

High-speed Braille Print Guide

This guide shows you how to print braille with the UJF-7151 plusII / UJF-3042MkII e / UJF-3042MkII EX e / UJF-6042MkII e.

Read this guide thoroughly before use.

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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.

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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. 5.9.0 or later
RasterLink7	Ver. 3.2.0 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.

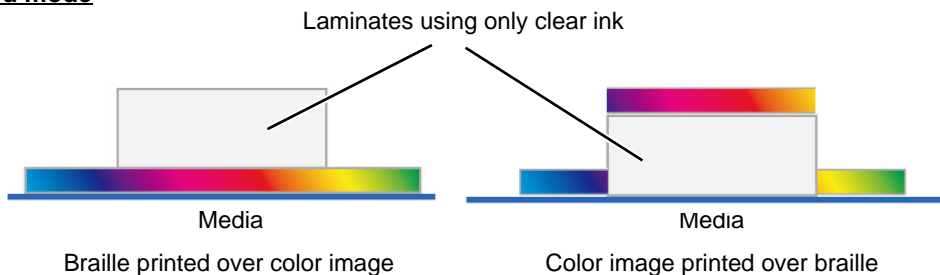
■ High-speed mode

Prints braille using a mixture of multiple inks.

- Basic prints braille using a mixture of CMYK ink.
- In UJF-7151plusII, Braille is printed by mixing special colors in addition to CMYK ink. Refer to P.6 "UJF-7151plusII" for details.

● Differences between Standard Mode and High-Speed Mode

Standard mode

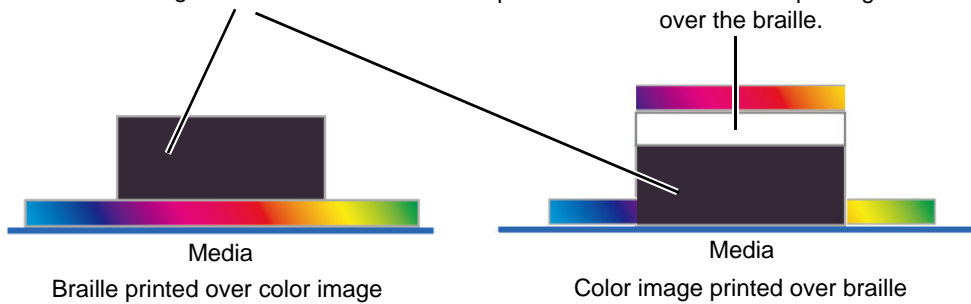


- Clear ink is laminated to the specified height for the braille.
- The settings can be altered to vary color image and braille printing order.

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-3042MKIle

■ Ink sets and supported braille modes

Ink set	Special color set	Standard mode	High-speed mode
LH-100 CMYK	WW		✓
	WCI	✓	✓
	WP		✓
	CIP	✓	✓
LUS-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-6042MKIle

■ Ink sets and supported braille modes

4 Color+SP


Ink set	Special color set	Standard mode	High-speed mode
LH-100 CMYK	CIPWW	✓	✓
LUS-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	WW		✓
	WCI	✓	✓
	WP		✓
	CIP	✓	✓
LUS-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.

	<ul style="list-style-type: none"> When a job is created, output settings are automatically applied to braille jobs.
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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-7151plusII

■ Ink sets and supported braille modes

4 Color+SP

Ink set	Special color set	Standard mode	High-speed mode
LH-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	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

