# Canon

imagePRESS C850/C750/C650/C65

# **Practical Guide** for Advanced Printing

This document provides useful explanations about procedures for printing documents and solutions to common printing problems. We recommend you read this document and the User' s Guide.



You can access canon.com/oip-manual to read the User's Guide that describes all functions of this machine.



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Types of Paper You Can Use for Calibration

- The shape of the machine and available functions may vary, depending on the machine you are using. Unauthorized reproduction of the contents of this document is prohibited.
- The information in this document is subject to change without notice.
- Available models differ depending on your region and product release dates.

# Recommended Types of Calibration

The density and tone of colors may change as you print large volumes of pages. Even if you are printing the same image, slight variations in the shades of colors may become apparent. This is characteristic to this machine. You need to calibrate the colors periodically to compensate for the difference in colors. The following two types of calibration can be done periodically. Refer to the following and select the type of calibration that meets your needs.





Simple Calibration

Enhanced Calibration

If you want to calibrate the colors quickly and easily <sup>*1</sup>	Simple Calibration (p. 4)
If you want to calibrate the colors as precisely as possible even if it takes time and effort	Enhanced Calibration (p. 5)
If the environment of the location in which you have installed the machine is outside the recommended range* <sup>2</sup>	Enhanced Calibration (p. 5)

\*1 You can select this type of calibration only if the environment in which the machine is installed is within the recommended range\*2.

\*2 For information on the environment (temperature and humidity) for installing the machine and storing paper, see the Installation and Operating Environment Guidelines or the Specialty Media Handling Guide.

### Recommended Types of Calibration

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# Other Types of Calibration You Can Do When You Notice Variations in the Shades and Tones of Colors

The following calibrations can be made in addition to Simple Calibration and Enhanced Calibration. Calibrate the machine only if you notice irregularities in the colors. (You do not need to calibrate the machine on a regular schedule.) Make sure to do automatic gradation calibration prior to doing either one of the following calibrations. If you are using the imagePRESS Server and a spectrophotometer, such as an X-Rite i1 Pro, you can make more precise corrections by doing both Shading Correction and Automatic Color Tone Correction. In this case, do these corrections in the following order: Automatic Gradation Calibration  $\rightarrow$  Shading Correction  $\rightarrow$  Automatic Color Tone Correction.



### **Shading Correction**

Do this if the color densities become uneven.

### Automatic Color Tone Correction

Do this if you notice differences in the color tones.

### Simple Calibration

If you want to correct the printed colors quickly and easily, this type of calibration is recommended. Do steps 1 to 3 in "Calibration After the Machine Is in Operation" once a day. (p. 37) This is, however, done on the premise that the environment (temperature and humidity) in which the machine is installed satisfies the recommended range. If the environment does not satisfy this range, do "Enhanced Calibration." (p. 5)

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### Prior to Starting Simple Calibration

See "Adjustment for Image Quality and Finishing (Calibration)" > "Automatic Gradation Adjustment" > "Changing Adjustment Level" in the User's Guide, and set [Adjustment Level] for automatic gradation adjustment to 'Same for All Paper Types'.

(X) Settings/Registration	Settings/ Reg.Shortcut	*
<auto adjust="" gradation=""> Sel (Adjustment Level&gt;</auto>		
Same for All Paper Types ((Same for All Paper Types) all paper types. Algoratory time than edjustment using (S	Paper pe Group to perform the same adjustments on ing (By Faper Type Group) takes more ame for All Paper Types].)	a to age
× Cancel	OK J	

### **Enhanced Calibration**

This type of calibration is recommended if you want to correct the shades and tones of colors as precisely as possible, even if it takes more time and effort. This is also suitable if the environment (temperature and humidity) in which the machine is installed does not satisfy the recommended range for some reason. This type of calibration uses specific types of paper, which correspond to the types of paper you want to print on, so that more precise corrections can be achieved. The paper is categorized in three groups, group A, B, and C, for the purpose of more precise calibration. See the list in "Types of Paper You Can Use for Calibration" at the end of this document. Find out in which group the paper you want to print on is categorized, and then select the corresponding type of paper you can use for calibration. To keep making corrections precisely, calibrate the machine for the paper you are printing on whenever you print on paper of a different group. For example, if you print on plain paper, which is listed in group A, in the morning, and print on Heavy 5, which is listed in group B, in the afternoon, calibrate the machine for paper in group A (p. 6) before starting printing jobs in the morning and calibrate the machine for paper in group B (p. 7) before starting printing jobs in the afternoon.

# Prior to Starting Enhanced Calibration

See "Adjustment for Image Quality and Finish (Calibration)" > "Automatic Gradation Adjustment" > "Changing Adjustment Level" in the User's Guide, and set [Adjustment Level] for automatic gradation adjustment to 'By Paper Type Group'. If you are not sure of the name of the paper to use for calibration, contact your local authorized Canon dealer.



### Calibrating for Paper in Group A

### 1 Load the paper for calibration for group A into the paper drawer.

• You can use the following type of paper to calibrate for paper in group A. You can also use the other type of paper if you registered it to use for calibration in advance.

For the European and Asia-Pacific Regions Canon Océ Top Colour Paper (100 g/m<sup>2</sup>)

### For the American Region

Hammermill Color Copy Digital (28 lb. (105 g/m<sup>2</sup>))

- 2 Press B → [Adjustment/Maintenance] → [Adjust Image Quality] → [Auto Adjust Gradation] → [Thin 1/Plain/Heavy 1-4].
- 3 Select the paper you loaded in step 1 for [Select Paper to Adjust].

 "Adjustment for Image Quality and Finishing (Calibration)" > "Automatic Gradation Adjustment" > "Selecting Paper for Calibration" in the User's Guide

**4** Do automatic gradation calibration (full calibration).

"Adjustment for Image Quality and Finishing (Calibration)" > "Automatic Gradation Adjustment" > "Full Adjustment" in the User's Guide

- 5 If you are using the imagePRESS Server, do steps 1 to 8 in "Calibrations on the imagePRESS Server" in "Required Calibrations." (p. 22)
  - Do calibration on the imagePRESS Server using the following type of paper. You can also use the type of paper that you want to use for printing if you registered it in advance.

### For the European and Asia-Pacific Regions

Canon Océ Top Colour Paper (100 g/m²)

### For the American Region

Hammermill Color Copy Digital (28 lb. (105 g/m<sup>2</sup>))

### Calibrating for Paper in Group B 1 Load the paper for calibration for group B into the paper drawer. • You can use the following type of paper to calibrate for paper in group B. You can also use the other type of paper if you registered it to use for calibration in advance. For the European and Asia-Pacific Regions Canon Océ Top Colour Paper (250 g/m<sup>2</sup>) For the American Region Mohawk Options Navajo Smooth Brilliant White (90 lb. Cover (243 g/m<sup>2</sup>)) 2 Press (6) $\rightarrow$ [Adjustment/Maintenance] $\rightarrow$ [Adjust Image Quality] $\rightarrow$ [Auto Adjust Gradation] $\rightarrow$ [Heavy 5]. 3 Select the paper you loaded in step 1 for [Select Paper to Adjust]. 🕐 "Adjustment for Image Quality and Finishing (Calibration)" > "Automatic Gradation Adjustment" > "Selecting Paper for Calibration" in the User's Guide **4** Do automatic gradation calibration (full calibration). (\*) "Adjustment for Image Quality and Finishing (Calibration)" > "Automatic Gradation Adjustment" > "Full Adjustment" in the User's Guide 5 If you are using the imagePRESS Server, do steps 1 to 8 in "Calibrations on the imagePRESS Server" in "Required Calibrations." (p. 22) • Do calibration on the imagePRESS Server using one of the following types of paper. You can also use the type of paper that you want to use for printing if you registered it in advance. For the European and Asia-Pacific Regions Type of paper you want to print on is Thick (221-256 gm2): Canon Océ Top Colour Paper (250 g/m<sup>2</sup>) Type of paper you want to print on is Coated (106-180 gm2): OK Top Coat Plus (127.9 g/m<sup>2</sup>) For the American Region Type of paper you want to print on is Thick (221-256 gm2): Mohawk Options Navajo Smooth Brilliant White (90 lb. Cover (243 g/m<sup>2</sup>)) Type of paper you want to print on is Coated (106-180 gm2): OK Top Coat Plus (34 lb. (127.9 g/m<sup>2</sup>))

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### Calibrating for Paper in Group C

### 1 Load the paper for calibration for group C into the paper drawer.

• You can use the following type of paper to calibrate for paper in group C. You can also use the other type of paper if you registered it to use for calibration in advance.

For the European and Asia-Pacific Regions Canon Océ Top Colour Paper (300 g/m<sup>2</sup>)

### For the American Region

Hammermill Color Copy Digital Cover (100 lb. (271 g/m<sup>2</sup>))

- 2 Press B → [Adjustment/Maintenance] → [Adjust Image Quality] → [Auto Adjust Gradation] → [Heavy 6].
- 3 Select the paper you loaded in step 1 for [Select Paper to Adjust].

 "Adjustment for Image Quality and Finishing (Calibration)" > "Automatic Gradation Adjustment" > "Selecting Paper for Calibration" in the User's Guide

**4** Do automatic gradation calibration (full calibration).

"Adjustment for Image Quality and Finishing (Calibration)" > "Automatic Gradation Adjustment" > "Full Adjustment" in the User's Guide

# 5 If you are using the imagePRESS Server, do steps 1 to 8 in "Calibrations on the imagePRESS Server" in "Required Calibrations." (p. 22)

• Do calibration on the imagePRESS Server using one of the following types of paper. You can also use the type of paper that you want to use for printing if you registered it in advance.

### For the European and Asia-Pacific Regions

Type of paper you want to print on is Heavy Thick (257-300 gm2): Canon Océ Top Colour Paper (300 g/m<sup>2</sup>)

Type of paper you want to print on is Heavy Coated (181-300 gm2): Futura Gloss Cover (271 g/m<sup>2</sup>)

### For the American Region

Type of paper you want to print on is Heavy Thick (257-300 gm2): Hammermill Color Copy Digital Cover (100 lb. (271 g/m<sup>2</sup>))

Type of paper you want to print on is Heavy Coated (181-300 gm2): Futura Gloss Cover (100 lb. (271 g/m<sup>2</sup>))

1	Load the paper for calibration for group A and B into different paper drawers.		
	<ul> <li>You can use the following type of paper to calibrate for paper in each group. You can also use the other type of paper if you registered it to use for calibration in advance.</li> </ul>		
	For the European and Asia-Pacific Regions		
	For paper in group A: Canon Océ Top Colour Paper (100 g/m²)		
	For the American Basian		
	For paper in group A: Hammermill Color Copy Digital (28 lb. (105 g/m²))		
	For paper in group B: Mohawk Options Navajo Smooth Brilliant White (90 lb. Cover (243 g/m²))		
2	Press $\circledast$ → [Adjustment/Maintenance] → [Adjust Image Quality] → [Auto Adjust Gradation] → [Thin 1/Plain/Heavy 1-4].		
3	Select the paper you loaded for calibration for group A for [Select Paper to Adjust].		
	"Adjustment for Image Quality and Finishing (Calibration)" > "Automatic Gradation Adjustment" > "Selecting Paper for Calibration" in the User's Guide		
4	Do automatic gradation calibration (full calibration).		
	"Adjustment for Image Quality and Finishing (Calibration)" > "Automatic Gradation Adjustment" > "Full Adjustment" in the User's Guide		
5	Press [Heavy 5].		
6	Select the paper you loaded for calibration for group B for [Select Paper to Adjust].		
	"Adjustment for Image Quality and Finishing (Calibration)" > "Automatic Gradation Adjustment" > "Selecting Paper for Calibration" in the User's Guide		
7	Do automatic gradation calibration (full calibration).		
	"Adjustment for Image Quality and Finishing (Calibration)" > "Automatic Gradation Adjustment" > "Full		

- 8 If you are using the imagePRESS Server, do steps 1 to 8 in "Calibrations on the imagePRESS Server" in "Required Calibrations." (p. 22)
  - Do calibration on the imagePRESS Server using one of the following types of paper. You can also use the type of paper that you want to use for printing if you registered it in advance.

### For the European and Asia-Pacific Regions

Type of paper you want to print on is Plain (52-220 gm2): Canon Océ Top Colour Paper (100 g/m<sup>2</sup>)

Type of paper you want to print on is Thick (221-256 gm2): Canon Océ Top Colour Paper (250 g/m<sup>2</sup>)

Type of paper you want to print on is Coated (106-180 gm2): OK Top Coat Plus (127.9  $g/m^2$ )

### For the American Region

Type of paper you want to print on is Plain (52-220 gm2): Hammermill Color Copy Digital (28 lb. (105 g/m<sup>2</sup>))

Type of paper you want to print on is Thick (221-256 gm2): Mohawk Options Navajo Smooth Brilliant White (90 lb. Cover (243 g/m<sup>2</sup>)) Type of paper you want to print on is Coated (106-180 gm2):

OK Top Coat Plus (34 lb. (127.9 g/m<sup>2</sup>))

### Calibrating for Paper in Group A and C

- Load the paper for calibration for group A and C into different paper drawers.
  - You can use the following type of paper to calibrate for paper in each group. You can also use the other type of paper if you registered it to use for calibration in advance.

### For the European and Asia-Pacific Regions

For paper in group A: Canon Océ Top Colour Paper (100 g/m<sup>2</sup>) For paper in group C: Canon Océ Top Colour Paper (300 g/m<sup>2</sup>)

### For the American Region

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For paper in group A: Hammermill Color Copy Digital (28 lb. (105 g/m<sup>2</sup>)) For paper in group C: Hammermill Color Copy Digital Cover (100 lb. (271 g/m<sup>2</sup>))

2 Press  $\circledast$  → [Adjustment/Maintenance] → [Adjust Image Quality] → [Auto Adjust Gradation] → [Thin 1/Plain/Heavy 1-4].

Recommended Types of Calibration

3 Select the paper you loaded for calibration for group A for [Select Paper to Adjust].

 "Adjustment for Image Quality and Finishing (Calibration)" > "Automatic Gradation Adjustment" > "Selecting Paper for Calibration" in the User's Guide

**4** Do automatic gradation calibration (full calibration).

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"Adjustment for Image Quality and Finishing (Calibration)" > "Automatic Gradation Adjustment" > "Full Adjustment" in the User's Guide

### 5 Press [Heavy 6].

6 Select the paper you loaded for calibration for group C for [Select Paper to Adjust].

 "Adjustment for Image Quality and Finishing (Calibration)" > "Automatic Gradation Adjustment" > "Selecting Paper for Calibration" in the User's Guide

7 Do automatic gradation calibration (full calibration).

"Adjustment for Image Quality and Finishing (Calibration)" > "Automatic Gradation Adjustment" > "Full Adjustment" in the User's Guide

- 8 If you are using the imagePRESS Server, do steps 1 to 8 in "Calibrations on the imagePRESS Server" in "Required Calibrations." (p. 22)
  - Do calibration on the imagePRESS Server using one of the following types of paper. You can also use the type of paper that you want to use for printing if you registered it in advance.

### For the European and Asia-Pacific Regions

Type of paper you want to print on is Plain (52-220 gm2): Canon Océ Top Colour Paper (100 g/m<sup>2</sup>)

Type of paper you want to print on is Heavy Thick (257-300 gm2): Canon Océ Top Colour Paper (300 g/m<sup>2</sup>)

Type of paper you want to print on is Heavy Coated (181-300 gm2): Futura Gloss Cover (271 g/m<sup>2</sup>)

### For the American Region

Type of paper you want to print on is Plain (52-220 gm2): Hammermill Color Copy Digital (28 lb. (105 g/m<sup>2</sup>))

Type of paper you want to print on is Heavy Thick (257-300 gm2): Hammermill Color Copy Digital Cover (100 lb. (271 g/m<sup>2</sup>))

Type of paper you want to print on is Heavy Coated (181-300 gm2): Futura Gloss Cover (100 lb. (271 g/m<sup>2</sup>))

### Calibrating for Paper in Group B and C

# Load the paper for calibration for group B and C into different paper drawers. You can use the following type of paper to calibrate for paper in each group. You can also use the other type of paper if you registered it to use for calibration in advance. For the European and Asia-Pacific Regions For paper in group B: Canon Océ Top Colour Paper (250 g/m<sup>2</sup>) For paper in group C: Canon Océ Top Colour Paper (300 g/m<sup>2</sup>) For the American Region For paper in group B: Mohawk Options Navajo Smooth Brilliant White (90 lb. Cover (243 g/m<sup>2</sup>)) For paper in group C: Hammermill Color Copy Digital Cover (100 lb. (271 g/m<sup>2</sup>))

- 3 Select the paper you loaded for calibration for group B for [Select Paper to Adjust].

 "Adjustment for Image Quality and Finishing (Calibration)" > "Automatic Gradation Adjustment" > "Selecting Paper for Calibration" in the User's Guide

- 4 Do automatic gradation calibration (full calibration).
  - ( "Adjustment for Image Quality and Finishing (Calibration)" > "Automatic Gradation Adjustment" > "Full Adjustment" in the User's Guide
- 5 Press [Heavy 6].

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6 Select the paper you loaded for calibration for group C for [Select Paper to Adjust].

 "Adjustment for Image Quality and Finishing (Calibration)" > "Automatic Gradation Adjustment" > "Selecting Paper for Calibration" in the User's Guide

Do automatic gradation calibration (full calibration).

"Adjustment for Image Quality and Finishing (Calibration)" > "Automatic Gradation Adjustment" > "Full Adjustment" in the User's Guide

Recommended Types of Calibration

# 8 If you are using the imagePRESS Server, do steps 1 to 8 in "Calibrations on the imagePRESS Server" in "Required Calibrations." (p. 22)

• Do calibration on the imagePRESS Server using one of the following types of paper. You can also use the type of paper that you want to use for printing if you registered it in advance.

### For the European and Asia-Pacific Regions

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Type of paper you want to print on is Thick (221-256 gm2): Canon Océ Top Colour Paper (250 g/m<sup>2</sup>)

Type of paper you want to print on is Heavy Thick (257-300 gm2): Canon Océ Top Colour Paper (300 g/m<sup>2</sup>)

Type of paper you want to print on is Coated (106-180 gm2): OK Top Coat Plus (127.9 g/m<sup>2</sup>)

Type of paper you want to print on is Heavy Coated (181-300 gm2): Futura Gloss Cover (271 g/m<sup>2</sup>)

### For the American Region

Type of paper you want to print on is Thick (221-256 gm2): Mohawk Options Navajo Smooth Brilliant White (90 lb. Cover (243 g/m<sup>2</sup>))

Type of paper you want to print on is Heavy Thick (257-300 gm2): Hammermill Color Copy Digital Cover (100 lb. (271 g/m<sup>2</sup>))

Type of paper you want to print on is Coated (106-180 gm2): OK Top Coat Plus (34 lb. (127.9 g/m<sup>2</sup>))

Type of paper you want to print on is Heavy Coated (181-300 gm2): Futura Gloss Cover (100 lb. (271 g/m<sup>2</sup>)) Calibrating for Paper in Group A, B, and C

# Load the paper for calibration for group A, B, and C into different paper drawers. You can use the following type of paper to calibrate for paper in each group. You can also use the other type of paper if you registered it to use for calibration in advance. For the European and Asia-Pacific Regions For paper in group A: Canon Océ Top Colour Paper (100 g/m<sup>2</sup>) For paper in group B: Canon Océ Top Colour Paper (250 g/m<sup>2</sup>) For paper in group C: Canon Océ Top Colour Paper (300 g/m<sup>2</sup>) For the American Region For paper in group A: Hammermill Color Copy Digital (28 lb. (105 g/m<sup>2</sup>)) For paper in group B: Mohawk Options Navajo Smooth Brilliant White (90 lb. Cover (243 g/m<sup>2</sup>)) For paper in group C: Hammermill Color Copy Digital Cover (100 lb. (271 g/m<sup>2</sup>))

- 2 Press  $\circledast$  → [Adjustment/Maintenance] → [Adjust Image Quality] → [Auto Adjust Gradation] → [Thin 1/Plain/Heavy 1-4].
- **3** Select the paper you loaded for calibration for group A for [Select Paper to Adjust].

