



MakerSpace Software Guide

Janome Digitizer MBX



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Before You Start

What is Janome Digitizer MBX?

Janome Digitizer MBX is the embroidery design software used to create, edit, and prepare designs for the embroidery machine. It converts artwork (images, text, and shapes) into stitch patterns that the machine can follow.

Think of it as the translator between your design idea and the physical embroidery. You create or import a design, the software converts it into stitches, and you export the result to a USB drive for the embroidery machine.

What is Janome Digitizer MBX used for?

- Creating text-based embroidery designs (names, monograms, phrases).
- Importing artwork (.JPG images) and converting them into stitch patterns using Auto Digitize.
- Adjusting stitch type, density, and fill patterns.
- Selecting the correct embroidery hoop size for your project.
- Exporting the finished design as a .JEF file for the embroidery machine.

What to Expect

- **Skill level:** Beginner with patience. The software isn't immediately intuitive and can feel complex at first, particularly when learning stitch counts, digitizing, and the finer details of building a stitch file.
- **Time:** 15–45 minutes to create a design, depending on complexity. Embroidery time is separate.
- **Prior knowledge:** Reading the Embroidery Machine guide first is recommended so you understand hoop sizes and machine basics. It is also strongly recommended to view the [official Janome 500E instruction video](#).

Tip: Simple designs with fewer colours and larger elements tend to embroider more reliably than complex, highly detailed designs.

What You Need

Janome Digitizer MBX is pre-installed on the MakerSpace computer connected to the embroidery machine. You do not need to install anything.

What to Bring

Your design or image: .PNG format works best for importing. You can either bring it on your own USB drive or download it on the MakerSpace computer. USB drives will be provided if you need one to save and transfer your file to the embroidery machine.

File Formats

- **.JPG** – The recommended format for importing artwork into the software.
- **.JEF** – The file format used by the Janome embroidery machine. This is the format you will export to.

Note: If you have a .PNG or other format, convert it to .JPG before importing.

Related Guides

Embroidery Machine Guide: Covers machine setup, hoop selection, threading, and running a job.

