



RADIANCE 101

IQ DESIGNER BASICS PROJECT

© 2025 Baby Lock USA and Canada. These instructions are part of the Baby Lock Radiance 101 class and are for individual use only. They may not be sold or distributed without prior written approval from Baby Lock. Provided instructions, graphics, embroidery files, design files, and any included video may not be sold, shared, or produced for commercial purposes.

PROJECT SUPPLY LIST

- Baby Lock Radiance
- Radiance IQ Designer Scanning Frame (optional)
- Provided Artwork - Print out on A4 paper (optional)
- USB Media - Provided artwork saved to the memory stick (optional)
- Baby Lock Embroidery Hoop - Size appropriate for project
- Baby Lock Tear-Away Firm Stabilizer - BLT103 (12"x10yd) or BLT103-20 (20"x10yd)
- Cotton Quilting Fabric - Used for applique (can also use HTV)
- Pre-wound or Self-wound Bobbins - Color is not important
- 40wt Embroidery Thread - Colors appropriate to project
- Applique Scissors (optional - if no applique scissors, something similar)
- Miscellaneous Sewing Supplies - seam ripper, stiletto, scissors, needles, pins, tape, etc.
- Apron - or whatever project will be stitched on

This list of project supplies will be adjusted based on how the project is created. This is just a suggestion of items that will be needed. Make note of any variations for future reference.

GOOD TO KNOW

Images throughout these instructions are simulated and may vary slightly from how the objects will appear on the machine's screen during creation of the project. Attempts were made to recreate the on-screen image as realistically as possible, but in some cases variations may be noted.

ARTWORK

The following artwork is provided for use in the outlined project. Copyright is maintained by author and therefore this artwork is not authorized for commercial use. Personal use only. Artwork is also being provided as a downloadable digital image for ease of use.



IMPORTING ARTWORK IN IQ DESIGNER

Importing artwork In to IQ Designer can be achieved in two different ways. Since the artwork is being provided in digital and printed format, either method may be used. Generally, if a digital version of the artwork is available, using the digital format will produce the most favorable outcome.



Standard Edition Opening Screen

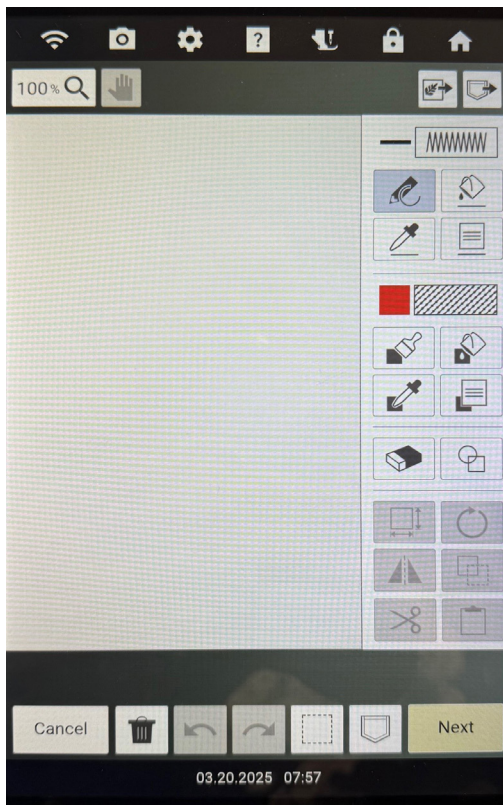


Limited Edition Opening Screen

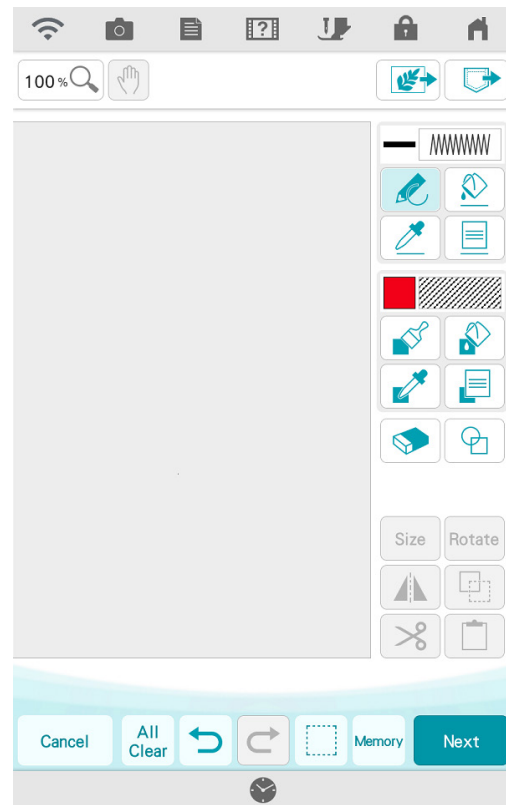
GOOD TO KNOW

The Standard Edition and Limited Edition models of the Baby Lock Radiance will have identical versions of IQ Designer. Other than the color palette of the Opening Screen and an additional design category, no difference between the two models exist.

BABY LOCK RADIANCE 101 - BASIC IQ DESIGNER



IQ Designer Main Screen
Baby Lock Radiance



IQ Designer Main Screen
Baby Lock Vision

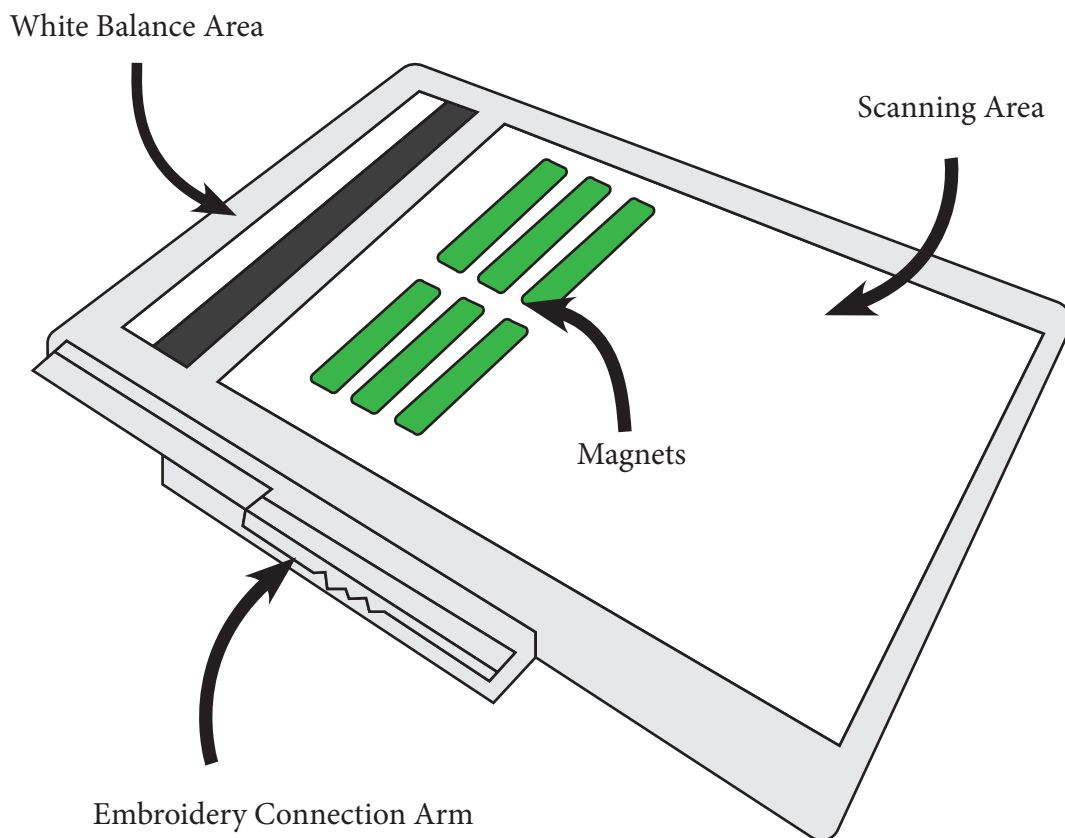
*** NOTE - Some screen images shown in this guide may have been created using the IQ Designer program on the Baby Lock Vision. The screen on the Baby Lock Radiance will be identical with the exception of color and one or two small options, which will be highlighted when needed. Any images that are a teal color palette will be from the Baby Lock Solaris Vision.*

