v) <For matte finish> MatteVarnish (v) <For embossed finish> Embossing (v)
 Embossed finish only	Use Custom Settings	On
	Overprint	<For LEC-330> 1 to 7 times <For LEC-300A> 1 to 10 times
	Operation Mode*	Print Only
	Return to Origin After Print	Off

Note: The specified number of overprinting passes and ink thickness

A graph showing reference values is given on page 30 to 31. Refer to it for details.

- The number of overprint passes for an embossed finish is the specified number of passes plus one.
- The ink thickness based on the specified number of overprint passes varies according to the type of media used and the printing environment.
- Depending on the specified number of overprint passes and the type of media used, the print heads may scrape the printed surface, or media jams may occur. Exercise caution.

After making the settings, click [OK] to close the “Queue A Properties” window.

4 Go to the job list and click the “Queue A” tab, and then drag the gloss-only print job to the queue A job list.

5 Carry out printing of gloss data only.

Click the print job in the Job list on the Queue A tab to select it, then click .

Chapter 4

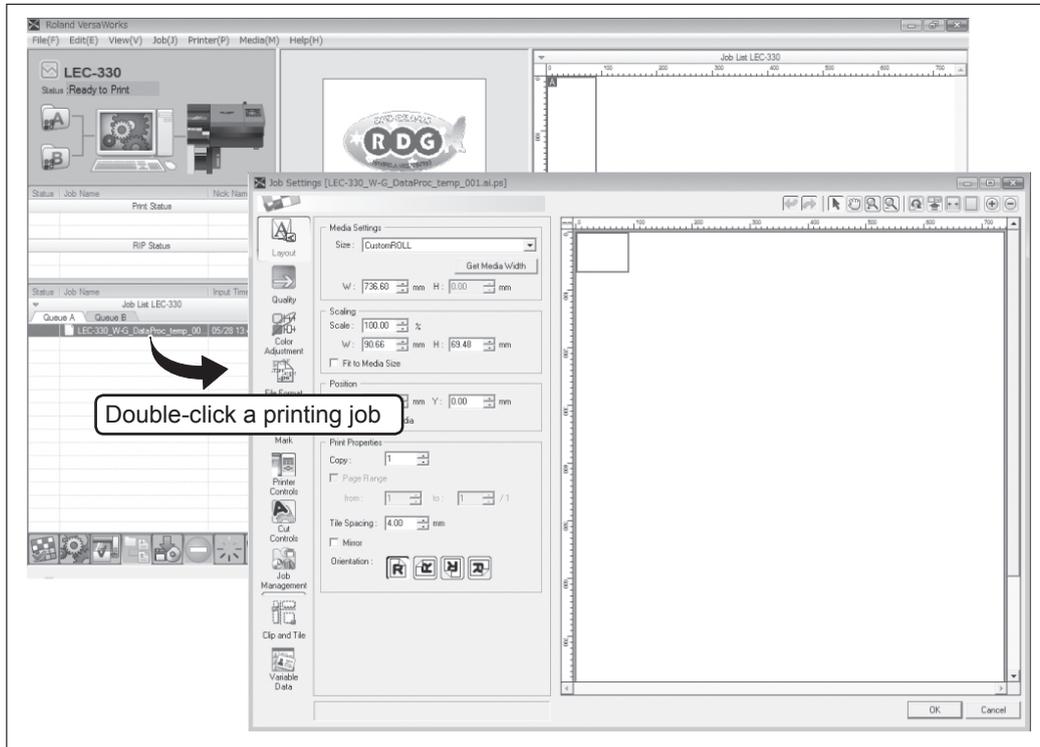
Advanced

4-1 More Advanced Printing Settings

Making Advanced Settings for Each Individual Job

Procedure

Before executing printing, double-click the print job to display the "Job Setting" window. This window is where you make advanced settings for a specific job, including settings that control printer operation and color adjustment.



Description

For many jobs, making the printing settings separately for each individual job when you execute it can be troublesome. Accordingly, the "Job Setting" window is where you make the settings for individual jobs before you execute printing. In other words, with this approach, you make shared basic settings at the "Queue Properties" window, and make the settings for the individual job at the "Job Setting" window. The settings in the "Job Setting" window are updates with the settings made at the "Queue Properties" window, so you can make job-specific settings such as color adjustment.

