EPSON

Braille Printing Guide

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Meaning of Symbols

⚠️ *Important:*	Important must be followed to avoid damage to this product.

Note:	Notes contain useful or additional information on the operation of this product.

☞	Indicates related reference content.

Screenshots used in this manual

The screenshots may differ slightly from the screens you are using. Also, they may be changed without notice. Please be aware of this when using the manual.

Product Model Descriptions

Some models described in this manual may not be sold in your country or region.

Viewing PDF Manuals

This section uses the Adobe Reader DC as an example to explain the basic operations for viewing the PDF manual in Adobe Reader.
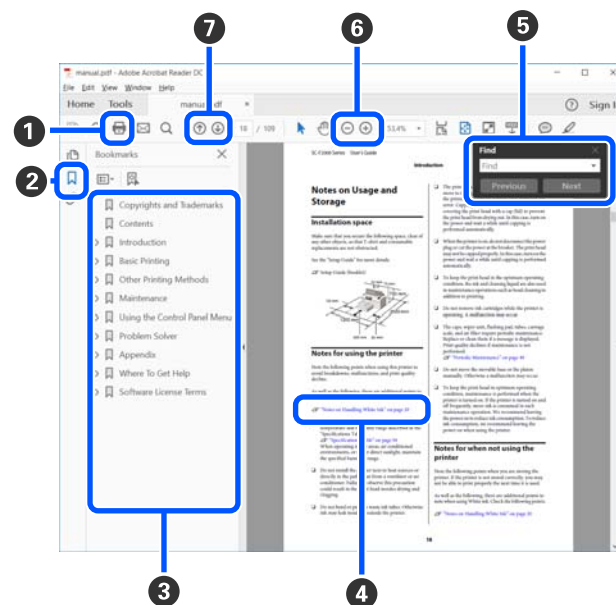
❶ Click to print the PDF manual.

❷ Each time it is clicked the bookmarks are hidden or shown.

❸ Click the title to open the relevant page.

Click [+] to open the titles lower in the hierarchy.

❹ If the reference is in blue text, click the blue text to open the relevant page.

To return to the original page, do the following.

For Windows

While pressing the **Alt** key, press the ← key.

For Mac

While pressing the **command** key, press the ← key.

Notes on Manuals

❺ You can enter and search for keywords, such as the names of items you want to confirm.

For Windows

Right click on a page in the PDF manual and select **Find** in the menu that is displayed to open the search toolbar.

For Mac

Select **Find** in the **Edit** menu to open the search toolbar.

❻ To enlarge text in the display that is too small to see clearly, click ⊕. Click ⊖ to reduce the size. To specify a part of an illustration or screenshot to enlarge, do the following.

For Windows

Right click on the page in the PDF manual and select **Marquee Zoom** in the menu that is displayed. The pointer changes to a magnifying glass, use it to specify the range of the place you want to enlarge.

For Mac

Click **View** menu - **Zoom** - **Marquee Zoom** in this order to change the pointer to a magnifying glass. Use the pointer as a magnifying glass to specify the range of the place you want to enlarge.

❼ Opens the previous page or next page.

Overview of Braille Printing

If you are using a model that supports UV ink other than the SC-V7000, you can print braille by printing multiple layers of Varnish ink (hereafter called Vr).

The braille dot shapes formed are designed to comply with JIS/ADA standards under specific conditions; however, the printed results may not meet these standards in some cases.

This guide explains how to create print data and print jobs to create braille shapes that are equivalent to the following standards.

❑ JIS standard: Performance and test method of ultraviolet ray hardening resinous braille (JIS T9253)

❑ ADA: Americans with Disabilities Act

For instructions on how to use models that support UV ink, see the printer's *User's Guide* (online manual).

Items to Prepare

Use the following software to print braille using your printer.

Adobe Illustrator

This is used to create print data for braille. You can create job data for braille printing in Epson Edge Print PRO by specifying spot colors for the parts to be printed in braille.

Epson Edge Print PRO

This is the Windows RIP software that comes with your printer. Use this when creating print jobs to send to the printer from braille print data created in Adobe Illustrator.

For instructions on how to install the software, see the *Installation Guide* (online manual). Also, for basic operating procedures, see the *Operation Guide*.

> *Note:*
> *To access the Epson Edge Print PRO Operation Guide, click the Help menu -* **Help** *from the main screen in Epson Edge Print PRO.*

Preparing the Operating Environment

Check the following points.

