

VersaSTUDIO ***BF-16***

Spot Color Ink Guide

This manual describes how to print using spot color ink.

Spot color inks such as gloss and white can be used for printing white ink as the base of the color ink or for printing gloss ink as a surface layer for adding gloss to a color image.

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Overview

About this Manual

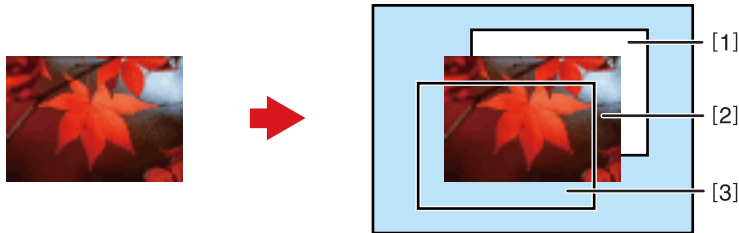
This document describes how to print using white and gloss ink.

For cautions on use and further details on how to use the BF-16, see the "BF-16 User's Manual."

☞ [BF-16 User's Manual](#)

Spot Color Printing

Spot color printing uses white and gloss inks. This enables printing of a color image on top of white ink to make the colors more vivid, or printing gloss ink on top of a color image to provide a gloss finish.



[1]: Base (white ink)

[2]: Image or illustration (CMYK)

[3]: Finish (Gloss finish with a gloss ink)

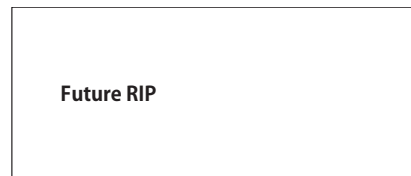
Workflow and Software Used

Workflow

Create print data



Create RIP file and send print data



Software

| Type of software | Name of software | Function |
|---------------------------|-------------------|---|
| Design software | Adobe Illustrator | Can be used to specify where to print white and gloss inks within the print data. |
| RIP and printing software | Future RIP | Can be used to create a RIP file with registered printing conditions, layout settings, and spot color information, and to configure spot color printing settings or perform printing. |

Printable Ink Combinations

This section describes the types of printing that use white ink (W) and gloss ink (V).

Print types

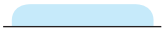



Future RIP can be used to specify the combination of color ink, white ink, and gloss ink. Cyan, magenta, yellow, and black are referred to as C.



- [1]: Gloss ink
- [2]: Color ink
- [3]: White ink

| Color combinations: | Application example | Overview |
|---------------------|---------------------|---|
| WCV | | White ink is used as the color ink undercoat, and gloss ink is used on top of the color ink. |
| W | | Only white ink is used. |
| C | | Only CMYK ink is used. |
| V | | Only gloss ink is used. |
| WC | | White ink is used as the undercoat for color ink. |
| WV | | Coating is performed using gloss ink on top of the white ink. |
| CV | | Coating is performed using gloss ink on top of the color ink. |
| CW | | White ink is used on top of color ink. This is used for reverse printing on transparent objects. |
| WCV (F) | | White ink is used as the undercoat for color ink, gloss ink is used on top of the color ink, and a matte finish is created. |

Overview

| Color combinations: | Application example | Overview |
|---------------------|---|---|
| V (F) |  | Only gloss ink is used, and a matte finish is created. |
| CV (F) |  | Coating is performed using gloss ink on top of the color ink, and a matte finish is created. |
| WV (F) |  | Coating is performed using gloss ink on top of the white ink, and a matte finish is created. |
| CWC |  | White ink is used on top of the color ink, and color ink is used on top of the white ink. This is used for printing that is visible from both front and back sides on transparent objects. |

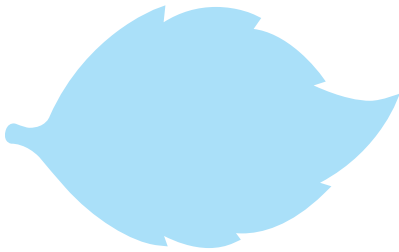
Print Data Types

Spot color print data is used in one of the following cases.

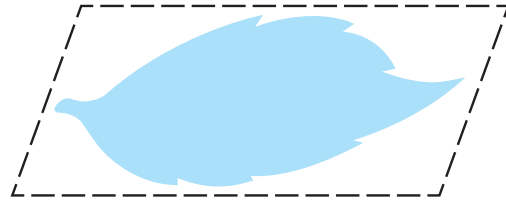
Spot color only printing

Print data for spot colors must be created.