White or CMYK Colors ⇨ Gloss: When You Want Keep Changes in Settings to a Minimum

The program used to create the printing data is Adobe Illustrator CS3. For detailed information on drawing methods and how to work with palettes, refer to the documentation or online help for Adobe Illustrator CS3. If you're using a different version of Adobe Illustrator, some of the operations may differ from the explanations given below.

Procedure

1. Create separate layers for the CMYK-color or white printing data and the gloss printing data.

① Prepare the spot colors (special colors) "RDG_WHITE" and "RDG_GLOSS."

On page 9, "Creating Data for Printing," follow step 1. to prepare the spot colors (special colors) "RDG_WHITE" and "RDG_GLOSS."

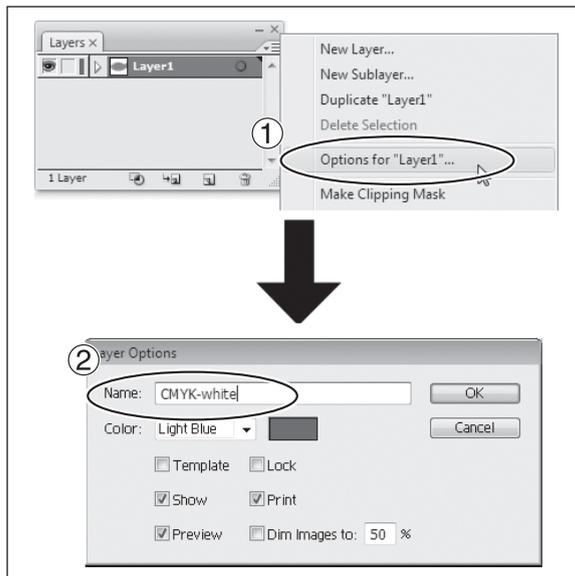
② Create the illustration for the areas using CMYK color and white data.

When drawing the illustration, give attention to the following points.

➤ Draw in CMYK mode.

➤ If you used two or more layers when drawing, then before you proceed to the subsequent operations, move all drawings to the same layer (named "Layer 1" here).

③



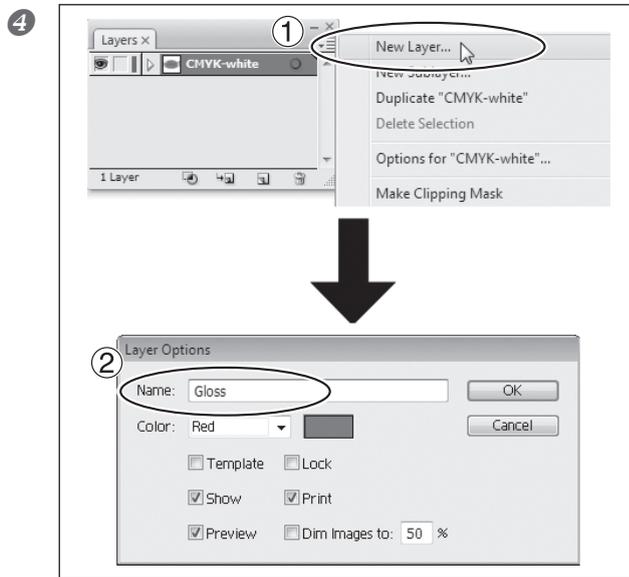
Name the layer.

① At the layer palette menu, select "Options for 'Layer 1'" to display the Layer Options window.

Note: The layer palette is displayed by going to the menu and selecting [Window], then [Layer].

② Assign "CMYK-white" (for example) as the name, then click [OK].

4-1 More Advanced Printing Setting



Create a new layer for the gloss data.

① At the layer palette menu, select "New Layer" to display the Layer Options window.

Note: The layer palette is displayed by going to the menu and selecting [Window], then [Layer].

② Assign "Gloss" (for example) as the name, then click [OK].

5 Create the illustration for the areas using gloss data.

Click the "Gloss" layer to make it the layer for drawing, then create the illustration for the areas using gloss.