❑ The printer is turned on.

❑ The computer on which Epson Edge Print PRO is installed is connected correctly to the printer.

❑ Epson Edge Print PRO software version 7.0.0.0 or later is installed.

❑ The printer you are using is registered in Epson Edge Print PRO.

Braille Printing Workflow

The following provides the workflow up to braille printing.

Creating data for braille printing

Create braille print data in Adobe Illustrator.

U "Creating Braille Print Data" on page 9

Creating the braille print job

Load the braille print data into Epson Edge Print PRO, create a braille print job, and then send it to the printer.

U "Creating a Braille Print Job" on page 10

Printing

Printing starts when the job has been received.

Precautions when Performing Braille Printing

In addition to the precautions listed in your printer's *User's Guide* (online manual), note the following points.

Use media that is 68.5 mm thick or less

If you use media that is thicker than 68.5 mm, you cannot set the Media Gap (the distance between the print head and the media surface) that is necessary for printing braille using your printer. If the **Media Gap** is not set correctly, the printer may malfunction during printing.

We recommend using media that supports UV ink

Depending on the media you use, such as media that does not support UV ink, the braille may not form a dome shape, may spread out, or may peel off easily.

Set the printer's Media Gap to 2.0 mm

Before printing braille jobs, set the printer's **Media Gap** to **2.0 mm**. If the **Media Gap** is not set correctly, the printer may malfunction during printing.

See your printer's *User's Guide* (online manual) for details.

Basic Braille Printing

This section explains how to create print data containing only braille (without images or text) and procedures for printing colorless braille.
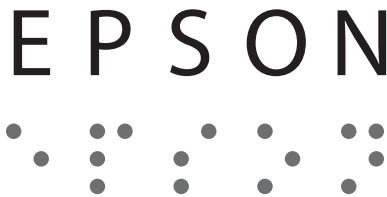
Creating Braille Print Data

This section explains how to create braille print data using Adobe Illustrator 2024 as an example.

The procedure may differ depending on your version of Adobe Illustrator.

1 Check the braille notation for the text you want to print.

Example: When printing "EPSON" in braille

2 Start Adobe Illustrator (hereafter called Illustrator) and create a new document.

A blank artboard is displayed.

> *Note:*
> *You can print braille over images or text by starting Illustrator and opening existing print data.*
>
> ☞ *"Printing Braille Over Images or Text" on page 12*

3 Open the Ellipse Tool and create perfect circles that will form the braille dots.
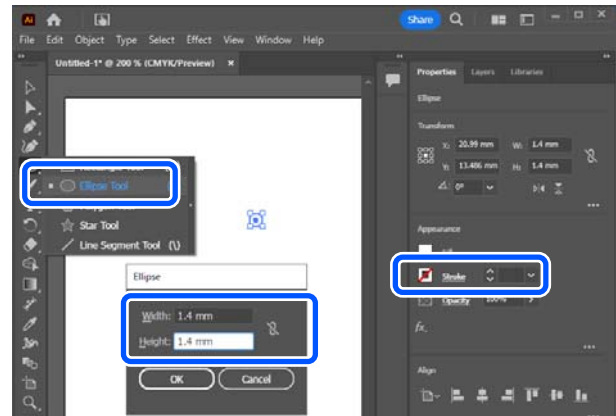
Create circles without outlines.

The diameter of the perfect circle varies depending on the type of braille you are printing.

❏ When printing braille equivalent to JIS standards
Diameter: 1.3 mm

❏ When printing braille equivalent to the ADA
Diameter: 1.4 mm

> *Note:*
> *The above diameters are recommended when printing braille equivalent to JIS standards or the ADA on an Epson printer that supports UV ink. These differ from the dot diameters defined in JIS standards or in the ADA.*