The version of IQ Designer found on the Baby Lock Radiance is very similar to that of the Baby Lock Vision. The images above show the IQ Designer Home Screen for each model. As you can see, the only difference between the two are color and updated icons for a couple of functions. The following highlights the current differences between the two version:

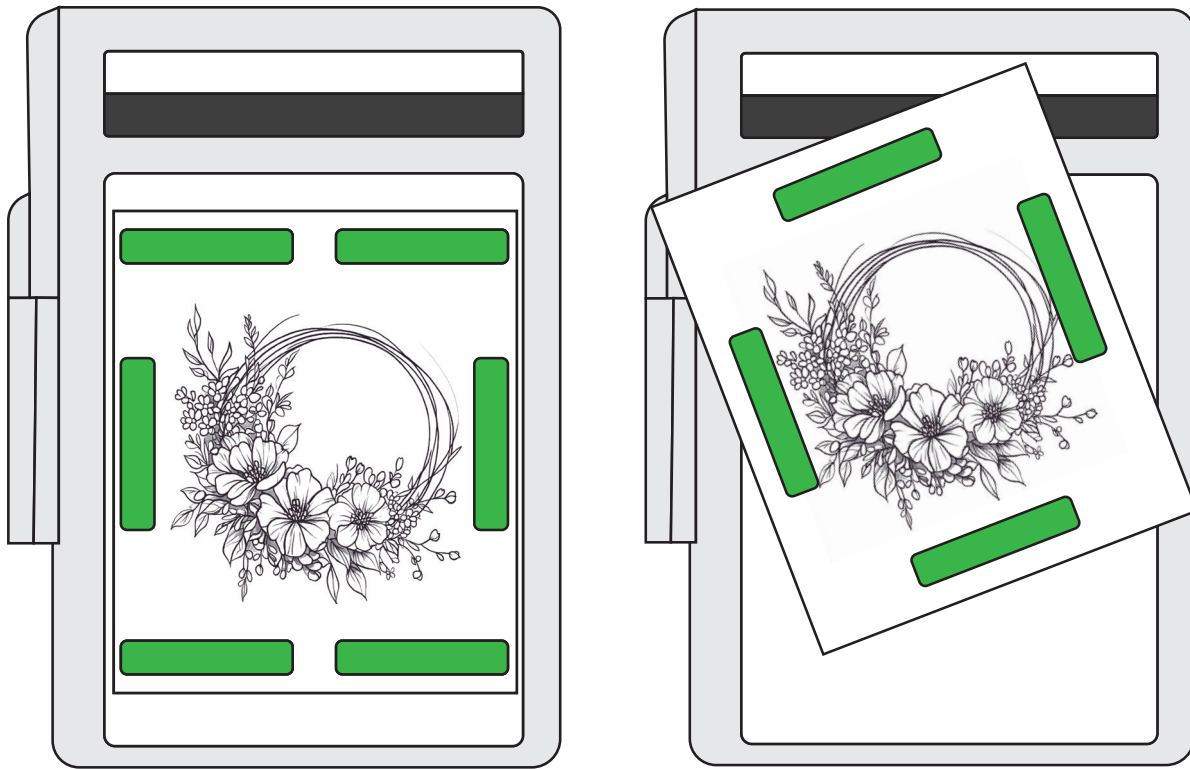
- Screen Color - Baby Lock Radiance shifts to a black and gray palette
- All Clear/Trash Can Icon - All Clear Icon has been updated to the Trash Can icon
- Size and Rotate Icons - Features previously labeled Size and Rotate are now shown with icons
- Running Stitch/Triple Stitch Underlay - Underlay stitches can now be turned on and off for the Running and Triple Stitch Line Properties
- Zig Zag Line Type - A zig zag line type is now available in Line Types on the Baby Lock Radiance.
- Decorative Fill Designs - Baby Lock Radiance includes six new Decorative Fills.

SCANNING FRAME

Importing artwork using the camera's scanning feature provides the user with the opportunity to use images that are not held in a digital format without having to rely on the need of additional equipment. This method is excellent for importing handwritten, or hand-drawn, pieces such as recipes and children's drawings. This truly allows the incorporation of personalized artwork in your projects. As of the time of writing this guide, Pages 241-244 of the Radiance Instruction and Reference Guide provides full instruction on creating patterns using scanned images. In this example, we are using the Scanning Frame to hold the printed artwork, but keep in mind that any item that is hooped can also be scanned.



SCANNING FRAME (CONT)



Before using the Scanning Frame, there are a few “Best Practices” that need to be followed:

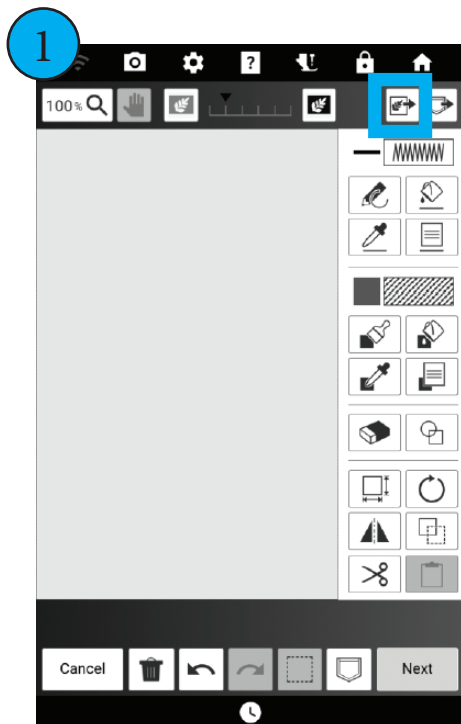
- Keep the White Balance Area clear. If this area is covered - partially or fully - an error will appear on the screen. The White Balance Area allows the machine to adjust the lighting of the machine to ensure a quality scan is achievable.
- Room lighting can also impact the clarity and success of using the scanning frame. If the machine is located next to a bright and sunny window, you may find it necessary to close curtains or blinds to prevent overexposure. Likewise, if the room is dark with little to no extra light, it may be necessary to improve the area lighting.
- The old saying “Garbage in, Garbage out” is very much applicable here. Starting with an image that is clear, sharp, and of high quality will always result in a better transfer.
- Only use the magnets that are included with your machine. These magnets have been created to specifically work with the machine without causing issues. Replacing these pieces with other magnets may result in failure of the frame to properly move over the bed of the machine.
- Overly complicated images may not process correctly, or even at all, resulting in an error message on the machine.

SCANNING THE ARTWORK

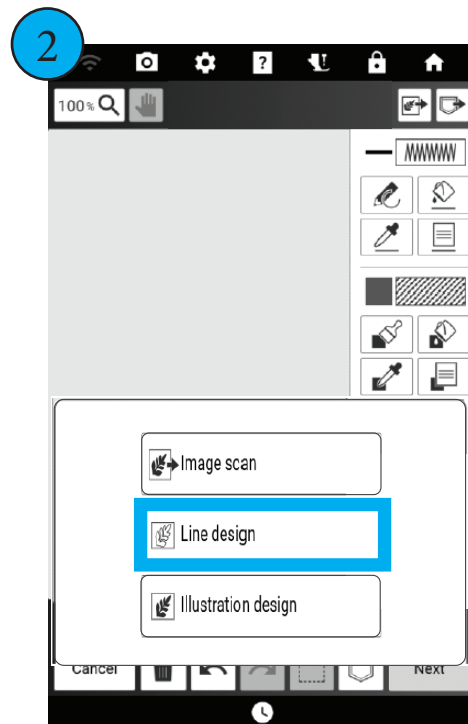
Begin by placing the Artwork on the Scanning Frame right side up. Be sure not to cover the White Balance Area in any way. Use the included Magnets to secure the artwork to the frame. Keep in mind that you are not required to use all of the included magnets. Use only what is needed to ensure the artwork doesn't shift during the scanning process. Although it is not necessary, some users like to remove the thread from the machine when using the scanning feature to prevent the tail of the thread from possibly being picked up by the camera. Load the Scanning Frame into the machine and then complete the following steps:



Begin by selecting IQ Designer from the Home Screen. This will open the IQ Designer Home Screen/Design Page.