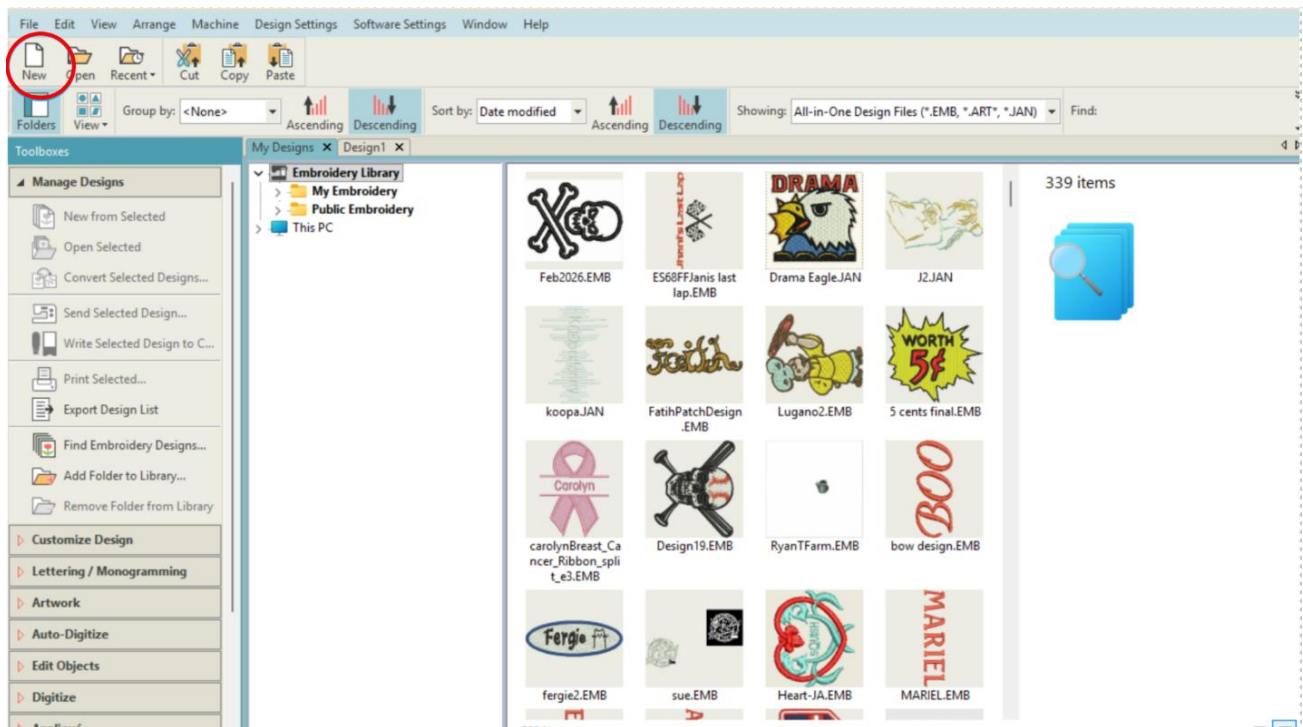
The Workspace

1. **Menu Bar and Tool Options (top):** Standard menus and context-sensitive options. Includes the hoop selection dropdown and toggles for rulers, grid, and hoop preview.
1. **Toolboxes (left side):** Expandable sections for Lettering, Artwork Import, Auto Digitize, and other design tools.
2. **Canvas (centre):** Your working area. Displays the selected hoop outline as a size reference.
3. **Properties Panels (right side):** Displays properties for the selected object, including fill type, stitch settings, and underlay options.
4. **Colour Swatches and Stitch Count (bottom):** Shows the thread colours used in your design and the total stitch count.