4 Arrange the perfect circles you created according to the braille notation you checked in step 1.

The spacing between dots varies depending on the type of braille you are printing. Check the dimensions carefully and then arrange accordingly.
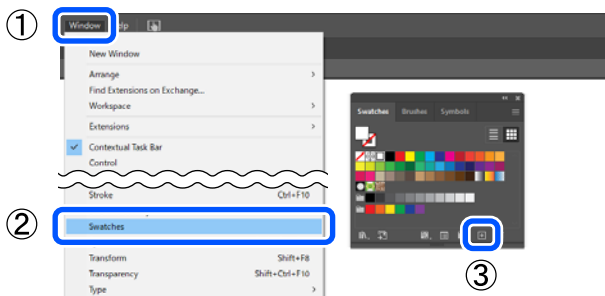
> *Note:*
> *See the following for detailed dimensional information for braille.*
>
> ❏ *When printing braille equivalent to JIS standards*
> *JIS T9253:2004 appendix*
>
> ❏ *When printing braille equivalent to the ADA*
> *Chapter 7 of the 2010 ADA Standards for Accessible Design*
> *(Available on the ADA.gov website)*

Basic Braille Printing

5 Click **Window** - **Swatches**, and then click 🔳 (New Swatch).

6 Save the spot color you want to use for the braille setting in Swatches, and then click **OK**.

As shown below, specify the spot color name, as well as the color to print from the screen in Illustrator.

① **Swatch Name**

Enter the following spot color name. The following input is case sensitive.
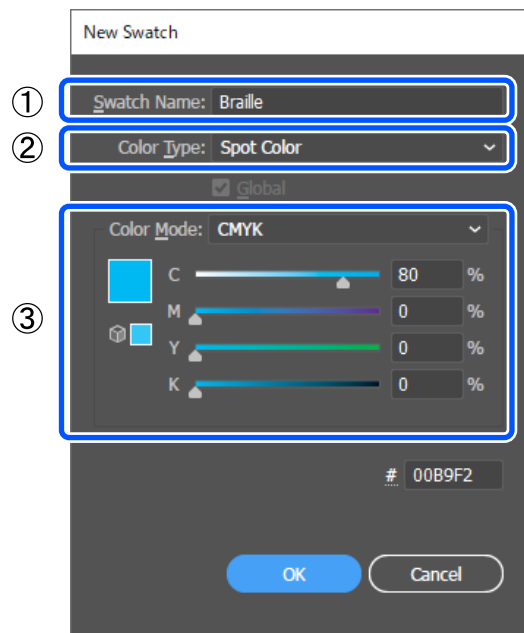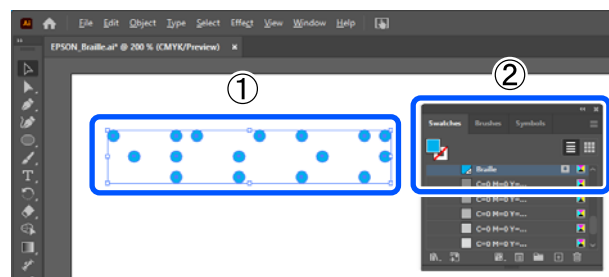
Braille

② **Color Type**

Select **Spot Color**.

③ **Color Mode**

Select **CMYK**, and then specify the color to print from the screen in Illustrator. Since white (all CMYK at 0%) can be difficult to distinguish from the background color, we recommend specifying another color that is easier to distinguish. (Light blue is set in the example image.) It is actually printed as Vr.

7 Select all the perfect circles arranged in step 4, and then specify the spot color for the braille you saved to the Swatches in step 6.

8 When you are finished with the spot color settings, save the data in PDF format.

Creating a Braille Print Job

1 Start Epson Edge Print PRO and select the printer you want to use for braille printing from the switch printer tab on the main screen.

2 Click ⊡ (Add) on the job toolbar, and then add the print data that includes the spot color settings for braille.
Or, drag and drop the print data onto the Job List.

The name of the data and a thumbnail for the print data that was added appear in the Job List.

Basic Braille Printing

3 Select the job for which you want to print braille from the Job List.

An image of the printout appears in the preview area.

**4** Click ☰ (Basic Settings) in the Job Setting menu.

The setting area switches to Basic Settings.

5 Select **General Braille** in **Media Name**, and then select the braille settings in **Number and Order of Layering**.

Select one of the following according to the type of braille you want to print, as in this example, we are printing only braille without any images or text.

❏ Single Layer (Braille Only - JIS)

❏ Single Layer (Braille Only - ADA)

When you select the braille settings in **Number and Order of Layering**, a **Braille** layer is added under the layer in the image data from the Job List.
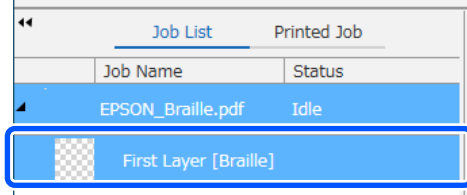
> *Note:*
> *See the following if **General Braille** is not displayed in **Media Name**.*
>
> ☞ *"When **General Braille** is not displayed in **Media Name** in Epson Edge Print PRO" on page 18*

6 Check other settings and click 🖶 (Print) on the job toolbar.

The RIP process starts, and the braille print job is sent to the printer.