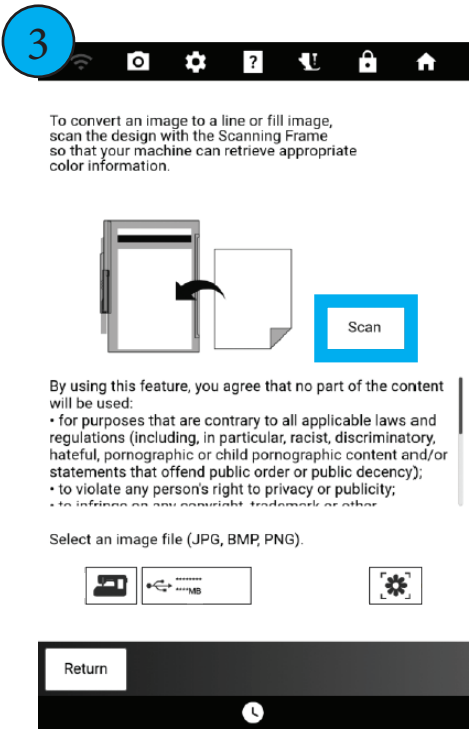


Select the Image Import icon.

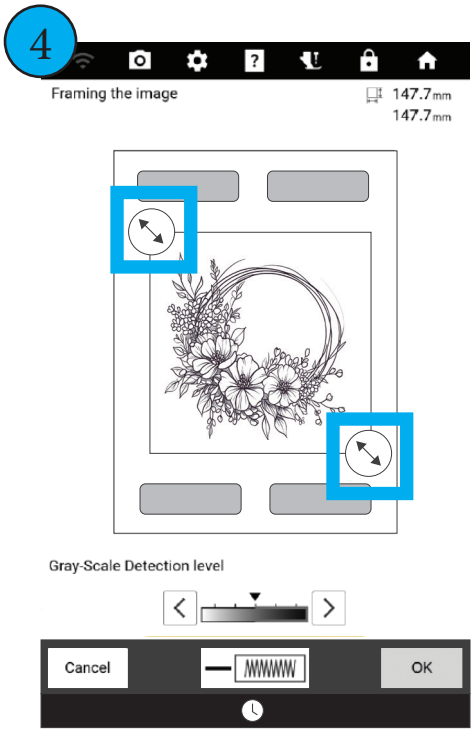


From the new dialogue box, select Line Design.

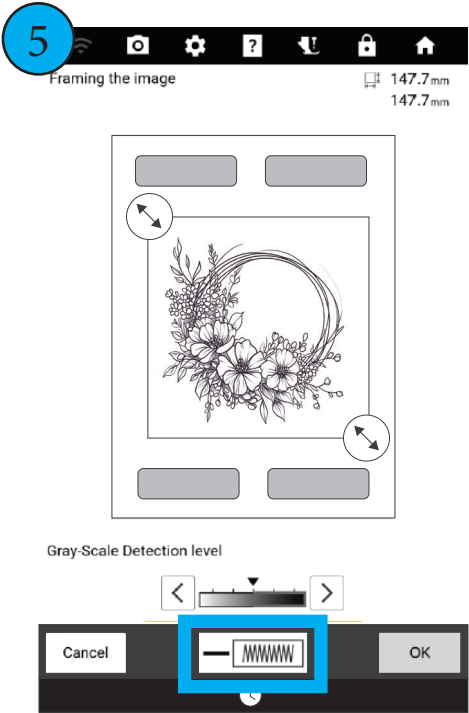
BABY LOCK RADIANCE 101 - BASIC IQ DESIGNER



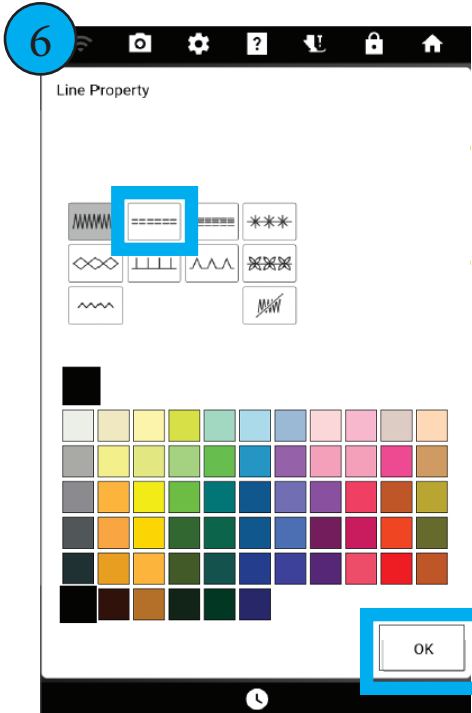
Select Scan. A warning of the Frame movement will appear.
Select OK.



When the scan is complete, use the Crop Tools to remove excess area around the image.

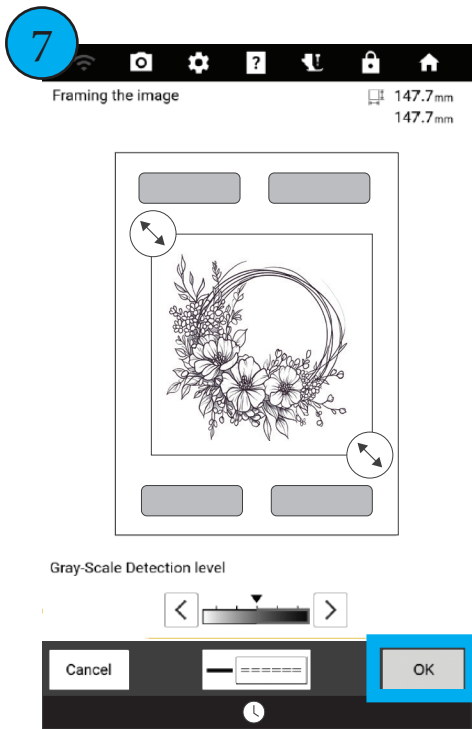


Select the Line Property icon.
This will allow you to select the Line Type that will be used on the design.

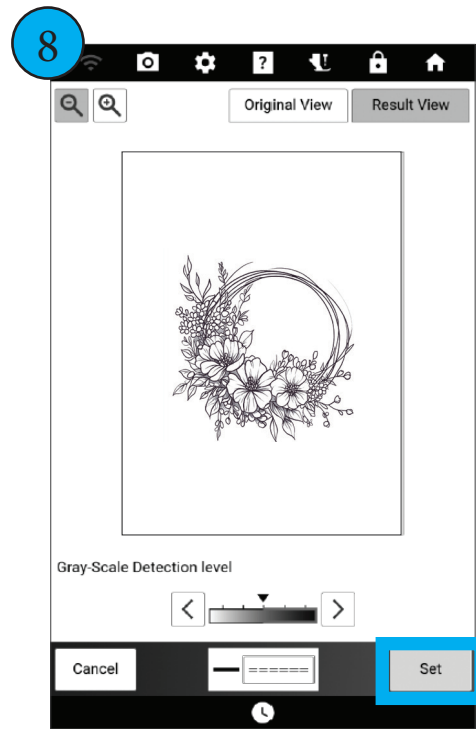


Select the Running Stitch. Select the Color of choice. Select OK.