 "Adjustment for Image Quality and Finishing (Calibration)" > "Automatic Gradation Adjustment" > "Selecting Paper for Calibration" in the User's Guide

4 Do automatic gradation calibration (full calibration).

"Adjustment for Image Quality and Finishing (Calibration)" > "Automatic Gradation Adjustment" > "Full Adjustment" in the User's Guide

5 Press [Heavy 5].

6 Select the paper you loaded for calibration for group B for [Select Paper to Adjust].

 "Adjustment for Image Quality and Finishing (Calibration)" > "Automatic Gradation Adjustment" > "Selecting Paper for Calibration" in the User's Guide

7 Do automatic gradation calibration (full calibration).

"Adjustment for Image Quality and Finishing (Calibration)" > "Automatic Gradation Adjustment" > "Full Adjustment" in the User's Guide

Recommended Types of Calibration

8	Press [Heavy 6].
9	Select the paper you loaded for calibration for group C for [Select Paper to Adjust].
	<ul> <li>"Adjustment for Image Quality and Finishing (Calibration)" &gt; "Automatic Gradation Adjustment" &gt; "Selecting Paper for Calibration" in the User's Guide</li> </ul>
10	Do automatic gradation calibration (full calibration).
	"Adjustment for Image Quality and Finishing (Calibration)" > "Automatic Gradation Adjustment" > "Full Adjustment" in the User's Guide
1	If you are using the imagePRESS Server, do steps 1 to 8 in "Calibrations on the imagePRESS Server" in "Required Calibrations." (p. 22)
	• Do calibration on the imagePRESS Server using one of the following types of paper. You can also use the type of paper that you want to use for printing if you registered it in advance.
	For the European and Asia-Pacific Regions
	Type of paper you want to print on is Plain (52-220 gm2): Canon Océ Top Colour Paper (100 g/m²)
	Type of paper you want to print on is Thick (221-256 gm2): Canon Océ Top Colour Paper (250 g/m²)
	Type of paper you want to print on is Heavy Thick (257-300 gm2): Canon Océ Top Colour Paper (300 g/m²)
	Type of paper you want to print on is Coated (106-180 gm2): OK Top Coat Plus (127.9 g/m²)
	Type of paper you want to print on is Heavy Coated (181-300 gm2): Futura Gloss Cover (271 g/m²)
	For the American Region
	Type of paper you want to print on is Plain (52-220 gm2): Hammermill Color Copy Digital (28 lb. (105 g/m²))
	Type of paper you want to print on is Thick (221-256 gm2): Mohawk Options Navajo Smooth Brilliant White (90 lb. Cover (243 g/m²))
	Type of paper you want to print on is Heavy Thick (257-300 gm2): Hammermill Color Copy Digital Cover (100 lb. (271 g/m²))
	Type of paper you want to print on is Coated (106-180 gm2): OK Top Coat Plus (34 lb. (127.9 g/m²))
	Type of paper you want to print on is Heavy Coated (181-300 gm2): Futura Gloss Cover (100 lb. (271 g/m²))

The density and tone of colors may change as you print large volumes of the same pages, even if you are printing the same image, slight variations in the shades of colors may become apparent. This is characteristic to this machine. You need to calibrate the colors periodically to compensate for the difference in colors.

### NOTE

This section explains how to perform calibration using [Adjustment Level] with 'Same for All Paper Types' for automatic gradation calibration. For more information on [Adjustment Level] for automatic gradation calibration, see "Adjustment for Image Quality and Finishing (Calibration)" > "Automatic Gradation Adjustment" > "Changing Adjustment Level" in the User's Guide.



### Calibration after Purchase

The machine must be calibrated after you install it on your site. Use the following procedure to do the calibration.

Step 1	Required Calibrations (Calibrations on the Machine) (p. 19)				
	▼				
Step 2	Required Calibrations (Calibrations on the imagePRESS Server) (p. 22)				
▼					
Step 3	Calibrating for Paper You Want to Use for Printing (Calibrations on the Machine) (p. 26)				
▼					
Step 4	Calibrating for Paper You Want to Use for Printing (Calibrations on the imagePRESS Server) (p. 29)				

### Calibration After the Machine Is in Operation

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After the activation, you need to perform calibration with the following frequency.

Every Day	Calibration After the Machine Is in Operation (p. 37)

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### **Calibration As Needed**

If any of the following symptoms appear, perform calibration as needed.

Wrong Colors on Printouts	Calibration As Needed (p. 38)

### **Calibration Order**

If you perform multiple calibrations, perform in order as follows.



### NOTE

The machine automatically corrects the color density every time it prints a certain number of pages to maintain stable gradations, densities, and shades of printed colors. When you print a large number of pages, you can increase the frequency of density corrections to minimize changes in colors.

Adjustment for Image Quality and Finishing (Calibration)" > "Gradation Adjustment During Printing" in the User's Guide

# Types of Paper You Can Use for Calibrating

You can use the following types of paper for calibration. If you want to use a different type of paper, you need to register the paper on the machine and the imagePRESS Server before performing a calibration. See "Calibrating for Paper You Want to Use for Printing" (p. 26) for the procedure.

### For the European and Asia-Pacific Regions

### Calibrating from the Machine

Canon Océ Top Colour Paper (100 g/m²)

### Calibrating from the imagePRESS Server

- Type of paper you want to print on is Plain (52-220 gm2): Canon Océ Top Colour Paper (100 g/m<sup>2</sup>)
- Type of paper you want to print on is Thick (221-256 gm2): Canon Océ Top Colour Paper (250 g/m<sup>2</sup>)
- Type of paper you want to print on is Heavy Thick (257-300 gm2): Canon Océ Top Colour Paper (300 g/m<sup>2</sup>)
- Type of paper you want to print on is Coated (106-180 gm2): OK Top Coat Plus (127.9 g/m<sup>2</sup>)
- Type of paper you want to print on is Heavy Coated (181-300 gm2): Futura Gloss Cover (271 g/m<sup>2</sup>)

### For the American Region

### Calibrating from the Machine

Hammermill Color Copy Digital (28 lb. (105 g/m<sup>2</sup>))

### Calibrating from the imagePRESS Server

- Type of paper you want to print on is Plain (52-220 gm2): Hammermill Color Copy Digital (28 lb. (105 g/m<sup>2</sup>))
- Type of paper you want to print on is Thick (221-256 gm2): Mohawk Options Navajo Smooth Brilliant White (90 lb. Cover (243 g/m<sup>2</sup>))
- Type of paper you want to print on is Heavy Thick (257-300 gm2): Hammermill Color Copy Digital Cover (100 lb. (271 g/m<sup>2</sup>))
- Type of paper you want to print on is Coated (106-180 gm2): OK Top Coat Plus (34 lb. (127.9 g/m<sup>2</sup>))
- Type of paper you want to print on is Heavy Coated (181-300 gm2): Futura Gloss Cover (100 lb. (271 g/m<sup>2</sup>))

\* The names of the types of paper are subject to change. For more information, contact your local authorized Canon dealer.

### Calibration after Purchase

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### Required Calibrations

There are two types of calibration. One is on the machine, the other is on the imagePRESS Server. You need to perform both types of calibration.

# Creating New Standard Values for Calibration

Standard values for calibration are already registered in the machine and the imagePRESS Server by default. If you notice a change in color, you can restore these default settings. Note that this value is a general value. However, you can create new standard values for your usage environment that allow you to calibrate the machine with greater accuracy.



1

### Calibrations on the Machine

This section explains how to create new standard values for calibration.

- Set [Adjustment Level] of Automatic Gradation Adjustment to [By Paper Type Groupe].
- "Adjustment for Image Quality and Finishing (Calibration)" > "Adjust Image Quality" > "Automatic Gradation Adjustment" > "Changing Adjustment Level" in the User's Guide



### Load the paper into the paper drawer.

For the European and Asia-Pacific Regions

	[Thin 1/Plain/Heavy 1-4]	[Heaby 5]	[Heaby 6]
Loaded paper	Canon Océ Top Colour Paper	Canon Océ Top Colour Paper	Canon Océ Top Colour Paper
	(100 g/m²)	(250 g/m²)	(300 g/m²)

### For the American Region\*

	[Thin 1/Plain/Heavy 1-4]	[Heaby 5]	[Heaby 6]
Loaded paper	Hammermill Color Copy Digital (28 lbŁ (105 g/m²))	Mohawk Options Navajo Smooth Brilliant White (90 IbŁ Cover (243 g/m²))	Hammermill Color Copy Digital Cover (100 lbŁ (271 g/m²))

\* If the paper name is described for the European and Asia-Pacific regions in the following pages, see the corresponding paper name described in the table above.



- "Settings/Registration" > "Registering the Paper Size and Type for a Paper Source" in the User's Guide
- Press (●) → [Preferences] → [Paper Settings] → [Paper Settings] to check the paper type.

🛞 Setting	s/Registration	Settings/ Reg.Shortcut	\$
<paper setting<="" th=""><th>s&gt;</th><th></th><th></th></paper>	s>		
A3			Set 🔸
2 A4 ≣	U		Custom Size
€ A4 ≣			▶ Envelope
▲ A4	D		
© A4 ≣	D		
■ Details ► 🗔 AS	of Selected Paper Plain 1	(80-90 g/m2)	<b>.</b>
			لد ٥٢

- 3 Select the paper that you want to correct, then press [Initialize When Using Full Adjust].
  - "Adjustment for Image Quality and Finishing (Calibration)" > "Automatic Gradation Adjustment" > "Selecting Paper for Calibration" in the User's Guide
  - Press (a)  $\rightarrow$  [Adjustment/Maintenance]  $\rightarrow$  [Adjust Image Quality]  $\rightarrow$  [Auto Adjust Gradation] to select the paper.
  - The selected paper is displayed in yellow.
- $4\quad \text{Press} \ [\text{On}] \to \text{press} \ [\text{OK}].$





# 5 Perform automatic gradation calibration (full calibration).

 "Adjustment for Image Quality and Finishing (Calibration)" > "Automatic Gradation Adjustment" > "Full Adjustment" in the User's Guide

- Select the paper drawer where you loaded the paper in step 1 as the paper source for test printing.
- Repeat steps 1 to 5 until automatic gradation calibration (full calibration) is finished for all paper types.
- Return [Adjustment Level] to [Same for All Paper Types] after adjustment for all paper types is finished.

# 6 Create and register a new standard for automatic color tone correction.

- "Adjustment for Image Quality and Finishing (Calibration)" > "Automatic Color Tone Correction" > "Registering Correction Pattern" in the User's Guide
- Select "Plain 1 (80-90 g/m<sup>2</sup>)" for the paper type that you use for test printing.
- Select the paper drawer where you have loaded "Canon Océ Top Colour Paper (100 g/m<sup>2</sup>)" as the paper source for test printing.



Auto Correct Color Tone
legister Correction Pattern
lob Type to Apply To
Cinse

PAN	

### Calibrations on the imagePRESS Server

This section explains how to calibrate for "Canon Océ Top Colour Paper (100 g/m<sup>2</sup>)" by using a manual spectrophotometer (X-Rite i1 Pro). You need to connect the spectrophotometer to a machine on which Command WorkStation is installed. Note that doing these operations overwrites any calibration values that you have registered.

Canon Océ Top
Colour Paper (100 g/m <sup>2</sup> )

Calibrations on the imagePRESS Server

### $1 \quad \text{Click [Job Center]} \rightarrow \text{[Calibrate] in Command WorkStation.}$

2 Fiery Command WorkStation		
File Edit Actions Go Server View	Help	
Servers 🤫	Job Center Device Center	Logged in as Administrator   Switch User
+ - ø	New Job Import Print Properties Preview Delete	Calibrate ogs Paper Catalog
F200	Printing:	Cancel Job Summary
Please load paper	# Job Status Job Title	User Size Pages Copies Media type Document si
Consumables		
A Multi-purpose tray (Unassigned)	Processing:	Cancel

### 2 Select each item as follows and click [Continue].

### [Calibrate for:]

Select the paper you use for the calibration. (Select "Plain (52-220 gm2)" here.)

### [Paper source:]

Select the paper drawer where you have loaded the paper. (Select the paper drawer where "Canon Océ Top Colour Paper (100  $g/m^2$ )" is loaded here.)

### [Measurement method:]

Select the calibration method. (Select "X-Rite i1Pro" here.)

• A calibration page is printed.

7 Calibrator	3
Calibrating "SERVER-Internet" Select the printing environment you want to calibrate for and cick "Continue" to print the calibration page(b).	
Calibrate for: Plain (52-220 gm2)	
Last calibrated: Default measurements	
Paper source: Drawer 1: Plain (80-90 g/m2); A4	
Measurement method: EFI ES-2000	
ColorCal EFT ES-1000 EFT ES-2000	
X-Rte iIPro X-Rte iIPro	
Load measurements from file	
2 Continue Cancel	

**3** Place the spectrophotometer, X-Rite i1 Pro, on the cradle and click [Continue].

.....



# 4 Place the sensor of the spectrophotometer on the calibration page.

- Place several sheets of blank paper on a flat surface and place the calibration paper on the top.
- Focus the sensor of the spectrophotometer on the white area indicated by the red frame in the image.



# 5 Hold the spectrophotometer button and scan the cyan strip.

- Hold the spectrophotometer button until you see <Scanning the Cyan strip...>. Keep holding the button and move the spectrophotometer from the top to the bottom to scan the cyan strip.
- Release the button after you have finished scanning.



6 Scan the magenta, yellow, and black strips in the same way.

7 After <Measurements completed successfully.> appears, click [Continue].



8 Click [Apply & Close].



### 9 If necessary, calibrate for the following papers in the same way.

### For the European and Asia-Pacific Regions

Canon Océ Top Colour Paper (250 g/m<sup>2</sup>) Canon Océ Top Colour Paper (300 g/m<sup>2</sup>) OK Top Coat Plus (127.9 g/m<sup>2</sup>) Futura Gloss Cover (271 g/m<sup>2</sup>)

### For the American Region

Mohawk Options Navajo Smooth Brilliant White (90 lb. Cover (243 g/m<sup>2</sup>)) Hammermill Color Copy Digital Cover (100 lb. (271 g/m<sup>2</sup>)) OK Top Coat Plus (34 lb. (127.9 g/m<sup>2</sup>)) Futura Gloss Cover (100 lb. (271 g/m<sup>2</sup>))

• In step 2, select one of the following types of paper for [Calibrate for:].

### For the European and Asia-Pacific Regions

Canon Océ Top Colour Paper (100 g/m<sup>2</sup>): Plain (52-220 gm2) Canon Océ Top Colour Paper (250 g/m<sup>2</sup>): Thick (221-256 gm2) Canon Océ Top Colour Paper (300 g/m<sup>2</sup>): Heavy Thick (257-300 gm2) OK Top Coat Plus (127.9 g/m<sup>2</sup>): Coated (106-180 gm2) Futura Gloss Cover (271 g/m<sup>2</sup>): Heavy Coated (181-300 gm2)

### For the American Region

Hammermill Color Copy Digital (28 lb. (105 g/m<sup>2</sup>)): Plain (52-220 gm2) Mohawk Options Navajo Smooth Brilliant White (90 lb. Cover (243 g/m<sup>2</sup>)): Thick (221-256 gm2) Hammermill Color Copy Digital Cover (100 lb. (271 g/m<sup>2</sup>)): Heavy Thick (257-300 gm2) OK Top Coat Plus (34 lb. (127.9 g/m<sup>2</sup>)): Coated (106-180 gm2) Futura Gloss Cover (100 lb. (271 g/m<sup>2</sup>)): Heavy Coated (181-300 gm2)

### Calibrating for Paper You Want to Use for Printing

You need to calibrate the machine for the paper you are actually using. Make sure you complete the procedure in "Calibrations on the Machine" (p. 19) in "Required Calibrations," even if you are not going to use "Canon Océ Top Colour Paper (100 g/m<sup>2</sup>)."



### Calibrations on the Machine

This section explains how to create new standard values for calibration. You must use uncoated paper for the calibration even if you are using some type of paper other than uncoated paper for printing. If this is the case, use an uncoated paper that is as close as possible to the basis weight of the paper you are using for printing. For more information, see "Types of Paper You Can Use for Calibration" at the end of this document.



### 1 Load the paper you want to use for calibration.

• Make sure that "Canon Océ Top Colour Paper (100 g/m<sup>2</sup>)" is also loaded properly for use.

2 Change the paper type of the paper drawer to match the paper type loaded in step 1.

- Settings/Registration" > "Registering the Paper Size and Type for a Paper Source" in the User's Guide
- Press (a)  $\rightarrow$  [Preferences]  $\rightarrow$  [Paper Settings]  $\rightarrow$  [Paper Settings] to set the paper type.

¢Paper Settings>	¢Paper Settings>	🖌) Settings	s/Registration	Settings/ Reg.Shortcut	÷
0 43     0 44       0 44     0       0 44     0       0 44     0       0 44     0       0 44     0	<ul> <li>B 43 ○ Custom Size</li> <li>Custom Size</li> <li>Custom Size</li> <li>Custom Size</li> <li>Envelope</li> <li>A4 ○</li> <li>B 44 ○</li> <li>Custom Size</li> <li>Provelope</li> <li>A3 Paper A</li> </ul>	<paper settings<="" th=""><th>»</th><th></th><th></th></paper>	»		
	U AA U AA U AA U Contractor Paper → Contractor Paper → Contractor Paper → Contractor Paper → Contractor Paper → Contractor Paper	■ A3 ■ ■ ■ ■ ■			Set
And a second	■ Details of Solected Paper > ☑ A3 Paper A	2 A4 2 A4			

### **3** Register the paper you want to use for calibration.

. . . . . . . . . . . . . . . .

- "Adjustment for Image Quality and Finishing (Calibration)" > "Automatic Gradation Adjustment" > "Registering Paper for Calibration" in the User's Guide
- Select <Standard> for the type for the paper to use as a basis.
- Select the paper drawer where you have loaded "Canon Océ Top Colour Paper (100 g/m<sup>2</sup>)" as the paper source contains the type of paper to use as a basis.
- Select the paper drawer in which the paper you can use for calibration has been loaded as the paper source that is loaded with custom paper to be used as the paper type to adjust.
- 4 Select the paper you registered in step 3 for [Select Paper to Adjust].
  - "Adjustment for Image Quality and Finishing (Calibration)" > "Automatic Gradation Adjustment" > "Selecting Paper for Calibration" in the User's Guide

🛞 Settings/Registration	Settings/ Reg.Shortcut	ıt	\$
<auto adjust="" gradation=""> Select the type.</auto>			
Adjustment will be applied for all paper typ Full Adjust Register , Paper to Adjust , Paper to Adjust - Otalie of Satected Paper - Stretcher	as. .stj	Select Method Number of She Output for Tes Adjustment Le Initialize When Full Adjust	ets to t Page vel Using
		OK	لد



# 5 Perform automatic gradation calibration (full calibration).

- "Adjustment for Image Quality and Finishing (Calibration)" > "Automatic Gradation Adjustment" > "Full Adjustment" in the User's Guide
- Select the paper drawer in which the paper you can use for calibration has been loaded as the paper source for test printing.



- 6 Create and register a new standard for calibration for automatic color tone correction.
  - "Adjustment for Image Quality and Finishing (Calibration)" > "Automatic Color Tone Correction" > "Registering Correction Pattern" in the User's Guide
  - Select the type of paper you can use for calibration as the paper type that you use for test printing.
  - Select the paper drawer in which the paper you can use for calibration has been loaded as the paper source for test printing.

Auto Correct Color Tone	
Register Correction Pattern	
= Job Type to Apply To	
	1/1
	V
Close	لد
	Auto Correct Color Tone     Register Correction Pattern     Job Type to Apply To     Close

### **IMPORTANT**

When standards for calibration are overwritten, the data is lost. Be careful not to overwrite the standard for calibration for "Canon Océ Top Colour Paper (100 g/m<sup>2</sup>)" when you register a new standard of calibration for the paper you can use for calibration.

. . . . . . . . . . . . . . . . . .

### Calibrations on the imagePRESS Server

. . . . . . . . .

This section explains how to use a manual spectrophotometer (X-Rite i1 Pro) to calibrate the machine for the paper you want to print on. You need to connect the spectrophotometer to a machine on which Command WorkStation is installed.

Paper to Print on	
Calibration	s on the imagePRESS Server

# $\label{eq:clickth} \begin{array}{l} 1 \quad \mbox{Click the [Device Center] tab in Command WorkStation} \rightarrow \mbox{[General]} \rightarrow \mbox{[Tools]} \rightarrow \mbox{[Manage] for} \\ <\mbox{Calibrate} >. \end{array}$

💈 Command WorkStation		
<u>File Edit Actions Go Server View H</u>	ielp	
Servers 📢	Job Center Device Center	SERVER-   Logged in as Administrator   Switch User
<b>.</b> .	General 😪 Color Setup 🔅 Resources 🖈 Workflows 🤱	🍰 Users 🛛 📫 Logs
<b>*</b> - <b>*</b>	General Info Server Configuration	
SERVER-		
Idle	Calibrate	Calibrate
	Compensate for day-to-day variations in printed quality.	Manage
		Preferences

### 2 Click [Create New].

😗 Calibrator			×
🕂 Create New 🖋 Edit	Delete		
Calibration settings	Last calibrated	Recommended paper	
🔒 Coated (106-180 gm2)	Default measurements		
🔒 Heavy Coated (181-300 gm2)	Default measurements		
🔒 Heavy Thick (257-300 gm2)	Default measurements		
🔒 Plain (52-220 gm2)	Default measurements		
🔒 Thick (221-256 gm2)	Default measurements		

• If there is no appropriate paper type, select <Server default>.