> *Note:*
> *When you click 🖶 (Print), the estimated time until printing finishes is displayed at the top of the preview area in Epson Edge Print PRO. However, when printing braille jobs, printing finishes sooner than the estimated time displayed.*
>
> *The following are the estimated printing times for each model when printing one line of braille equivalent to the ADA along the short edge of A4 size media (210 mm/8.3 in).*
>
> ❏ *For SC-V1000 Series: approx. 11 minutes*
>
> ❏ *For SC-V2000 Series: approx. 7 minutes*

Starting Printing

> ❗ *Important:*
>
> *Before starting braille printing, check that the **Media Gap** is set to **2.0 mm** on the printer's control panel screen. You can change the setting by pressing the **Media Gap** area on the screen.*
>
> *If the **Media Gap** is not set correctly, the printer may malfunction during printing.*

1 When the printer has received the job, ◈ is displayed at the bottom right of the screen.

2 Check that the media is loaded, and then press the ◈ area on the screen.

The braille layer is automatically printed multiple times to achieve a height equivalent to the braille standard selected in **Number and Order of Layering** when creating the braille print job.

After printing, measure the diameter and height of the braille dots to check they have been printed at the dimensions appropriate for the type of braille.

See the following if the braille has not been printed at the appropriate dimensions for the type of braille.

☞ *"When You Want to Adjust the Size of the Printed Braille" on page 19*

# Various Braille Printing Methods

Printing Braille Over Images or Text

The following uses two examples to explain the procedure for printing colorless braille over printed images or text.

❏ When printing image or text data with braille data in a single print job

❏ When printing image or text data with braille data in separate print jobs

When Printing Image or Text Data with Braille Data in a Single Print Job

As shown in the following example, when combining images or text with braille in a single print job, you can complete printing the images or text and braille by sending just one print job to the printer.

Example:
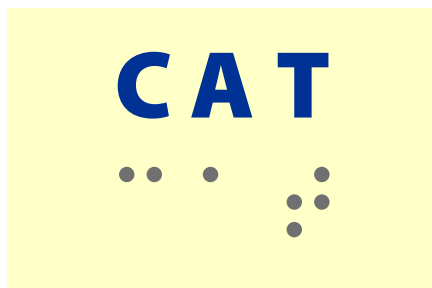
When you want to print simple print data as shown in the illustration, we recommend combining it into a single print job.

Notes on creating print data

Do not set spot colors for Vr printing in images or text

Images or text with the **Varnish** spot color set for Vr printing are recognized as braille by Epson Edge Print PRO and will be printed in multiple layers at the same height as the braille.

When you need to set spot colors for Vr printing for images or text, create the image or text print data and the braille data as separate print jobs.

See the Epson Edge Print PRO *Operation Guide* for details on spot colors for Vr printing.

Set Overprint Fill for the braille parts, and set the stacking order to the front

When creating print data, set overprint for the braille parts, and set the stacking order of objects so that they are above (in front of) images or text. By setting overprint for the braille parts, images or text that overlap with the braille will also be printed.
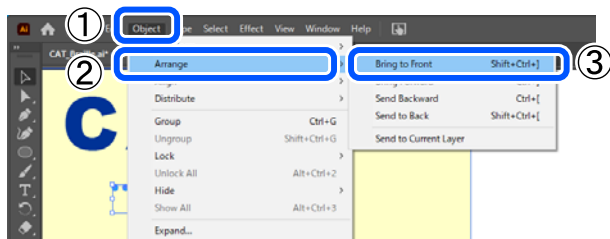
The following shows the settings for Adobe Illustrator 2024.

1. Select all braille objects.

2. Click **Window** - **Attributes** to display the Attributes panel, and then select **Overprint Fill**.

3. Click **Object** - **Arrange** - **Bring to Front**.

Various Braille Printing Methods

See the following for more details on creating braille print data.