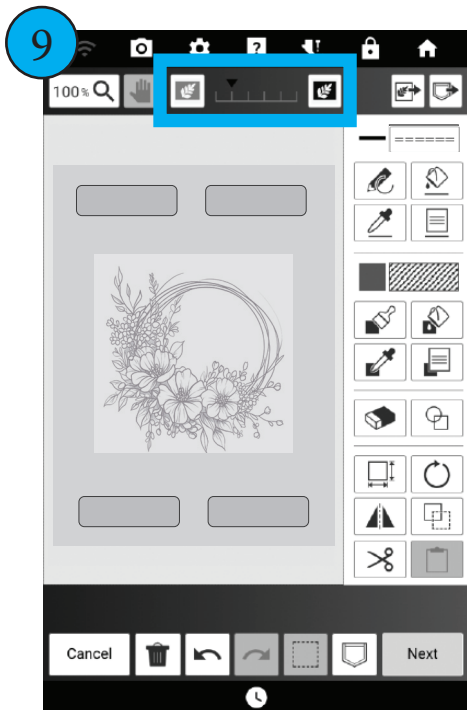
BABY LOCK RADIANCE 101 - BASIC IQ DESIGNER



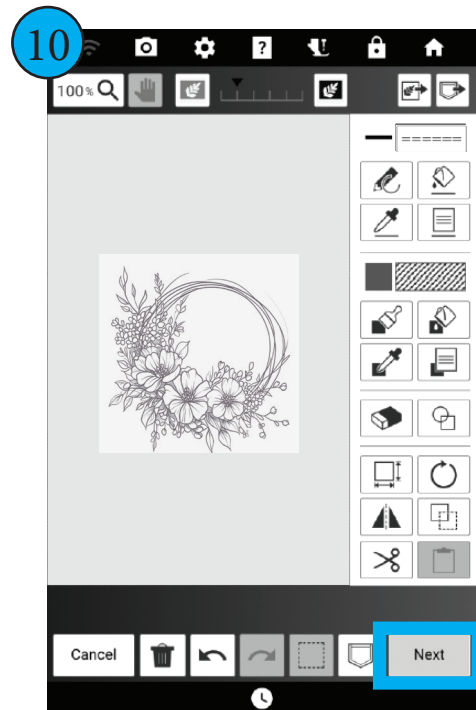
Select OK to advance to the next screen.



Gray Scale Detection can be adjusted if needed. Select Set.



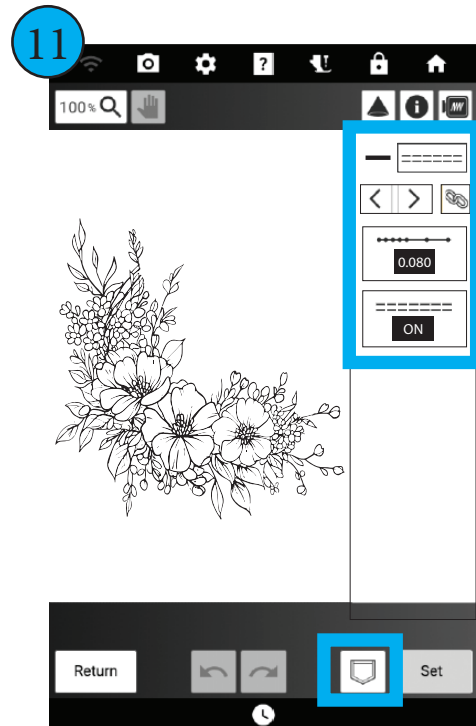
The Scanned Design will open on the IQ Designer Home Screen. The original Scan can be seen in the background. Adjust Opacity.



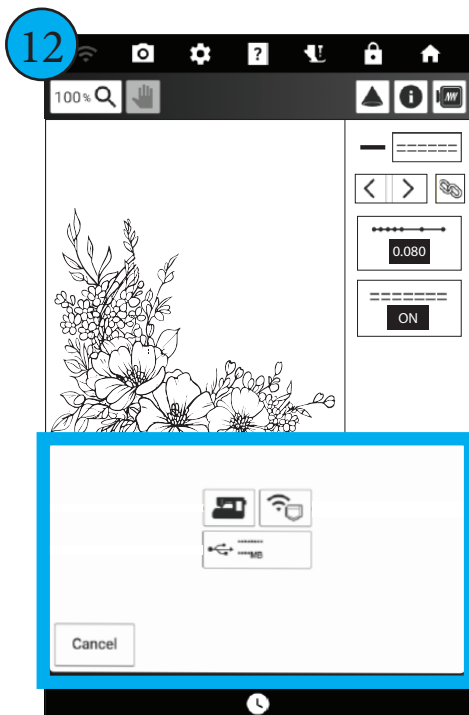
The Scanned Design can now be edited as desired. Once editing is complete, select Next.

In the sample, the spray of flowers from the lower left of the original artwork have been isolated and will be used as decorative stitching. Running Stitches have been applied to the full design. When Running Stitches are used, the Run Pitch (Stitch Length) and Underlay may be adjusted as desired. If other stitch types are used, their available adjustments will be shown.

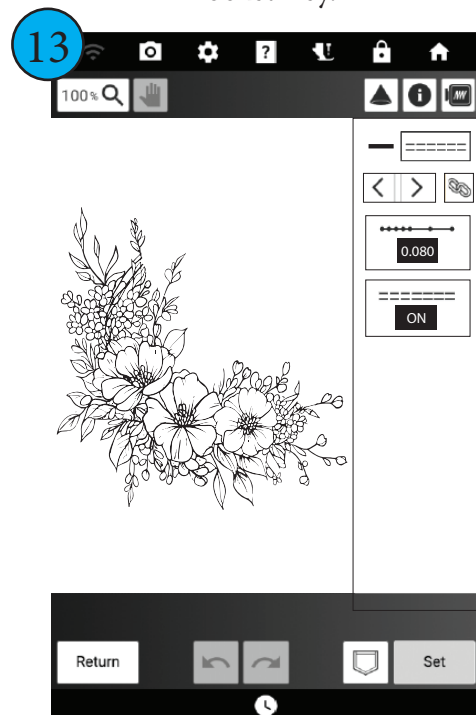
Refer to the Using IQ Designer Editing Tools to Transform the Artwork section for information of customizing your artwork.



Make any desired changes to Run Pitch (Stitch Length) and Underlay. Select the Memory Pocket Key.



Select the Memory Location of choice.



Select the Home Key. When prompted to delete, select OK. Proceed to Creating the Applique Shape section.

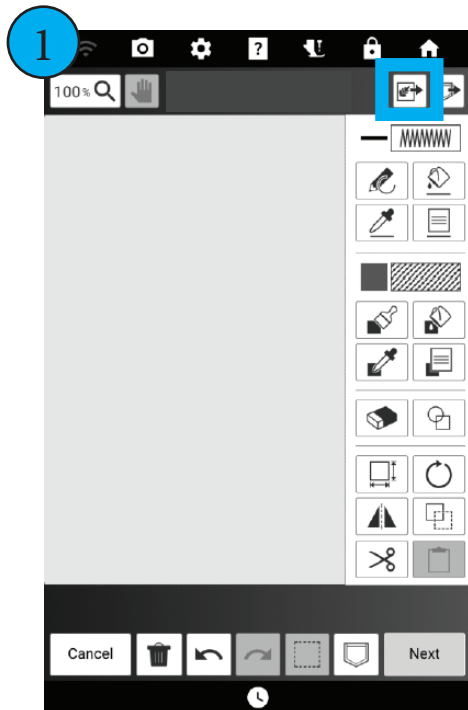
USING DIGITAL ARTWORK

Begin by saving the digital file to a USB Media Stick. A USB with the memory capacity of 8GB to 32GB is recommended for the Baby Lock Radiance. The acceptable image file types are JPG, BMP, and PNG. The IQ Intuition Placement App can also be used to transfer the digital file if a Wireless Connection has been established on the Baby Lock Radiance.

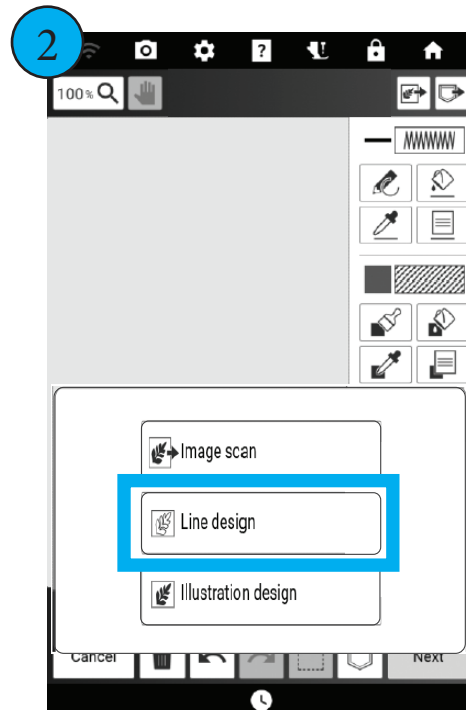
If using a USB Media Stick, place the drive in one of the two available USB Ports located on the right side of the machine and follow the steps below.