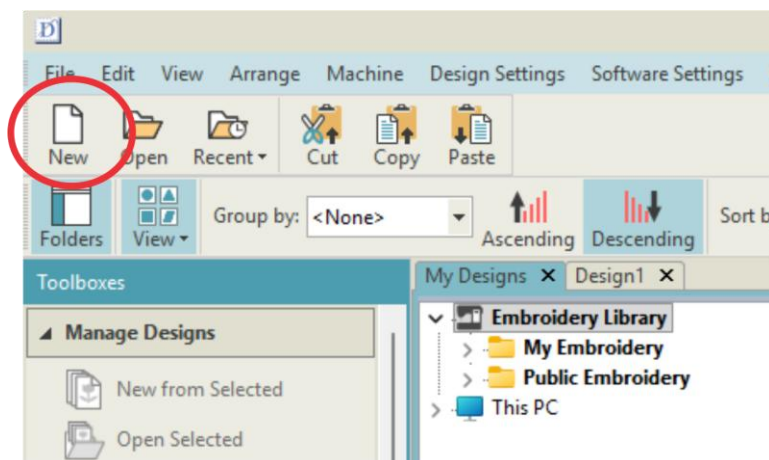
Getting Started

1. Create a New Design

1. Open Janome Digitizer MBX. On the My Designs page, click New.

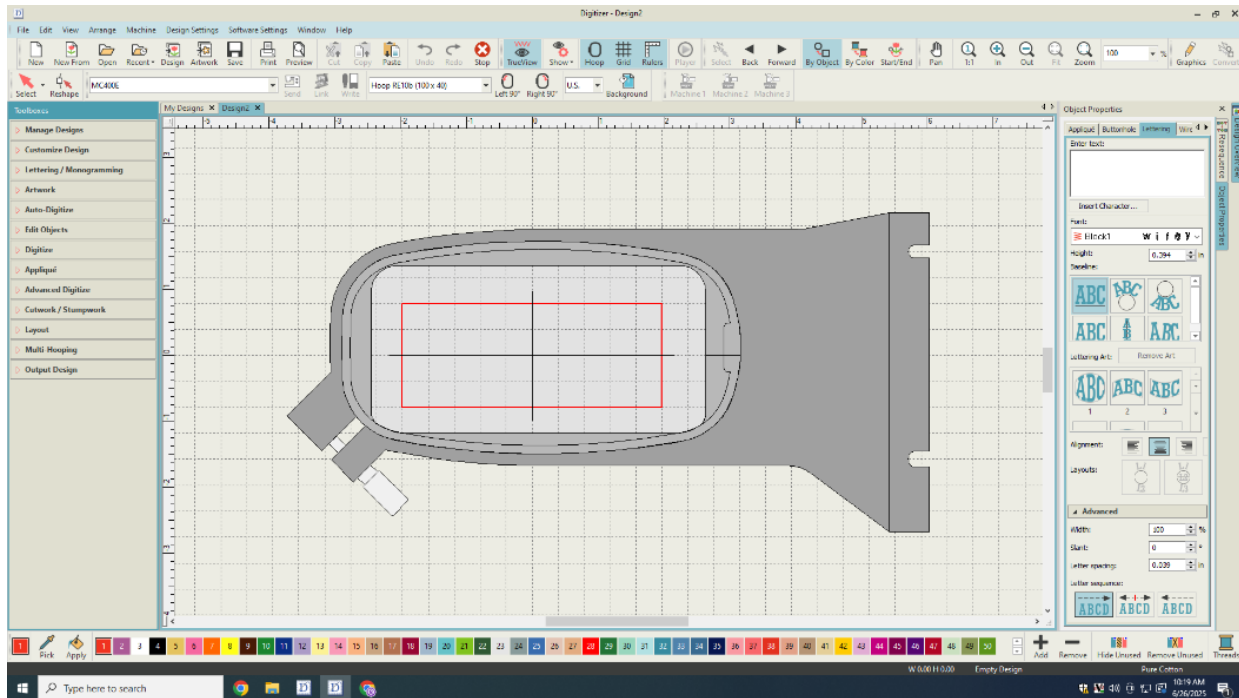


A screenshot of the My Designs page, showing how to start a new document.



A close-up screenshot showing how to start a new document.

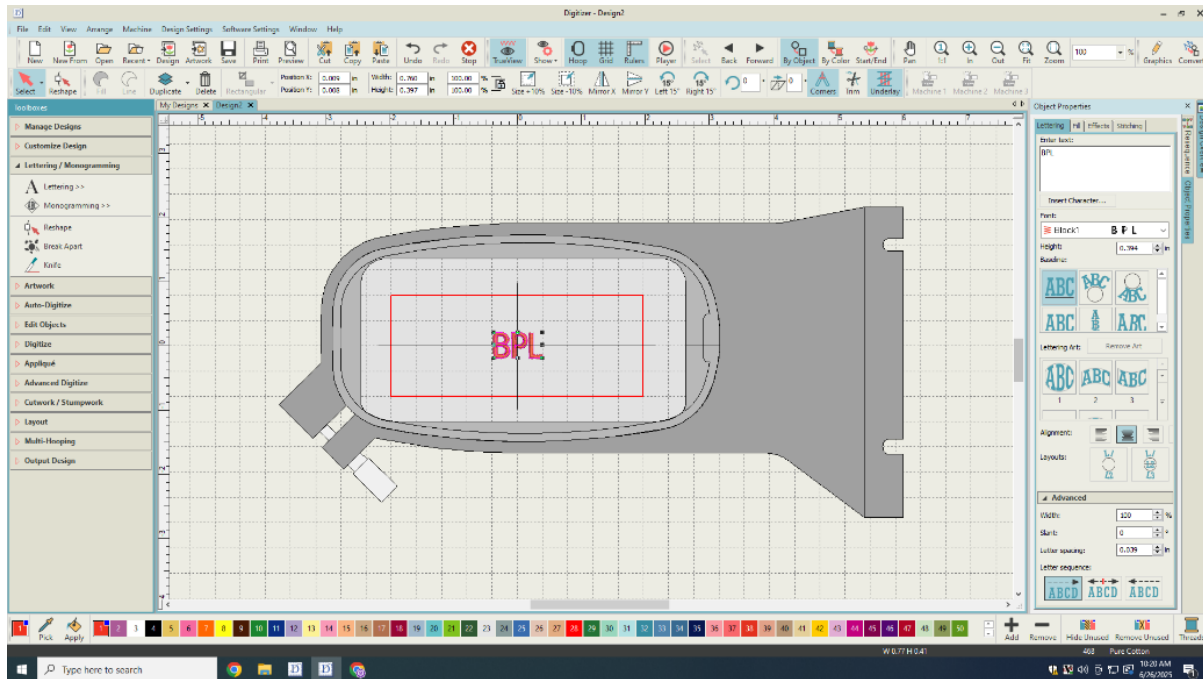
2. In the working screen, select the correct hoop from the dropdown in the top toolbar.



A screenshot of the working screen.

2. Add Text (Lettering)

1. In the Toolboxes on the left, expand the Lettering/Monogramming section.
2. Select the Lettering Tool and click on the canvas.
3. Type your text. Use the Properties panel on the right to change the font and size.



A screenshot showing how to add text (lettering).

Note: Font size is measured in inches, not points. Double-click the text object to re-edit it.

3. Import and Digitize Artwork

If you want to embroider an image rather than text:

1. In the Toolboxes on the left, select the Insert Artwork option.
2. Browse to your .JPG file and import it.
3. With the artwork selected, choose Auto Digitize Embroidery from the Auto Digitize toolbox.
4. Set the number of colours. Note: The background counts as a colour.
5. On the next screen, assign each colour as Detail (stitched outlines), Fill (large filled areas), or Omit (remove, typically the background).
6. Click OK. The digitized design will appear on the canvas.
7. Drag the digitized result aside to separate it from the original image. Delete the original image.