U "Creating Braille Print Data" on page 9

Notes on creating print jobs

Only a single color layer can be printed under braille

Print data for images or text can only have a single color layer. You cannot print White ink (hereafter called WH) as a background for color.

When you need to print WH as a background for color, create the image or text print data and the braille data as separate print jobs.

Select a double-layer setting in Number and Order of Layering

When creating a print job in Epson Edge Print Pro, select the following in the Job Settings menu - ☰ (Basic Settings).

❏   Media Name
    Select **General Braille**.

❏   Number and Order of Layering
    Select one of the following according to the type of braille you want to print.
    Double Layer (Color -> Braille – JIS)
    Double Layer (Color -> Braille – ADA)

When you select a double-layer setting for braille in **Number and Order of Layering**, a **Color** layer and a **Braille** layer are added under the layer in the image data from the Job List.
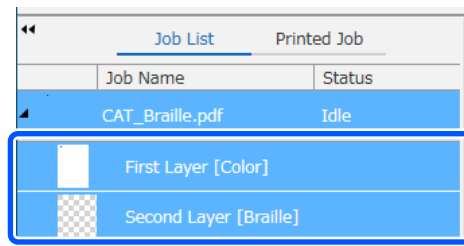
Since the **Color** layer is the same as for a normal image or text print job, you can change the output color using ▐▛ (Color Replacement). See the Epson Edge Print PRO *Operation Guide* for details.

When Printing Image or Text Data with Braille Data in Separate Print Jobs

As shown in the following example, when creating and printing image or text print data with braille data in separate print jobs, you can perform multi-layer printing for the image and text print job.
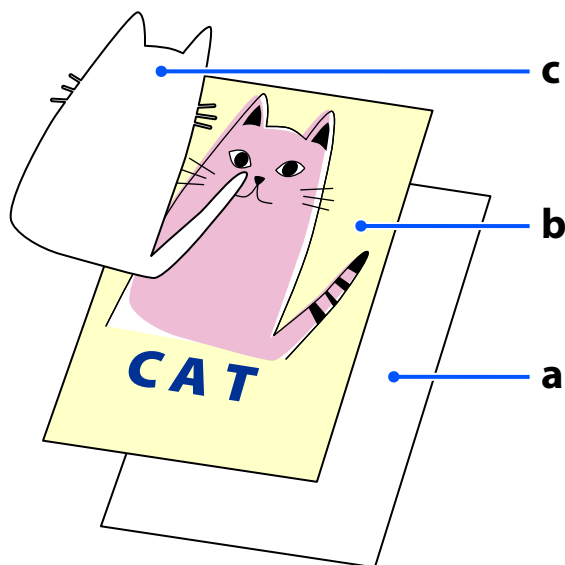
Example:

Print Job A

First Layer: Print WH over the entire surface as a background for the color (a)
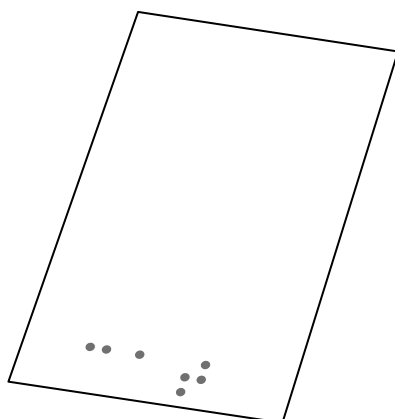
Second Layer: Print images or text in color (b)

Various Braille Printing Methods

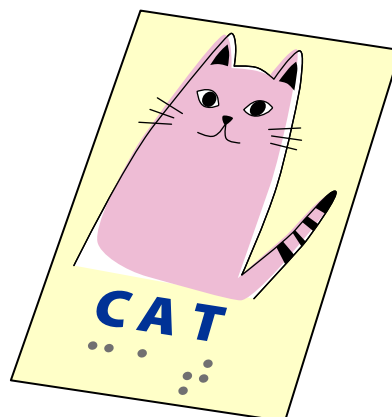Third Layer: Print Vr on top of the image (c)

Print Job B

Print braille only.

When you run Print Job A and then Print Job B, braille is printed on top of the multi-layer images or text.

Print Jobs A + B

❏ With this printing method, the print job for images or text (Print Job A) is the same as a normal print job, so you can perform multi-layer printing. You can set spot colors for Vr printing on images or text, or print WH as a background for the color. You can also add up to 10 layers using the multi-layer printing function in Epson Edge Print PRO.
See the Epson Edge Print PRO *Operation Guide* for details on multi-layer printing.

