

UJF-7151 plusII / UJF-3042MkII e / UJF-3042MkII EX e / UJF-6042MkII e / JFX200-1213EX / JFX200-2513EX

High-speed Braille Print Guide

This guide shows you how to print braille in high speed or standard mode with the UJF-7151 plusII / UJF-3042MkII e / UJF-3042MkII EX e / UJF-6042MkII e / JFX200-1213EX / JFX200-2513EX.

Read this guide thoroughly before use.

Note

- It is strictly prohibited to write or copy a part or whole of this document without our approval.
- This document has been carefully prepared for your easy understanding, however, please do not hesitate to contact a distributor in your district or our office if you have any inquiry.
- Description contained in this document are subject to change without notice for improvement.
- Copying the Mimaki Engineering Co. Ltd. software described in this guide to other disks (except for backup purposes) or loading it to memory except for the purpose of running it, is strictly prohibited.
- Due to improvement or change of software, the description of this document could be partially different in specification, for which your understanding is requested.
- With the exception of what is provided for in the warranty provisions of MIMAKI ENGINEERING CO., LTD., we do not assume any liability against the damages (including but not limited to the loss of profit, indirect damage, special damage or other monetary damages) arisen out of the use or failure to use of this product. The same shall also apply to the case even if MIMAKI ENGINEERING CO., LTD. had been notified of the possibility of arising damages in advance. As an example, we shall not be liable for any loss of the media made using this product or indirect damages caused by the product made using this media.
- You can also download the latest operation manual from our website.

Notations used in this document

- Items and buttons displayed in menus and on screens are marked with square brackets ([]) as in [File].

Symbols



- This symbol indicates important information for using this product.



- This symbol indicates useful information.

RasterLink is the trademarks or registered trademarks of MIMAKI ENGINEERING CO., LTD. in Japan and in other countries.

Adobe, the Adobe logo, Acrobat, Illustrator, Photoshop, and PostScript are the trademarks or registered trademarks of Adobe Inc. in the United States and other countries. CorelDRAW is a trademark or registered trademark of Corel Corporation in Canada, the United States and other countries, and its affiliates.

Microsoft and Windows are trademarks or registered trademarks of Microsoft Corporation of the United States and other countries.

Apple and Macintosh are trademarks or registered trademarks of Apple Inc. of the United States and other countries.

Other company and product names mentioned herein are the trademarks or registered trademarks of the respective companies in Japan and in other countries.

Table of Contents

<i>Note</i>	<i>1</i>
<i>About Braille Printing</i>	<i>3</i>
<i>Target Environment</i>	<i>4</i>
<i>Recommended Media for Each Ink</i>	<i>8</i>
<i>Printing in Standard Mode/High-Speed Mode</i>	<i>9</i>

About Braille Printing

RasterLink offers the following three different braille printing modes:

- Standard mode
- High-speed mode
- Compliant mode

Important!

- The braille printing modes available will vary depending on the model and ink set. (Refer to P.4 "Target Environment")
- Only one printing mode can be used for printing a single image.
- [Compliant Mode] is a mode in which JIS and ADA compliant braille can be created. Please refer to the separate "Braille Printing Guide" for more information on this mode.

Printing Braille with Specified Lamination Conditions (Standard Mode, High-Speed Mode)

Important!

- Supported in conjunction with the following software:

MimakiDriver	Ver. 5.10.1 or later
RasterLink7	Ver. 3.3.4 or later
RasterLinkTools	Ver. 1.16.0 or later

● Explanation of Modes

■ Standard mode

Prints braille using clear ink.

Allows parameters such as height and overlay order with color images to be specified.

■ High-speed mode

Prints braille using a mixture of multiple inks.

- Basic prints braille using a mixture of CMYK ink.

- In UJF-7151plusII, JFX200-1213EX and JFX200-2513EX, Braille is printed by mixing special colors in addition to CMYK ink.