Begin by selecting IQ Designer from the Home Screen. This will open the IQ Designer Home Screen/Design Page.

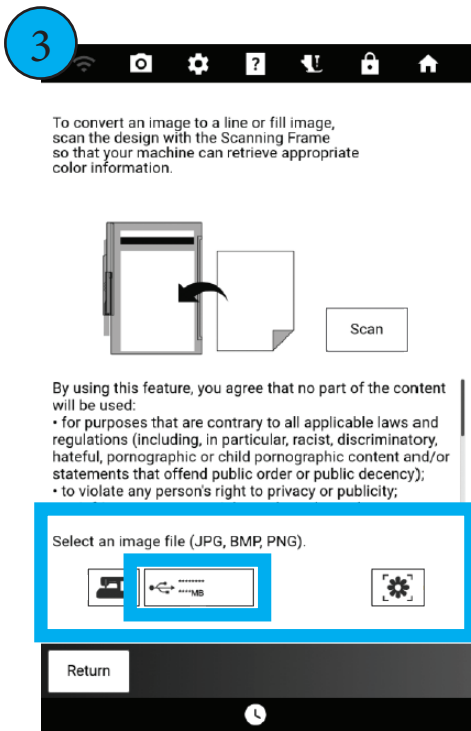


Select the Image Import Key.

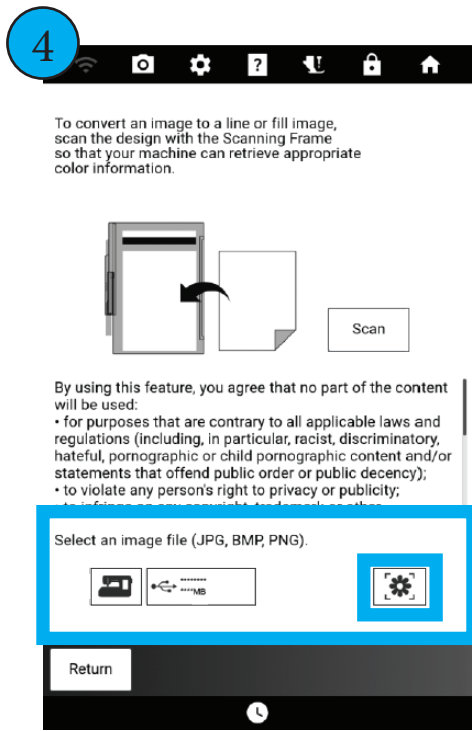


From the popup window, select Line Design.

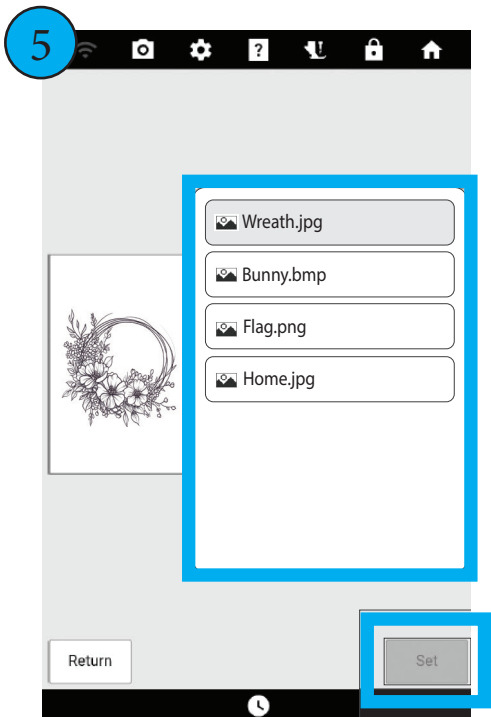
BABY LOCK RADIANCE 101 - BASIC IQ DESIGNER



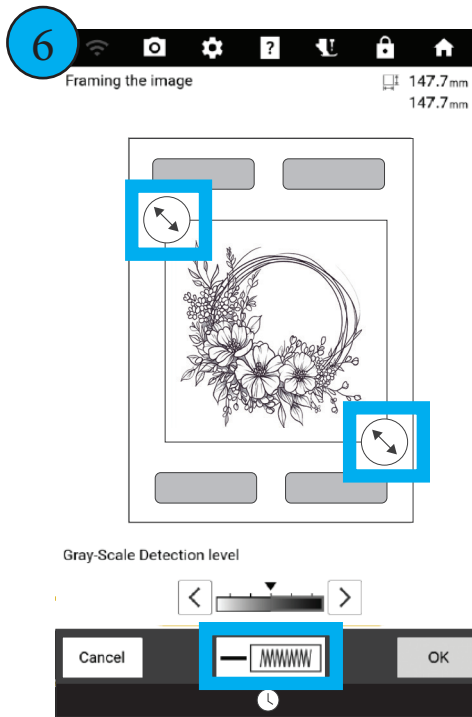
From the Scan Screen, select the location where the image is saved. In this case, the USB.



If using the IQ Institution Positioning App, Select the Flower Icon.

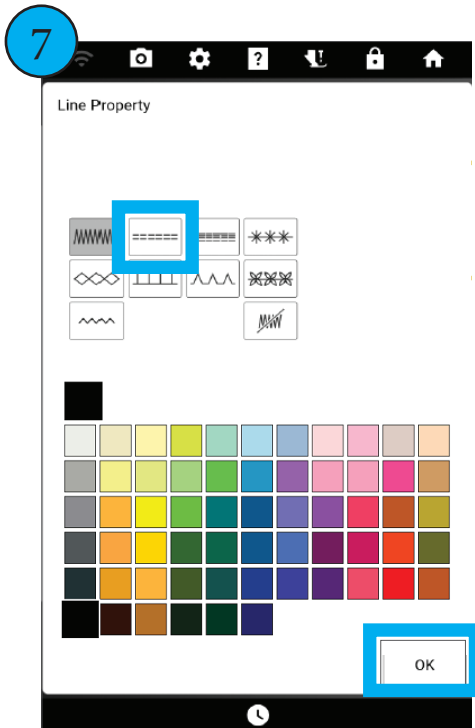


Select the file of your choice. Select Set. A preview of the image file is shown on the left.

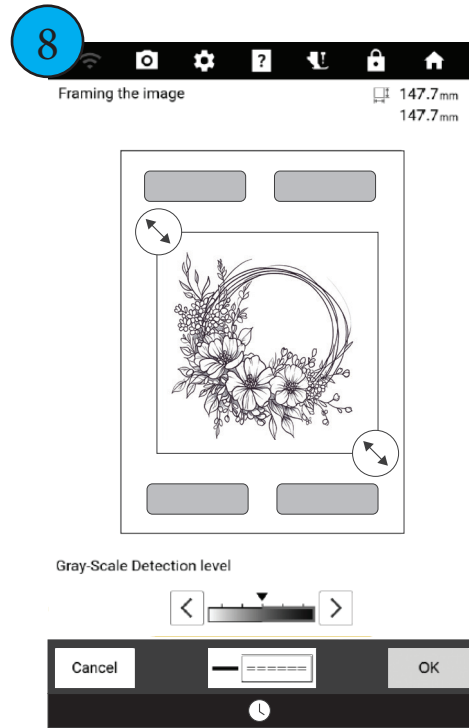


Use the Cropping Tools to remove any excess space in the image. Select the Line Preview.