☞ P. 8 "Creating Print Data for Spot Colors"



Print data for spot colors



Spot color printing

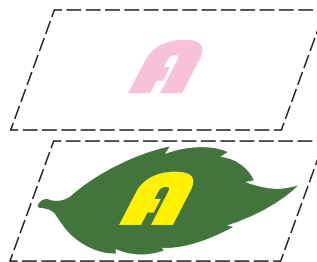
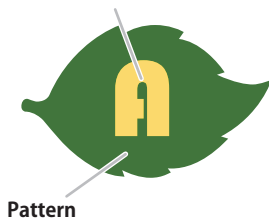
Spot color printing in layers with patterns

Print data for spot colors must be created.

☞ P. 8 "Creating Print Data for Spot Colors"

Spot color lamination

Spot color lamination (Overprint)

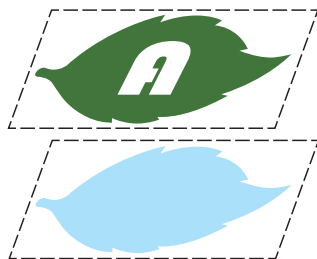
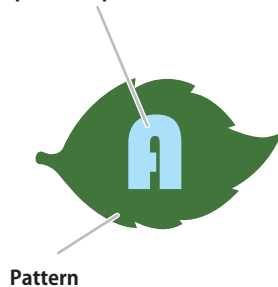


Spot color printing

Pattern printing

Spot color on a base

Spot color placed on base



Pattern printing

Spot color printing

Printing

Creating Print Data for Spot Colors

This section describes how to create the following print data using Adobe Illustrator.

Laminate the pattern using gloss spot color, and print white spot color on the base.



[1]: Finish (Gloss finish with a gloss ink)

[2]: Image or illustration (CMYK)

[3]: Base (white ink)

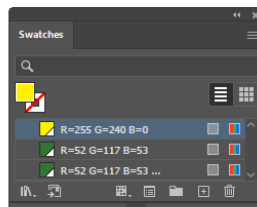
手順

1 Create the CMYK pattern.

① Create the pattern.


② Open the [Swatches] window and add color to the pattern.

Click [Window] > [Swatches] from the menu bar to specify the pattern colors.

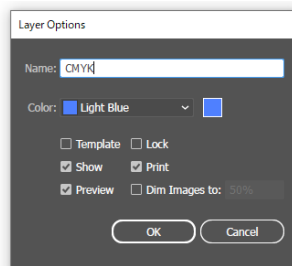
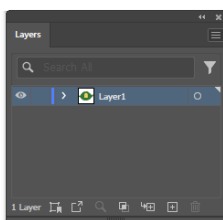


③ Open the [Layers] window.

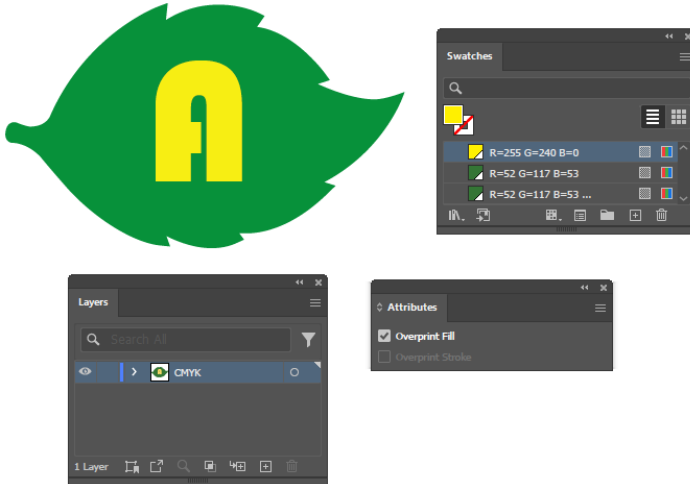
Click [Window] > [Layers] from the menu bar.

④ Click  > [Options for "Layer 1"] to change the name of the layer.



Enter "CMYK" in the [Name] field, and then click [OK].