Recommended Media for Each Ink

Substrate	LH-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

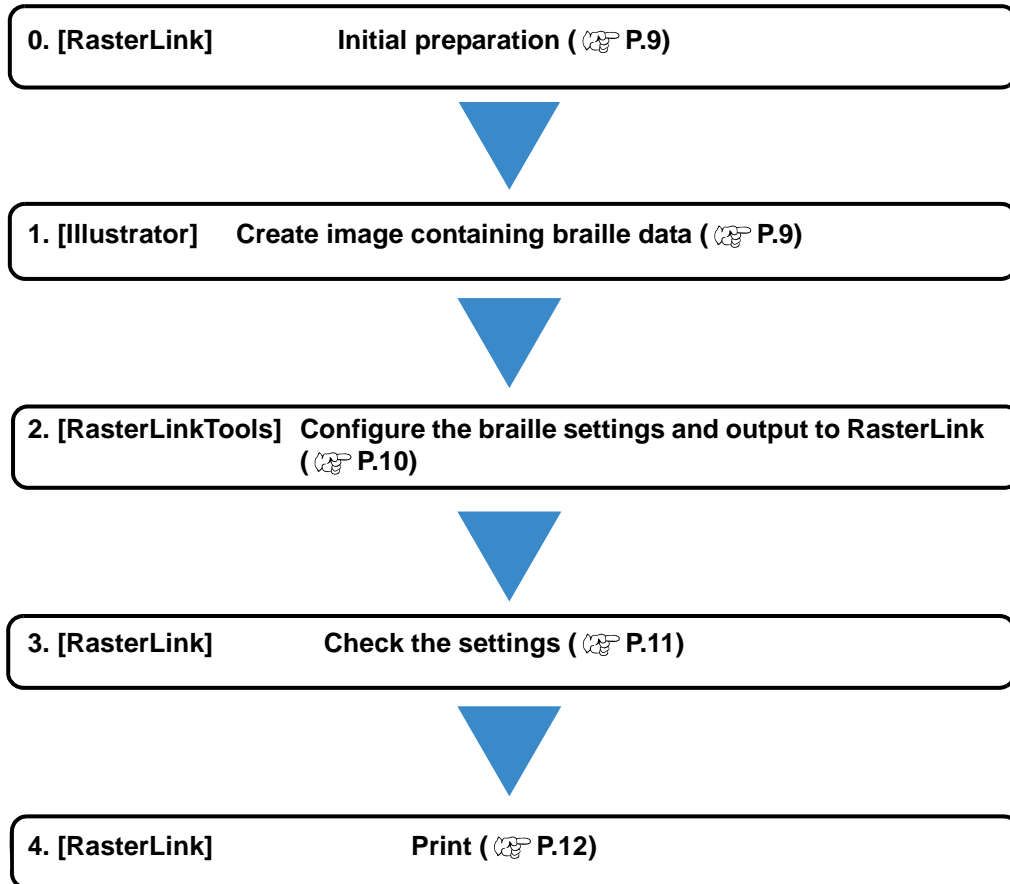
Using media other than the recommended above may cause issues such as these.

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

Always confirm that no problems are occurring if you use media other than the recommended one.

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

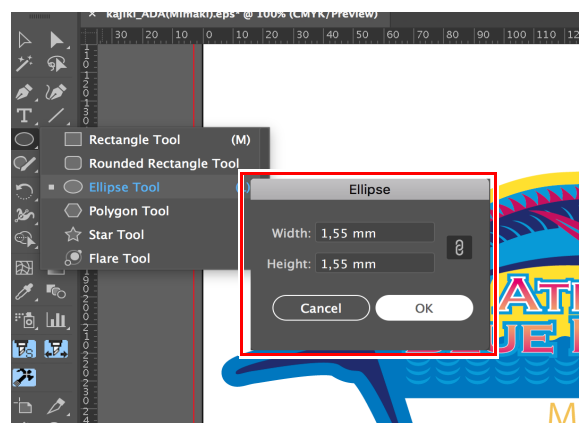
- (1) Based on the Braille syntax, check the Braille arrangement for the character you want to create.

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.



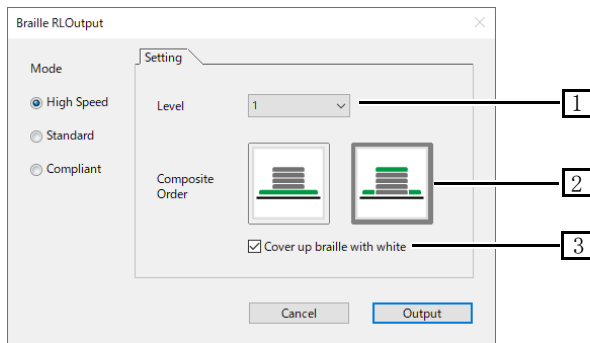
- (3) Layout the shape you created in (2) based on the standards for Braille of JIS.