# 4 Enter the required information and click [Continue].

- It will be easier to find the calibration settings if you enter specific characteristics of the paper you are calibrating, such as gloss value, in addition to basis weight and paper type.
- You can check the print settings by clicking [Properties].

]
erties

# 5 Select the items as described below and click [Continue].

### [Paper source:]

Select the paper drawer in which the paper you want to print on is loaded.

### [Measurement method:]

Select the calibration method. (Select "X-Rite i1Pro" here.)

• A calibration page is printed.

lew calibration sett	ing "XXX paper"		
Recommended paper	XXX paper		
	Plain 1 (80-90 g/m2		
elect the paper source rint	and measurement m	ethod, then click	Continue"
Paper source:			
Drawer 1: Plain (80-	0 g/m2); A4		-
Measurement method	:		-
EFI ES-2000		<b>\</b>	
EFI ES-1000			
EFI ES-2000			
X-Rite i1Pro			
X-Rite i1Pro2			
Load measuremer	nts from file		



6 Follow steps 3 to 7 in "Calibrations on the imagePRESS Server" (p. 22) in "Required Calibrations."

7 Link the calibration setting with the output profile and click [OK].



• The calibration setting for the paper you want to print on is added to the list.

	Calibrator	Indiana di Kasara	
•	🕨 Create New 📝 Edit 👘	Delete	
	Calibration settings	Last calibrated	Recommended paper
	Coated (106-209 gm2)	Default measurements	
	XXX paper	10/3/2013 7:15:28 PM	XXX paper
	Heavy Coated (210-256 gm2)	Default measurements	
	Heavy Thick (210-256 gm2)	Default measurements	
	Plain (64-105 gm2)	10/3/2013 7:02:43 PM	
	Thick (106-209 gm2)	Default measurements	

8

....

Click the [Device Center] tab in Command WorkStation  $\rightarrow$  [Resources]  $\rightarrow$  [Profiles].

🌯 Comma	and WorkStation									
File Edit	Actions Go Server	View I	Help							
Servers			Job Center	Device Cent	er			SERVER-	Logged in as Ad	ministrator   Switch User
	_		📥 General	😌 Color Setup	Resources	KA Workflows	🤳 Users	🔒 Logs		
			Paper Catalog	VDP Resources	Profiles	Spot Colors Fo	nts			

### 9 Click [Output Profiles] to display a list of profiles.

• An output profile with "Copy" appended to the name appears in the list as the output profile for the paper you want to print on.



Output Profiles Description Calibration Media type Canon imagePRESS Canon imagePRESS Plain (52-220 gm2) Plain (52-220 gm2) Canon imagePRESS Contend (106-18... Coated (106-180 gm2) Unable to retrieve this information. 🔒 Canon imagePRESS 🕬 📖 Heavy Coated (... Heavy Coated (181-300 gm2) Canon imagePRESS Thick (221-256 ... Thick (221-256 gm2) Canon imagePRESS Heavy Thick (25... Heavy Thick (257-300 gm2) Plain (52-220 g Settings Edit Profile Device Link Profiles Export Delete

### 10 Right-click the output profile for the paper you are using, and click [Settings].

11 Select or enter the items as shown below, and click [OK].

. . . . . . . . . . . .

### [Profile Description:]

Enter a simple description to distinguish this profile from other profiles.

### [Media Type:]

Nothing needs to be selected.

### [Calibration:]

Select the calibration setting you created in steps 1 to 7 for the paper you want to print on.

Output Profile Settings	×
Profile Description:	
Output Profile of XXX paper	
Media Type:	
Plain (52-220 gm2)	
Heavy Thick (227-256 gm2)	
Coated (106-180 gm2)	
Calibration:	
NAME:	
XXX paper	
ОК Саг	ncel

12 Click the [Device Center] tab in Command WorkStation  $\rightarrow$  [Resources]  $\rightarrow$  [Paper Catalog]  $\rightarrow$  [Add New].

2 Command WorkStation		
File Edit Actions Go Server View	Help	
Servers	Job Center Device Center SERVER-  Log	ged in as Administrator   Switch User
<b>4</b> – "X	🔄 📥 General 🛛 😜 Color Setup 🛛 🛞 Resources 🛛 🖈 Workflows 🛛 🧩 Users 🛛 👫 Logs	
	Paper Catalog VDP Resources Profiles Spot Colors Fonts	
SERVER-	Paper Catalog (Total: 24 📫 Add New) 前 Delete 🛛 🎽 Import 👻 📑 Export 👻	× Settings

13 Register attributes of the paper you want to print on in the imagePRESS Server.

• Set a name, type or size of the paper.



• Select the output profile you set in step 11 in <Front Color Profile>.

New			×
			_
	Name *:	XXX paper	
P	roduct ID:		
Med	lia type *: (	Plain 1 (80-90 g/m2) -	)
9	Set count:		
Output pa	per size *: (	A3 -	Custom
Front Co	lor Profile:	Output Profile of XXX paper 🛛 🔻	
Back Co	lor Profile:	Same as Front	]
			OK Cancel

### NOTE

- If the front and back surfaces of the paper are different, you can select <Back Color Profile> and <Front Color Profile> separately.
- For detailed information on the setting items, see the user manual or the Help for the imagePRESS Server.
Getting the Best Colors from Your Machine

### 14 Click [OK].

#### NOTE

See the following reference for information about how to use profile creation software to create output profiles. The set of the s

## Calibration Settings and Output Profiles

.......

You need to link the output profile to the calibration settings to use them for the paper you want to print on. You can use a calibration setting with several output profiles, but each output profile must be linked with only a single calibration setting.



## Setting Output Profiles to a Job

 $\circlearrowright$ 

You can set output profiles to each job in the imagePRESS Server. Follow the procedure below to use an arbitrary profile temporarily.

- 1 Double-click the job in Command WorkStation.
  - [Job Properties] is displayed.
- 2 Select the [Color] tab, and then click [Basic Settings].



3 Select any profiles in [Output Profile] on the <Color Management> screen and click [OK].

Color Management	
Image: Construction         Image: Construction           Image: Construction Construction         Image: Construction           Image: Construction         Image: Construction<	Contract Predice
spat Color     Spat Color     Spat Color matching     Gray and Back     Reg      Off     Off     Off     Off     Off     Off     Off	Description: Setting for handling all color conversion for the output device.
Server Defaults	Output Profile: Output Profile of XOX paper

### Calibration After the Machine Is in Operation

.....

Perform automatic gradation calibration (full calibration) once a day to output CMYK properly. If you use the imagePRESS Server, perform automatic gradation calibration (full calibration) on the machine, and then perform calibration on the imagePRESS Server.



#### Load the paper into the paper drawer.

1

- Load "Canon Océ Top Colour Paper (100 g/m<sup>2</sup>)" or the paper you want to use for calibration which has been registered.
- 2 Select the paper type you loaded in step 1 for [Select Paper to Adjust].
  - "Adjustment for Image Quality and Finishing (Calibration)" > "Automatic Gradation Adjustment" > "Selecting Paper for Calibration" in the User's Guide



## **3** Perform automatic gradation calibration (full calibration).

- "Adjustment for Image Quality and Finishing (Calibration)" > "Automatic Gradation Adjustment" > "Full Adjustment" in the User's Guide
- Select the paper drawer where you loaded the paper in step 1 as the paper source for test printing.



- 4 If you use the imagePRESS Server, perform steps 1 to 8 in "Calibrations on the imagePRESS Server" in "Required Calibrations." (p. 22)
  - Do calibration on the imagePRESS Server using the paper on the list in "Types of Paper You Can Use for Calibration" at the end of this document. You can also use the type of paper that you want to use for printing if you registered it in advance.

### **Calibration As Needed**

If the wrong flesh tone or incorrect gray scale appears on printouts, perform automatic gradation calibration (full calibration), and then perform shading correction and automatic color tone correction on the machine. Doing so may improve the shades of colors. If the wrong color appears on heavy paper or coated paper, proceed to perform calibration on the imagePRESS Server. Doing so may improve the shades of colors more effectively.



#### Automatic Gradation Calibration

#### 1 Load the paper into the paper drawer.

• Load "Canon Océ Top Colour Paper (100 g/m<sup>2</sup>)" or the paper you want to use for calibration which has been registered.

2 Select the paper type you loaded in step 1 for [Select Paper to Adjust].

.........

 "Adjustment for Image Quality and Finishing (Calibration)" > "Automatic Gradation Adjustment" > "Selecting Paper for Calibration" in the User's Guide

(X) Settings/Registration	Settings/ Reg.Shortcut	\$
<auto adjust="" gradation=""> Select the type.</auto>		
Adjustment will be applied for all paper ty	pes.	
Full Adjust Pager to Adjust Select Select Details of SelectAdjust Details of SelectApper - Standard	just	Select Method Number of Sheets to Output for Test Page Adjustment Level Initialize When Using Full Adjust
		لد OK

## **3** Perform automatic gradation calibration (full calibration).

- "Adjustment for Image Quality and Finishing (Calibration)" > "Automatic Gradation Adjustment" > "Full Adjustment" in the User's Guide
- Select the paper drawer where you loaded the paper in step 1 as the paper source for test printing.



#### Shading Correction

#### 4 Perform shading correction.

🕑 "Adjustment for Image Quality and Finishing (Calibration)" > "Shading Correction" in the User's Guide

#### Automatic Color Tone Correction

#### 5 Perform automatic color tone correction.

- "Adjustment for Image Quality and Finishing (Calibration)" > "Automatic Color Tone Correction" > "Automatic Color Tone Correction" in the User's Guide
- Press [Change Corr. Pattern], and select the calibration standard you created in "Calibration after Purchase." (p. 19)
- Select the paper drawer where you loaded the paper in step 1 as the paper source for the paper for which you are calibrating the machine.



## 6 If the wrong color appears on heavy paper or coated paper, do steps 1 to 8 in "Calibrations on the imagePRESS Server" in "Required Calibrations." (p. 22)

• Do calibration on the imagePRESS Server using one of the following types of paper. You can also use the type of paper that you want to use for printing if you registered it in advance.

#### For the European and Asia-Pacific Regions

Type of paper you want to print on is Thick (221-256 gm2): Canon Océ Top Colour Paper (250 g/m<sup>2</sup>)

Type of paper you want to print on is Heavy Thick (257-300 gm2): Canon Océ Top Colour Paper (300 g/m<sup>2</sup>)

Type of paper you want to print on is Coated (106-180 gm2): OK Top Coat Plus (127.9  $g/m^2$ )

Type of paper you want to print on is Heavy Coated (181-300 gm2): Futura Gloss Cover (271 g/m<sup>2</sup>)

#### For the American Region

Type of paper you want to print on is Thick (221-256 gm2): Mohawk Options Navajo Smooth Brilliant White (90 lb. Cover (243 g/m<sup>2</sup>))

Type of paper you want to print on is Heavy Thick (257-300 gm2): Hammermill Color Copy Digital Cover (100 lb. (271 g/m<sup>2</sup>))

Type of paper you want to print on is Coated (106-180 gm2): OK Top Coat Plus (34 lb. (127.9 g/m<sup>2</sup>))

Type of paper you want to print on is Heavy Coated (181-300 gm2): Futura Gloss Cover (100 lb. (271  $g/m^2$ ))

#### Getting the Best Colors from Your Machine

## When Creating a Custom Output Profile, How Do I Do?

.....

If you create a custom output profile using profile creation software, you need to output the chart for color measurement from the imagePRESS Server. Specify the job properties for the outputting chart in the Command WorkStation as follows.

#### **IMPORTANT**

Make sure to do the following procedure. If the job properties are not specified properly, the chart for color measurement may not be output correctly.

#### NOTE

For information on how to create a custom output profile, see the user manual or the Help for the profile creation software you are using.

- Double-click the job for which you want to output a chart.
   [Job Properties] is displayed.
- 2 Select the [Color] tab, and then click [Basic Settings].



3 Select [Bypass conversion] in [CMYK/Grayscale] on the <Color Management> screen.

Color Management			
CHYK / Grayscale     Source Device Link     Japan Color 2011 Costed     Full (Output GCR)			Expert Settings
RGB         LAB           Image: Source         Device Link           Image: SRGB (PC)         Image: SrGB (PC)           Image: Photographic         Image: SrGB (PC)	Output i     Use medi	Profile a defin	bration 20 gm2) surrements

4 Confirm that the appropriate calibration setting is displayed in [Calibration].



• If you want to change a calibration setting, select the output profile, which is linked with your desired calibration setting, in [Output Profile].

Color Management	
Coor Venagement	Exert Setting.
Spot color matching	

#### NOTE

If you select [Bypass conversion] in [CMYK/Grayscale], the output profile is not used. Only a calibration setting linked with the selected output profile is applied.

5 Click [OK].

### Getting the Best Colors from Your Machine

6 Select the [Image] tab on the <Job Properties> screen, clear the check box for [Toner reduction].



7 Click [OK].

# How to Get the Most Accurate Colors Possible for Your Printouts

Use the following procedures to adjust colors if a spot color in a logo is not exactly reproduced, or if the colors on your printouts are not acceptable, for example.



Step 1	Eliminating the Basic Causes (p. 44)					
	▼					
Step 2	Changing Print Settings for a Job with the imagePRESS Server (p. 46)					

## Step 1 Eliminating the Basic Causes

Find the answers to your questions about how to solve your problems.

### Q. Do you calibrate the colors periodically?

**A.** The density and tone of colors may change gradually as you print large volumes of pages, which means you cannot reproduce accurate colors. You need to calibrate the colors to solve the problem.

#### Solution

See the following references to calibrate the colors periodically.

- 🕑 "Recommended Types of Calibration" (p. 2)
- 🕑 "Getting the Best Colors from Your Machine" (p. 16)

How to Get the Most Accurate Colors Possible for Your Printouts

### Q. Are you using an appropriate simulation profile?

**A.** Use either the default simulation profile on your machine or the simulation profile designated by your customer. If you use some other simulation profile, colors may change.

#### Solution

Double-click the job in Command WorkStation, and click [Color]  $\rightarrow$  [Basic Settings]. The simulation profile currently set is displayed. Specify the appropriate simulation profile, if necessary.



### Step 2 Changing Print Settings for a Job with the imagePRESS Server

If you still have the same problem after you follow the procedures in step 1 "Eliminating the Basic Causes," change the print settings in Command WorkStation on the imagePRESS Server as follows. However, the adjustments described in this section change overall colors. If you want to change the colors of photos only, see the following.

(p. 55) "How to Print Clear Photos" (p. 55)

- Printing a Spot Color Accurately (p. 46)
- Changing the Colors of an Entire Page (p. 48)

#### Printing a Spot Color Accurately

Try this procedure if you cannot reproduce a specified spot color. Registering spot colors in Command WorkStation ensures consistency and accuracy in color reproduction.

1 Click the [Device Center] tab in Command WorkStation  $\rightarrow$  [Resources]  $\rightarrow$  [Spot Colors].

🏂 Command	WorkStation											, e <mark>x</mark>
File Edit /	Actions Go	Server	View	Help								
Servers				44	Job Center	Device Center		SERVER		Logged in a	s Administrato	or   Switch User
- A			.1	×	🚔 General 🧲	Color Setup	ources 💦 🛪 Workflows	🍰 Users 🛛 👔	Logs			
					Paper Catalog	VDP Resources Profil	les Spot Colors Font	S				
Idle	VER-				Properties Pap Out	er source: Auto tray selec out profile: Canon imagePR	t; Any media type; ; Letter ESS Plain (US) v 1F		Set the p print set	roperty settir ings before e	ngs to match t diting a spot o	the intended color.

 $2\quad \mathsf{Click}\,[\mathsf{New}]\,{\rightarrow}\,[\mathsf{Spot}\,\mathsf{Color}].$ 

Scommand WorkStation		
File Edit Actions Go Server View Hel		
Servers 🥨	Job Center Device Center	SERVER-  Logged in as Administrator   Switch User
<b>4</b> – A	🚔 General 😝 Color Setup 🍥 Resources 🛪 Workflows 🏼 🍰 Us	sers 📫 Logs
<u>×</u>	Paper Catalog VDP Resources Profiles Spot Colors Fonts	
SERVER-	Properties Paper source: Auto tray select; Any media type; ; Letter Output profile: Canon imagePRESS Plain (US) v1F	Set the property settings to match the intended print settings before editing a spot color.
	🕂 New 💼 Delete 🕌 Import 📑 Export 📥 Print 🧉	🗦 Instrument 🛛 👬 Find 🛛 🍋 2-Color Print Mapping
	Group Group Glore Guide (2007).ICM Group Name Spot Color Addted:9/26/2007 10:06:34 AM   Numb R_ DIC Colo Addted:9/26/2007 10:06:34 AM   Numb	1 c.
Linable to retrieve this information	System Substitute Group HKS E (C Substitute Color	MYK Edit

How to Get the Most Accurate Colors Possible for Your Printouts

#### **3** Register a spot color.

For detailed instructions for registration, see the following help.
 Command WorkStation > Help > Spot Colors > About Spot Colors > Creating a new spot color

4 Double-click the job in Command WorkStation.

• [Job Properties] is displayed.

5 Select the [Color] tab, and then click [Basic Settings].



6 Select the check box for [Spot color matching].

Color Management			×
CHYR / Grayscale Source Device Link ISO Uncosted FOGRA29L (EF) Full (Output SCR) Source Device Link Source Device Link G Hotographic U	Output Profile Use media defined Use media defined		xert Settings
Spot Color	Description		
Server Defaults		ОК	Cancel

#### 7 Click [OK] $\rightarrow$ [OK].

• Print a test sheet to check the finished result. If you are satisfied with the result, you can print the job.

.....

#### Changing the Colors of an Entire Page

If you think that the colors are somewhat dark overall, and you want to change the colors so they are just a little bit lighter, try the following procedure to adjust the entire palette of colors on the page.

1 Right-click the ripped job marked with  $\ge$  in Command WorkStation  $\rightarrow$  click [ImageViewer].



#### NOTE

- You can only edit ripped jobs.
- If you perform rasterization processing after editing a job, the edits are canceled.
- [ImageViewer] is only compatible with the imagePRESS Server F200, and the optional GA premium package web activate for imagePRESS Server F200 is required.

••••••••••••••••••••••••

2 Select the [Color Wheel] tab on the <Color Adjust> panel, and then move the slider to change all the colors on the page so they appear the way you want.



• For detailed instructions about adjusting colors, see the help files for ImageViewer.

#### 3 To confirm if the colors are acceptable, click [File] $\rightarrow$ [Print] and do a test print.

If you are satisfied with the result, save the adjusted settings by clicking [File] → [Save As], then print the job
that you just saved with the adjusted settings.

# ý

## Using a Custom Profile to Improve the Accuracy of Color Reproduction

If the color on printouts is not the same as you get when you print using preset profiles, you can create a custom profile and use it to print a job. This column explains how to create a new custom profile by making fine adjustments to the CMYK tone curves in an existing profile.

#### NOTE

If you use profile creation software instead of Command WorkStation to create custom profiles, see the following reference and output the chart for color measurement from the imagePRESS Server.

(p. 41) "When Creating a Custom Output Profile, How Do I Do?" (p. 41)

1 Click the [Device Center] tab in Command WorkStation  $\rightarrow$  [Resources]  $\rightarrow$  [Profiles].

Scommand WorkStation				
File Edit Actions Go Server	View H	lelp		
Servers	•	Job Center	Device Center	SERVER-   Logged in as Administrator   Switch User
• •	.3	📥 General 🧧	Color Setup	s 💦 Workflows 🥵 Users 🎼 Logs
	<b>X</b> .	Paper Catalog	VDP Resources Profiles	Spot Colors Fonts
SERVER-		Profile Manager(1	Fotal:21) 🔀 Settings 📔	- Import 🔁 Export 📄 Paper Simulation 👘 Delete

2 Right-click the profile you want to use as a base to create a custom profile  $\rightarrow$  click [Edit Profile].

Idle	GMYK Source Profi	les	Canon ima	gePRESS ( ) Pla		
	🙀 RGB Source Profile	s				Edit
	😧 Output Profiles					
	Description	Calibration	Media type			
	🌜 Canon imagePRESS	Plain (52-220 gm2)	Plain (52-220 gm2)			
	💧 Canon imagePRESS	Coated (106-18	Coated (106-180 gm2)			
1 Unable to retrieve this information.	Canon imagePRESS	Heavy Coated (	Heavy Coated (181-300 gm2)			
	Canon imagePRESS	Thick (221-256	Thick (221-256 gm2)			
	Canon imagePRESS	Heavy Thick (25	Heavy Thick (257-300 gm2)			
	Canon imagePRESS	Plain (52-220 gn 7)	Settinas			OUTPUT
	🕞 Device Link Profiles		Edit Profile		Description:	Canon imagePRESS
			Export		Trees	Plain (JP) NOTPINAL Copy 1
			Delete		Type:	Output
					Device Class:	Output

#### How to Get the Most Accurate Colors Possible for Your Printouts

3 Adjust the CMYK tone curves, and then click [Save].



- For detailed instructions on adjustments, see the help files on the <Color Editor> screen.
- 4 Enter an easy to understand description in <Description> so that you can easily tell the difference between profiles, and then click [Save].

