

High Speed Braille with UJF Series Printers

Printing enables you to create full-color signage using a one-machine process. With Mimaki High-Speed Braille options, you can now print multiples in the time it takes an operator to create 1 or 2 signs using a raster method.¹

While a printer cannot be deemed “compliant”, this UJF method expresses a simple workflow that can create compliant printed signage. Please observe all local ADA requirements and regulations.

SYSTEM REQUIREMENTS

PRINTER: UJF MkII e Series, UJF-7151 plusII

INK: LH-100, (LUS-120 available, not recommended for ADA)

INK CONFIGURATION: All LH-100 configurations supported.

RASTERLINK VERSION: RasterLink7 v3.2.0+

PLUG-IN VERSION: RasterLinkTools v1.16.0+ for Adobe Illustrator

MIMAKI DRIVER: RL7 v5.9.0+

PROFILE:² requires installation of:
[Braille]HighSpeed 600x900VD
[Braille]Standard 600x900VD

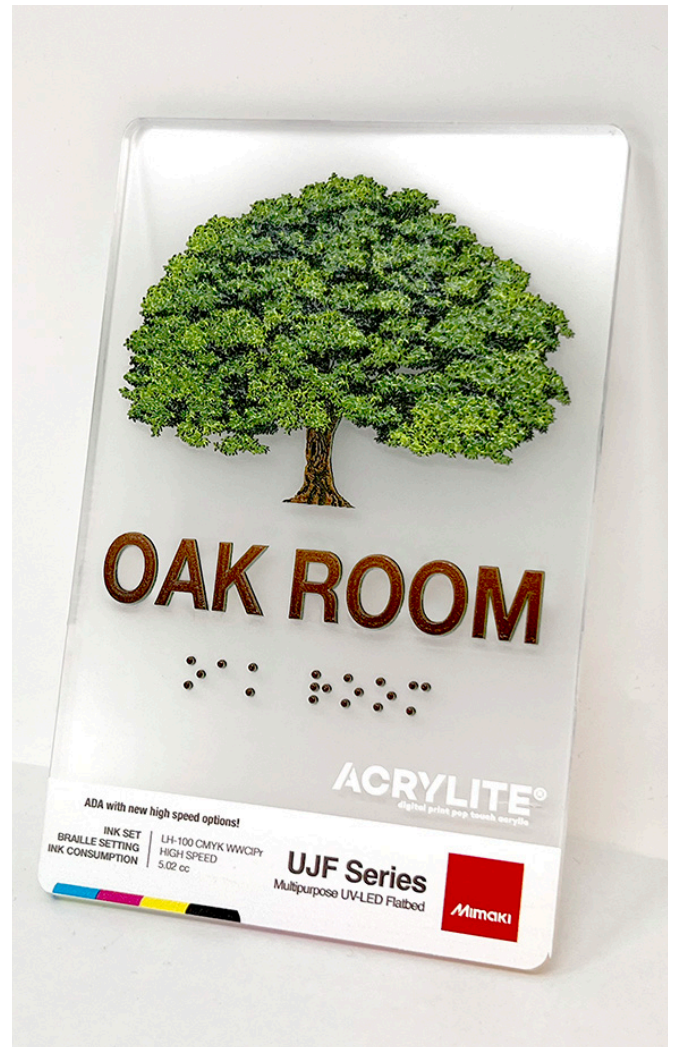


Image shows ADA signage printed with high speed Braille profile.

Preparation: please install the proper **RasterLink7**, **profiles**, **RasterLinkTools** and the latest **Mimaki Driver** for your printer, prior to using this guide.

The **Braille font** used in this **[How-To]** is not a Mimaki product. It is a third-party software found in the online ADA Standards guide. This is not meant to replace any system your shop may already use. To achieve ADA Standard Braille size, this font size should be 24pt.

Braille print dots can be created with 1.55mm circles and spaced according to ADA requirements. A “font” is not required to print Braille.