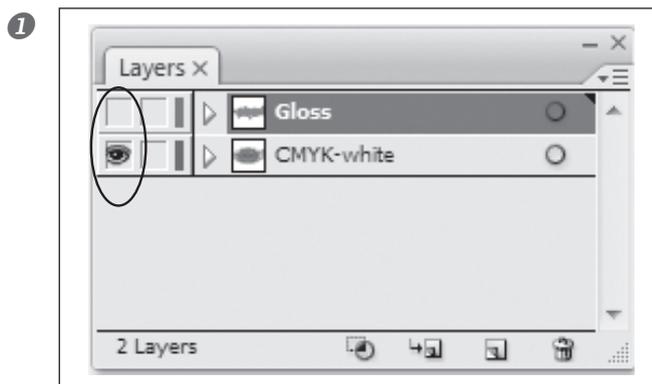
6 Specify "RDG_WHITE" as the color of the areas using white.

Select the illustration that has the areas using white, and for the fill color, select the "RDG_WHITE" spot color you created in step 1.

7 Specify "RDG_GLOSS" as the color of the areas using gloss.

Select the illustration that has the areas using gloss, and for the fill color, select the "RDG_GLOSS" spot color you created in step 1.

2. Save the CMYK-color or white printing mask data and the gloss printing data separately.

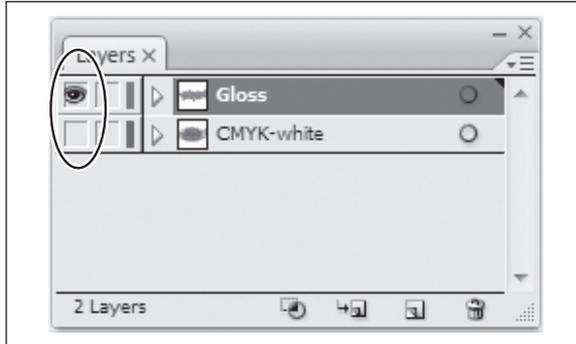


At the layer palette, display "CMYK-white" only.

- 2 Carry out step 3. on pages 12 through 14 to save a PostScript file containing "CMYK" only.

Example: "C:\¥white-gloss_print" for the folder to save to, and "label_cmyk-white.ps" as the file name

3



At the layer palette, display "Gloss" only.

- 4 Carry out step 3. on pages 12 through 14 to save a PostScript file containing "CMYK-white" only.

Example: "C:\¥white-gloss_print" for the folder to save to, and "label_cmyk-white.ps" as the file name

3. At the "Queue A Properties" and "Queue B Properties" windows, make the basic settings for printing.

- 1 At the "Queue A Properties" window, make the basic settings for printing the CMYK color data or white data.

Double-click , and in the "Queue A Properties" window that appears, make the basic settings for printing as shown below.

Icon	Setting item	Setting
 Quality	Media Type	Generic
	Mode	Refer to page 18, "3-1 Printing Using White and CMYK Color Inks," and select the mode that matches the target results.
 Cut Controls	Operation Mode	Print Only
	Return to Origin After Print	On

- At the "Queue B Properties" window, make the basic settings for printing white data only.

Double-click , and in the "Queue B Properties" window that appears, make the basic settings for printing as shown below.

Icon	Setting item	Setting
 Quality	Media Type	Special Effects
	Mode	Refer to page 24, "3-2 Printing Using Gloss Ink," and select the mode that matches the target results.
 Printer Controls Embossed finish only	Use Custom Settings	On
	Overprint*	<For LEC-330> 1 to 7 times <For LEC-300A> 1 to 10 times
 Cut Controls	Operation Mode	Print Only
	Return to Origin After Print	Off

Note: The specified number of overprinting passes and ink thickness

A graph showing reference values is given on page 30 to 31. Refer to it for details.

- The number of overprint passes for an embossed finish is the specified number of passes plus one.
- The ink thickness based on the specified number of overprint passes varies according to the type of media used and the printing environment.
- Depending on the specified number of overprint passes and the type of media used, the print heads may scrape the printed surface, or media jams may occur. Exercise caution.

4. Execute printing of the CMYK color data or white data.

- Go to "Job List" and click the "Queue A" tab.
- Drag "label_cmyk-white.ps" to the queue A job list.
- Click "label_cmyk-white.ps" to select it, then click .

Printing of the CMYK color data or white data is executed. After output, the media is taken back up and printing of the gloss data is executed.

5. Execute printing of the Gloss data.

- Go to "Job List" and click the "Queue B" tab.
- Drag "label_gloss.ps" to the queue B job list.
- Click "label_gloss.ps" to select it, then click .