Save		×
	Description	Modified
۲	Canon imagePRESS	2/27/2014 4:20:15 PM
6	Canon imagePRESS	2/10/2014 5:35:28 PM
6	Canon imagePRESS Canon imagePRESS Canon imagePRESS	2/20/2014 2:42:28 PM
6	Canon imagePRESS Canon imagePRESS Canon imagePRESS	2/25/2014 10:21:1
â	Canon imagePRESS	2/25/2014 10:34:0
Des	cription: XXXXXX	
	s	ave Cancel

- 5 Click [Close] to close the <Color Editor> screen.
  - The created custom profile is added to the list.

S Command WorkStation				
File Edit Actions Go Server View He	lp			
Servers ((	Job Center Devic	e Center	SERVER	Logged in as Administrator   Switch User
+ - ø	General 😪 Color Se Paper Catalog VDP Reso	tup 💮 Resourc	es 🛪 Workflows 🥔 Users	t <mark>in</mark> Logs
SERVER-	Profile Manager (Total:20)	🔆 Settings 📔	-Import 🔁 Export 📄 Paper	Simulation 📄 Delete
Idle	🔓 CMYK Source Profik	25		Canon imagePRESS
	🙀 RGB Source Profiles			Edit
	🙀 Output Profiles			
	Description	Calibration	Media type	
	🌲 Canon imagePRESS	Plain (52-220 gm2)	Plain (52-220 gm2)	
	Canon imagePRESS	Coated (106-18	Coated (106-180 gm2)	
Unable to retrieve this information.	Canon imagePRESS	Heavy Coated (	Heavy Coated (181-300 gm2)	
	Canon imagePRESS	Thick (221-256	Thick (221-256 gm2)	
	Canon imagePRESS	Heavy Thick (25	Heavy Thick (257-300 cm2)	
	XXXXXX	Heavy Thick (25		OUTPUT
				Description: Canon imagePRESS

......

6 Print a test sheet using the custom profile you created to check the result. If you are satisfied with the result, you can print the job.

# Smoothing Colors in Photographs, Figures, Lines, and Text

If you specify the same color for a part of a photograph and a figure, differences may appear in the printout as shown on the right, follow the procedure below to solve the problem.



- 1 Double-click the job in Command WorkStation on the imagePRESS Server.
  - [Job Properties] is displayed.
- 2 Click the [Image] tab  $\rightarrow$  select [Resolution], [Error diffusion], or [Gradation] for the print settings in <Printer's halftone>, as necessary.



#### Smoothing colors while keeping the gradation of photographs

We recommend [Gradation] for <Printer's halftone>. The gradation setting is applied to photographs, figures, lines, and text. As a result, you can reduce the differences in colors.

• [Gradation] is appropriate for producing gradations in images. For this reason, if you apply [Gradation] to text and lines, jagged edges (rough edges in an image) may appear in the printout.

#### Smoothing colors while keeping both the gradation of photographs and the sharpness of text and lines

We recommend [Resolution] for <Printer's halftone>. The resolution setting is applied to photographs, figures, lines, and text. As a result, you can reduce the differences in colors.

#### Smoothing colors while reducing jagged edges on text and lines

We recommend [Error diffusion] for <Printer's halftone>. This error diffusion setting is applied to photographs, figures, lines, and text. As a result, you can reduce the differences in colors.

• [Error diffusion] is appropriate for producing text and thin lines. For this reason, if you apply [Error diffusion] to photographs, jagged outlines may appear in the printout.

#### 3 Click [OK].

• Print a test sheet to check the colors. If you are satisfied with the result, you can print the job.

# How to Print Clear Photos

If the characteristics of photos, such as the brightness, contrast, color, and sharpness, are different from what you expected, follow the procedure below to print better photos.

## 1 Right-click the job in Command WorkStation on the imagePRESS Server → click [Image Enhance Visual Editor].

• If [Image Enhance Visual Editor] is not displayed, see "When Image Enhance Visual Editor Is Unavailable." (p. 58)



#### NOTE

- You can only edit processed jobs.
- If you perform rasterization processing after editing a job, the edits are canceled.
- [ImageEnhance Visual Editor] is only compatible with the imagePRESS Server F200.

2 Adjust the values for <Tone>, <Color>, <Sharpness>, and <Red-Eye Correction> on the <Image Enhance Visual Editor> screen.



#### $3 \quad \text{Click [File]} \rightarrow [\text{Proof Print] to check the finished result.}$

- If you are satisfied with the result, click [File]  $\rightarrow$  [Save] to save the adjusted values, and then you can print the job.

# Reducing Jagged Edges and Emphasizing Edges

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If you want to reduce jagged edges and reduce noise, or if you want to emphasize edges and smooth images, try the following procedure to improve the printed image.

- 1 Double-click the job in Command WorkStation on the imagePRESS Server.
  - [Job Properties] is displayed.
- 2 Click the [Image] tab and change the print settings for <Image smoothing> or <Sharpness>, as necessary.



#### Reducing jagged edges and reducing noise

Select the check box for <Image smoothing>.

• This function performs complementary processing to smooth low resolution images. The effects of insufficient resolution are reduced by smoothing jagged edges in images with resolutions of less than 150 dpi from sources such as the Internet.

#### Emphasizing edges and smoothing images

To emphasize edges, select a positive value. To smooth images, select a negative value.



- 3 Click [OK].
  - Print a test sheet to check the finished result. If you are satisfied with the result, you can print the job.

## When Image Enhance Visual Editor Is Unavailable

When Image Enhance Visual Editor is unavailable, you can select [Image Enhance] and adjust the brightness, contrast, color, and sharpness of photos. However, if you make these adjustments, the adjusted values are applied to future jobs as well as the current job. Be sure to restore the settings to their defaults when you finish the job.

1 Click the [Device Center] tab in Command WorkStation  $\rightarrow$  [Workflows]  $\rightarrow$  [Image Enhance]  $\rightarrow$  [Edit].



2 Select <Custom Settings> on the <Image Enhance Settings> screen, and adjust the values for <Exposure>, <Color>, <Shadows & Highlights>, <Sharpness>, and <Red-Eye Correction>.

Automatia	Shadows & Highlights
This mode will detect applicable images in a job and dynamically optimize the Brightness, Contrast, Tone, Saturation, Sharpness and Color.	Vato Correction Shadows
<ul> <li>Custom Settings</li> </ul>	0 100
Exposure     Dynamic Correction Brightness	E Highlights 0 100
-100 100	Sharpness
-100 100 m m m m m m m m m m m m m m m m	Non-skin Sharpness -100 100 Skin Sharpness
Color	
Cast Correction	-100 100
Tone         0         ▲           -100         100         ▼           Cooler         Warmer         ■	Region
Saturation	0 200 Less More
Reset OK Cancel	Reset OK Cancel

#### 3 Click [OK].

- Print a test sheet to check the finished result. If you are satisfied with the result, you can print the job.
- To restore the values to their defaults after printing the job, return to the <Image Enhance Settings> screen, select <Automatic>, and click [OK].

 $\bigvee$ 

# What to Do If, After Printing Large Volumes of Text Documents, Colors in Photos Are Inconsistent

If you clean inside the main unit after printing large volumes of text documents, you can reduce the inconsistency of colors in the photos that you print.

Clean inside the main unit. Press  $\textcircled{O} \rightarrow$  [Adjustment/Maintenance]  $\rightarrow$ [Maintenance]  $\rightarrow$  [Clean Inside Main Unit].

 "Maintenance" > "Output Paper Becomes Dirty (Cleaning Inside of the Main Unit)" in the User's Guide

🛞 Se	ttings/Registration	Settings/ Reg.Shortcut	\$
Select	an item to set. <clean inside="" main="" unit=""></clean>		
Top Adjus Main	Press [Start] to begin clea	aning inside the main unit.	
		Start	
			1/1
	× Cancel		

## Getting Clear Texts and Lines from Your Machine

If you are not satisfied with printouts because of faint, blurry, or rough edges on text and lines, follow the procedures below to solve the problems.



Step 1	Eliminating the Basic Causes (p. 60)				
Step 2	Changing Print Settings for a Job with the imagePRESS Server (p. 61)				

### Step 1 Eliminating the Basic Causes

Find the answers to your questions about how to solve your problems.

### Q. Are the letters or lines too small or too thin?

**A.** If the letters or lines in the data you are printing are too small or too thin, the printed letters and lines may appear faint.

#### Solution

If possible, modify the data you are printing to enlarge the text and make the lines thicker.

### Q. Are you using an outline font?

**A.** Outline fonts become thicker when they are printed, and they look different from their images on your computer screen.

#### Solution

- If you set [1200dpi] for <Resolution>, it may reduce the thickness of fonts. For detailed procedure, see "Reducing the thickness of outline fonts." (p. 62)
- If possible, print the image using a non-outline font.

### Step 2 Changing Print Settings for a Job with the imagePRESS Server

If printed text or lines are still faint or blurry after you follow the procedures in step 1 "Eliminating the Basic Causes," change the print settings in Command WorkStation on the imagePRESS Server. Note that if you change the following print settings, it may affect the print results, such as when printing photos. If possible, we recommend you change the settings gradually, so you can judge the effect of the changes that you make.

- Printing figures, lines, and text with vivid clarity while keeping the smooth gradation of photographs
- Printing text with vivid clarity while keeping the smooth gradation of photographs, figures, and lines
- Reducing jagged edges on text and lines
- Printing text thicker because the thin lines of Roman fonts appear faint
- Reducing the thickness of outline fonts
- Changing Settings in the Image Tab" (p. 61)
- Printing black text and lines clearly
- (p. 66) "Changing Settings in the Color Tab" (p. 66)

#### Changing Settings in the Image Tab

- 1 Double-click the job in Command WorkStation.
  - [Job Properties] is displayed.
- $\label{eq:2} Click the [Image] tab \rightarrow change the print settings for <Printer's halftone>, <Advanced smoothing>, <Text width adjustment>, <Resolution> if necessary.$



## Printing figures, lines, and text with vivid clarity while keeping the smooth gradation of photographs

We recommend you select [Pattern 2] or [Pattern 7] for <Printer's halftone>.

• If you want to keep the gradation of figures and lines, we recommend you select [Pattern 7].

## Printing text with vivid clarity while keeping the smooth gradation of photographs, figures, and lines

We recommend you select [Pattern 4] for <Printer's halftone>.

#### Reducing jagged edges on text and lines

We recommend you select [Level 1] or [Level 2] for <Advanced smoothing>.

- To use this function, you need to specify the settings for advanced smoothing in advance. For detailed information, see "Specifying the Settings for the Printout's Finish." (p. 64)
- If you use this function, colors of the edges on text and lines and colors of the text and lines themselves may look darker.

## Printing text thicker because the thin lines of Roman fonts appear faint

We recommend you select the check box for <Text width adjustment>.

• To use this function, you need to specify the thickness and font color for the target text in advance. For detailed information, see "Specifying the Settings for the Printout's Finish." (p. 64)

#### Reducing the thickness of outline fonts

We recommend you select [1200dpi] for <Resolution>.

• In some cases, this may make lines too thin and faint because it prints text and lines exactly as they are in the data.





 $A \cdot A$ 

 $R \cdot R$ 



#### 3 Click [OK].

• Print a test sheet to check the sharpness of text and lines. If you are satisfied with the result, you can print a job.

#### Getting Clear Texts and Lines from Your Machine

# Patterns for <Printer's halftone>

Each of the following dither patterns, [Gradation], [Resolution], and [Error diffusion], has been set in this machine by default.

Dither Pattern	Name	Features
	Gradation	This pattern is appropriate for producing an image, such as a picture, for which the gradation is important.
	Resolution	This pattern is appropriate for producing text and thin lines.
	Error diffusion	This pattern is appropriate for producing text and thin lines because no jagged edges (rough edges in an image) appear on it.

If you select [Pattern 2], [Pattern 4], and [Pattern 7] for <Printer's halftone>, these patterns above are automatically set to the output image.

Pattern	lmages (Photographs)	Graphics (Figures and Lines)	Text (Letters)
Pattern 2	Gradation	Error diffusion	Error diffusion
Pattern 4	Gradation	Gradation	Error diffusion
Pattern 7	Gradation	Resolution	Error diffusion



## Specifying the Settings for the Printout's Finish





2 Press [Tools]  $\rightarrow$  [Setup].

Fiory		
Login		
Jobs	Setup	Tray Alignment
🗭 PrintNe		
1 Info	Clear Server	Restart Server
🗶 Tools	Check Video Board	
🖉 Calibrate		

3 Enter the password  $\rightarrow$  press [Login].



Getting Clear Texts and Lines from Your Machine

4 Press [Printer]  $\rightarrow$  [Print Form Setup].

Fiery	
Server	General
Network	USB
Printer	Print Form Setup
PDL	
	Uept. ID Managehent
Exit Setup	

- 5 Specify the settings for Advanced smoothing.
  - If you want to reduce jagged edges on lines, select [On] for <Advanced smoothing for graphics>.
  - If you want to reduce jagged edges on text, select [On] for <Advanced smoothing for text>.
  - If you want to apply the advanced smoothing settings to direct printing, such as PDF printing, select [Level 1] or [Level 2] for <Advanced smoothing>. ([Level 2] is more effective.)
- 6 Specify the settings for the text element.
  - If you want to make horizontal lines on the text thicker, select [Level 1] or [Level 2] for <Horizontal text width adjustment>. ([Level 2] is more effective.)
  - If you want to make vertical lines in the text thicker, select [Level 1] or [Level 2] for <Vertical text width adjustment>. ([Level 2] is more effective.)
  - If you want to specify the settings for the text element for black text only, select [Black only] for <Text width adjustment color>.
  - If you want to apply the settings for the text element for direct printing, such as PDF printing, select [On] for <Text width adjustment>.
- 7 Press [Save Changes].



#### Changing Settings in the Color Tab

- 1 Double-click the job in Command WorkStation.
  - [Job Properties] is displayed.
- 2 Click the [Color] tab  $\rightarrow$  [Expert Settings].

lob Properties									
Job: INDEX-A4.p	s			• •	]	Presets:			•
		1		•		<b>I</b>	<b>\$</b>	<b>*</b>	<b></b>
Quick Access	Job Info	Media	Layout	Color	Image	Finishing	VDP	Stamping	Summary
									Reset
Color mode									
🔶 💿 СМҮК		Basi	c Setting		Exner	t Settings			
Grave	cale		o o cocange			e occangom			
00									
Comp	osite over	orint		-7	Subst	itute colors			

3 Click the [Gray & Black Processing] tab, and change the print settings in <Black text and graphics> according to what you are printing and how you want the printouts to appear.

Advi	anced	l Edit		×
	Colo	or Input	Gray & Black Processing Jutput	
	۲	Gray		
		RGB	© Off	
		СМҮК	♥ Text/Graphics/Images	
	Place			_
	Diac	Black	text and graphics:	
		© P	ure Black On	
		P	ure Black On	
		A N	lormal	

#### Printing black text and lines clearly

We recommend you select [Pure Black On] or [Rich Black On] for <Black text and graphics>.

• You can make black elements in printouts more vivid if you select [Rich Black On] rather than [Pure Black On], because [Rich Black On] produces black by adding cyan to black.  $A \cdot A$ 

#### Getting Clear Texts and Lines from Your Machine

#### $4\quad \mathsf{Click}\,[\mathsf{OK}] \to [\mathsf{OK}].$

.....

• Print a test sheet to check the sharpness of text and lines. If you are satisfied with the result, you can print a job.

.........

# How to Make Transparency Effects Work As Expected

If you specify a transparency setting to make the overlapping part of multiple objects transparent or to print the object with a drop shadow, the printouts may differ from what you expect. For example, the transparent part may have a different color, or a box may appear around the shadow and transparency on the printout. In these cases, check the color mode of the data you are printing. Is it RGB or CMYK? Then, follow the procedures described below. This may help eliminate your problems.



- For RGB Color Mode (p. 68)
- For CMYK Color Mode (p. 69)

### For RGB Color Mode

The following procedure is possible only when the data is a PDF file.

- 1 Double-click the job in Command WorkStation on the imagePRESS Server.
  - [Job Properties] is displayed.
- 2 Select the [Color] tab, and then select the check box for <Optimize RGB transparency>.



#### 3 Click [OK].

• Print a test sheet to check the finished result. If you are satisfied with the result, you can print the job.

### For CMYK Color Mode

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If you change the settings as described below, the troubles of the transparency setting may be reduced. However, the colors may change and the image may become more dense overall. Print a test sheet to check the finished result.

- 1 Double-click the job in Command WorkStation on the imagePRESS Server.
  - [Job Properties] is displayed.
- 2 Click the [Color] tab  $\rightarrow$  [Expert Settings].



3 Click the [Color Input] tab, and select [Full (Source GCR)] in <Processing method>.



#### 4 Click $[OK] \rightarrow [OK]$ .

• Print a test sheet to check the finished result. If you are satisfied with the result, you can print the job.

## Another Remedy

If you are using the imagePRESS Server F200, Adobe PDF Print Engine is also available for direct printing of PDF files without using a printer driver. You can avoid many problems by using an Adobe PDF Print Engine, which does not convert data to PostScript so transparent objects are not flattened during printing.

1 Click the [Device Center] tab in Command WorkStation  $\rightarrow$  [General]  $\rightarrow$  [Server Configuration]  $\rightarrow$  [Configure].


2 Click [RIP]  $\rightarrow$  [APPE], and select the check box for <Enable Adobe PDF Print Engine (APPE)>.

E.			
SERVER-	Search	٩	Log Out
Fiery Server	APPE		APPE
Job Submission	PS Settings		The APPE interpreter provides better handling of transparent elements in modern PDF
Job Management	VDP	ſ	
Network	Set Page Device		Use Adobe PDF Print Engine Preferred as default for PDF jobs
Security	Native Documents		
RIP			
Scan			

- 3 Click [Save], and close the [Configure] window.
- 4 Click the [Job Center] tab in Command WorkStation, and double-click the job.• [Job Properties] is displayed.
- 5 Click the [Color] tab, and select the check box for <Adobe PDF Print Engine Preferred>.



- 6 Click [OK].
  - Print a test sheet to check the finished result. If you are satisfied with the result, you can print the job.

# How to Solve the Overprint Problems

Does the color on printouts differ from what you expected because the top color knocks out the area underneath even though you set overprinting in the application? In other cases, does the color on printouts differ from what you expected because the top color does not knock out the area underneath because you set overprinting in the application by mistake? Follow the procedure below to solve the problems.



- 1 Double-click the job in Command WorkStation on the imagePRESS Server.
  - [Job Properties] is displayed.
- 2 Click the [Color] tab  $\rightarrow$  change the print settings for <Composite overprint>, as necessary.



#### Overprinting

Select the check box for <Composite overprint>.





#### Canceling overprinting

Clear the check box for <Composite overprint>.



How to Solve the Overprint Problems

### 3 Click [OK].

• Print a test sheet to check the finished result. If you are satisfied with the result, you can print the job. If you are not satisfied with the result, check the job and application settings.

Black Overprint

You can specify the overprint setting for an object (K (black)=100%) on the imagePRESS Server without specifying it in the application.

- Double-click the job in Command WorkStation on the imagePRESS Server.
   [Job Properties] is displayed.
- 2 Click the [Color] tab  $\rightarrow$  [Expert Settings].



3 Click the [Gray & Black Processing] tab, and change the print settings in <Black overprint (for pure black)> according to what you are printing and how you want the printouts to appear.

Adva	nced	Edit	×
Į	Colo	r Input	Gray & Black Processing Dutput
	۲	Gray	
		RGB	© Off
		СМҮК	♥ Text/Graphics/Images
	Blac	k	
		Black	text and graphics:
		© Pi	ure Black On
		В	lack overprint (for pure black):
			🛛 Text 💽
			Off
			Text/Graphics

Overprinting text only

Select [Text/Graphics].

Not using overprint

Overprinting text, figures, and lines

Select [Text].





4 Click [OK]  $\rightarrow$  [OK].

Select [Off].

• Print a test sheet to check the finished result. If you are satisfied with the result, you can print the job. If you are not satisfied with the result, check the job and application settings.