1. Based on two-color, cut, weed, drill & bead method.

2. Profiles can be downloaded on the printer product pages found at <https://mimaki.com/product/inkjet> or through Mimaki RL7 Profile Manager App



STEP 01: FILE ORGANIZATION

1.0 DESIGN NOTES

- RasterLinkTools is not design software, it prepares the file for processing in RasterLink7. *Layout requirements are set by ADA (2010) Standards. Please refer to the site www.ada.gov or your local municipality for details.*

1.1 OPEN RASTERLINK APP fig. 1

- Open the Mimaki RasterLinkTools app by selecting menu item [Window] > [Mimaki RasterLink].



fig. 1

1.2 ORGANIZE LAYERS fig. 2

- Once the design layout is final (including full final color), separate Braille, text, and pictogram into a new layer. The applications identifies the whole layer as one element
- Make sure any background art or color stays on a separate layer below. If the background is white or a non-print layer (as in our example) be sure to create a white or clear shape to maintain the artboard layout or media size to maintain easy print spacing.

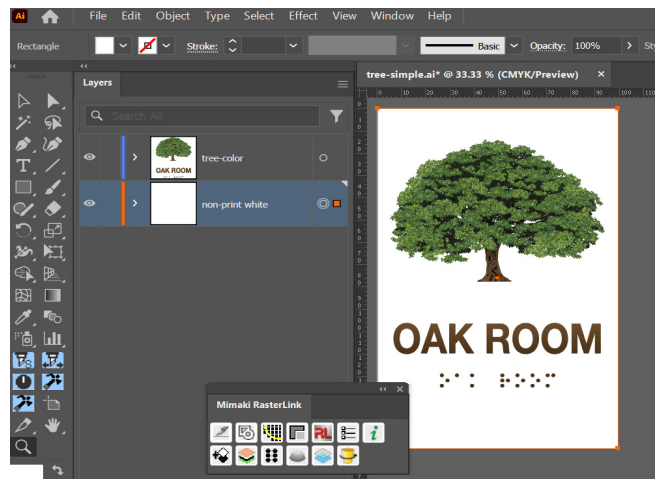


fig. 2

1.3 IDENTIFY IMAGE PARTS FOR PROCESSING

- Select the “raised” elements layer. Raised elements can include Braille, text and pictogram. Some types of ADA Signage do not require a pictogram or image. fig. 3
- With the raised elements still selected/highlighted, select the **Braille** icon as indicated on the right. This will open the Braille Output Menu options. fig. 4

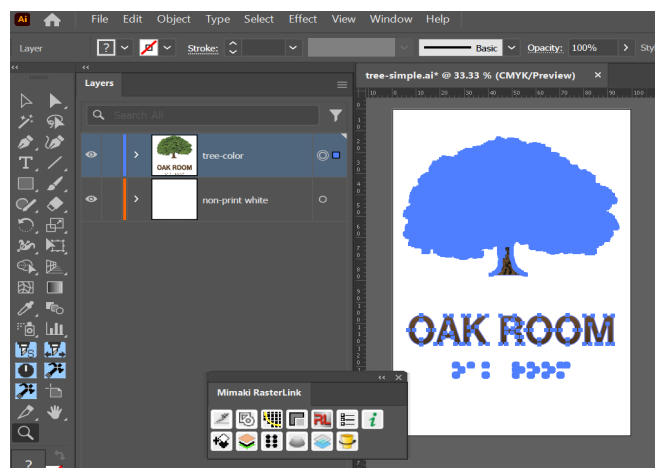


fig. 3

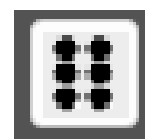


fig. 4



1.4 MENU DIALOGUE OPTIONS fig. 5

- Under **Mode** select **High Speed**
 - » **High Speed** *CMYK ink build*
 - » **Standard** *Clear ink build (slower, finer)*
 - » **Compliant** *Clear Braille only print, does not build text*
- On the **Setting** tab, select desired height with **Level**
 - » **lvl 1** *0.012 in (0.3 mm)*
 - » **lvl 2** *0.020 in (0.5 mm)*
 - » **lvl 3** *0.027 in (0.6 - 0.7 mm) - (Meets most compliance height standards.)*
 - » **lvl 4** *0.035 in (0.9 mm)*