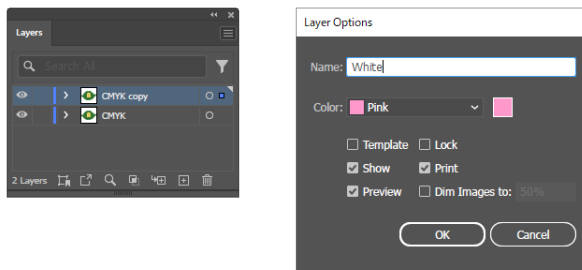


- ⑤ Open the [Attributes] window.
Click [Window] > [Attributes] from the menu bar.
- ⑥ Select the [Overprint Fill] check box.



2 Create a white ink base.

- ① In the [Layers] window, click .
- ② Click [Duplicate "CMYK"].
A duplicate CMYK pattern will be created on top of the original CMYK pattern. The layer name is "CMYK copy".
- ③ In the [Layers] window, select [CMYK copy].
- ④ Click  > [Options for "CMYK copy"] to change the name of the layer.
Enter "White" in the [Name] field, and then click [OK].

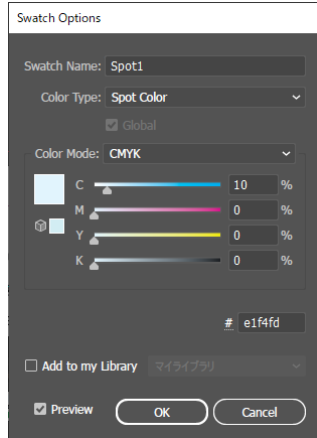


- ⑤ Delete the text from the pattern on the [White] layer.
The text must be deleted because this layer will be used as the base pattern.

⑥ Specify the spot color in the swatches.

Click  > [New Swatch], and configure the settings as follows.

- Name: Spot1
The "S" must be capitalized, and make sure there is no space between the letters and number.
- Color type: Spot color
- Specify which color represents White in the data.
Set the color using the C, M, Y, and K color bars.

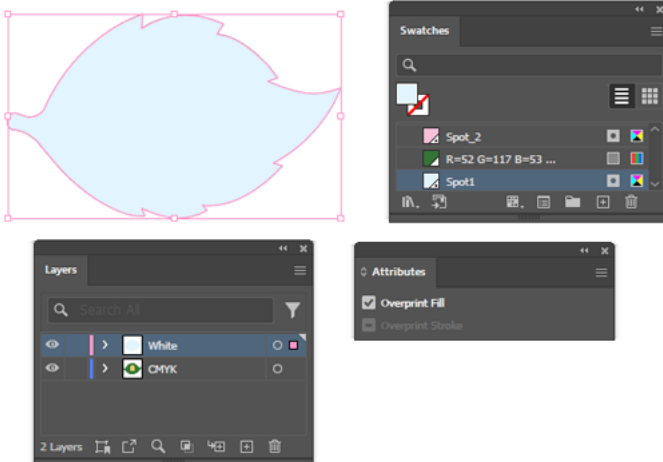


⑦ Clear the [Overprint Fill] check box.

⑧ Select the pattern.

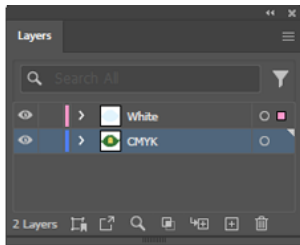
⑨ Apply [Spot1] to the pattern.



In the [Swatches] window, select [Spot1] to apply it.

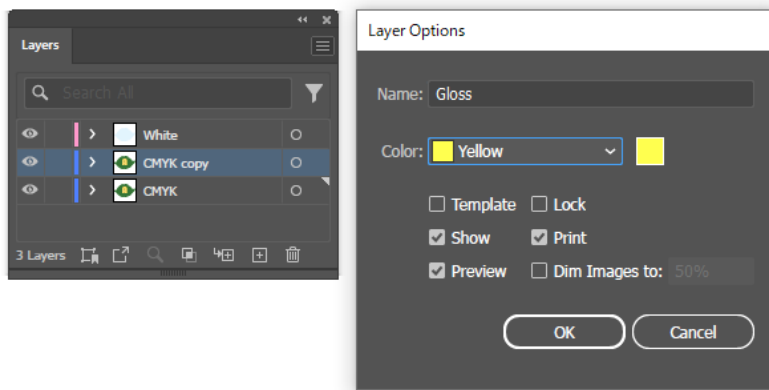



3 Create a gloss pattern.

- ① In the [Layers] window, select [CMYK].