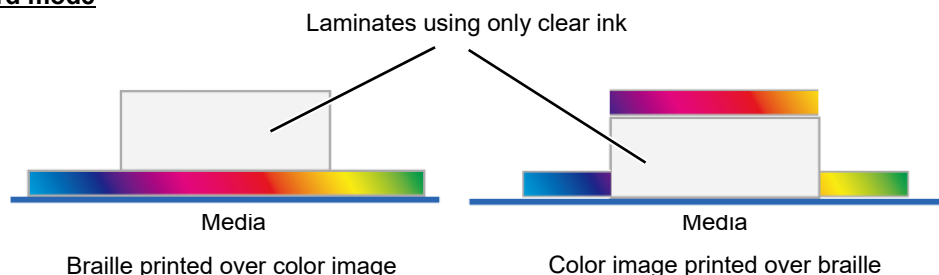
For more details, please see below.

P.6 "UJF-7151 plusII"

P.7 "JFX200-1213EX, JFX200-2513EX"

● Differences between Standard Mode and High-Speed Mode

Standard mode

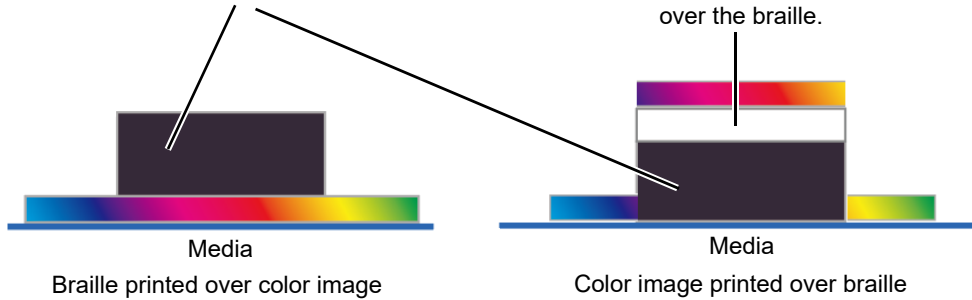


- Clear ink is laminated to the specified height for the braille.
- The settings can be altered to vary color image and braille printing order.

High-speed mode

Laminates using a mixture of CMYK ink

Options are available to allow printing of white ink over the braille.



- A mixture of CMYK ink is laminated to the specified height for the braille.
- The settings can be altered to vary color image and braille printing order.
- Option settings are available to allow white ink to be printed to cover the braille.

Target Environment

✓ symbol in the table below indicates the mode is compatible.

● UJF-3042MKII e

■ Ink sets and supported braille modes

Ink set	Special color set	Standard mode	High-speed mode
LH-100 CMYK ELH-100 CMYK	WW		✓
	WCI	✓	✓
	WP		✓
	CIP	✓	✓
LUS-120 CMYK ELS-120 CMYK	WW		✓
	WCI	✓	✓
	WP		✓
	CIP	✓	✓
LUS-150 CMYK	-	Not supported	
LUS-200 CMYK	-	Not supported	

■ Print conditions

In RasterLink, device profiles with the following conditions should be installed for each ink set.



- When a job is created, output settings are automatically applied to braille jobs.

Mode	Standard mode	High-speed mode
Media	[Braille] Standard mode	[Braille] High-speed mode
Resolution	1200 x 1200 VD	600 x 1200 VD
No. of passes	16 passes	16 passes

● UJF-6042MKII e / UJF-3042MkII EX e

■ Ink sets and supported braille modes

4 Color+SP

Ink set	Special color set	Standard mode	High-speed mode
LH-100 CMYK ELH-100 CMYK	CIPWW	✓	✓
LUS-120 CMYK ELS-120 CMYK	CIPWW	✓	✓
LUS-150 CMYK	-	Not supported	
LUS-200 CMYK	-	Not supported	

6 Color+SP

Ink set	Special color set	Standard mode	High-speed mode
LH-100 CMYKLcLm ELH-100 CMYKLcLm	WW		✓
	WCI	✓	✓
	WP		✓
	CIP	✓	✓
LUS-120 CMYKLcLm ELS-120 CMYKLcLm	WW		✓
	WCI	✓	✓
	WP		✓
	CIP	✓	✓
LUS-150 CMYKLcLm	-	Not supported	
LUS-200 CMYKLcLm	-	Not supported	

■ Print conditions

In RasterLink, device profiles with the following conditions should be installed for each ink set.