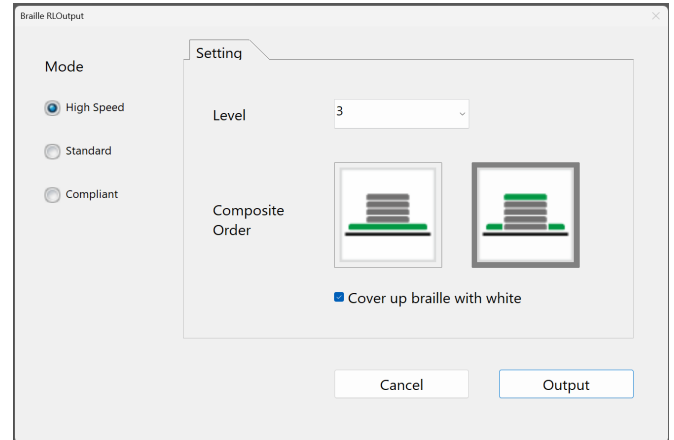


fig. 5

- **Composite Order** sets print layer order
 - » **Left** signifies color will print before “building layers”.
 - » **Right** signifies color will print after “building layers”.
- **Cover up Braille with white option**
 - » When the final raised portion color is white or any other color besides black, this setting needs to be selected. If the final text and Braille is intended to be black, unselect this box. For this example, we will be printing color so check this box.

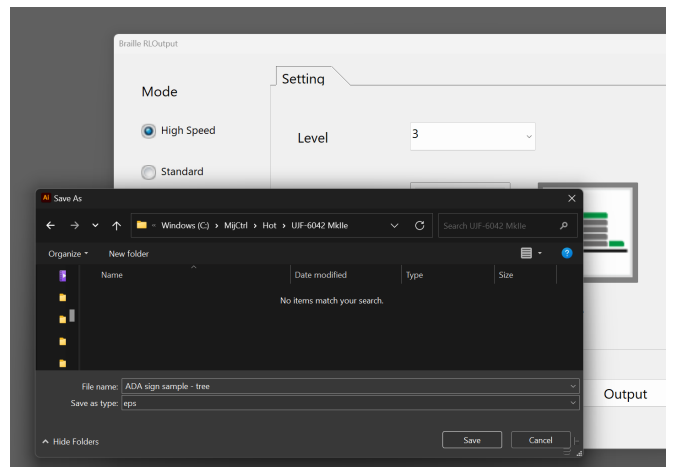


fig. 6

- **Output** fig. 6
 - » “Outputting” saves it as two EPS files that will be layered automatically within RasterLink7. For this to happen, the files need to be saved directly to the printer’s hotfolder. These hotfolders are located at:

C:\MijCtrl\Hot\[name of printer]

» **If you are not working on the computer with RasterLink or a networked hotfolder, you may save files to a thumb-drive and then “drag n’ drop” the files into the hotfolder.**

- **EPS Options** fig.7
 - » Default settings should be fine, be sure it will be output in high resolution or better, under [preset]. Select OK and go to RasterLink, or drag and drop files into the hotfolder and open RasterLink.

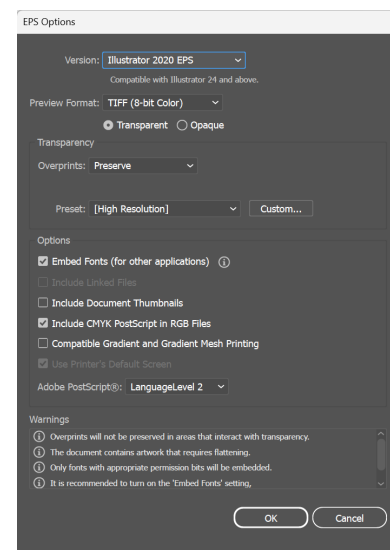


fig. 7



STEP 02: RASTERLINK

FOR A FULL COLOR IMAGE

2.1 FILE LOADING

- Once the files load through the hotfolder, they should appear as they do in *fig. 8* with the Braille icon on a black silhouette copy of the raised portions.
- The “Braille” or build layer should indicate “Braille [High Speed Mode]” under the **Attribute** column.