- ② In the [Layers] window, click .
- ③ Click [Duplicate "CMYK"].
[CMYK copy] will be created in the [Layers] window.
- ④ In the [Layers] window, select [CMYK copy].
- ⑤ Click  > [Options for "CMYK copy"] to change the name of the layer.
Change the name to "Gloss" and click [OK].

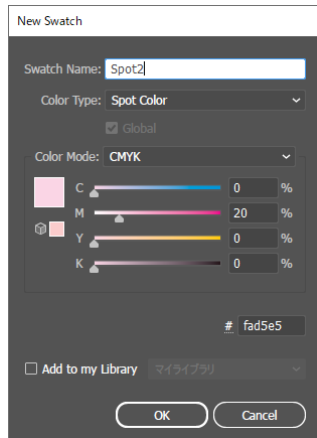


- ⑥ Hide the [CMYK] and [White] layers.
In the [Layers] window, click  next to [CMYK] and [White] to hide the layers.
- ⑦ Create a pattern for the [Gloss] layer.
The leaf pattern will be deleted, and only the text will remain.

⑧ Specify the spot color in the swatches.

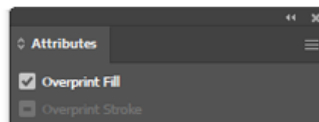
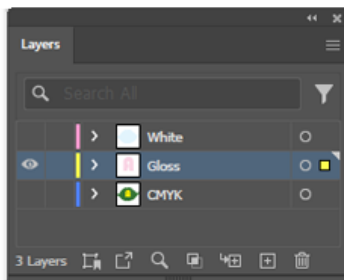
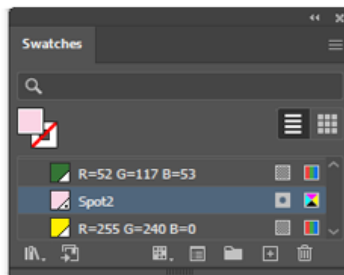
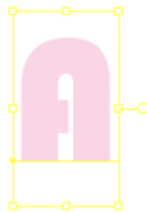
Click  > [New Swatch], and configure the settings as follows.

- Name: Spot2
The "S" must be capitalized, and make sure there is no space between the letters and number.
- Color type: Spot color
- Specify which color represents Gloss in the data.
Set the color using the C, M, Y, and K color bars.



⑨ Apply [Spot2] to the pattern.

Select the Gloss layer pattern, and in the [Swatches] window, select [Spot2] to apply it. Make sure the [Overprint Fill] check box is checked.



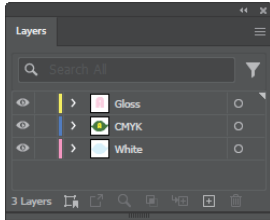
4 Check the data created and change the layer hierarchy.

- ① Display the [White] and [Gloss] layers in the [Layers] window.

Click areas next to the [White] and [Gloss] layers in the [Layers] window to display  .

- ② Change the layer hierarchy.

Change the layer hierarchy to [Gloss], [CMYK], and then [White].



- ③ Configure the settings for each layer.

| Layer name | Swatch (*1) | Overprint Fill (*2) |
|------------|-------------|---------------------|
| Gloss | Spot2 | Selected |
| CMYK | No | Selected |
| White | Spot1 | Off |

*1: Specify a swatch for each object within a layer.

*2: "Overprint Fill" in the "Attributes" window

Important

If the overprint settings are not configured, areas that overlap the object below will not be printed.

Important

A spot color must be specified for every object printed with white or gloss ink. This ensures the RIP software and the printer can recognize the print area for the spot color correctly. Configure the settings as indicated below.

| Spot color ink | Name | Color Type |
|----------------|-------|------------|
| White | Spot1 | Spot color |
| Gloss | Spot2 | |

5 Save the print data.

The print data will be saved in PDF format.

Creating and Printing RIP Files

Important

The UV light will turn on when printing starts. Be sure to wear protective eyewear before clicking [Print].



Recommended Printing Settings

Large differences in print quality occur due to the combination of [Select Solution:], [Speed:], [Feather level:], and [Feather type:]. The recommended printing settings are the following.