❏ See the following for details on creating a braille-only print job (Print Job B).
U

> **!** *Important:*
>
> *Before starting braille printing after printing images and text, set the **Media Gap** to 2.0 mm on the printer's control panel screen. You can change the setting by pressing the **Media Gap** area on the screen.*
>
> *If the **Media Gap** is not set correctly, the printer may malfunction during printing.*

Printing Color Braille

You can print color braille by creating an object that serves as the background for the braille dots when creating the print data and print the background in any color.
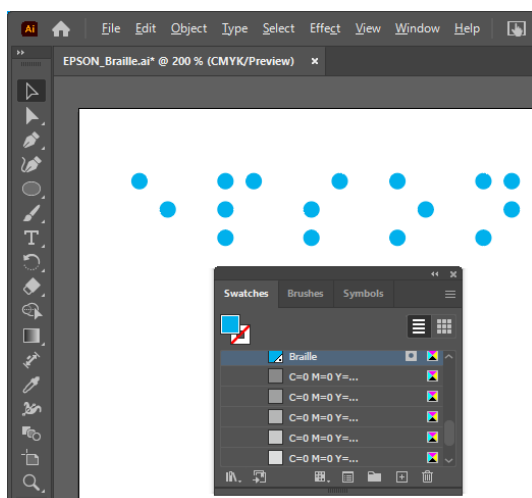
Various Braille Printing Methods

Creating Color Braille Print Data

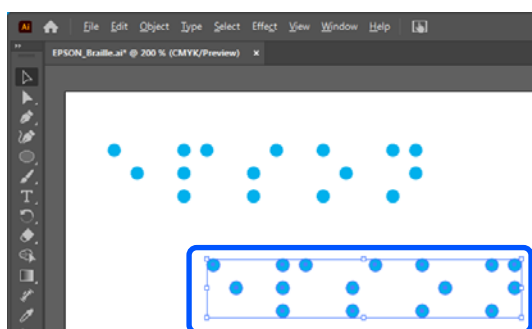This section explains how to create color braille print data using Adobe Illustrator 2024 as an example.

The procedure may differ depending on your version of Adobe Illustrator.

1 See steps 1 to 7 below to create print data for braille with spot colors set for the braille.

U

2 Select all of the objects created in step 1 and copy & paste them onto the artboard.

3 Fill the copied objects with a color of your choice.

The background of the braille dots is printed in the color you set, making the braille appear colored.

When setting a spot color as the fill, do not set the spot color named "Braille".
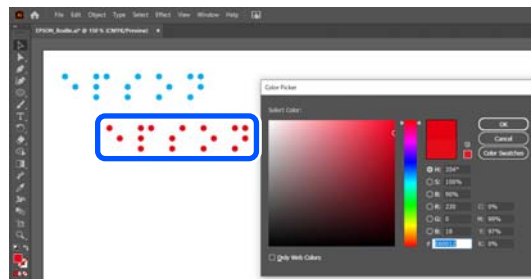
4 Select all of the braille print data created in step 1 (the objects to be copied) and set **Overprint Fill**.

Click **Window** - **Attributes** to display the Attributes panel, and then select **Overprint Fill** to apply the settings.
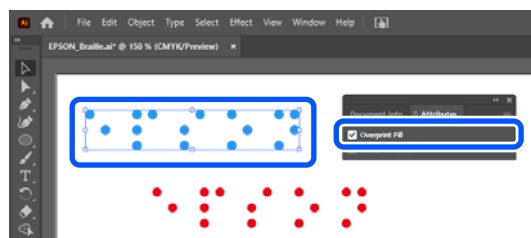
Various Braille Printing Methods

5 Select all of the destination objects from step 3 and position them so that they overlap perfectly with the braille data from step 4, and then set their stacking order to be below (behind) the braille data.