# How to Fix Misalignment of Images

If the following troubles often occur, the machine may have alignment problems. Follow the procedures described in this section to solve such problems.

- The register marks on one side of a printed sheet do not match those on the other side.
- The thumb indexes on the printed pages are not aligned.
- The image is not printed within the register marks.

#### NOTE

- You may not be able to correct misalignment that is less than 1.0 mm (1/25").
- The machine decides the printing start position based on the leading edge of the paper. After the front side of the paper is printed, the paper is reversed and the back side of the paper is printed from the trailing edge. Because of this, the position where printing starts may be slightly different on opposite sides of the paper.



Step 1	Eliminating the Basic Causes of Misalignment (p. 76)			
	▼			
Step 2	<ul> <li>Changing Settings on the Machine According to Paper Characteristics (p. 78)</li> <li>If Using the scanner (p. 78)</li> <li>If Not using the scanner (p. 82)</li> </ul>			
$\checkmark$				
Step 3	Changing Print Settings on the Printer Driver (p. 86)			



# Step 1 Eliminating the Basic Causes of Misalignment

Find the answers to your questions about how to solve your problems.

### Q. Is the machine or paper located in a high humidity environment?

**A.** Paper tends to expand when it absorbs moisture from a highly humid environment. If this happens, the images may be printed in the wrong position. For example, the image may be printed in the lower left corner, rather than in the center as expected. Or, images printed on the front and back of the paper may be misaligned.

#### Solution

- Keep the machine and paper in a room with a steady temperature and humidity. If the temperature and humidity are unstable, it may cause the paper to expand or shrink, resulting in misalignment of printed images.
- For the appropriate temperature and humidity, see the Installation and Operating Environment Guidelines or the Specialty Media Handling Guide.
- · Before you load paper, place the package of paper near the machine so it can fully acclimatize to the temperature and humidity.
- Unwrap the paper immediately before you load the paper into the machine.

# Q. Is the paper cut correctly?

**A.** If the paper is not uniform in size and shape, the margins around the image may be different on each page. If the paper is not cut square, the images may be skewed when they are printed.

#### Solution

- Use a different batch of paper that has been cut correctly.
- If you cut the paper yourself, measure it and confirm it is the correct size.





the paper is larger than the set paper size.

How to Fix Misalignment of Images

### **Q.** Did you load paper in the correct position?

.........

**A.** If you place the paper guide in the wrong position or do not align the edges of the paper before you load it, the printed images may be misaligned on every page.



#### Solution

- Align the edges of the paper and load it again.
- Make sure that the paper guide is placed in the correct position.

## Q. Did you register the paper type correctly?

**A.** If you load a different brand of paper, different from the one you have used before, you need to change the settings for the paper in the machine. If you start printing without changing the settings, the machine applies the previous settings to the new paper type, which causes misalignment of the images on every page.

#### Solution

Press  $\textcircled{O} \rightarrow$  [Preferences]  $\rightarrow$  [Paper Settings]  $\rightarrow$  [Paper Settings]  $\rightarrow$  select the brand of paper that you have loaded.

📀 "Settings/Registration" > "Registering the Paper Size and Type for a Paper Source" in the User's Guide

<b>●</b> /	All	💌 🔹 Sort L	ist by	▼ Reg'd (C	lesc.) 🛛 🔻	
. ,	łame			Weight	Size	
3 0	Canon select paper 68			68 g/m2	No Settings	) ·
U 1	Thin 2 (52-63 g/m2)			58 g/m2	No Settings	Í
01	Thin 1 (64-79 g/m2)			72 g/m2	No Settings	
D F	Plain 1 (80-90 g/m2)			85 g/m2	No Settings	
DF	Plain 2 (91-105 g/m2)			98 g/m2	No Settings	
D F	leavy 1 (106-128 g/n2)			117 g/m2	No Settings	
Q H	leavy 2 (129-150 g/n2)			140 g/m2	No Settings	
	Simple Details Settings	•				

## Q. Have the machine got warmed up enough to obtain proper printing results?

**A.** If you start printing before the machine gets warmed up enough, such as just after turned ON, the printed images may be misaligned.

#### Solution

Before you start a print job, warm up the machine by printing 10 to 30 copies of a test page.

## Step 2 Changing Settings on the Machine According to Paper Characteristics

#### If Using the Scanner

If the images on the front and back sides are misaligned with each other and you want to adjust easily, you can adjust the alignment of the images by scanning the test pages with the guide sheet.

Guide Sheet



### How to Fix Misalignment of Images

# Before adjustment with the guide sheet

- Clean the platen glass and the underside of the feeder.
- "Maintenance" > "Routine Cleaning" > "Originals Cannot Be Scanned Properly (Cleaning the Platen Glass)" in the User's Guide
- In order to use this function, the guide sheet is required. For more information, contact your local authorized Canon dealer.
- Before adjustment, print the guide sheet (A3 or 11" x 17") under the following conditions. Accurate adjustment may not be possible if the guide sheet is not printed correctly.
  - Select the same size as the guide sheet.
  - Use paper with a weight of more than 200 g/m<sup>2</sup> (74 lb cover).
  - Set the zoom ratio as 100%.
- We recommend that the test page is printed to the recommended paper The adjustment may not be performed correctly on the paper that has ruggedness on surface (such as a textured paper, etc.).
- If the position of the image cannot be adjusted correctly by [Use Scanner], adjust the position of the image by [Do Not Use Scanner].
- The Duplex Color Image Reader Unit-H1 (optional) is required for this adjustment.
- 1 Press (◎) → [Preferences] → [Paper Settings] → [Paper Type Management Settings] → Select the paper type that you want to edit from the list → press [Details/Edit] → [Change] for <Adjust Image Position>.
- 2 Press [Use Scanner].
- 3 Enter the number of test page to make  $\rightarrow$  press [Next].

#### NOTE

- The larger the number of output test pages, the more accurate the adjustment is.
- If specifying multiple output test pages, make sure that all of the test pages are scanned in the order they are output. If the order is changed or the scanning process is not performed successively, the adjustment may not be made correctly.
- To obtain a highly precise correction result easily, set the number of output test pages to one, complete the adjustment, and then adjust [Front Side] and [Back Side] of <Lead Edge (e) Align>. These settings and adjustments allow you to obtain a correction result similar to that obtained by scanning multiple test pages.
- To align the position of the front and back surfaces for the user image, press [Do Not Use Scanner] to adjust additionaly the position of the image.





#### NOTE

The test page is printed.

5 Place the guide sheet on the platen glass with the arrows of the sheet and on the platen glass aligned.



6 Align the mark **A** on the test page for the first scan operation with the mark on the guide sheet.



How to Fix Misalignment of Images

7 Close the feeder  $\rightarrow$  press [Start Scanning].



#### NOTE

9

Open and close the feeder gently. Make sure that the guide sheet remains aligned when closing the feeder.

8 Turn the test page upside down, and then align the mark  $\triangle$  on the test page for the second scan operation with the mark on the guide sheet  $\rightarrow$  press [Start Scanning].

Turn the test page over, and then align the mark  $\widehat{\bigtriangleup}$  on the test page for the third scan operation with the mark on the guide sheet  $\rightarrow$  press [Start Scanning].

10 Turn the test page upside down, and then align the mark  $\stackrel{\frown}{\geq}$  on the test page for the fourth scan operation with the mark on the guide sheet  $\rightarrow$  press [Start Scanning].

#### **11** Adjustment is complete.

If you have specified multiple output test pages, repeat steps 6 to 10 for all of the output test pages. In this case, adjustment is complete when all of the test pages have been scanned. Make sure that the test pages are scanned in the order they are output.

### If Not Using the Scanner

If you still have the same problem after you follow the procedures in step 1 "Eliminating the Basic Causes of Misalignment," change the settings to meet paper characteristics.

#### NOTE

You cannot change the settings for a 'standard' type of paper that is indicated with the paper-without-pencil icon () on the screen. In this case, duplicate a 'standard' type of paper to make a 'custom' type of paper that is indicated with the paper- and-pencil icon (), and change the settings for it. After specifying the settings for the custom type of paper you made, press  $\bigcirc \rightarrow$  [Preferences]  $\rightarrow$  [Paper Settings]  $\rightarrow$  [Paper Settings], and change a type of paper for the paper source to that paper.

#### Registering the Measured Value of the Paper

If you want to print the image within a specified area, you need to register the correct paper size in advance. Measure the paper size and register the value.

Press ( $\textcircled{O} \rightarrow$  [Preferences]  $\rightarrow$  [Paper Settings]  $\rightarrow$  [Paper Type Management Settings]  $\rightarrow$  select the brand of paper in which the image is misaligned  $\rightarrow$  press [Details/Edit]  $\rightarrow$  [Change] for <Size>  $\rightarrow$  [Custom Size]  $\rightarrow$  enter the measured value.

"Paper Type Management" > "Changing the Size" in the User's Guide



How to Fix Misalignment of Images

#### Adjusting the Position of the Image

Print a test page.

2

You can adjust the position in which the image is actually printed.





3 Adjust the position of the image in the sequence shown below.



- 4 Print another test page and hold it up to a light to see if the  $\oplus$  (register marks) are in the same position on both sides of the paper.
- 5 If the  $\oplus$  (register marks) are not aligned, adjust the position of the image again in the sequence shown below.



#### NOTE

- Print about ten copies of the test page, and then measure the final page that is printed. This is done to improve accuracy, because the position of the images that are printed first is inconsistent. If the humidity is high, print about 30 copies of the test page and measure the final page.
- If you are adjusting the position of the image on coated paper or heavy paper that is more than 250 g/m<sup>2</sup> (66 lb bond), print three to five test pages and use the average value. This is done because the position of the image on heavy or coated paper is inconsistent.
- Use the marks for each paper size when checking for misalignment of images. For example, if the test page is A3, use the  $\bigoplus$  register mark to check for misalignment.
- If you change the value in [Adj. Secondary Transfer Volt.], be sure to adjust the zoom ratio of the image.

📀 "Paper Type Management" > "Adjusting the Image Position" in the User's Guide

How to Fix Misalignment of Images

# How to Correct Skew and Parallelogram/Trapezoid Distortion on a Small Test Page

#### **Skew Correction**

.....

t**ete** If the test page is so small that <j> is not on the page, add an arbitrary mark  $\langle i' \rangle$ anywhere on the red line <h>. Then, enter the distance from <j'> to the left edge of Leading the paper in [j]. Enter the distance from  $\langle i \rangle$ Edge to <j'> in [h]. Enter this distance in [h]. Enter this Left Edge distance in [j]. **Trapezoid Distortion Correction** 0 💼 If the test page is so small that the distances b' : Enter this distance in [b]. e b and h cannot be measured, add <c'>. <b'> and <h'> as shown in the illustration on the right. Enter these distances in [c], [b] Leading c': Enter this distance in [c]. and [h] respectively. Edge h': Enter this distance in [h]. ..... Left Edge Parallelogram Distortion Correction Enter this distance in [a]. If the test page is so small that <a> is not on o 💼

Leading

Edge

the page, add an arbitrary mark  $\langle a \rangle$  on the red line  $\langle c \rangle$ . Enter the distance from  $\langle a \rangle$  to the leading edge of the paper in [a]. Enter the distance from  $\langle g \rangle$  to  $\langle a \rangle$  in [c].

Enter this distance in [c].

Left Edge

# Step 3 Changing Print Settings on the Printer Driver

If you still have misalignment problems after you follow the procedures in steps 1 and 2, you can adjust the image position by changing the print job settings on the printer driver. The procedure below is for imagePRESS Server.

.....

#### Printing One Page on One or Each Side of Paper

For example, if the printing results are different from what you expected as shown below, use the following procedure to change the settings. These settings can be changed for each job.





1 Double-click the job in Command WorkStation on the imagePRESS Server.

• [Job Properties] is displayed.

2 Click the [Finishing] tab → select [Image shift] and enter the value in millimeters (inches) to move the image horizontally (X direction) and vertically (Y direction).

In this case, enter the value for each direction as shown below.
 [Front] X: 1.00 mm, Y: 2.00 mm
 [Back] X: 2.00 mm, Y: 3.00 mm



- 3 Click [Print].
  - The machine starts printing. Check the printed page and confirm that the misalignment problem is solved, and then start printing.

#### Printing Multiple Pages on One or Each Side of Paper

. . . . . . . . . . . . . . . . . .

For example, if the printing results are different from what you expected as shown below, use the following procedure to change the settings. These settings can be changed for each job.



- Double-click the job in Command WorkStation on the imagePRESS Server.
  - [Job Properties] is displayed.

1

2 Click the [Layout] tab  $\rightarrow$  select [Normal]  $\rightarrow$  <Short edge binding> for [2-sided printing] and <2> for [Pages per Sheet].



#### NOTE

If you select [Booklet], not [Normal], you cannot select [Image shift] in step 3. If you want to make a booklet, you need to print the job and then saddle stitch it separately.

- $\label{eq:click the [Finishing] tab} \rightarrow \text{select [Image shift] and enter the value in millimeters (inches) to} move the image horizontally (X direction) and vertically (Y direction).$ 
  - In this case, enter the value for each direction as shown below.
     [Front] X: 1.00 mm, Y: 2.00 mm
     [Back] X: 2.00 mm, Y: 3.00 mm



#### 4 Click [Print].

• The machine starts printing. Check the printed page and confirm that the misalignment problem is solved, and then saddle stitch the booklet separately if you want to make a booklet.

How to Fix Misalignment of Images

#### NOTE

• You cannot move the image on each page after the imposition of images is completed. The laid out images on the two pages move together as a single image.



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• If you select [Booklet] in step 2, you can move the image toward the fore-edge or the gutter of the page as shown in the illustration below. For more information, see the following.





# How to Fix Curled Printouts

If printouts are curled, follow the procedures described in this section to solve the problems.





## Step 1 Eliminating the Basic Causes of Curled Paper

Find the answers to your questions about how to solve your problems.

### $\mathbf{Q}_{\bullet}$ Is the machine or paper located in a high or low humidity environment?

**A.** The humidity may cause the paper to expand or shrink. If you store the paper in an extremely high or low humidity environment, the paper may curl before printing.

#### Solution

- Keep the machine and paper in a room with steady temperature and humidity. If the temperature and humidity are unstable, it may cause the paper to expand or shrink, resulting in curled paper.
- For the appropriate temperature and humidity, see the *Installation and Operating Environment Guidelines* or the *Specialty Media Handling Guide*.
- Before you load paper, place the package of paper near the machine so it can fully acclimatize to the temperature and humidity.
- Unwrap the paper immediately before you load it into the machine.

### Q. Are the edges of the image extremely dark?

**A.** If the edges of the image are extremely dark, the paper may tend to curl during printing.

#### Solution

- Use heavier paper.
- Decrease the density in the very dark areas to reduce the difference in the density between the dark and light areas.



## Step 2 Changing Settings on the Machine According to Paper Characteristics

If you still have the same problem after you follow the procedures in step 1 "Eliminating the Basic Causes of Curled Paper," change the settings to meet characteristics of the paper you are using.

#### **IMPORTANT**

1

This function may affect how paper is fed. Since increasing the value to a great extent may cause paper jams, we recommend adjusting the values in small increments.

#### Press $\textcircled{O} \rightarrow [Preferences] \rightarrow [Paper Settings] \rightarrow [Paper Type Management Settings].$

 $igodoldsymbol{igo$ 

2 Select the paper type that you want to edit from the list  $\rightarrow$  press [Details/Edit]  $\rightarrow$  [Change] for <Curl Correction Level>.



### 3 Press [-] or [+] under [Face Up Output (Reverse)] or [Face Down Output (Normal)] to correct the curl correction level.

- To determine the curl direction, watch the paper as it is output to the output tray.
- Adjust the curl correction level in the direction opposite to the direction that the output paper is curled.





- 4 Make test copies or prints on the paper for which you have adjusted the machine and check the condition of the printouts.
  - Repeat steps 1 to 4 to adjust the curl correction level until the paper does not curl when it is output.

#### NOTE

The regular procedure is to set the level of curl correction in advance to suit the characteristics of each type of paper. This is because the curl in the paper depends on the paper's materials and basis weight. However, if significant changes in the environment, such as temperature and humidity, occur for some reason, and the changes temporarily affect the condition of the paper, such as moisture content, the curl may not be corrected to your satisfaction. If this happens, see the following and adjust the level of the curl correction for the paper source in which you have loaded the paper for which you want to calibrate the machine.

\*Adjustment for Image Quality and Finishing (Calibration)" > "Curl Correction for Each Paper Drawer" in the User's Guide

# How to Fix a Curl That Is Perpendicular to the Direction of Paper Feed

Printouts may not curl if you print on the back side of the paper. However, be careful of the paper's finish, because the finish of the front and back sides of the paper may differ, depending on the type of paper. If the printouts are still curled even if you print on the back side of the paper, follow the procedures described above to adjust the curl correction level.



# How to Align and Staple Printouts

If the stapled papers are misaligned, follow the procedures below to solve the problem.



## Q. Did you load paper in the correct position?

**A.** If you place the paper guides in the wrong position or do not align the edges of the paper before you load it, stapled papers may be misaligned.



#### Solution

- Align the edges of the paper and load it again.
- Make sure that the paper guides are placed in the correct position.

## **Q.** Does the paper shrink when it is output?

**A.** Depending on the paper, printed paper may shrink. As a result, the saddle stitch position may be misaligned.

#### Solution

See the following and adjust the position to align the paper.

🕑 "Adjustment for Image Quality and Finishing (Calibration)" > "Paper Alignment When Stapling" in the User's Guide

#### NOTE

Depending on the finisher you are using, the function mentioned above may not be available.

## Q. Is [Speed Priority] set to the mode for double stapling?

**A.** You can set whether to give priority to speed or precision for double stapling. If you select speed priority, the precision for double stapling may fall.

#### Solution

See the following and change the mode to [Precision Priority].

"Adjustment for Image Quality and Finishing (Calibration)" > "Speed/Precision Priority for Double Staple" in the User's Guide

#### NOTE

Depending on the finisher you are using, the function mentioned above may not be available.

# How to Adjust the Saddle Stitch Position

When you make a saddle stitch booklet, if you notice the following phenomena, you need to adjust the saddle stitch position. Follow the procedures below to solve the problem.

- The saddle stitch fold position is not aligned with the saddle stitch position.
- The saddle stitch fold and saddle stitch positions are not in the center of the booklet.



Step 1	Adjusting the Saddle Stitch Position to the Center of the Booklet (p. 95)			
▼				
Step 2	Adjusting the Saddle Stitch Fold Position to the Center of the Booklet (p. 97)			

#### NOTE

Depending on the finisher you are using, the functions mentioned in this section may not be available.

# Step 1 Adjusting the Saddle Stitch Position to the Center of the Booklet

#### NOTE

1

If the saddle stitch position is exactly in the center of the booklet but the saddle stitch fold position is not, skip this step, go to the procedures in step 2 "Adjusting the Saddle Stitch Fold Position to the Center of the Booklet."

Press  $\textcircled{O} \rightarrow$  [Preferences]  $\rightarrow$  [Paper Settings]  $\rightarrow$  [Paper Type Management Settings].

• "Paper Type Management" > "Adjusting the Saddle Stitch Position" in the User's Guide

<details edit=""></details>		
Adi Antistatic Bias	► 0	Change
Adjust ITB Image Clearing	▶ 0	Change
Adjust Gloss/Fine Black	Not Adjusted	Channe
Change Fold/Stitch Position	► 0.00 mm	Change
Adj. Saddle Stitch Fold Pos.	► 0.00 mm	unange
Adjust Saddle Fold Position	► 0.00 mm	Change
Adjust Hole Punch Position	► 0.0 mm	Change
Corr. Tail End Toner Applic.	Not Adjusted	Change
Adjust Fixing Speed	► 0	Change
Adjust Fixing Pressure	▶ 0	Change
▼ 3/4 ▲		ОК

# 3 Press [♥] or [▲] to adjust the saddle stitch position.

- If you want the saddle stitch position to shift to the right while facing the printed side of the printout, increase the setting value.
- If you want the saddle stitch position to shift to the left while facing the printed side of the printout, decrease the setting value.



#### 4 Make test prints and check the finish.

- If the saddle stitch position is still not exactly in the center of the booklet, repeat steps 1 to 4 until the saddle stitch position is shifted exactly to the center of the booklet.
- If the saddle stitch position has shifted exactly to the center of the booklet, but the saddle stitch fold position is not, go to the procedures in step 2 "Adjusting the Saddle Stitch Fold Position to the Center of the Booklet."





### Step 2 Adjusting the Saddle Stitch Fold Position to the Center of the Booklet

#### NOTE

If the saddle stitch position is not exactly in the center of the booklet, follow the procedures in step 1 "Adjusting the Saddle Stitch Position to the Center of the Booklet."