Draft

| | |
|--------------------|-------------------------|
| [Select Solution:] | [960 x 900_6P_23-0909X] |
| [Speed:] | [High] |
| [Feather level:] | [High] |
| [Feather type:] | [Default type] |

High Speed

| | |
|--------------------|-------------------------|
| [Select Solution:] | [960 x 900_6P_23-0909X] |
| [Speed:] | [High] |
| [Feather level:] | [Mid] |
| [Feather type:] | [Enhanced type] |

Standard

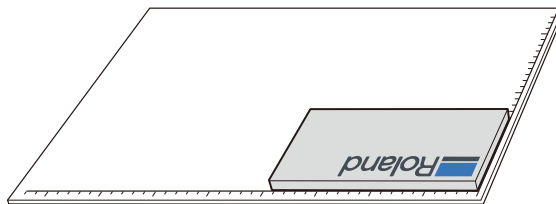
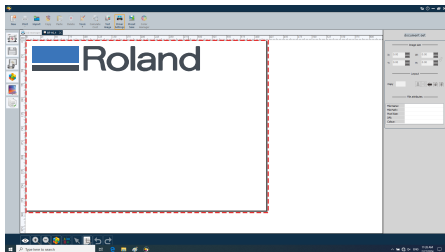
| | |
|--------------------|-------------------------|
| [Select Solution:] | [960 x 900_6P_23-0909X] |
| [Speed:] | [High] |
| [Feather level:] | [High] |
| [Feather type:] | [Enhanced type] |

High Quality

| | |
|--------------------|--------------------------|
| [Select Solution:] | [960 x 1200_8P_23-0908X] |
| [Speed:] | [High] |
| [Feather level:] | [High] |
| [Feather type:] | [Enhanced type] |

MEMO

The direction displayed on the Future RIP screen and the actual printing direction are reversed. Make sure the print data layout and the orientation of the object to be printed on are correct.

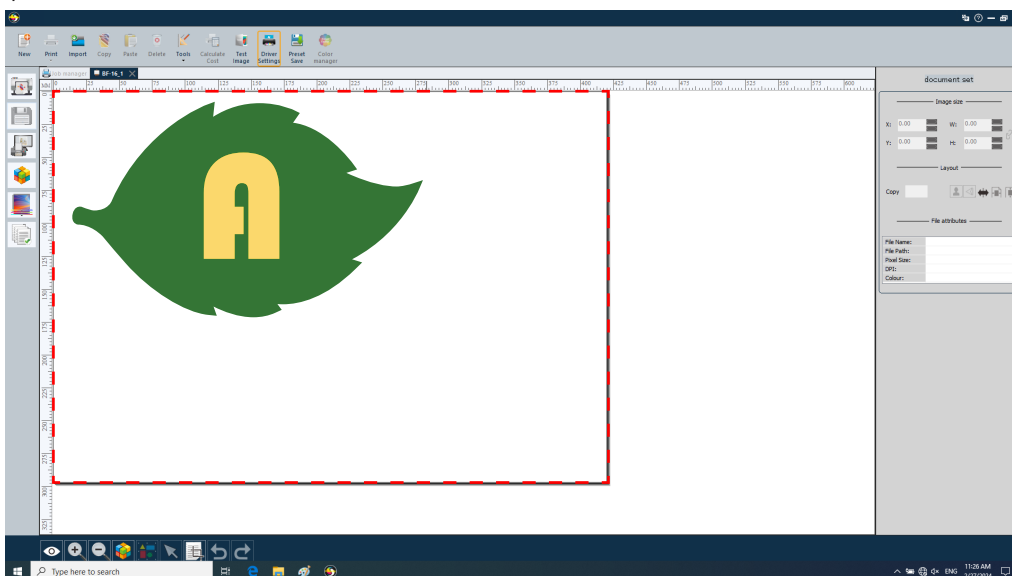


手順

- 1 Start Future RIP.
- 2 Create a new print job.
Click [New] on the toolbar.
- 3 Load print data into Future RIP.
Click [Import] and specify the location where the print data is saved.
- 4 Contain the print data within the layout area indicated by the red broken lines.

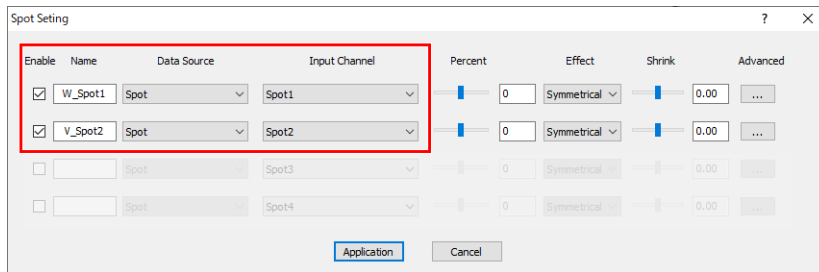
MEMO

The portion of the print data that is not in the layout area indicated by the red broken lines will not be printed.