- When a job is created, output settings are automatically applied to braille jobs.

4 Color+SP

Mode	Standard mode	High-speed mode
Media	[Braille] Standard mode	[Braille] High-speed mode
Resolution	1200 x 1200 VD	600 x 1200 VD
No. of passes	16 passes	16 passes

6 Color+SP

Mode	Standard mode	High-speed mode
Media	[Braille] Standard mode	[Braille] High-speed mode
Resolution	1200 x 1200 VD	600 x 1200 VD
No. of passes	16 passes	16 passes

● UJF-7151 plusII

■ Ink sets and supported braille modes

4 Color+SP

Ink set	Special color set	Standard mode	High-speed mode
LH-100 CMYK ELH-100 CMYK	CIPWW	✓	✓ *1
LUS-120 CMYK	CIPWW	✓	✓ *1
LUS-350 CMYK	-	Not supported	

*1 : Braille is printed in CMYK + clear mixed colors.

6 Color+SP

Ink set	Special color set	Standard mode	High-speed mode
LH-100 CMYKLcLm ELH-100 CMYKLcLm	WW		✓ *2
	WCI	✓	✓ *1
	WP		✓ *2
	CIP	✓	✓ *1
	CISi	✓	✓ *1
	WSi		✓ *2
LUS-120 CMYKLcLm	WW		✓ *2
	WCI	✓	✓ *1
	WP		✓ *2
	CIP	✓	✓ *1
LUS-350 CMYKLcLm	-	Not supported	

*1 : Braille is printed in CMYK + clear mixed colors.

*2 : Braille is printed in CMYK + white mixed colors.

■ Print conditions

In RasterLink, device profiles with the following conditions should be installed for each ink set.



- When a job is created, output settings are automatically applied to braille jobs.

4 Color+SP

Mode	Standard mode	High-speed mode
Media	[Braille] Standard mode	[Braille] High-speed mode
Resolution	600 x 900 VD	600 x 900 VD
No. of passes	16 passes	12 passes

6 Color+SP

Mode	Standard mode	High-speed mode
Media	[Braille] Standard mode	[Braille] High-speed mode
Resolution	600 x 900 VD	600 x 900 VD
No. of passes	16 passes	12 passes

● JFX200-1213EX, JFX200-2513EX

■ Ink sets and supported braille modes

4Color+SP

Ink set	Special color set	Standard mode	High-speed mode
LH-100 CMYK ELH-100 CMYK	CICIWW	✓	✓ *1
	CIPWW	✓	✓ *1
	WWWW		✓ *1
LUS-120 CMYK	CICIWW	✓	✓ *1
	CIPWW	✓	✓ *1
	WWWW		✓ *1
LUS-150 CMYK	CICIWW	Not supported	
	CIPWW	Not supported	
	WWWW	Not supported	
LUS-211 CMYK	CICIWW	Not supported	
	WWWW	Not supported	
LUS-350 CMYK	CICIWW	Not supported	
	WWWW	Not supported	

*1 : Braille is printed in CMYK + white mixed colors.

6Color+SP

Ink set	Special color set	Standard mode	High-speed mode
LH-100 CMYKLcLm ELH-100 CMYKLcLm	WCI	✓	✓ *1
LUS-350 CMYKLcLm	WCI	Not supported	

*1 : Braille is printed in CMYK + white mixed colors.

■ Print conditions

In RasterLink, device profiles with the following conditions should be installed for each ink set.



- When a job is created, output settings are automatically applied to braille jobs.