Layered	Thumbnail	Job Name	Attribute
		ADA sign sample - tree_RL_LAYER_02_...	Color
		ADA sign sample - tree_RL_LAYER_02_...	Braille[High speed mode]

fig. 8

2.2 FINAL STEPS BEFORE PRINTING

- » Verify print conditions for color layer in the **Quality** tab (*Alt+Q*). *fig 9*
- » Build layer resolution or conditions cannot be edited.
- » Step & repeat your prints in **Layout** or **Jig Print** tabs. (*Alt+G*) *fig.10*
- » **RIP and Print** (*Alt+X*)

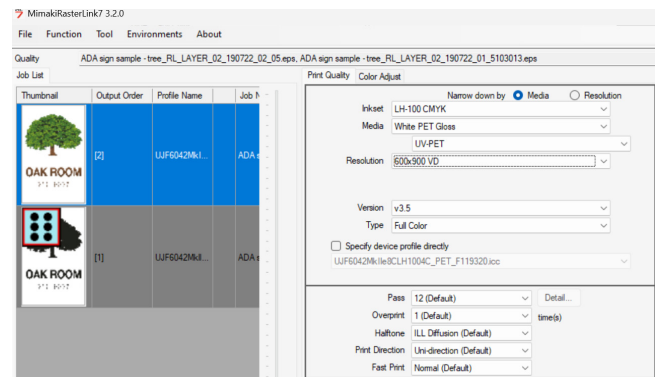


fig. 9

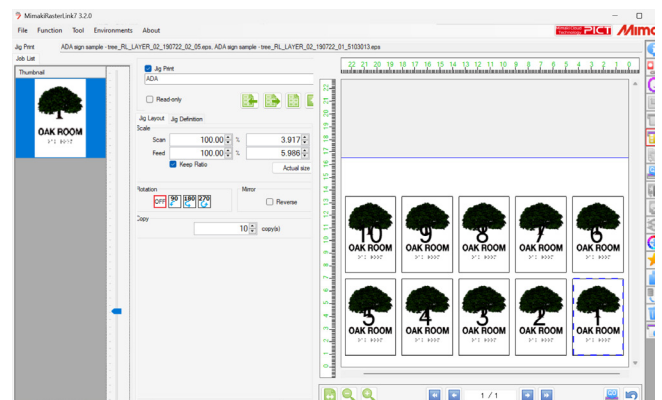


fig. 10



TIPS, TRICKS & TECHNIQUES

A. DESIGN CONSIDERATIONS

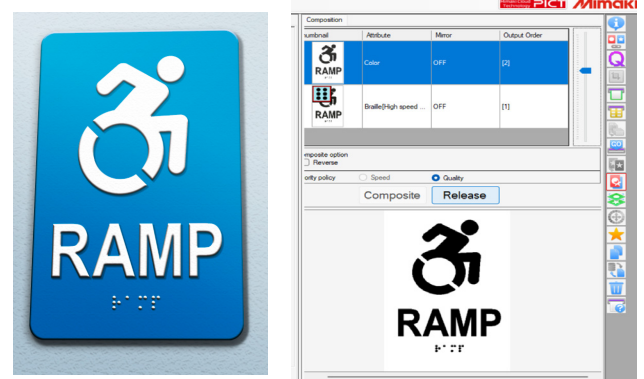
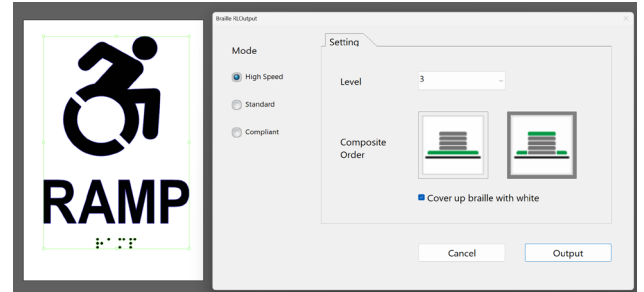
A1 IF YOU ARE DESIGNING A SIGN WITH ONLY WHITE INK PRINT (common ADA style)