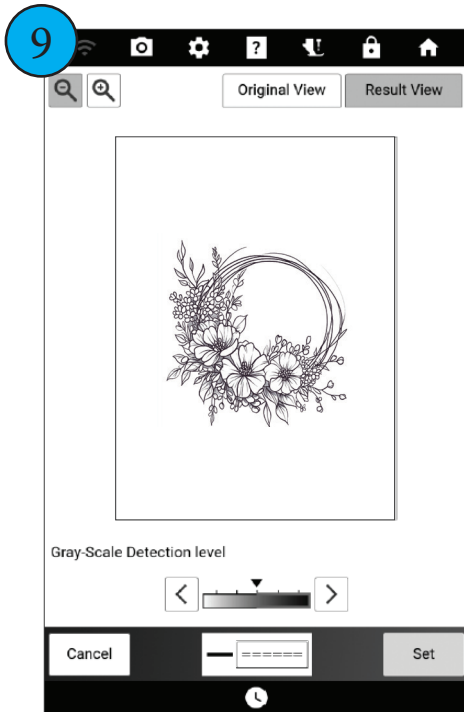
BABY LOCK RADIANCE 101 - BASIC IQ DESIGNER



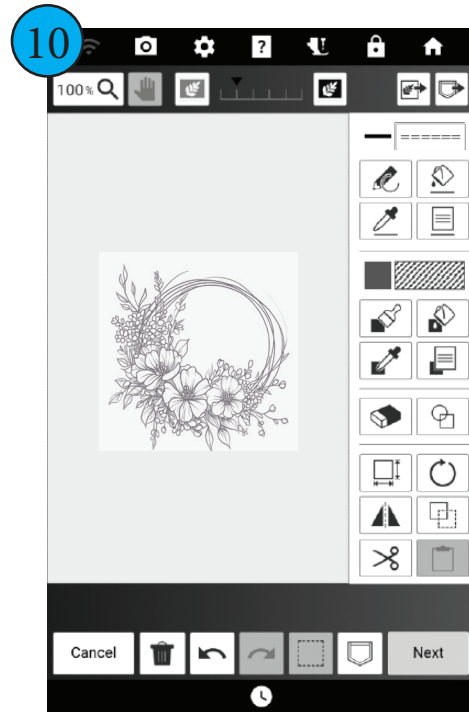
Select the Running Stitch Line Type. Select Color of choice. Select OK.



Select OK.



Adjust the Gray Scale Detection, if needed. Select Set.



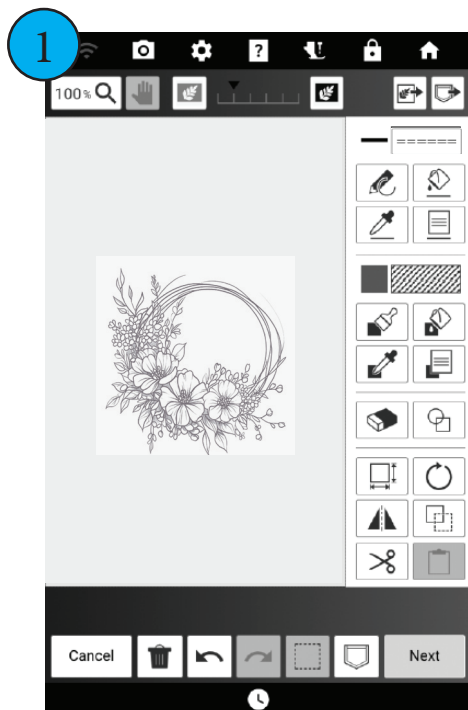
Adjust the transparency of the original image. Design is now ready to be used in IQ Designer. See Steps 11-13 of prior section.

EDITING THE ARTWORK

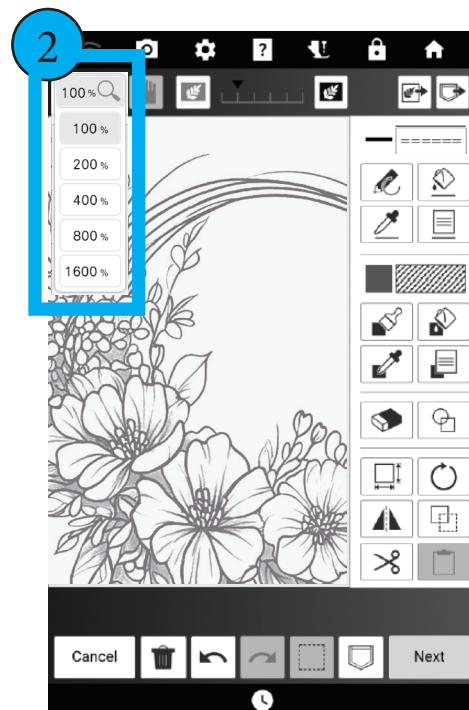
Now that the image has been imported into IQ Designer and assigned a running stitch, editing the image for use in the final design can begin. Have fun with this and feel free to make the design your own. If you are new to IQ Designer, playing around in the program is the best way to learn. Make sure that you Save your work often. You can use the Internal Memory or a USB Media Stick. When working in IQ Designer, you are working with Artwork files, not embroidery files. Because of this, IQ Designer files can only be read by IQ Designer software and only on the specific Model of Machine that the file was created on. Once the artwork file has been moved over to the Embroidery side of the machine, it becomes a PHX file, which is an internal Baby Lock machine type. PHX files can only be read by other machines that create PHX files and by Baby Lock Palette 11 Digitizing Software.

Once the artwork has been imported and a running stitch has been assigned, proceed with the following steps to create your decorative embroidery file.

USING IQ DESIGNER EDITING TOOLS TO TRANSFORM THE ARTWORK

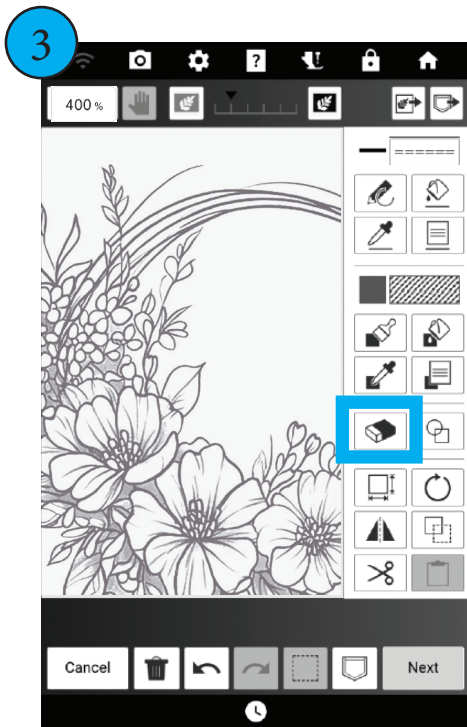


Begin with the imported design on the IQ Designer editing screen. To start, we will clean up the artwork.

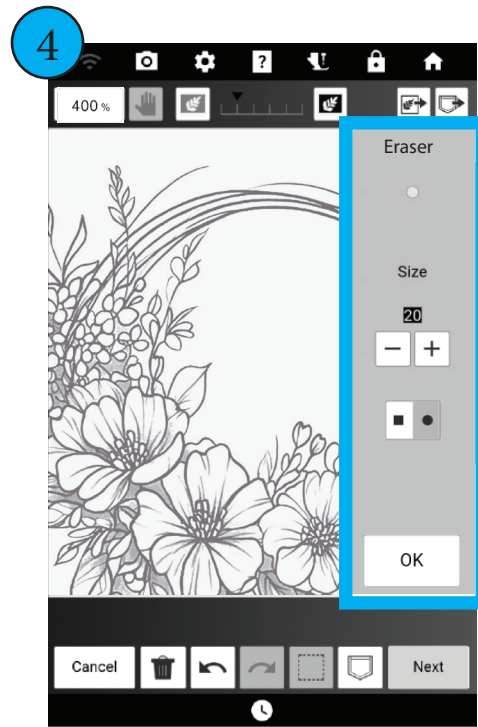


Use the Zoom whenever it is needed. You can zoom from 100% and up to 1600%.