4 Color+SP

Mode	Standard mode	High-speed mode
Media	[Braille] Standard mode	[Braille] High-speed mode
Resolution	1200 x 1200 VD	600 x 900 VD
No. of passes	32 passes	12 passes

6 Color+SP

Mode	Standard mode	High-speed mode
Media	[Braille] Standard mode	[Braille] High-speed mode
Resolution	1200 x 1200 VD	600 x 900 VD
No. of passes	32 passes	24 passes

Recommended Media for Each Ink

Substrate	LH-100 ELH-100	LUS-120
Polycarbonate	OK	OK
Polystyrene	OK	OK
ABS	OK	OK
PET w/ Adhesive Coating HK31WF	OK	OK
PET w/ Adhesive Coating U292W	Not available	OK

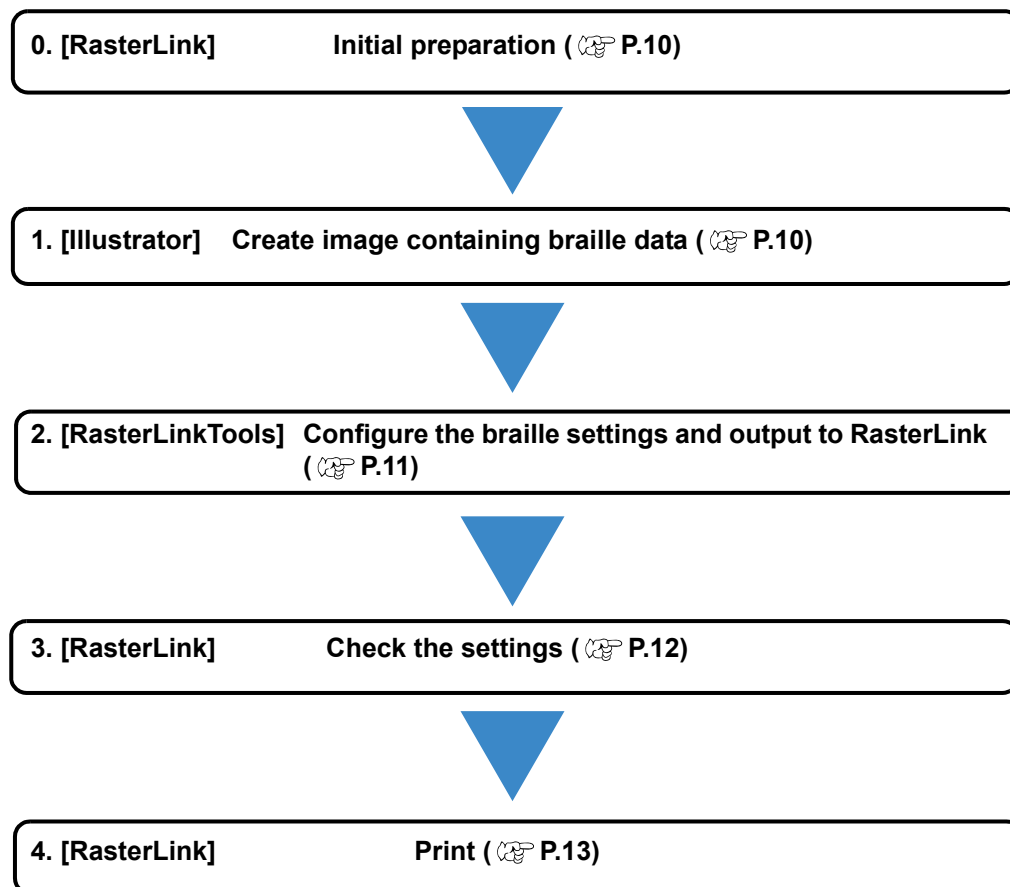
Even with media of the same type, the following issues may occur when manufacturers, types, or environments differ.

- Media becomes warped and rubs against the heads.
- Ink eventually peels off the media.

Please confirm that no problems are occurring before use.

Printing in Standard Mode/High-Speed Mode

The explanation is provided in the following order:



0. [RasterLink] Initial preparation

- (1) Create a hot folder
 - Image data used in Standard/High-speed modes must be loaded into RasterLink7 using a hot folder.
 - For details of how to create a hot folder, refer to the [RasterLink7 NetworkConnectionGuide].
- (2) Install a dedicated profile
 - A dedicated profile is required for printing in Standard/High-speed mode.



Dedicated profiles may be obtained in the following two ways:

- Install via the profile manager download function.
- Download from the RasterLink7 download page.

For details of how to install profiles, refer to the [RasterLink7 Installation Guide].

1. [Illustrator] Create image containing braille data

- (1) Open the color image forming the base in Illustrator.
- (2) Create the braille data.