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

- (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

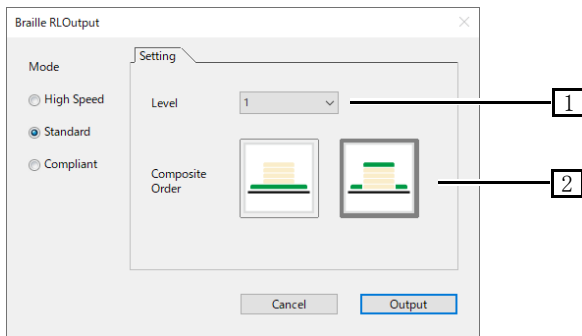


1	[Level]	Varies the braille height. Level 1: Approx. 0.3 mm Level 2: Approx. 0.5 mm Level 3: Approx. 0.7 mm Level 4: Approx. 0.9 mm
2	[Composite Order]	Specifies the printing order for the color image forming the base for the braille.
3	[Cover up braille with white]	Enable this to print white ink over 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.



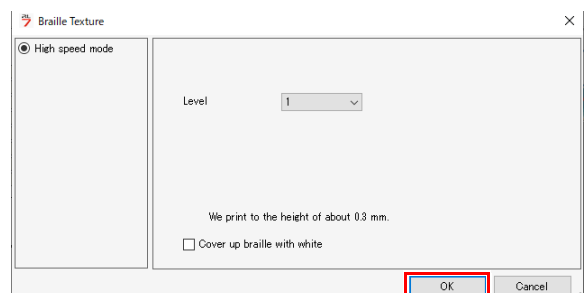
Be sure to output to the hot folder. If saving to another folder, be sure to load from the hot folder when loading to RasterLink7.

3. [RasterLink] Check the Settings


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

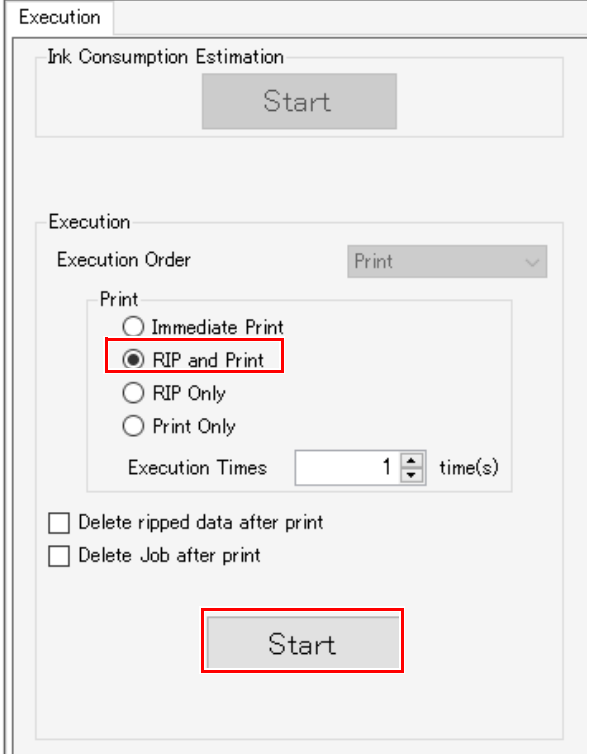
Arranged	Layered	Thumbnail	Job Name	Attribute	Date
			Braille_Seaside_RL_LAYER_02_125956_02_50010...	Braille Texture[High speed mode]	2023/12/12 13:00:03
			Braille_Seaside_RL_LAYER_02_125956_01_05.eps	Color	2023/12/12 13:00:03

- Select "Braille Texture" for the job properties, then click the [Properties] icon
- 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. 10
- 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