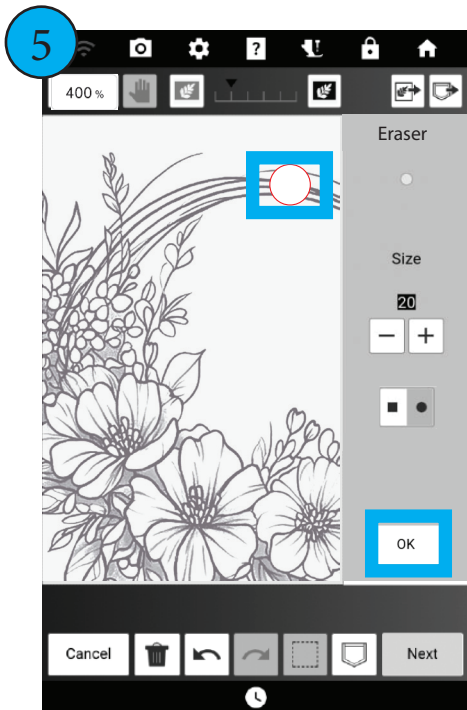
BABY LOCK RADIANCE 101 - BASIC IQ DESIGNER



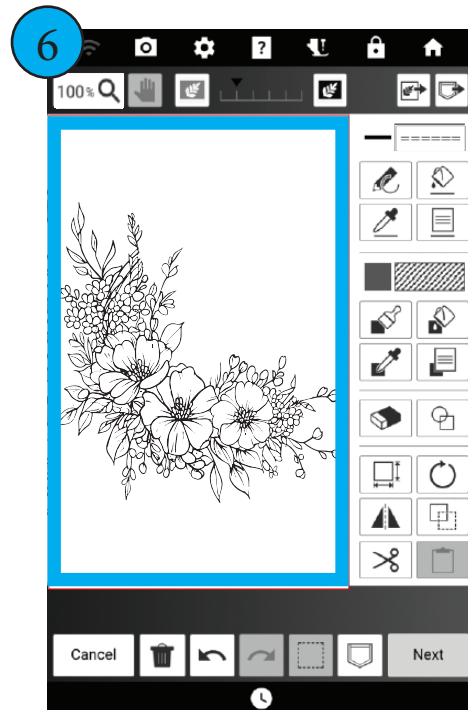
Select the Eraser Tool.



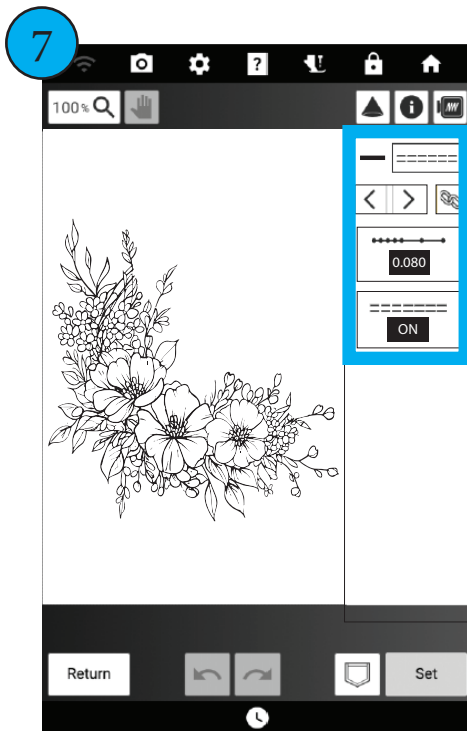
Adjust the Eraser Size and Tip Shape.



Using the Eraser Tool, remove the branches of the wreath. Adjust the Eraser Size and Zoom as needed. Select OK to close window.



Here you can see that I have erased all of the reeds, leaving just the floral spray. Select Next.

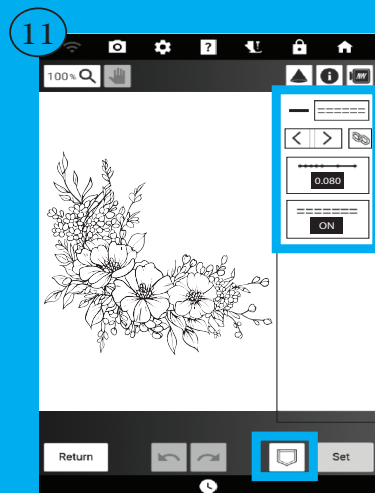


On the Settings/Preview page, the Run Pitch (Stitch Length) and Underlay can be changed. Add to Memory.

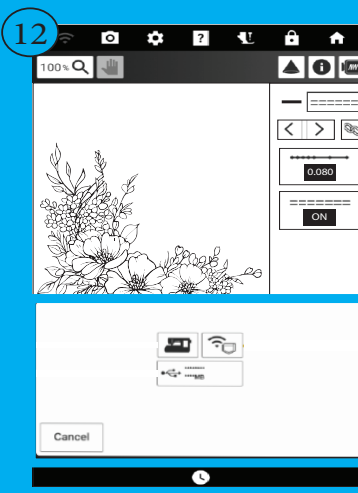
GOOD TO KNOW

When saving an IQ Designer File from the IQ Designer Settings/Preview Page, an artwork file is saved in the IQ Designer Memory AND an embroidery file (PHX) is created and saved in the Embroidery Memory. This eliminates the need to go in and out of IQ Designer when working on a layered design.

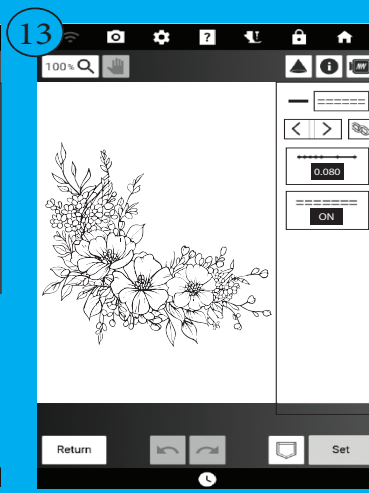
Steps 11-13 from the Scanning the Artwork, as shown below, highlights the process of saving the edited artwork once complete. Because the design is being saved on the Embroidery Settings/Layout Screen, the working artwork file of the design will be saved in IQ Designer, and an embroidery version will be saved in the embroidery side of the machine.



Make any desired changes to Run Pitch (Stitch Length) and Underlay. Select Memory Pocket Key.



Select the Memory Location of choice.



Select the Home Key. When prompted to delete, select OK. Proceed to Creating the Applique Shape section.

CREATING THE APPLIQUE SHAPE

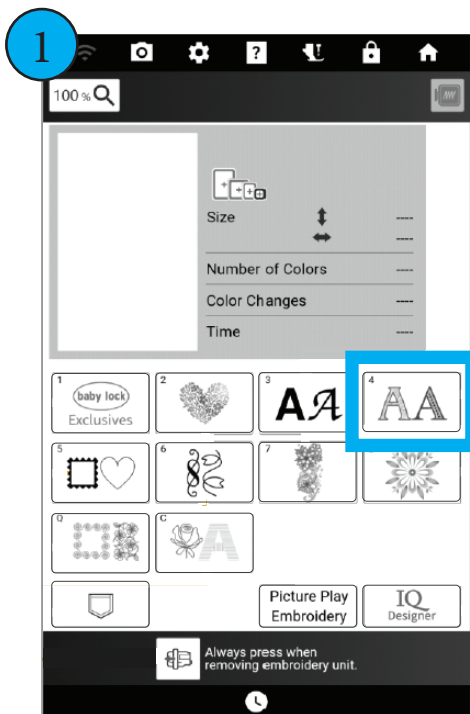
In this example, we will be using one of the Large Format Font Characters, to base our applique on. Keep in mind that this process can be done using any embroidery design, including imported designs.

To begin, clear the current design from the machine (AFTER the design has been saved), by selecting the Home icon. A prompt asking if it is okay to delete current pattern will appear. Select OK.

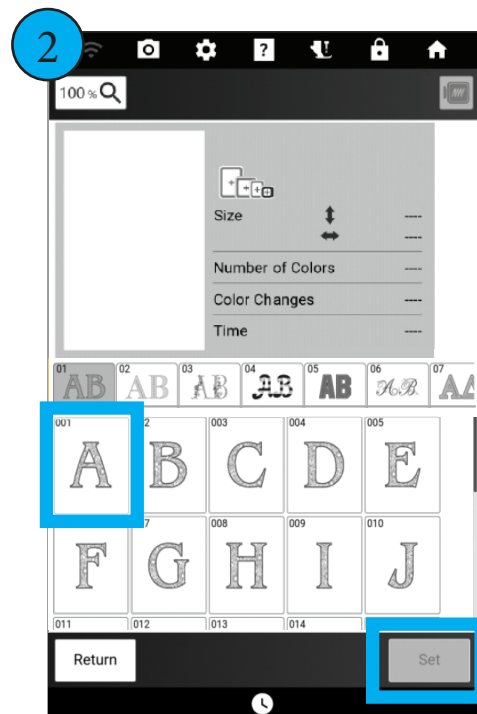
From the Home Screen, select Embroidery. This will open the Embroidery Pattern Selection Screen. Complete the following steps:



Select Embroidery from the Home Screen.