Description

When you perform fill overprinting using gloss ink after printing using white or CMYK color inks, you can keep the changes to settings during printing to a minimum by modifying the settings for the method you use to create the printing data and the settings for the queue folder. With this method, you first break down and save separate printing data for white and CMYK colors on the one hand and for gloss on the other, and also selectively use queue folders A and B: one for white and CMYK color data, and one for gloss data. This method requires more preparations before you perform printing, but is effective when you don't want to have to modify the printing settings for each individual job.

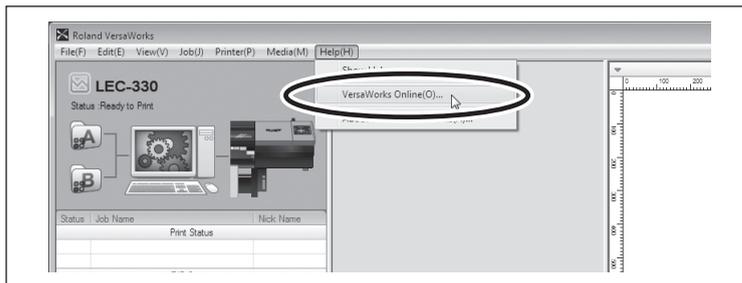
VersaWorks Online (More Advanced Printing Settings)

This document has described the basic methods for printing using white or gloss ink. Of course, methods of printing using white or gloss ink other than the ones in this document are also available. You can use Illustrator's transparency features, or perform other special printing operations not covered in this document. You can get information on these advanced printing methods and the latest information about VersaWorks by viewing VersaWorks Online.

If you want to learn more about the features of VersaWorks, or if you want to use white or gloss ink more effectively, be sure to visit VersaWorks Online.

Procedure

Click [Help], and then click VersaWorks Online] from Main menu.



VersaWorks Online: <http://dg4.roland.co.jp/en/RVW2forWeb/index.html>

4-2 Creating Decals (Cutting after Printing)

Overview of Decal Creation

You can carry out cutting after completing printing by drawing what are known as "cutting paths" in the image data used for printing. This feature is useful, for example, when you want to make stickers using adhesive transparent film media. For information about how to draw cutting paths, see "VersaWorks Quick Start Guide".

When you're cutting a printed surface, we recommend carrying out a cutting test before the actual operation. For information on how to perform a cutting test, refer to User's Manual of your printer

Creating Decals Through Printing Using CMYK Color Inks or White Ink

Carry out the operations in "Printing White and CMYK Color Inks in a Single-Pass" on page 18, "Printing Using Only White Ink" on page 22, or "Printing Using Only CMYK Inks" page 23, except for the following changes.

- Add cutting paths to the printing data.
- At the "Queue A Properties" window, make the settings shown below for "Cutting Control," then carry out printing.

Icon	Setting item	Setting
	Operation Mode	Print & Cut

This executes cutting automatically after printing and drying have finished.

Creating Decals Through Printing Using Gloss Ink

Carry out the operations in "Gloss-finish Printing (White or CMYK Colors ⇒ Gloss)" on page 24, "Matte-finish Printing (White or CMYK Colors ⇒ Gloss)" on page 26, "Matte-finish Printing (Single-pass Printing Using Gloss and CMYK Color Inks)" on page 28, "Embossed-finish Printing (White or CMYK Colors ⇒ Gloss)" on page 29, or "Printing Using Only Gloss Ink" on page 32, except for the following changes.

- Add cutting paths to the printing data.
- When you're performing printing using gloss ink, at the "Queue A Properties" window (or "Job Setting" window), make the settings shown below, then carry out printing.

Icon	Setting item	Setting
	Operation Mode	Print & Cut

This executes cutting automatically after all printing and drying have finished.

4-3 Composing Printing Data

Composing Printing Data Containing Only CMYK Colors or Containing Only White (or Gloss)

VersaWorks has a feature for composing printing data containing only CMYK colors or only white (or gloss). To use this feature, the following requirements must be met.

- The printing-data combination that you can compose is a single set of printing data containing only CMYK colors or only white (or gloss).
- The printing data is a TIFF file. Also, for printing data containing white (or gloss) only, when saving the TIFF file, for "TIFF Options," set "Color Mode" to "Grayscale."