Braille data can be created as follows:

- Use braille font
 - (1) Input braille using a braille font.
 - (2) Select the braille to be input, then create an outline.
- Use Ellipse tool to position dots in accordance with braille grammar

Creating braille data using ellipse tool

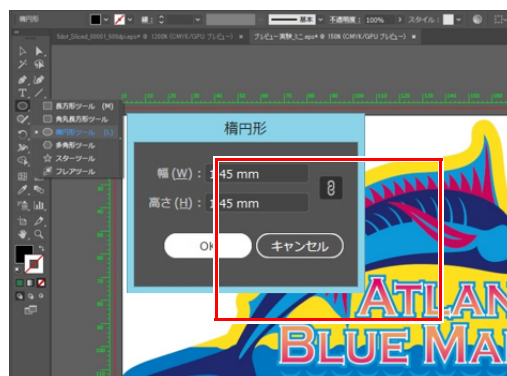
- (1) Based on the Braille syntax, check the Braille arrangement for the character you want to create.

Example

Mimaki



- (2) Use the Ellipse Tool in Illustrator to create the following shape.
 - Shape: Perfect circle
 - Diameter:
Compliant with Braille standards.
Setting the line to "None" makes alignment easier in the next step.



- (3) Layout the shape you created in (2) based on the standards for Braille of JIS.



2. [RasterLinkTools] Configure the Braille Settings and Output to RasterLink

Important!

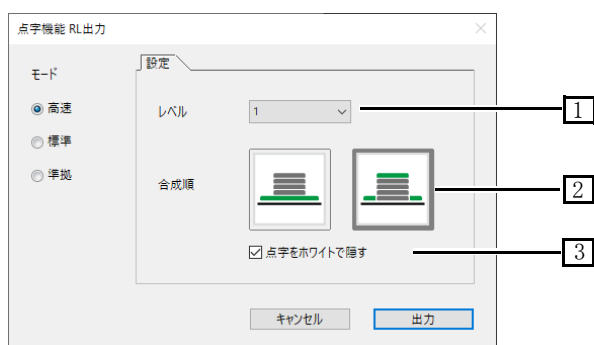
In the case of CorelDRAW

When using special color such as metallic color together, use the palette provided by RasterLinkTools.

Refer to the separate "Metallic Color Printing Guide" for how to select a pallet.

- (1) Select all of the braille data.
- (2) Click the [Braille] icon in RasterLinkTools.
 - The [Braille Function RL Output] window appears.
- (3) Select "High-speed" or "Standard" for [Mode].

High-speed mode

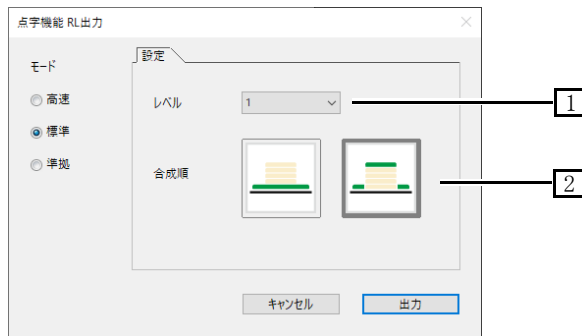


1	[Level]	Varies the braille height. Level 1: Approx. 0.3 mm Level 2: Approx. 0.5 mm Level 3: Approx. 0.7 mm Level 4: Approx. 0.9 mm
2	[Composite Order]	Specifies the printing order for the color image forming the base for the braille.
3	[Cover up braille with white]	Enable this to print white ink over the braille. • This setting is ignored for models not equipped with white ink, even when enabled. • If [Composite Order] is "Color -> Braille", it cannot be set.

Difference in print results depending on [Order] and [Hide Braille with white] settings

[Composite Order]	Color → Braille	Braille → Color	Braille → Color
[Cover up braille with white]	OFF	OFF	ON
Printed state of braille	Mixed colors	The braille appears darker as the color image is printed on top of the mixed colors.	The braille takes the color of the color image, as white ink is printed on top of the mixed colors, and the color image is printed on top of that.