5 Click  [Print Set] to set.

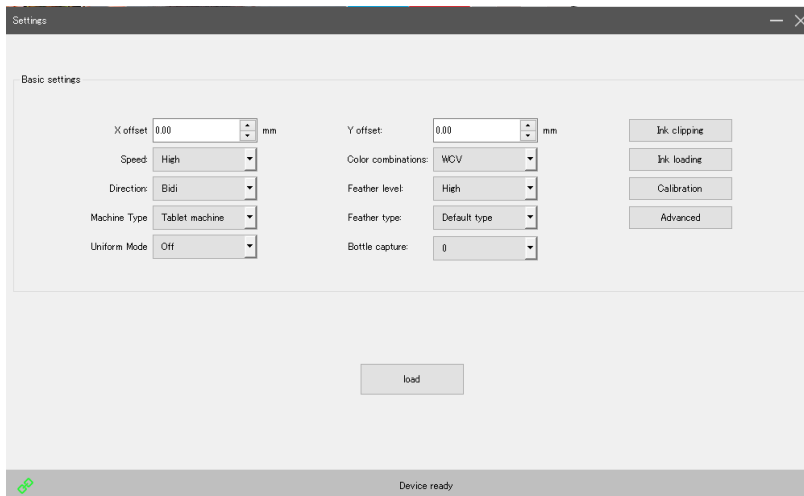
- ① Set the resolution with [Select Solution] in [Driver installation].
Select and set either [960 x 1200_8P_23-0908X] or [960 x 900_6P_23-0909X].
- ② Select [TCP/IP] for [Send Type] in [Driver installation].
- ③ Use [Spot Set] under [Spot Mgr] to configure the spot color settings when using white ink or gloss ink for printing.
 - Select the [Enable] check box for [W_Spot1] and [V_Spot2].
 - Check that the [W_Spot1] [Input Channel] is [Spot1] and [V_Spot2] [Input Channel] is [Spot2].



After configuring the settings, click [Application].





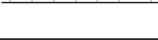
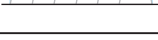



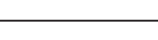
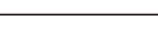
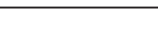

6 Select the input profile with  [Color Management].

7 Click [Driver Setting] and configure the printing settings.



- ① Set the printing speed with [Speed:].
Select from [Low], [Standard], and [High].
- ② Set the printing direction with [Direction:].
When [Right] is selected, printing is performed when the print-head carriage moves from right to left. When [Left] is selected, printing is performed when the print-head carriage moves from left to right. When [Bi Direction] is selected, printing is performed in both directions, from right to left and from left to right.

③ Set the inks to use for printing with [Color combinations:].

| Color combinations: | Application example | Overview |
|---------------------|---|---|
| WCV |  | White ink is used as the color ink undercoat, and gloss ink is used on top of the color ink. |
| W |  | Only white ink is used. |
| C |  | Only CMYK ink is used. |
| V |  | Only gloss ink is used. |
| WC |  | White ink is used as the undercoat for color ink. |
| WV |  | Coating is performed using gloss ink on top of the white ink. |
| CV |  | Coating is performed using gloss ink on top of the color ink. |
| CW |  | White ink is used on top of color ink. This is used for reverse printing on transparent objects. |
| WCV (F) |  | White ink is used as the undercoat for color ink, gloss ink is used on top of the color ink, and a matte finish is created. |
| V (F) |  | Only gloss ink is used, and a matte finish is created. |
| CV (F) |  | Coating is performed using gloss ink on top of the color ink, and a matte finish is created. |
| WV (F) |  | Coating is performed using gloss ink on top of the white ink, and a matte finish is created. |
| CWC |  | White ink is used on top of the color ink, and color ink is used on top of the white ink. This is used for printing that is visible from both front and back sides on transparent objects. |

④ Adjust the level of the dispersion method for the ink dot landing positions with [Feather level:].

Select from [Off], [Low], [Mid], and [High].

- ⑤ **Adjust the density of the landed ink dots with [Feather type:].**

Select from [Default type] and [Enhanced type].

- ⑥ **Click [Save].**

- ⑦ **Click [×] to close the window.**

Settings are now completed.

- ⑧ **Click  [Print].**

The process for converting the data into data that is suitable for printing is started. When the process ends, printing starts.