A1.1 Design

- Design in a color that can be easily seen like black.
- Select the composite order with “color” on top.
- Check **Cover up Braille with white**
- Send to RasterLink7

A1.2 RasterLink

- Separate the layers with **Composition** tab (Alt+M) by selecting **Release**
- With the Build layer selected, layout, step & repeat, Jig Print like above.



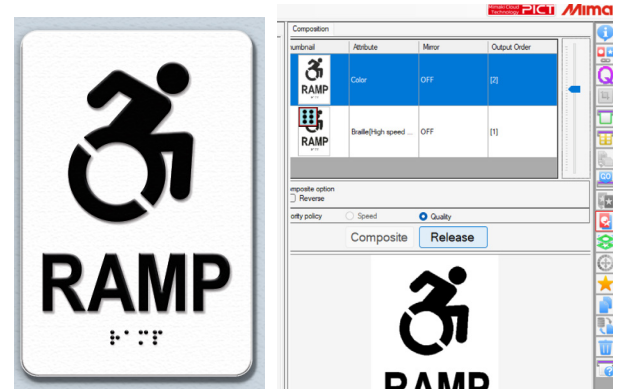
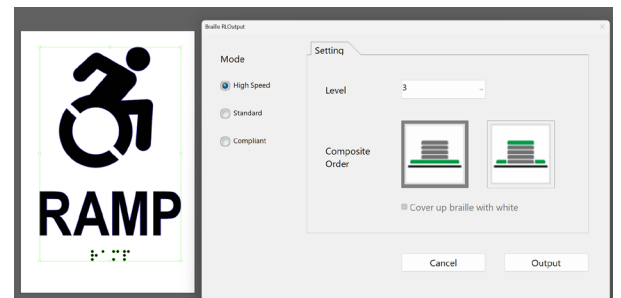
A.2 IF YOU ARE DESIGNING A SIGN WITH ONLY BLACK INK PRINT

A2.1 Design

- Design in a color that can be easily seen like black.
- Select the composite order with “color” on bottom.
- Send to RasterLink7

A2.2 RasterLink

- Separate the layers with **Composition** tab (Alt+M) by selecting **Release**
- With the Build layer selected, layout, step & repeat, Jig Print like above.



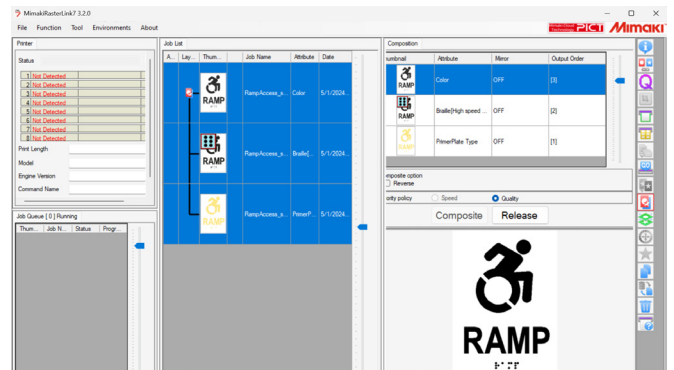
TIPS, TRICKS & TECHNIQUES

A. DESIGN CONSIDERATIONS

A3 SETTINGS THAT CAN BE MODIFIED IN RASTERLINK7

A3.1 Primer, clear effects

- Whole image and valid pixel special color layers can be added in the **Composition** tab (Alt+M) by first releasing build and color layers, then layering them in the appropriate order.



A3.2 Build settings can be changed for braille layer within RasterLink7

- With build layer selected, go to **Info** tab (Alt+I) and then [Job Attribute > Setup].
- There, you can modify, **height level** and “**cover up with white.**”
- To modify the color print order, simply composite in the print order desired within the **Composition** tab.