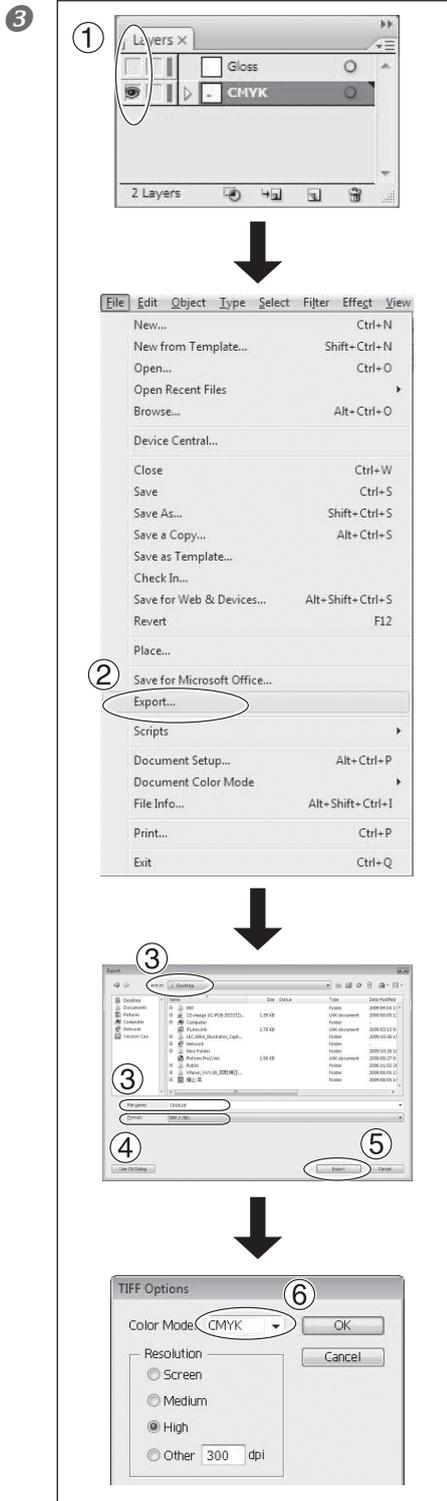
In the explanations in this section, Adobe Illustrator CS3 is the program used to create the printing data.

Procedure

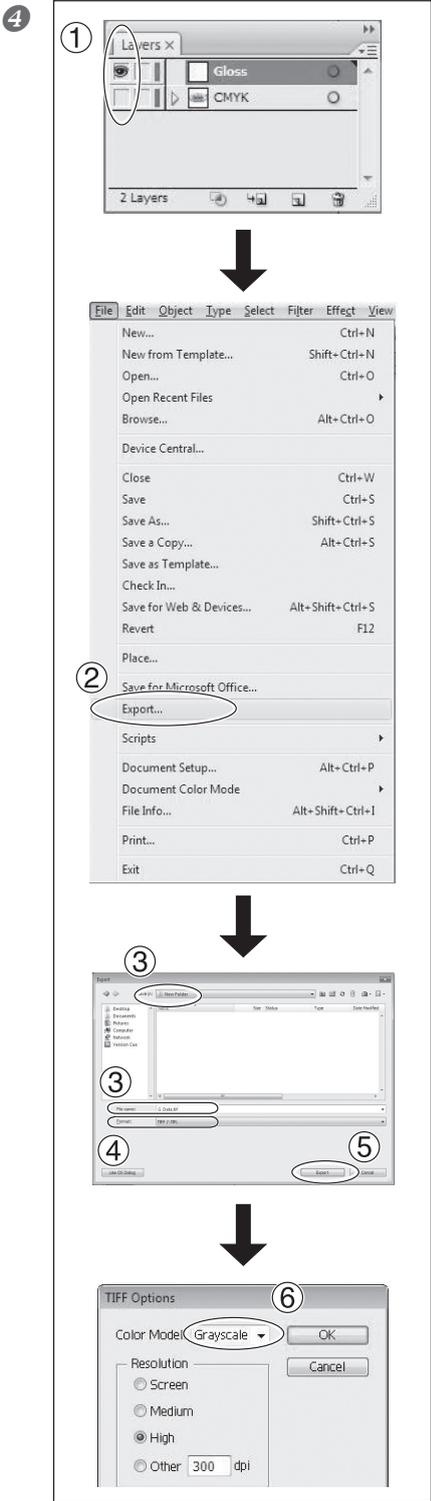
- 1 Make sure that you've finished making the preparations for VersaWorks and getting the printer ready** (☞ page 7, "Chapter 2 Getting Ready").
- 2 Create printing data containing only CMYK colors and only white (or gloss).**
Follow steps 1 on page 37, "White or CMYK Colors ⇒ Gloss: When You Want to Keep Changes in Settings to a Minimum," to create the data.