- Press (⊕) → [Preferences] → [Paper Settings] → [Paper Type Management Settings].
   (•) "Paper Type Management" > "Adjusting the Saddle Stitch Fold Placement" in the User's Guide

. . . . . . . . .

(Details/Colt/		
<ul> <li>Adj. Antistatic Bias</li> </ul>	► 0	Change
<ul> <li>Adjust ITB Image Clearing</li> </ul>	► 0	Change
<ul> <li>Adjust Gloss/Fine Black</li> </ul>	Not Adjusted	Change
<ul> <li>Change Fold/Stitch Position</li> </ul>	► 0.00 mm	Chance
<ul> <li>Adj. Saddle Stitch Fold Pos.</li> </ul>	► 0.00 mm	Change
<ul> <li>Adjust Saddle Fold Position</li> </ul>	► 0.00 mm	unange
<ul> <li>Adjust Hole Punch Position</li> </ul>	► 0.0 mm	Change
<ul> <li>Corr. Tail End Toner Applic.</li> </ul>	Not Adjusted	Change
<ul> <li>Adjust Fixing Speed</li> </ul>	▶ 0	Change
<ul> <li>Adjust Fixing Pressure</li> </ul>	► 0	Change

# 3 Press [▼] or [▲] to adjust the saddle stitch fold position.

- If you want the saddle stitch fold position to shift to the right while facing the printed side of the printout, increase the setting value.
- If you want the saddle stitch fold position to shift to the left while facing the printed side of the printout, decrease the setting value.



#### 4 Make test prints and check the finish.

• If the saddle stitch position is exactly in the center of the booklet, but the saddle stitch fold position is not, repeat steps 1 to 4 until the saddle stitch fold position is shifted exactly to the center of the booklet.



# Improving the Finish of Booklets

If you are not satisfied with how your booklets are finished, such as the page layout being different from what you expected, or the starting and/ or ending page of the main document not being printed on the pages you expected, follow the procedures described in this section to specify settings. This section explains how to specify each setting to make a saddle stitch booklet that opens to the left (left binding) as an example.



Step 1	Confirming the Basic Settings (p. 98)					
▼						
Step 2	Confirming the Position of Text and Images on the Page (p. 100)					
Step 3	Adjusting Margins with Creep Compensation (p. 102)					
Step 4	Checking the Cover Settings (p. 103)					

# Step 1 Confirming the Basic Settings

1 Double-click a job in Command WorkStation on the imagePRESS Server.

- [Job Properties] is displayed.
- 2 Select the [Layout] tab, and then click [Booklet].



Improving the Finish of Booklets

3 Confirm that [Saddle] and [Left Binding] are selected for <Booklet Type>.



4 Confirm that the appropriate paper size is selected from the <Paper Size for 2-up> drop-down list.

Job Properties		- x
Job: Print	Presets:	•
	🕐 🗊 💽 💌 📕 🗞 🕸 🛇	
Quick Access	Job Info Media Layout Color Image Finishing VDP Stamping Summary	set
Normal	Launch Wizard	^
Gangup	Booklet Tyne: Could be binding	
Booklet		
Impose	Paper Size	
	Paper Size for 2-up:	=
	A4	
	Shrink to fit	
	2	

#### NOTE

- Select a paper size for <Paper Size for 2-up> that is twice as large as the size of the booklet you want to make. For example, if you select A4 for <Paper Size for 2-up>, the finished booklet size is A5.
- When making a saddle stitched booklet, two pages of the original document are printed on each sheet of paper (2-up). For example, if you select A4 for <Paper Size for 2-up>, and parts of the image and text on the page are larger than A5, those parts are cropped from the printouts. To avoid this, select the check box for <Shrink to fit>. This automatically reduces the size of the original pages, without unwanted cropping, so that they can be printed on the size of paper you selected.

## Step 2 Confirming the Position of Text and Images on the Page

1 Confirm the settings for <Centering adjustment> and <Increase gutter by> under <Page Alignment>.



#### If parts of images or text are hidden by the binding

If you select <At the spine> for <Centering adjustment>, be sure that '0.0' is not set for <Increase gutter by>. If '0.0' is set, the print position of each page is aligned to the center of the paper without a gutter. When the pages are stitched together, the printed image and text may be hidden. Be sure to specify an appropriate value for <Increase gutter by>. For example, if you set '4.0' (mm), the images and text on both the left and right pages are moved 2 mm toward the fore-edges.





adjustment>, and set '4.0' (mm) for <Increase gutter by>

Improving the Finish of Booklets

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#### If parts of images or text are too close to the fore-edges

If the images or text are printed too close to the fore-edges, even though you set the print position to the center of the page\*, confirm that the value for <Increase gutter by> is set to '0.0'. For example, if you set '4.0' (mm), images and text on both the left and right pages moves 2 mm toward the fore-edge. If there is an image on a gutter, set to a negative value to move the margin to the gutter.

........

\* If you select <At the center> for <Centering adjustment>, the images and text on both the left and right pages are centered on each page.



If you select <At the center> for <Centering adjustment>, and set '0.0' for <Increase gutter by>



If you select <At the center> for <Centering adjustment>, and set '4.0' (mm) for <Increase gutter by>

Input the measurements to the center of the paper as negative values.



Select <At the center> for <Centering adjustment> and input a negative value for <Increase gutter by> to move the image to the gutter side.

## Step 3 Adjusting Margins with Creep Compensation

A problem, when binding a booklet with very thick paper or many pages, is that progressively more paper is trimmed from the pages the closer they are to the center of the booklet. If the booklet is trimmed as is, the type area position near the center and near the covers will differ. To avoid this, type areas need to be moved slightly closer to the foreedges on some pages. This is called creep compensation. If the type area positions are inconsistent, check that the creep compensation settings are correct.

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\*1 Without creep compensation, the outer margins after the booklet is trimmed are inconsistent.

\*2 With creep compensation, the outer margins after the booklet is trimmed get consistent.

1 Select the check box for <Compensate creep>, and then select a type of paper from the dropdown list.

Job Properties							
Job: Print		•		Presets	:		•
A	🕜 🔒 📑	😙 🔜		<b>\$</b>	2	<b></b>	
Quick Access	Job Info Media Layout	Color Image	Finishing	VDP	Stamping	Summary	
							Reset
Normal							<b>^</b>
Gangup	Paper Size Paper Size for 2-up:						
Booklet	A4						
💿 Impose	Shrink to fit						
	Page Alignment					₹ I	
	Centering adjustmen	nt: <ul> <li>At the spine</li> </ul>	🗇 At th	e center	× × ×		
	Increase gutter by:	0.0 🔹 🖲 Milli	imeters	Inches			в
	Compensate cree	p Plain 💌					

When making a booklet containing many pages by using plain paper Select [Plain].

When making a booklet by using heavy paper (heavy basis weight) Select [Heavy].

# Step 4 Checking the Cover Settings

1

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If you have any of the following problems, confirm that the settings for the cover are appropriate.

- The first page of the main document is printed on the front cover, even though you want to add a front cover using a pre-printed cover.
- The main document is printed on the inside of the front cover, even though you want the front cover to be blank.

### Feeding Pre-printed Covers from a Different Paper Source than for the Main Document

Confirm <Pre-Printed> is selected from the <Content input> drop-down list for <Cover>.





2 Click [Define Cover] to confirm the settings are appropriate.

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### Leaving the Inside of the Front Cover Blank

1 Confirm [Front & Back Separately] is selected from the <Content input> drop-down list for <Cover>.



Improving the Finish of Booklets



2 Confirm [Print on outside] is selected from the <Front cover> drop-down list.

# Various Settings for Printing Covers

You can specify various ways to print covers depending on what you select for the <Front cover> and <Back cover> settings.

#### If [Print on outside] is selected for the <Front cover>

If you select [Print on outside] for <Front cover>, the machine starts printing the first page of the print data on the outside of the front cover and does not print on the inside of the front cover, and then continues printing the second page of the print data on the page following the front cover.



#### If [Print on inside] is selected for the <Front cover>

The machine prints the first page on the inside of the front cover and the following pages in order after that. It does not print on the outside of the front cover.



#### If [Print on both sides] is selected for the <Front cover>

The machine prints the first page on the outside of the front cover and the following pages in order after that. It prints on the inside of the front cover too.


#### If [Do not print] is selected for the <Front cover>

. . . . . . . . . . . . . . .

The machine does not print on either side of the front cover. It prints the first page on the next page after the front cover and the following pages in order.



## NOTE

• Confirm the settings for <Back cover> as well as the settings for <Front cover>. For example, if you set [Print on outside] for both <Back cover> and <Front cover>, and print a job that has a total of 18 pages, the pages are printed as shown below.



• If the total number of pages in the print data does not match the settings for <Front cover> and <Back cover>, unwanted blank pages may be inserted. If the printed result of the booklet differs from what you expected, adjust the total number of pages in the print data by inserting blank pages.

#### If [Print on any side] is selected for the <Back cover>

The pages are printed in the order that they appear in the data, regardless of whether the first page is intended to be a cover page or body page. When you print data consisting of 18 pages, the data is printed as follows.



# How to Align Printouts

If printouts are misaligned or the edges of printouts are folded on the output trays of the finisher, follow the procedures below to solve the problem.



- 1 Press  $\textcircled{O} \rightarrow$  [Adjustment/Maintenance]  $\rightarrow$  [Adjust Action]  $\rightarrow$  [Finisher Tray A Alignment Adjustment] or [Finisher Tray B Alignment Adjustment].
  - "Adjustment for Image Quality and Finishing (Calibration)" > "Paper Alignment on Finisher Tray A/B" in the User's Guide
- 2 Press [-] or [+] to adjust the paper alignment.



• If the edges of printouts are folded Press [-] to increase the width for aligning printouts.



• If printouts are misaligned Press [+] to decrease the width for aligning printouts.



## NOTE

- If you set [Staple] in the finishing mode, the adjustments in [Finisher Tray A Alignment Adjustment] and [Finisher Tray B Alignment Adjustment] are disabled.
- Depending on the finisher you are using, the function mentioned above may not be available.

. . . . . . . . . . .

How to Align Thin Paper

The frequency of the misalignment of printouts increases when using "Thin 2 (52 g/m<sup>2</sup> to 63 g/m<sup>2</sup> (14 lb bond to 16 lb bond))" paper, compared with other types of paper, due to the characteristics of the paper. Setting [Alignment Priority] for [Finisher Output Priority Settings (Thin)] may improve the situation.

"Adjustment for Image Quality and Finishing (Calibration)" > "Changing the Finisher Output Priority Settings (Thin)" in the User's Guide

## NOTE

- This setting is enabled only when using "Thin 2" paper, and is disabled when using other types of paper, such as "Plain" or "Thin 1 (64 g/m<sup>2</sup> to 79 g/m<sup>2</sup> (17 lb bond to 20 lb bond))" paper.
- Depending on the finisher you are using, the function mentioned above may not be available.

# Repeated Paper Jams Caused by Paper Wrapping around the Fixing Belt

If paper jams or paper feed problems, such as the corner of printouts being folded, often occur even though you have followed the instructions described in the User's Guide to handle and prevent paper jams, paper may be wrapping around the fixing belt. Follow the procedures described in this section to solve the problems.



# Step 1 Understanding What Causes Paper to Wrap around the Fixing Belt

There are the following three possible causes of paper wrapping around the fixing belt:

## Paper Has Absorbed Too Much Moisture Due to High Humidity

When the humidity is high, paper may absorb too much moisture. As a result, the paper is more likely to wrap around the fixing belt.

## You Are Using Thin Paper or Soft and Flexible Paper

If you use thin paper or paper that is flexible and easily bends, the paper tends to curl. This kind of paper is more likely to wrap around the fixing belt.

## There Is a Very Dark Area Near the Leading Edge of the Paper

A dense layer of toner is applied to print a dark area. If the dark area is near the leading edge of the paper and the leading margin is very small, the toner may act as an adhesive. As a result, the leading edge of the paper sticks to the surface of the fixing belt and the paper is likely to wrap around the fixing belt.





If the leading edge margin of the paper is small and a large amount of toner is used, paper is likely to wrap around the fixing belt. If the leading edge margin of the paper is large and a small amount of toner is used, paper is less likely to wrap around the fixing belt.

# Step 2 Keeping the Paper's Moisture Content at an Appropriate Level

Use the following recommendations to keep the moisture content of the paper at an appropriate level.

- Before you load paper, place the package of paper in a room with an appropriate temperature and humidity so it can fully acclimatize to the temperature and humidity. For the appropriate temperature and humidity, see the *Installation and Operating Environment Guidelines* or the *Specialty Media Handling Guide*.
- If paper absorbs moisture from a highly humid environment, turn the heater of the paper deck on to dry out the paper. For instructions on how to turn the heater on, contact your local authorized Canon dealer.

## NOTE

- Check the installation and operating environment of the machine. Is the machine located in a room with steady temperature and humidity? Keep the paper in the same environment as that where the machine is located.
- Before you load paper, place the package of paper near the machine so it can fully acclimatize to the temperature and humidity.
- Unwrap the paper immediately before you load the paper into the machine.

# Step 3 Changing the Machine's Settings

If you still have the same problem after you follow the procedures in "Keeping the Paper's Moisture Content at an Appropriate Level" in step 2, change the machine's settings in the following order: "Do an Automatic Gradation Adjustment  $\rightarrow$  Reduce the Value of Gloss  $\rightarrow$  Turn On the Toner Amount Reduction Mode."

## Do an Automatic Gradation Adjustment

Doing an automatic gradation adjustment adjusts the total amount of toner that is used, which may prevent the paper from wrapping around the fixing belt.

Press ( $\textcircled{O} \rightarrow$  [Adjustment/Maintenance]  $\rightarrow$  [Adjust Image Quality]  $\rightarrow$  [Auto Adjust Gradation].

 "Adjustment for Image Quality and Finishing (Calibration)" > "Automatic Gradation Adjustment" in the User's Guide

Adjustment will be ceptied for all pages to	1000	
Full Adjust , Quick At Full Adjust , Quick At , Pager to Adjust , Salect , Pager to Adjust - Details of Salected - Standard	ijust	<ul> <li>Select Method</li> <li>Number of Sheets to</li> <li>Output for Test Page</li> <li>Adjustment Løvel</li> <li>Initializa When Using</li> <li>Full Adjust</li> </ul>

# Reduce the Value of Gloss

Reducing the gloss value lowers the temperature of the fixing unit. As a result, paper may not curl, which may prevent the paper from wrapping around the fixing belt. However, this setting may reduce the gloss of printed images, so print a test sheet to check the finished result.

Press ( $\textcircled{O} \rightarrow$  [Preferences]  $\rightarrow$  [Paper Settings]  $\rightarrow$  [Paper Type Management Settings]  $\rightarrow$  select the type of paper you are using that is having this problem  $\rightarrow$  press [Details/Edit]  $\rightarrow$  [Change] for <Adjust Gloss/Fine Black>  $\rightarrow$  adjust the value for [Gloss] toward the minus end.

"Paper Type Management" > "Adjusting the Gloss and Fine Black" in the User's Guide



## Turn On the Toner Amount Reduction Mode

Turning on the Toner Amount Reduction Mode reduces the amount of toner that is used. As a result, you may prevent the paper from wrapping around the fixing belt. However, this setting may change the color of printed images, so print a test sheet to check the finished result.

Press (O  $\rightarrow$  [Preferences]  $\rightarrow$  [Paper Settings]  $\rightarrow$  [Paper Type Management Settings]  $\rightarrow$  select the type of paper you are using that is having this problem  $\rightarrow$  press [Details/Edit]  $\rightarrow$  [Change] for <Toner Amount Reduct. Mode>  $\rightarrow$  select [On].

"Paper Type Management" > "Adjusting the Total Amount of Toner" in the User's Guide

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<ul> <li>Adj</li> <li>Cu</li> <li>Adj</li> <li>Adj</li> <li>Adj</li> <li>Adj</li> <li>Co</li> <li>Adj</li> <li>Tor</li> <li>Adj</li> </ul>	On	Off	20 → 30 → 30 → 30 → 30 → 30 → 30 → 30 → 3
	Cancel	ОК	

# When Alternately Printing on Both Thin and Heavy Paper

If paper often wraps around the fixing belt when you switch the paper from heavy to thin while you are printing, change from the Productivity Priority mode to the Quality Priority mode as follows. This may improve the situation. However, productivity falls overall because time is needed whenever the machine switches from one type of paper to another.

Press (a)  $\rightarrow$  [Function Settings]  $\rightarrow$  [Common]  $\rightarrow$  [Print Settings]  $\rightarrow$  [Prod./Img. Qlty. Priority for Mixed Ppr. Type]  $\rightarrow$  [Quality Priority].

 "Settings/Registration" > "Productivity/Image Quality Priority for Mixed Paper Type" in the User's Guide

d Paper Type>	
Duality Priority	1/2
OK J	
	Proper Type>

## NOTE

The print speed may be slow for a while after the printing starts, depending on the job.

# Step 4 Try This If You Still Have the Same Problems

If the problems persist after following the procedures in steps 2 and 3, try the procedures described below. They may improve the situation. However, these procedures differ from the purchase order, so be sure to get the customer's consent beforehand.

# Changing the Types of Paper to Print on

Use thicker or stiffer paper to prevent the paper from wrapping around the fixing belt.

# Reducing the Density

Decrease the density in very dark areas. As the amount of toner applied to the paper is reduced, the paper separates more easily from the surface of the fixing belt and other parts of the machine.

# Enlarging the Leading Edge Margin

Enlarge the width of the margin on the leading edge of the paper. A wider margin on the leading edge of the paper makes the paper itself separate more easily from the surface of the fixing belt and other parts of the machine.

# If a Certain Type of Paper Often Wraps around the Fixing Belt

You can adjust the value for the leading edge margin that is used for a certain type of paper.

Press ( $\textcircled{O} \rightarrow$  [Preferences]  $\rightarrow$  [Paper Settings]  $\rightarrow$  [Paper Type Management Settings]  $\rightarrow$  select the type of paper you are using that is having this problem  $\rightarrow$  press [Details/Edit]  $\rightarrow$  [Change] for <Adjust Lead/Tail Margins>  $\rightarrow$  adjust the value for [Lead Edge] toward the plus end.

 "Paper Type Management" > "Adjusting the Lead Edge/Tail End Margins" in the User's Guide

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# Improving Productivity

This section provides information you can use to do jobs quickly and smoothly. You can improve productivity and speed up your work just by learning the pointers and techniques we introduce here.

- Choosing Paper Wisely (p. 116)
- Speeding Up a Print Job by Using Thin Paper First (p. 117)
- Replacing a Toner Cartridge without Stopping the Print Job (p. 118)
- Increasing a Paper Loading Capacity by Giving Priority to the Lower Tray (p. 119)
- Using Auto Drawer Switching to Its Fullest (p. 120)
- Increasing Print Speed by Giving Priority to Either Thin Paper or Heavy Paper (p. 125)
- Speeding Up a Print Job Manually When Printing on Heavy 5/Heavy 6 Paper (p. 126)
- Speeding Up a Print Job by Giving Priority to Productivity Rather Than Gloss (p. 127)

# **Choosing Paper Wisely**

Print speed changes depending on the type of paper and the basis weight. You can improve productivity by choosing a paper consciously to meet your needs. First of all, see the following table.

## Relationship between Types of Paper and Print Speed

Basis Weight	Types of Paper That Have Been Registered in the Machine (Standard Paper)	Print Speed
52 g/m² to 220 g/m² (14 lb bond to 80 lb cover)	Thin 1 or 2, Plain 1 or 2, Heavy 1 to 4	-
221 g/m <sup>2</sup> to 256 g/m <sup>2</sup> (82 lb cover to 140 lb index)	Heavy 5	2/3 as fast
257 g/m <sup>2</sup> to 300 g/m <sup>2</sup> (140 lb index to 110 lb cover)	Heavy 6	1/2 as fast

For example, if you use a paper type whose basis weight is 221 g/m<sup>2</sup>, Heavy 5 is a normal choice for the type of paper. In this case, the print speed slows down to two thirds of the print speed of Heavy 4, whose basis weight is 220 g/m<sup>2</sup>. In this way only 1 g/m<sup>2</sup> of the basis weight creates about 1.5 times difference in the print speed. You can improve productivity by using a paper type whose basis weight is 220 g/m<sup>2</sup>, not 221 g/m<sup>2</sup>.

# NOTE

- Only thin, plain, and heavy papers are selected from the standard types of paper and listed in the table above.
- Print speed changes not just according to the basis weight, by the type of paper as well. For the relationship between standard paper and print speed, see "Types of Paper You Can Use for Calibration" at the end of this document. (If you use group A as the base, the print speeds of group B and group C are two thirds as fast and one half as fast respectively.)
- The print speed may differ from those in the table depending on the amount of images and the room temperature.