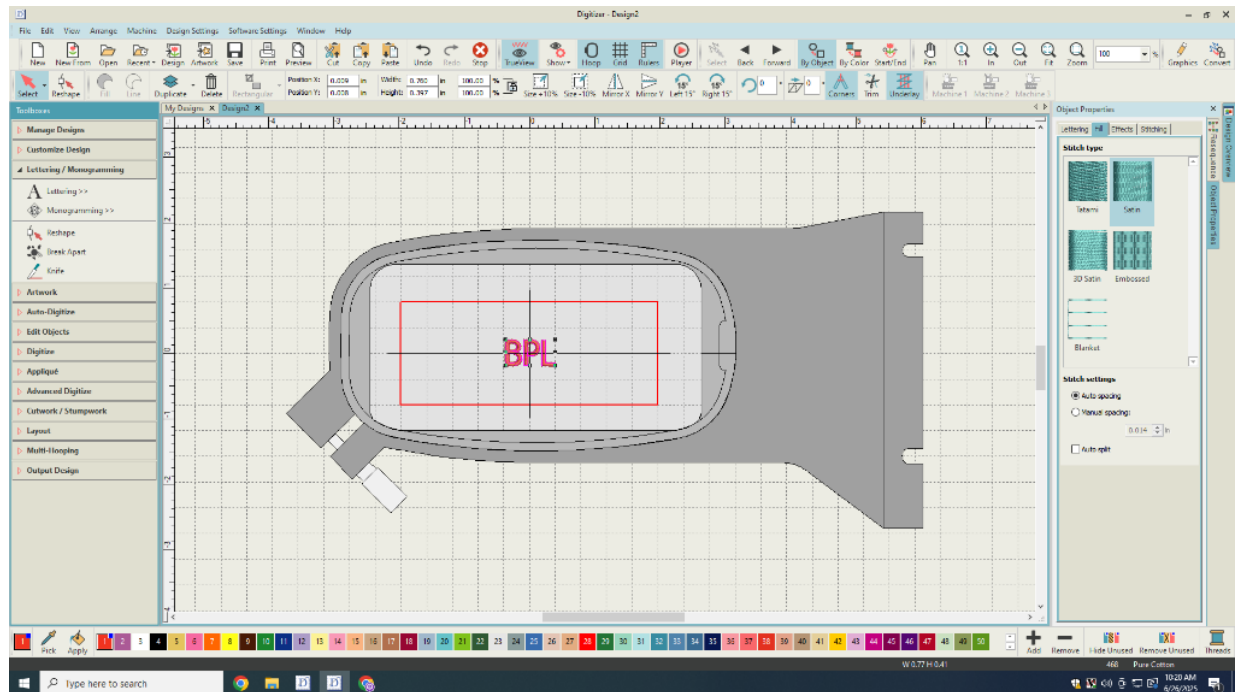
4. Adjust and Position Your Design

Click and drag to position your design within the hoop outline. Resize by dragging the corner handles or entering dimensions in the toolbar. Check the stitch count at the bottom of the screen—lower is generally better for reliability.

5. Adjust Fill and Stitch Settings

Select an object in your design and use the Properties panels on the right:

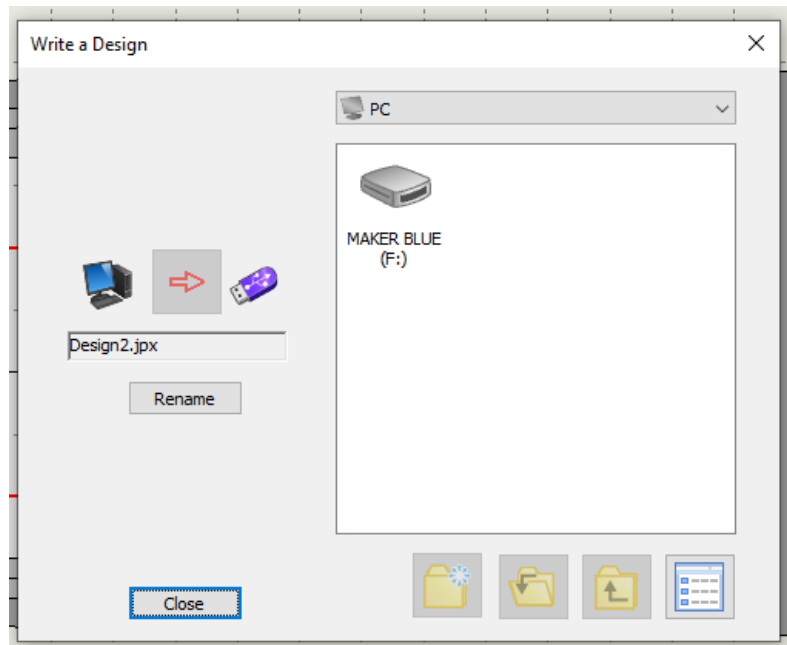
- **Fill tab:** Choose Tatami or Satin. Adjust spacing if needed (larger spacing = fewer stitches, lower density).
- **Stitching tab:** Enable or disable Underlay. Use underlay on larger elements for better quality but be aware it increases stitch count.