Continued on the next page

4-3 Composing Printing Data



- ① At the layer palette, display "CMYK" only.
- ② From the menu, select "File," then "Export."
- ③ Specify the destination and file name.
- ④ For "Format," specify "TIFF (*.TIF)."
- ⑤ Click [Export].
- ⑥ Under TIFF Options, set "Color Model" to "CMYK."



① At the layer palette, display "White (or Gloss)" only.

② From the menu, select "File," then "Export."

③ Specify the destination and file name.

④ For "Format," specify "TIFF (*.TIF)."

⑤ Click [Export].

⑥ Under TIFF Options, set "Color Model" to "Grayscale."

4-3 Composing Printing Data

5 Make the settings in the “Queue A Properties” window.

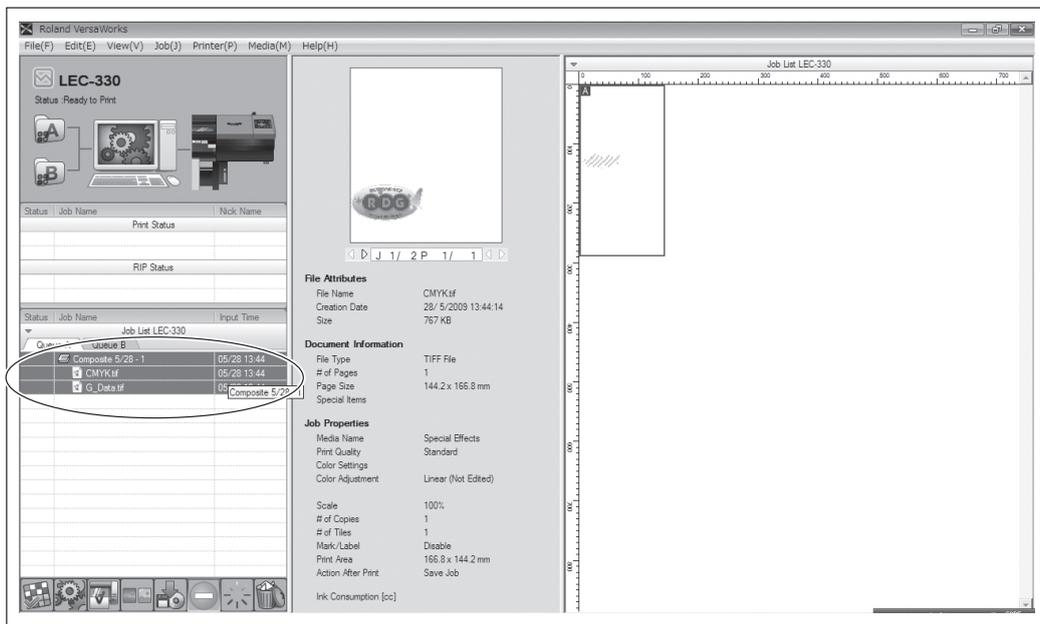
For the selected printing method (☞ page 17, "Chapter 3 -- Printing"), make the settings for "Queue A Properties." When doing this, also add the following settings.

Icon	Setting item	Setting
 File Format	Composition	<When composing printing data containing white only> Ex1=RDG_WHITE <When composing printing data containing gloss only> Ex1=RDG_GLOSS
 Job Management	Number of Jobs	2
	Compose	On

After making the settings, click [OK] to close the “Queue A Properties” window.

6 Go to "Job List" and click the "Queue A" tab, and drag the print job you created in step 3 and 4 to the queue A job list.

Composing is performed automatically.



7 Carry out printing.

Click the print job in the Job list on the Queue A tab to select it, then click .

Description

Your printer can be used for proofing of such as soft packaging and package. In such the case, the commercially available software RIP may be used for color matching with the color of printing machine. The matched colors may be stored in a TIFF file depending on some type of commercially available software RIP. In addition, CMYK and white (or gloss) values are stored separately.

By using the composing feature of VersaWorks, the TIFF files of CMYK and white (or gloss) can be composed to a single print job. This result allows single-pass printing of the CMYK ink and white (or gloss) ink, which offers some effects such as shorter printing time.*

Note: Single-pass printing of the gloss ink and CMYK ink is enabled only for the matt-finish printing.



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