Standard mode



1	[Level]	Varies the braille height. Level 1: Approx. 0.3 mm Level 2: Approx. 0.5 mm Level 3: Approx. 0.7 mm Level 4: Approx. 0.9 mm
2	[Composite Order]	Specifies the printing order for the color image forming the base for the braille.

Difference in print results depending on [Composite Order] settings

[Composite Order]	Color → Braille	Braille → Color
Printed state of braille	Braille is transparent	Braille takes color of color image

- (4) Once set, click the [Output] button.
- The [Save as] window appears. Enter the file name and save.



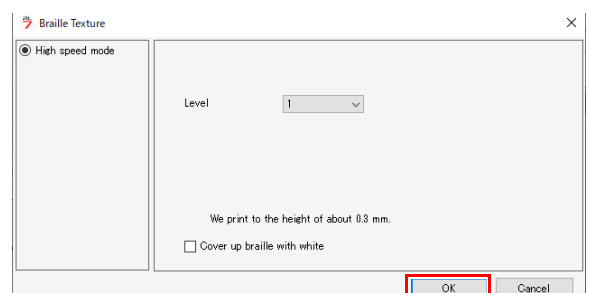
Be sure to output to the hot folder. If saving to another folder, be sure to load from the hot folder when loading to RasterLink7.

3. [RasterLink] Check the Settings

Loading using the hot folder creates two jobs as shown below.

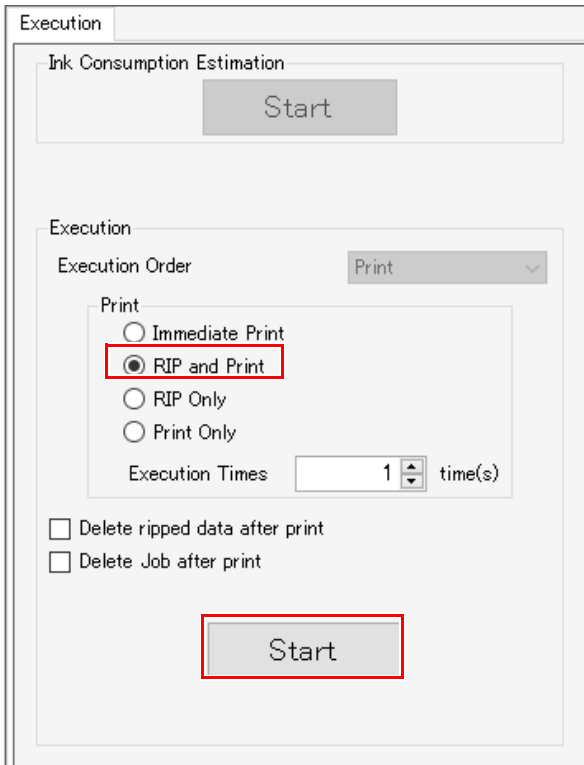
Job List					
Arranged	Layered	Thumbnail	Job Name	Attribute	Date
			Braille_Seaside_RL_LAYER_02_125956_02_50010...	Braille Texture[High speed mode]	2023/12/12 13:00:03
			Braille_Seaside_RL_LAYER_02_125956_01_05.eps	Color	2023/12/12 13:00:03

- (1) Select "Braille Texture" for the job properties, then click the [Properties] icon .
- (2) Click the [Setup] button for [Job Attribute].
- The setting window appears.
 - The [Level] and [Cover up braille with white] settings set in RasterLinkTools can be configured.
 - For details of setting items, refer to P. 11
- (3) Click [OK].



4. [RasterLink] Print

- (1) Click the [Execution] icon .
- (2) Select [RIP and Print], then click [Start].



Execution

Ink Consumption Estimation

Start

Execution

Execution Order Print

Print

☐ Immediate Print

☒ RIP and Print

☐ RIP Only

☐ Print Only

Execution Times 1 time(s)

☐ Delete ripped data after print

☐ Delete Job after print

Start

Important!

When outputting high-speed Braille, ink may get on the carriage base, the area around the head, and the UV LED frame.
Please clean the carriage base, head area, and UV LED frame frequently.