A screenshot of the adjust fill and stitch settings.

6. Export to USB

1. When your design is complete, go to Machine → Write.
2. Rename the design. Short names required.
3. Double-click the USB storage icon.
4. Click the red arrow to transfer the design to the USB drive.



A screenshot showing how to export to USB.

Key Concepts

Hoop Selection

Choosing the correct embroidery hoop is critical. The hoop must be large enough to fit your design but small enough to hold the fabric securely. **Select the hoop in the software before designing** so the canvas shows the correct working area.

Refer to the Embroidery Machine guide for available hoop sizes.

Stitch Count

The stitch count is the total number of individual stitches in your design. It is displayed at the bottom of the working screen. **Designs with high stitch counts are more likely to cause issues** such as thread jams, puckering, or misalignment.

As a guideline: small designs should generally stay under 6,000 stitches. You will develop a feel for appropriate stitch counts with practice. Please record your design's stitch count on the provided sheet, as this will be used to calculate your project's cost.

Fill Types

When an area of your design is filled with stitches, you can choose the fill pattern:

- **Tatami:** A dense, textured fill similar to a woven pattern. Produces a solid, opaque result but uses more stitches.
- **Satin:** A smooth, shiny fill made of parallel stitches. Works well for smaller areas, text, and borders. Uses fewer stitches than Tatami.

For most projects, Tatami or Satin will give you the best results.

Underlay

Underlay is a set of preliminary stitches sewn before the main fill. It helps stabilize the fabric and improves the appearance of larger design elements. Underlay increases the total stitch count, so it is best used selectively on areas that need extra support.

Colour Count

Each colour in your design requires the machine to stop and change thread. Fewer colours means fewer stops, faster stitching, and less chance of issues. When using Auto Digitize, remember that the background counts as a colour.

Tips for Success

- **Start simple.** Begin with a text-only design or a simple shape before attempting complex images. This helps you learn how stitch counts and fill types behave.
- **Watch your stitch count.** High stitch counts increase the risk of jams and errors. If your count seems high, try increasing the fill spacing or reducing detail.
- **Use fewer colours.** Each colour requires a thread change and a machine stop. Fewer colours means faster, more reliable results.
- **Select the hoop first.** Always choose your hoop in the software before designing. This ensures your design fits the physical hoop you will use on the machine.
- **Test with scrap fabric.** Before embroidering on your final project, run a test on scrap fabric to check placement, colour, and stitch quality.
- **Use .JPG for artwork imports.** The software works most reliably with .JPG images. Convert other formats before importing.
- **Keep designs appropriately sized.** Very small elements with dense stitching can jam. Very large fills with high stitch counts can shift. Find the right balance for your project.

Common Issues & Quick Fixes

Problem	What to Do
Stitch count is too high	Increase the fill spacing, switch from Tatami to Satin, reduce the number of colours.
Artwork will not import	Make sure the file is in .JPG format. Convert from .PNG or other formats if needed.
Auto Digitize result looks wrong	Try adjusting the number of colours. Reassign which colours are Detail, Fill, or Omit. Simpler images with clear colour boundaries digitize better.
Text is too small or hard to read	Increase the font size. Very small text produces tiny stitches that may not sew cleanly. Keep text at a readable size relative to the hoop.
Design shifted or looks distorted on fabric	The fabric may not be hooped tightly enough. Ensure the fabric is taut and flat in the hoop before stitching. Also check for excessive underlay.
Cannot find design on USB	Make sure you used Machine → Write and selected the USB icon. The file must be in .JEF format.

Need More Help?

If you need additional support:

- Ask MakerSpace staff for assistance at All Levels Access hours.
- Refer to the Embroidery Machine guide for machine setup and operation.
- Consult the Janome Digitizer MBX manual, available beside the embroidery machine.
- Visit the MakerSpace web page for booking and contact information.