To set the stacking order, click **Object** - **Arrange** - **Send to Back**.
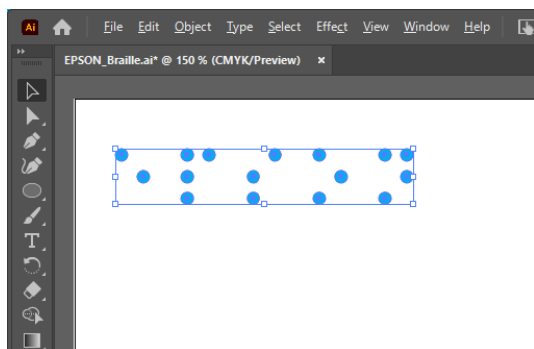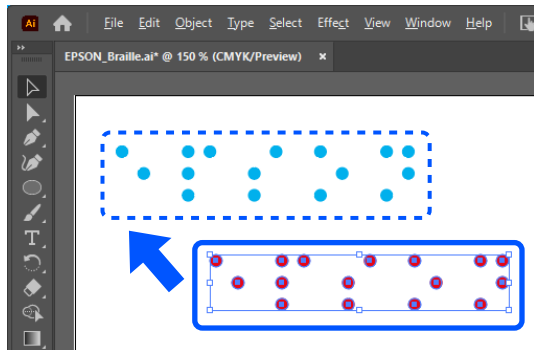
The following shows the stacking order of the objects.

A: Braille print data (with spot color set for the braille)

B: Braille background (with fill color of your choice)

6 Save the data in PDF format.

Creating a Color Braille Print Job

1 Start Epson Edge Print PRO and select the printer you want to use for braille printing from the switch printer tab on the main screen.

2 Click ⊕ (Add) on the job toolbar to add the color braille print data.
Or, drag and drop the print data onto the Job List.

The name of the data and a thumbnail for the print data that was added appear in the Job List.

3 Select the job for which you want to print braille from the Job List.

An image of the printout appears in the preview area.

4 Click ☰ (Basic Settings) in the Job Setting menu.

The setting area switches to Basic Settings.

5 Select **General Braille** in **Media Name**, and then select the double-layer setting in **Number and Order of Layering**.

Select one of the following according to the type of braille you want to print.

❏ Double Layer (Color -> Braille – JIS)

❏ Double Layer (Color -> Braille – ADA)

When you select a double-layer setting for braille in **Number and Order of Layering**, a **Color** layer and a **Braille** layer are added under the layer in the image data from the Job List.

Since the **Color** layer is the same as for a normal image or text print job, you can change the output color as needed using ⧉ (Color Replacement). See the Epson Edge Print PRO *Operation Guide* for details.

Various Braille Printing Methods

6 Check other settings and click 🖨 (Print) on the job toolbar.

The RIP process starts, and the color braille print job is sent to the printer.

Troubleshooting & Tips

When General Braille is not displayed in Media Name in Epson Edge Print PRO

If the software version of Epson Edge Print PRO installed on your computer is earlier than 7.0.0.0, you need to update it to version 7.0.0.0 or later.

U

Also, when using Epson Edge Print PRO version 7.0.0.0 or later, you need to re-register the printer in Epson Edge Print PRO.

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> *Note:*
> *You can check the software version of Epson Edge Print PRO by clicking the Help menu –* ***Version****.*

Updating Epson Edge Print PRO

1 Click **Download** in **Epson Edge Print Installer / Updater** on the download site (https://support.epson.net/eep/) for Epson Edge Print PRO, and then save the file to any location on your computer.

2 Download the **Model Information File** for your printer model by clicking **Download**, and save the Model Information File to any location on your computer.

3 Close Epson Edge Print PRO.

4 Unzip the file saved in step 1, and then double-click EEPSetup.exe to start the installation.

Follow the on-screen instructions to complete the installation.

> *Note:*
> *You do not need to uninstall the version of Epson Edge Print PRO that you were using. It is updated when you install and overwrite with the latest software.*

5 Unzip the Model Information File you saved in step 2, and then double-click Model Information File (.exe) to start the installation.

Follow the on-screen instructions to complete the installation.

See the following section and re-register the printer in Epson Edge Print PRO with the updated model information.

Re-registering the Printer

By unregistering a printer, all the following content related to work done previously on the printer is deleted.

❏ Job data for Job List or Printed Job lists

❏ Acquired and added print information

❏ Added Quick Sets

If you want to use the above content after re-registering the printer, save (Export) the necessary data to a file in advance. See the Epson Edge Print PRO *Operation Guide* for details.

1 Start Epson Edge Print PRO, and then click the Tool menu - **Preferences** - 🖶 (Printer).

2 Select the printer to unregister in the list, and then click 🗑 (Unregister).
Or, open the right click menu on the icon of the printer to unregister and select **Unregister**.