# Speeding Up a Print Job by Using Thin Paper First

The temperature of the fixing unit in the machine is adjusted as necessary according to the type of paper and the basis weight. Generally, the temperature of the fixing unit is set to lower when paper with a small basis weight, such as thin paper, is loaded. It takes more time for the temperature of the fixing unit to fall than to increase. You can use the characteristics of the fixing unit to increase productivity. For example you can reduce the time required for the fixing unit temperature to adjust by printing on the thin paper first if you need to print on thin paper and heavy paper consecutively.

Order of Paper Used	Fixing Unit Temperature	Waiting Time
Thin paper $\rightarrow$ Thin paper Heavy paper $\rightarrow$ Heavy paper	No temperature adjustment	None
Thin paper $\rightarrow$ Heavy paper	Increase the temperature	Short
Heavy paper $\rightarrow$ Thin paper	Lower the temperature	Long

# NOTE

- The waiting time may be different from those in the table because the time required for the fixing unit to adjust the temperature changes depending on the type of paper and the basis weight as well as the room temperature.
- You can increase print speed by controlling the fixing unit for temperature adjustment. For more information, see "Increasing Print Speed by Giving Priority to Either Thin Paper or Heavy Paper." (p. 125)

# Replacing a Toner Cartridge without Stopping the Print Job

When the remaining toner is low, the machine displays an error message on the touch panel display. If toner remains in the machine, it continues to print jobs even after the cartridge is empty, but it stops printing after toner in the machine is totally empty. Productivity falls overall, because the print job stops until the toner cartridge is replaced. You can maintain productivity by replacing the toner cartridge when there is still toner in the machine without stopping the print job. You can safely replace toner cartridges while printing.

Error Message*	Remaining Toner	Print Job	Toner Cartridge Replacement
Replace toner cartridge. (Black)	The toner cartridge is empty, but a little toner is left in the machine.	The machine continues to print jobs while toner is still left.	You can replace the toner cartridge while printing.
Replace toner. (Black)	The toner cartridge is empty and there is no toner remaining in the machine.	Print job is automatically stopped.	The machine restarts the print job after you replace the toner cartridge.

\* The messages are for black toner. You will see a different color in the message for cyan, magenta and yellow toners.

## NOTE

• See the following information on replacing toner cartridges.

• "Maintenance" > "Replacing the Toner Cartridge" in the User's Guide

• You can always check the toner level on [Status Monitor/Cancel]. See the following for more information.

🕑 "Status Monitor /Cancel" > "Checking the Status of Consumables and Other Information" in the User's Guide

# Increasing a Paper Loading Capacity by Giving Priority to the Lower Tray

The finisher has a two-tiered paper tray, and the lower tray can stack many more printouts than the upper tray. If you designate the lower tray for large volumes of printing, productivity improves because you do not need to remove the printed paper as often.

# Finisher-AM1

Paper loading capacity of tray B is larger than that of tray A. For more information on specifying the output tray, see the following.

. . . . . . . . . . . . . . . .

🕑 "Settings/Registration" > "Output Tray Designation" in the User's Guide



# High Volume Stack Mode

If you set the High Volume Stack Mode to 'On', the tray order to which printouts are output is fixed. For example, when you print a job to tray A and B on the Finisher-AM1 with the High Volume Stack Mode 'On', the printouts are stacked on the tray B first, and after the tray B reaches its capacity, the printed paper is stacked on tray A. You can improve productivity by setting the High Volume Stack Mode to 'On' and using tray B first. For more information on the High Volume Stack Mode, see the following.

🕑 "Settings/Registration" > "High Volume Stack Mode" in the User's Guide

# NOTE

Depending on the finisher you are using, the High Volume Stack Mode may not be available.

# Using Auto Drawer Switching to Its Fullest

Auto Drawer Switching is a function that automatically feeds paper from a different paper drawer when the specified paper drawer runs out of paper. You can prevent the machine from running out of paper by using this function. This section explains how to use Auto Drawer Switching for large print job that is printed from a computer as an example.

## **IMPORTANT**

1

When you refill the paper drawer, be careful not to open the paper drawer that the machine is currently using. Doing so may cause a paper jam.

## Example: To print 10,000 pages in a row using Plain 1 (80 g/m<sup>2</sup>) using the Multi-drawer Paper Deck-B1

The Multi-drawer Paper Deck-B1 has three paper sources, the upper, middle, and lower drawers, and each can stack up to 2,000 sheets of paper (80 g/m<sup>2</sup>). With Auto Drawer Switching, you can load paper into the drawers as the paper runs out, without stopping printing. If you keep refilling the paper drawers so they do not run out, you can print 10,000 sheets continuously. The paper source changes four times to complete this print job.

# Specifying the Settings on the Machine

After you load 2,000 sheets of paper into each of the upper, middle, and lower drawers on the Multi-drawer Paper Deck-B1, specify the following settings.

# Press O $\rightarrow$ [Function Settings] $\rightarrow$ [Common] $\rightarrow$ [Paper Feed Settings] $\rightarrow$ [Paper Drawer Auto Selection On/Off].

Improving Productivity

# 2 Select [Printer].

Select an item to set (Paper Drawer Auto Selection On Fond Com	/0ff>
Funci Com Print	× •
Acc	ter
Fax	Coptimal 1/1 Productivity
	OK a

# NOTE

If you clear the check box for <Optimal Productivity>, the machine switches a paper source to another after the paper source in use for paper feeding completely runs out of paper. Printing is interrupted for a slight moment during this paper source switching. If you select the check box for <Optimal Productivity>, the machine switches a paper source to another with 50 to 100 sheets of paper remaining in the paper source in use. This can prevent interrupting a print job and help you to improve productivity.

# 3 Select [On] for paper sources 4, 5, and 6.

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4 Select [Use Group] → press [Change] for paper source 4.

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 $5 \quad \text{Select [Group 2]} \rightarrow \text{press [OK]}.$ 

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	Group 7	Group 8	Group 9	
	Group 10			
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6 In the same way that you change the setting for paper source 4, change [Group 1] to [Group 2] for paper sources 5 and 6.

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## NOTE

Paper sources **4**, **5** and **6** are equivalent to the upper, middle, lower drawers of the Multi-drawer Paper Deck-B1.



Improving Productivity



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# Starting a Print Job

1

As the machine starts printing, paper is fed from the upper drawer of the Multi-drawer Paper Deck-B1. After the paper source changes, follow the procedure below.

Press  $\textcircled{\otimes}$   $\rightarrow$  select the [Paper] tab.

# 2 Make sure the paper source has changed to the middle drawer.

• The paper source in use is highlighted in yellow on the image which is in the lower left corner of the screen.

🚍 Job	Paper	Toner/Other	
Paper Size	Name		Weight
	Plain 1 (80-90 g/m2)		85 g/m2
2 8 . 4	Plain 1 (80-90 g/m2)		85 g/m2
8 E 🛛 M	Plain 1 (80-90 g/m2)		85 g/m2
🖸 📋 🗋 M	Plain 1 (80-90 g/m2)		85 g/m2
0 II 🛛 🗚	Plain 1 (80-90 g/m2)		85 g/m2
0 H . M	Plain 1 (80-90 g/m2)		85 g/m2
🖬 📋 Sheet Insert	er 1		
📴 📋 Sheet Insert	er 2		
	Details	→ Paper → Settings → Managem	ie ent Settings
		0	1000

3 Load paper into the upper drawer of the Multi-drawer Paper Deck-B1.

### 4 In the same way, load paper into the middle drawer of the Multi-drawer Paper Deck-B1.

. . . . . . . . . . . . . . .

• When the middle drawer runs out of paper, the paper source changes to another paper drawer again. Load paper into the middle drawer in the same way.

## NOTE

- You do not need to stop a print job when you refill paper.
- If the machine detects two or more paper drawers that contain the paper when you are using Auto Drawer Switching, it switches paper sources in order of priority, the highest priority first. In the example described in this section, the priority order is as follows:
  - 1 Upper drawer
  - 2 Middle drawer
  - 3 Lower drawer
- After you complete a print job, make sure to restore the setting on both the machine and the printer driver to prevent the setting being applied to the next print job.
- You can use Auto Drawer Switching for various purposes besides those mentioned in this section. For more information, see the following.

Settings/Registration" > "Enabling Paper Drawer Auto Selection" in the User's Guide

# Increasing Print Speed by Giving Priority to Either Thin Paper or Heavy Paper

The temperature of the fixing unit in the machine is adjusted constantly according to the type of paper and the paper's basis weight. As a result, when you switch the type of paper for a job, the machine needs to adjust the temperature according to the paper and you may need to wait for the temperature to change. For this reason, we provide a way to improve the overall productivity by roughly specifying priority for either heavy paper or thin paper.

## Example: To print on both Thin 1 (64 $g/m^2$ ) and Plain 1 (80 $g/m^2$ ) for a job

. . . . . . . . . . . . . . . . . . .

Technically, the temperature of the fixing unit for Thin 1 (64 g/m<sup>2</sup>) and Plain 1 (80 g/m<sup>2</sup>) paper is different. If you set [Thin Paper Priority] in the following procedure, you can reduce the waiting time and improve productivity because the temperature of the fixing unit is optimized for paper with a small basis weight (less than 128 g/m<sup>2</sup>).

- Press (
   → [Function Settings] → [Common] → [Print Settings] → [Prod./Img. Qlty. Priority for Mixed Ppr. Type].
- 2 Press [Productivity Priority].



3 Select [Thin Paper Priority]  $\rightarrow$  press [OK]  $\rightarrow$  [OK].



# 4 Start Printing.

## NOTE

- If you set [Productivity Priority] for this setting, uneven gloss may occur or toner may not be properly applied to the image, under the certain conditions.
- If you select [Thin Paper Priority] and then print on paper with a basis weight greater than 129 g/m<sup>2</sup> (40 lb bond), the time you wait while temperature adjusts may increase.
- Besides the above mentioned settings, you can improve productivity by giving priority to heavy paper with a basis weight over than 129 g/m<sup>2</sup> (40 lb bond), or you can give priority to image quality by optimizing the temperature for all types of paper. For more information, see the following.

Settings/Registration" > "Productivity/Image Quality Priority for Mixed Paper Type" in the User's Guide

# Speeding Up a Print Job Manually When Printing on Heavy 5/Heavy 6 Paper

The print speed changes depending on the type of paper and the paper's basis weight. When you use paper with a high basis weight, the machine prints images at slower speeds so that paper feeds smoothly and the toner is applied to the paper properly. If you set [Heavy 5/Heavy 6 Paper Productivity Priority] to 'On', you can force the print speed to increase. For more information, see the following.

Settings/Registration" > "Heavy 5/Heavy 6 Paper Productivity Priority" in the User's Guide

# NOTE

When [Heavy 5/Heavy 6 Paper Productivity Priority] is set to 'On', print speed increases, but color/gloss/fixing quality may be adversely affected.

# Speeding Up a Print Job by Giving Priority to Productivity Rather Than Gloss

The print speed changes depending on the type of paper and the paper's basis weight. When you use coated paper, the machine prints images more slowly to preserve the gloss of the image. If you specify [Productivity Priority] in [Coated Paper Productivity/Gloss Priority], you can force the machine to print faster. For more information, see the following.

Settings/Registration" > "Coated Paper Productivity/Gloss Priority" in the User's Guide

# NOTE

If you specify these settings, the print speed increases but the gloss quality may be adversely affected.

# Problems with Printouts That Look Like the Following Images

If your printouts consistently appear as shown in the images below, refer to the cause and remedy described here to solve the problem. However, please refer to the User's Guide and confirm the instructions before you adjust the settings, because adjusting the settings may cause the color balance to become unstable. If the situation does not improve even after adjusting the settings, contact your local authorized Canon dealer



Streaks that are perpendicular to the direction of feed appear in the printout.



← Feeding Direction

Many streaks that are perpendicular to the direction of feed appear in the printout.



#### ← Feeding Direction

#### Check the Cause and Remedy Below

#### Cause

The intermediate transfer belt is warped.

#### Remedy

If you have not used your machine for a long period of time, the intermediate transfer belt may become warped. If this happens, clean inside the main unit several times.

Press ( $\circledast$ )  $\rightarrow$  [Adjustment/Maintenance]  $\rightarrow$ [Maintenance]  $\rightarrow$  [Clean Inside Main Unit].

### Cause

Color displacement has occurred in the printout.

#### Remedy

Correct the color displacement.

Press ( $) \rightarrow$  [Adjustment/Maintenance]  $\rightarrow$  [Adjust Image Quality]  $\rightarrow$  [Special Smoothing].

# Problems with Printouts That Look Like the Following Images

#### When Your Printouts Look Like..

Black streaks that are perpendicular to the direction of feed appear in the printout and the color of the streaks gradually fades.



#### ← Feeding Direction

### Check the Cause and Remedy Below

#### Cause

Printouts may be distorted because the toner is fixing to paper that is too dry.

### Remedy

- Avoid storing paper stock in extremely low humidity environments for a long period of time, unless it is suitably wrapped.
- Unwrap the paper immediately before you load it into the machine. Keep unused paper in a closed package and use it as soon as possible.
- To improve this situation, adjust the value for <Adjust Fixing Speed> to match the specific characteristics of the paper.

Press ( $\textcircled{O} \rightarrow$  [Preferences]  $\rightarrow$  [Paper Settings]  $\rightarrow$  [Paper Type Management Settings]  $\rightarrow$  select the type of paper you are using that is having this problem  $\rightarrow$  press [Details/Edit]  $\rightarrow$  [Change] for <Adjust Fixing Speed>  $\rightarrow$  adjust the fixing speed toward the plus end.

"Paper Type Management" > "Adjusting the Fixing Speed" in the User's Guide

#### When Your Printouts Look Like...

Streaks that are parallel to the direction of feed appear in the printout.



← Feeding Direction

Glossy streaks appear on both edges of the page parallel to the direction of feed.



← Feeding Direction

#### Check the Cause and Remedy Below

## Cause

The corona assembly wires inside the main unit are dirty.

#### Remedy

Clean the corona assembly wires inside the main unit several times.

 $\begin{array}{l} \mbox{Press} \textcircled{\otimes} \rightarrow \mbox{[Adjustment/Maintenance]} \rightarrow \mbox{[Maintenance]} \\ \rightarrow \mbox{[Clean Wire]}. \end{array}$ 

"Maintenance" > "Output Paper Becomes Dirty (Wire Cleaning)" in the User's Guide

### Cause

Parts of the surface of the fixing belt are rough.

#### Remedy

Refresh the fixing belt. Press  $\textcircled{O} \rightarrow [Adjustment/Maintenance] \rightarrow [Maintenance]$  $\rightarrow [Refresh Fixing Belt].$ 

 "Maintenance" > "Streaks and Gloss Unevenness Appear on Output Paper (Refreshing the Fixing Belt)" in the User's Guide

# Problems with Printouts That Look Like the Following Images

#### When Your Printouts Look Like.

When paper with a longer width is used after copying or printing large volumes of paper with a shorter width, dirty black bars appear on the left and right edges of paper.



← Feeding Direction

When paper with a longer width is used after copying or printing large volumes of paper with a shorter width, colors on the left and right edges are faint.



← Feeding Direction

#### Check the Cause and Remedy Below

## Cause

Both sides of the pressure belt are dirty.

#### Remedy

Clean the pressure belt.

Press  $\textcircled{O} \rightarrow$  [Adjustment/Maintenance]  $\rightarrow$  [Maintenance]  $\rightarrow$  [Clean Belt].

"Maintenance" > "Output Paper Becomes Dirty (Belt Cleaning)" in the User's Guide

#### Cause

The primary voltage that transfers toner to the paper does not match the specific characteristics of the paper.

#### Remedy

To improve this situation, adjust the value for <Adj. Primary Transfer Voltage> to match the specific characteristics of the paper.

Press (a)  $\rightarrow$  [Preferences]  $\rightarrow$  [Paper Settings]  $\rightarrow$  [Paper Type Management Settings]  $\rightarrow$  select the type of paper you are using that is having this problem  $\rightarrow$  press [Details/Edit]  $\rightarrow$  [Change] for <Adj. Primary Transfer Voltage>  $\rightarrow$  adjust the voltage value of black toward the minus end.

 "Paper Type Management" > "Adjusting the Primary Transfer Voltage" in the User's Guide

#### When Your Printouts Look Like..

Color becomes faint on the tail end of the paper, when the printout is very dark.



← Feeding Direction

Toner is not applied to the tail end of the paper, which appears white, when the printout is very light.



← Feeding Direction

#### Check the Cause and Remedy Below

## Cause

Tail end of the paper is curled.

#### Remedy

• This may occur because the toner is not applied evenly to the curled parts of the paper. Eliminate the cause of paper curl.

## ( Thow to Fix Curled Printouts" (p. 90)

• To improve this situation when using paper that tends to curl, adjust the value for <Corr. Tail End Toner Applic.> to match the specific characteristics of the paper.

Press (•)  $\rightarrow$  [Preferences]  $\rightarrow$  [Paper Settings]  $\rightarrow$  [Paper Type Management Settings]  $\rightarrow$  select the type of paper you are using that is having this problem  $\rightarrow$  press [Details/Edit]  $\rightarrow$  [Change] for <Corr. Tail End Toner Applic.>  $\rightarrow$  adjust the correction value. If images are faint, adjust the correction value toward the minus end in [Correction Level]. If the tail end of the paper appears white, adjust the correction value toward the plus end in [Correction Level].

"Paper Type Management" > "Changing the Tail End White Patch Correction" in the User's Guide

# Problems with Printouts That Look Like the Following Images

#### When Your Printouts Look Like...

The tail end of paper is wrinkled.



← Feeding Direction

#### Check the Cause and Remedy Below

#### Cause

- 1. Paper tends to wrinkle because the printer is installed in a hot or humid environment.
- 2. Paper tends to wrinkle because the paper is thin.

#### Remedy

- Locate the machine in a room that has consistent and suitable temperature and humidity. Keep the paper in the same environment as that where the machine is located. For the appropriate temperature and humidity, see the *Installation and Operating Environment Guidelines* or the *Specialty Media Handling Guide*.
- To improve this situation, adjust the value for <Adjust Gloss/Fine Black> to match the specific characteristics of the paper.

Press (a)  $\rightarrow$  [Preferences]  $\rightarrow$  [Paper Settings]  $\rightarrow$  [Paper Type Management Settings]  $\rightarrow$  select the type of paper you are using that is having this problem  $\rightarrow$  press [Details/Edit]  $\rightarrow$  [Change] for <Adjust Gloss/Fine Black>  $\rightarrow$  adjust the value for [Gloss] toward the minus end.

"Paper Type Management" > "Adjusting the Gloss and Fine Black" in the User's Guide

#### When Your Printouts Look Like..

Uneven glossy areas may occur in high density images. (Type A)



Toner may splatter around the edges of high density images. (Type A)



#### Check the Cause and Remedy Below

#### Cause

The secondary voltage that transfers toner to the paper does not match the specific characteristics of the paper.

#### Remedy

To improve this situation, adjust the value for <Adj. Secondary Transfer Volt.> to match the specific characteristics of the paper. There are two types of problems: type A and type B. Adjust the value according to the problem with your printout.

Press (ⓐ) → [Preferences] → [Paper Settings] → [Paper Type Management Settings] → select the type of paper you are using that is having this problem → press [Details/Edit] → [Change] for <Adj. Secondary Transfer Volt.> → adjust the voltage value. For type A, adjust the voltage value toward the plus end. For type B, adjust the voltage value toward the minus end.

"Paper Type Management" > "Adjusting the Secondary Transfer Voltage" in the User's Guide

# Problems with Printouts That Look Like the Following Images

#### When Your Printouts Look Like...

Tiny white spots that look like bubbles appear. (Type B)



Tiny white spots appear. (Type B)



#### The definition of the printout is low.



#### Check the Cause and Remedy Below

#### Cause

The secondary voltage that transfers toner to the paper does not match the specific characteristics of the paper.

#### Remedy

To improve this situation, adjust the value for <Adj. Secondary Transfer Volt.> to match the specific characteristics of the paper. There are two types of problems: type A and type B. Adjust the value according to the problem with your printout.

Press ( $\bigcirc \rightarrow$  [Preferences]  $\rightarrow$  [Paper Settings]  $\rightarrow$  [Paper Type Management Settings]  $\rightarrow$  select the type of paper you are using that is having this problem  $\rightarrow$  press [Details/Edit]  $\rightarrow$  [Change] for <Adj. Secondary Transfer Volt.>  $\rightarrow$  adjust the voltage value. For type A, adjust the voltage value toward the plus end. For type B, adjust the voltage value toward the minus end.

"Paper Type Management" > "Adjusting the Secondary Transfer Voltage" in the User's Guide

#### Cause

The dither settings are not appropriate for the image being printed.

#### Remedy

To improve this situation, adjust the dither settings to increase the space between halftone dots.

Press  $\textcircled{O} \rightarrow$  [Adjustment/Maintenance]  $\rightarrow$  [Adjust Image Quality]  $\rightarrow$  [Dither Settings]  $\rightarrow$  decrease the setting value for <Gradation> and <Resolution>.

 "Adjustment for Image Quality and Finishing (Calibration)" > "Dither Settings" in the User's Guide

#### When Your Printouts Look Like..

When printing on coated paper, uneven densities appears in the center of the image as if the printed image were scratched.



← Feeding Direction

When printing on coated paper, printouts are distorted, as shown in the orange frames in the illustration below.



← Feeding Direction

#### Check the Cause and Remedy Below

#### Cause

Paper that has dried unevenly and has become wavy causes troubles when it is fed.

#### Remedy

- If paper loses moisture and the moisture content has become irregular, the paper may become wavy. Avoid storing paper stock in extremely low humidity environments for a long period of time, unless it is suitably wrapped.
- To improve this situation, adjust the settings for <Correct Image for Scratching> to match the specific characteristics of the paper.

Press (a)  $\rightarrow$  [Preferences]  $\rightarrow$  [Paper Settings]  $\rightarrow$  [Paper Type Management Settings]  $\rightarrow$  select the type of paper you are using that is having this problem  $\rightarrow$  press [Details/Edit]  $\rightarrow$  [Change] for <Correct Image for Scratching>  $\rightarrow$  set [On].

 "Paper Type Management" > "Correcting the Image for Scratching" in the User's Guide

# Problems with Printouts That Look Like the Following Images

#### When Your Printouts Look Like..

When printing on coated paper, uneven glossiness that looks like rain fall appears on the leading edge of the image.



← Feeding Direction

### Check the Cause and Remedy Below

#### Cause

The toner cannot fix to the paper because too much water vapor is evaporating from the surface of the paper.

### Remedy

- Locate the machine in a room that has consistent and suitable temperature and humidity. Keep the paper in the same environment as that where the machine is located. For the appropriate temperature and humidity, see the *Installation and Operating Environment Guidelines* or the *Specialty Media Handling Guide*.
- To improve this situation, adjust the value for <Adjust Gloss/Fine Black> to match the specific characteristics of the paper.

Press ( $\bigcirc \rightarrow$  [Preferences]  $\rightarrow$  [Paper Settings]  $\rightarrow$  [Paper Type Management Settings]  $\rightarrow$  select the type of paper you are using that is having this problem  $\rightarrow$  press [Details/Edit]  $\rightarrow$  [Change] for <Adjust Gloss/Fine Black>  $\rightarrow$  adjust the value for [Gloss] toward the minus end.

"Paper Type Management" > "Adjusting the Gloss and Fine Black" in the User's Guide

#### When Your Printouts Look Like...

A part of the image is faint, and fine streaks appear in the faint area.



← Feeding Direction

#### Check the Cause and Remedy Below

#### Cause

- 1. The primary voltage that transfers toner to the paper does not match the specific characteristics of the paper.
- 2. Too much toner is being used.

#### Remedy

• To improve this situation, adjust the value for <Adj. Primary Transfer Voltage> to match the specific characteristics of the paper.

Press (•)  $\rightarrow$  [Preferences]  $\rightarrow$  [Paper Settings]  $\rightarrow$ [Paper Type Management Settings]  $\rightarrow$  select the type of paper you are using that is having this problem  $\rightarrow$  press [Details/Edit]  $\rightarrow$  [Change] for <Adj. Primary Transfer Voltage>  $\rightarrow$  adjust the voltage value of black toward the minus end.

"Paper Type Management" > "Adjusting the Primary Transfer Voltage" in the User's Guide

- - "Adjustment for Image Quality and Finishing (Calibration)" > "Automatic Gradation Adjustment" in the User's Guide

# Problems with Printouts That Look Like the Following Images

#### When Your Printouts Look Like...

Text and images do not print clearly.



#### Check the Cause and Remedy Below

#### Cause

There is a high probability that condensation may be occurring on the photoconductor drum because the printer is installed in a hot or humid environment.

#### Remedy

When printing in black and white, increase the temperature of the photoconductor drum. Press  $\textcircled{O} \rightarrow [Adjustment/Maintenance] \rightarrow [Adjust Image Quality] \rightarrow [Adjust Drum Temperature] \rightarrow select [High].$ 

 "Adjustment for Image Quality and Finishing (Calibration)" > "Adjusting Drum Temperature" in the User's Guide

#### Cause

Temperature for fixing toner does not match the specific characteristics of the paper.

#### Remedy

To improve this situation, adjust the value for <Adjust Gloss/Fine Black> to match the specific characteristics of the paper.

Press (•)  $\rightarrow$  [Preferences]  $\rightarrow$  [Paper Settings]  $\rightarrow$  [Paper Type Management Settings]  $\rightarrow$  select the type of paper you are using that is having this problem  $\rightarrow$  press [Details/Edit]  $\rightarrow$  [Change] for <Adjust Gloss/Fine Black>  $\rightarrow$  adjust the value for [Gloss] toward the minus end.

"Paper Type Management" > "Adjusting the Gloss and Fine Black" in the User's Guide





← Feeding Direction

#### When Your Printouts Look Like..

Uneven glossiness that is perpendicular to the direction of feed occurs.

On the first sheet, there is a color difference in an area reaching 174 mm (6 7/8") from the leading edge caused by uneven glossiness.



Color difference ← Feeding Direction

On the second and following sheets, there is a bar of uneven glossiness within an area reaching 174 mm (6 7/8") from the leading edge.



#### Check the Cause and Remedy Below

#### Cause

Temperature for fixing toner does not match the specific characteristics of the paper.

#### Remedy

To improve this situation, adjust the value for <Adjust Gloss/Fine Black> to match the specific characteristics of the paper.

Press (•)  $\rightarrow$  [Preferences]  $\rightarrow$  [Paper Settings]  $\rightarrow$  [Paper Type Management Settings]  $\rightarrow$  select the type of paper you are using that is having this problem  $\rightarrow$  press [Details/Edit]  $\rightarrow$  [Change] for <Adjust Gloss/Fine Black>  $\rightarrow$  adjust the value for [Gloss] toward the minus end if the area is too glossy or toward the plus end if it is not glossy enough.

"Paper Type Management" > "Adjusting the Gloss and Fine Black" in the User's Guide

# Problems with Printouts That Look Like the Following Images

#### When Your Printouts Look Like...

Yellow does not appear yellow.



#### Check the Cause and Remedy Below

#### Cause

The residue of other colors of toner has accumulated on the intermediate transfer belt.

#### Remedy

This phenomenon may occur if the toner does not fully fix to the paper you are using.

• To improve this situation, adjust the value for <Adj. Secondary Transfer Volt.> to match the specific characteristics of the paper.

Press (O  $\rightarrow$  [Preferences]  $\rightarrow$  [Paper Settings]  $\rightarrow$  [Paper Type Management Settings]  $\rightarrow$  select the type of paper you are using that is having this problem  $\rightarrow$  press [Details/Edit]  $\rightarrow$  [Change] for <Adj. Secondary Transfer Volt.>  $\rightarrow$  adjust the voltage value toward the minus end.

#### "Paper Type Management" > "Adjusting the Secondary Transfer Voltage" in the User's Guide

• To improve this situation, adjust the value for <Adjust ITB Image Clearing> to match the specific characteristics of the paper.

Press (a)  $\rightarrow$  [Preferences]  $\rightarrow$  [Paper Settings]  $\rightarrow$ [Paper Type Management Settings]  $\rightarrow$  select the type of paper you are using that is having this problem  $\rightarrow$  press [Details/Edit]  $\rightarrow$  [Change] for <Adjust ITB Image Clearing>  $\rightarrow$  adjust the image clear level to increase the precision of automatic cleaning of the intermediate transfer belt.

"Paper Type Management" > "Adjusting the Image Clear Level of the ITB (Intermediate Transfer Belt)" in the User's Guide

#### When Your Printouts Look Like..

If colors that have the same hue but have different brightness are adjacent to each other, the boundary between light areas and dark areas appears white. This is because the toner does not fix to the paper.



← Feeding Direction

#### The moiré effect occurs when copying.



#### Check the Cause and Remedy Below

#### Cause

..........

The machine cannot develop the images correctly at the border of two areas due to the deterioration of the developers.

#### Remedy

To improve this situation, adjust the voltage for the image development in [Correct White Gap]. Press (a)  $\rightarrow$  [Adjustment/Maintenance]  $\rightarrow$  [Adjust Image Quality]  $\rightarrow$  [Correct White Gap]  $\rightarrow$  change the setting value to [1] or [2].

 "Adjustment for Image Quality and Finishing (Calibration)" > "White Gap Correction" in the User's Guide

#### Cause

Moiré occurs when regularly spaced dots in two or more patterns in an image overlap. The dots in a halftone image may create a moiré effect when scanned by the machine.

#### Remedy

Select [Map] in [Original Type] to reduce the moiré effect. Press  $\bigcirc \rightarrow$  [Copy]  $\rightarrow$  [Options]  $\rightarrow$  [Original Type]  $\rightarrow$ select [Map].
## Types of Paper You Can Use for Calibration

## For the European and Asia-Pacific Regions

Calibration on the Machine			Types of Paper You Want to Print on					
			Group A	Group B	Group C	Group B	Group C	
			Types of Paper That Have Been Registered in Advance in the Machine (Standard Paper)					
			Thin 2, Thin 1, Plain 1, Plain 2, Recycled 1 to 3, Color 1, Color 2, Heavy 1 to 4, Vellum 1 to 3, Bond 1 to 3, Pre-Punched 1, Pre-Punched 2, Tab 1, Tab 2, Textured 1 to 2	Heavy 5, Textured 3 to 5, Labels, Letterhead, Envelopes	Heavy 6, Textured 6 to 8, Transparency	1-Sided Coated 1 to 3, 2-Sided Coated 1 to 3, Matte Coated 1 to 3	1-Sided Coated 4 to 6, 2-Sided Coated 4 to 6, Matte Coated 4 to 6	
			Types of Paper the User Can Register (Custom Paper)					
			<ul> <li>Custom paper whose basis weight and finish are equivalent to Standard Paper (52 g/m<sup>2</sup> to 220 g/m<sup>2</sup>)</li> <li>Custom paper whose finish is equivalent to Pre-Punched or Tab (64 g/m<sup>2</sup> to 220 g/m<sup>2</sup>)</li> </ul>	<ul> <li>Custom paper whose basis weight and finish are equivalent to Standard Paper (221 g/m<sup>2</sup> to 256 g/m<sup>2</sup>)</li> <li>Custom paper whose finish is equivalent to Tab (221 g/m<sup>2</sup> to 256 g/m<sup>2</sup>)</li> <li>Custom paper whose finish is equivalent to Labels, Letterhead, or Envelopes (80 g/m<sup>2</sup> to 300 g/m<sup>2</sup>)</li> </ul>	<ul> <li>Custom paper whose basis weight and finish are equivalent to Standard Paper (257 g/m<sup>2</sup> to 300 g/m<sup>2</sup>)</li> <li>Custom paper whose finish is equivalent to Tab (257 g/m<sup>2</sup> to 300 g/m<sup>2</sup>)</li> <li>Custom paper whose finish is equivalent to Transparency (80 g/m<sup>2</sup> to 300 g/m<sup>2</sup>)</li> </ul>	Custom paper whose basis weight and finish are equivalent to Standard Paper (106 g/m² to 180 g/m²)	Custom paper whose basis weight and finish are equivalent to Standard Paper (181 g/m² to 300 g/m²)	
	Simple Calibration							
or		Paper Required as a Reference to Calibrate Other Types of Paper	Canon Océ Top Colour Paper (100 g/m²)					
Can Use f		Paper Required When You Want to Do a More Precise Calibration	Thin 1, Plain 1, Plain 2, or Heavy 1 to 4/uncoated paper, or custom paper with an equivalent finish and basis weight (64 g/m <sup>2</sup> to 220 g/m <sup>2</sup> )					
'aper You n	Enhanced Calibration	Paper Required as a Reference to Calibrate Other Types of Paper	Canon Océ Top Colour Paper (100 g/m²)	Canon Océ Top Colour Paper (250 g/m²)	Canon Océ Top Colour Paper (300 g/m²)	Canon Océ Top Colour Paper (250 g/m²)	Canon Océ Top Colour Paper (300 g/m²)	
Types of P Calibratio		Paper Required When You Want to Do a More Precise Calibration	Thin 1, Plain 1, Plain 2, or Heavy 1 to 4/uncoated paper, or custom paper with an equivalent finish and basis weight (64 g/m² to 220 g/m²)	Heavy 5/uncoated paper, or custom paper with an equivalent finish and basis weight (221 g/m² to 256 g/m²)	Heavy 6/uncoated paper, or custom paper with an equivalent finish and basis weight (257 g/m² to 300 g/m²)	Heavy 5/uncoated paper, or custom paper with an equivalent finish and basis weight (221 g/m² to 256 g/m²)	Heavy 6/uncoated paper, or custom paper with an equivalent finish and basis weight (257 g/m² to 300 g/m²)	

Calibration on the imagePRESS Server		on the imagePRESS Server		Types of Paper You Want to Print On			
			Group A	Group B	Group C	Group B	Group C
			Plain (52-220 gm2)	Thick (221-256 gm2)	Heavy Thick (257-300 gm2)	Coated (106-180 gm2)	Heavy Coated (181-300 gm2)
Types of Paper You Can Use for Calibration	Simple Calibration	Paper Recommended as a Reference to Calibrate Other Types of Paper				OK Top Coat Plus (127.9 g/m²)	Futura Gloss Cover (271 g/m²)
		Paper Required When You Want to Do a More Precise Calibration	-	-	-	Same as the paper you want to use for printing	
	Enhanced Calibration	Paper Recommended as a Reference to Calibrate Other Types of Paper	Canon Océ Top Colour Paper (100 g/m²)	Canon Océ Top Colour Paper (250 g/m²)	Canon Océ Top Colour Paper (300 g/m²)	OK Top Coat Plus (127.9 g/m²)	Futura Gloss Cover (271 g/m²)
		Paper Required When You Want to Do a More Precise Calibration	Same as the paper you want to use for printing				

For information on which paper you should use for calibration when you print on paper registered in the paper database, contact your local authorized Canon dealer. The name of the 'Paper required as a reference to calibrate other types of paper' and 'Paper recommended as a reference to calibrate other types of paper' is subject to change without notice. For more information, contact your local authorized Canon dealer.

## For the American Region

Calibration on the Machine		on the Machine	Types of Paper You Want to Print on					
			Group A	Group B	Group C	Group B	Group C	
			Types of Paper That Have Been Registered in Advance in the Machine (Standard Paper)					
			Thin 2, Thin 1, Plain 1, Plain 2, Recycled 1 to 3, Color 1, Color 2, Heavy 1 to 4, Vellum 1 to 3, Bond 1 to 3, Pre-Punched 1, Pre-Punched 2, Tab 1, Tab 2, Textured 1 to 2	Heavy 5, Textured 3 to 5, Labels, Letterhead, Envelop	Heavy 6, Textured 6 to 8, Transparency	1-Sided Coated 1 to 3, 2-Sided Coated 1 to 3, Matte Coated 1 to 3	1-Sided Coated 4 to 6, 2-Sided Coated 4 to 6, Matte Coated 4 to 6	
			Types of Paper the User Can Register (Custom Paper)					
			<ul> <li>Custom paper whose basis weight and finish are equivalent to Standard Paper (14 Ib bond to 80 lb cover (52 g/m<sup>2</sup> to 220 g/m<sup>2</sup>))</li> <li>Custom paper whose finish is equivalent to Pre-Punched or Tab (17 lb bond to 80 lb cover (64 g/m<sup>2</sup> to 220 g/m<sup>2</sup>))</li> </ul>	<ul> <li>Custom paper whose basis weight and finish are equivalent to Standard Paper (82 lb cover to 140 lb index (221 g/m<sup>2</sup> to 256 g/m<sup>2</sup>))</li> <li>Custom paper whose finish is equivalent to Tab (82 lb cover to 140 lb index (221 g/m<sup>2</sup> to 256 g/m<sup>2</sup>))</li> <li>Custom paper whose finish is equivalent to Labels, Letterhead, or Envelopes (20 lb bond to 110 lb cover (80g/m<sup>2</sup> to 300 g/m<sup>2</sup>))</li> </ul>	<ul> <li>Custom paper whose basis weight and finish are equivalent to Standard Paper (140 lb index to 110 lb cover (257 g/m<sup>2</sup> to 300 g/m<sup>2</sup>))</li> <li>Custom paper whose finish is equivalent to Tab (140 lb index to 110 lb cover (257 g/m<sup>2</sup> to 300 g/m<sup>2</sup>))</li> <li>Custom paper whose finish is equivalent to Transparency (20 lb bond to 110 lb cover (80 g/m<sup>2</sup> to 300 g/m<sup>2</sup>))</li> </ul>	Custom paper whose basis weight and finish are equivalent to Standard Paper (29 Ib bond to 66 Ib cover (106 g/m² to 180 g/m²))	Custom paper whose basis weight and finish are equivalent to Standard Paper (67 lb cover to 110 lb cover (181 g/m <sup>2</sup> to 300 g/m <sup>2</sup> ))	
Types of Paper You Can Use for Calibration	Simple Calibration	Paper Required as a Reference to Calibrate Other Types of Paper	Hammermill Color Copy Digital (28 lb. (105 g/m²))					
		Paper Required When You Want to Do a More Precise Calibration	Thin 1, Plain 1, Plain 2, or Heavy 1 to 4/uncoated paper, or custom paper with an equivalent finish and basis weight (17 lb bond to 80 lb cover (64 g/m <sup>2</sup> to 220 g/m <sup>2</sup> ))					
	Enhanced Calibration	Paper Required as a Reference to Calibrate Other Types of Paper	Hammermill Color Copy Digital (28 lb. (105 g/m²))	Mohawk Options Navajo Smooth Brilliant White (90 lb. Cover (243 g/m²))	Hammermill Color Copy Digital Cover (100 lb. (271 g/m²))	Mohawk Options Navajo Smooth Brilliant White (90 lb. Cover (243 g/m²))	Hammermill Color Copy Digital Cover (100 lb. (271 g/m²))	
		Paper Required When You Want to Do a More Precise Calibration	Thin 1, Plain 1, Plain 2, or Heavy 1 to 4/uncoated paper, or custom paper with an equivalent finish and basis weight (17 lb bond to 80 lb cover (64 g/m² to 220 g/m²))	Heavy 5/uncoated paper, or custom paper with an equivalent finish and basis weight (82 lb cover to 140 lb index (221 g/m² to 256 g/m²))	Heavy 6/uncoated paper, or custom paper with an equivalent finish and basis weight (140 lb index to 110 lb cover (257 g/m² to 300 g/m²))	Heavy 5/uncoated paper, or custom paper with an equivalent finish and basis weight (82 lb cover to 140 lb index (221 g/m² to 256 g/m²))	Heavy 6/uncoated paper, or custom paper with an equivalent finish and basis weight (140 lb index to 110 lb cover (257 g/m² to 300 g/m²))	

Calibration on the imagePRESS Server		on the imagePRESS Server	Types of Paper You Want to Print On				
			Group A	Group B	Group C	Group B	Group C
			Plain (52-220 gm2)	Thick (221-256 gm2)	Heavy Thick (257-300 gm2)	Coated (106-180 gm2)	Heavy Coated (181-300 gm2)
Types of Paper You Can Use for Calibration	Simple Calibration	Paper Recommended as a Reference to Calibrate Other Types of Paper	-		-	OK Top Coat Plus (34 lb. (127.9 g/m²))	Futura Gloss Cover (100 lb. (271 g/m²))
		Paper Required When You Want to Do a More Precise Calibration	-	-	-	Same as the paper you want to use for printing	
	Enhanced Calibration	Paper Recommended as a Reference to Calibrate Other Types of Paper	Hammermill Color Copy Digital (28 lb. (105 g/m²))	Mohawk Options Navajo Smooth Brilliant White (90 lb. Cover (243 g/m²))	Hammermill Color Copy Digital Cover (100 lb. (271 g/m²))	OK Top Coat Plus (34 lb. (127.9 g/m²))	Futura Gloss Cover (100 lb. (271 g/m²))
		Paper Required When You Want to Do a More Precise Calibration	Same as the paper you want to use for printing				

For information on which paper you should use for calibration when you print on paper registered in the paper database, contact your local authorized Canon dealer. The name of the 'Paper required as a reference to calibrate other types of paper' and 'Paper recommended as a reference to calibrate other types of paper' and 'Paper recommended as a reference to calibrate other types of paper' is subject to change without notice. For more information, contact your local authorized Canon dealer.