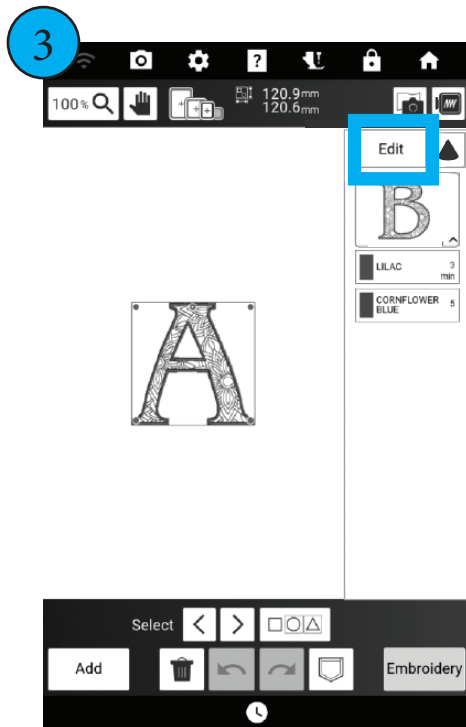


From the Pattern Selection Screen, Select Category 4, Decorative Alphabet Patterns.

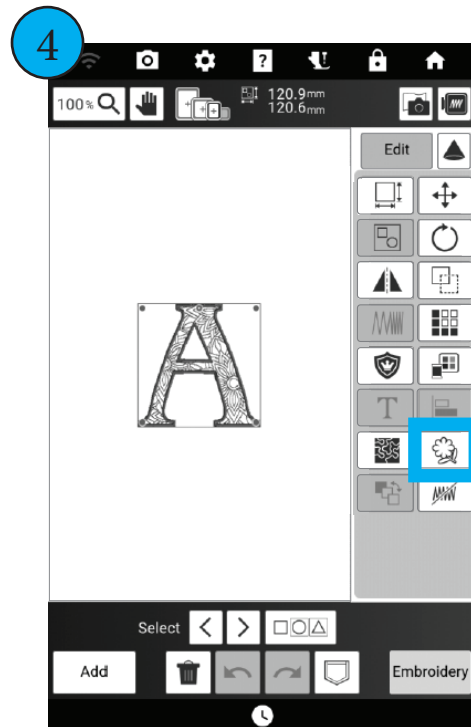


Design Set 01 will be selected by default. Select the Style and Letter of your choice. Select Set.

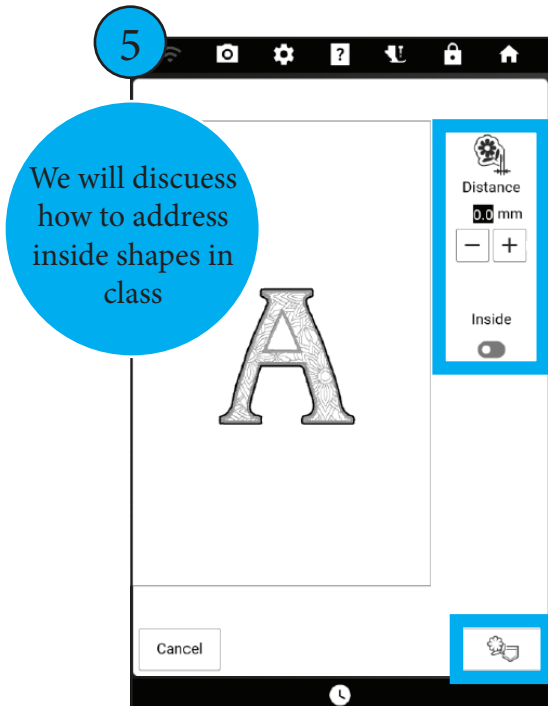
BABY LOCK RADIANCE 101 - BASIC IQ DESIGNER



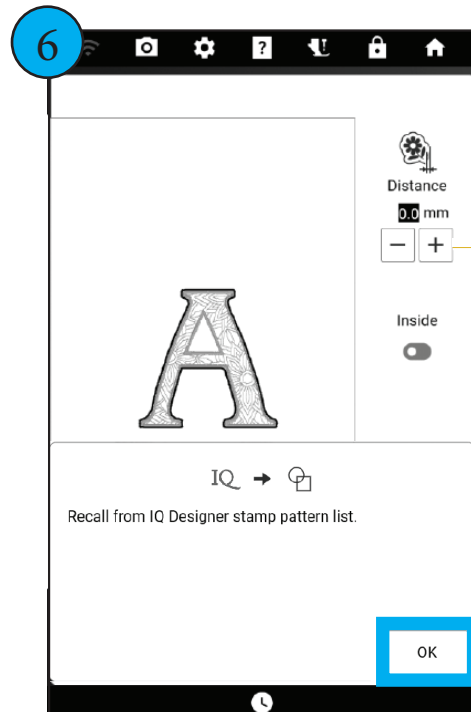
The letter will be set in the Design Area. Select the Edit Key.



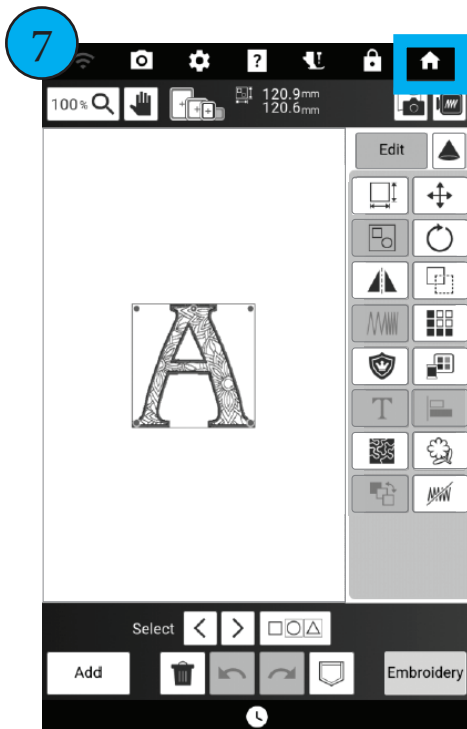
Select the Shape Creation/Stamp/Outline Tool.



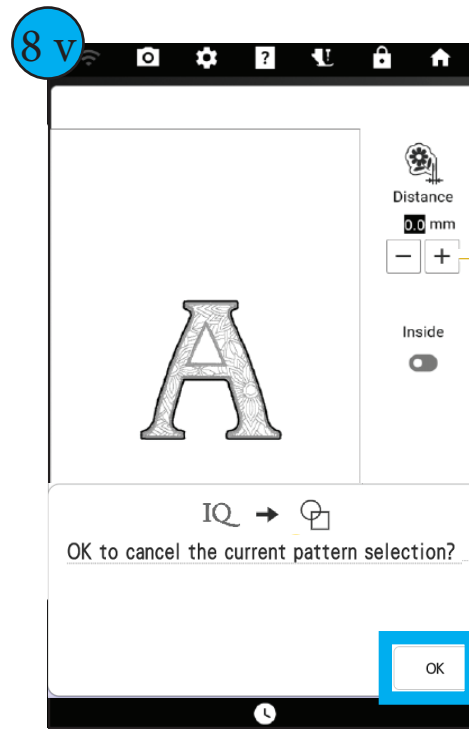
Leave the Distance at the default value (black background). Turn Inside on if desired. Select the Outline Memory Save icon.



A message indicating the Outline will be saved in IQ Designer appears. Select OK.



The Embroidery Edit Screen opens. Select the Home Key.



A message asking permission to delete current pattern appears. Select OK.

CREATING THE PARTS OF THE APPLIQUE

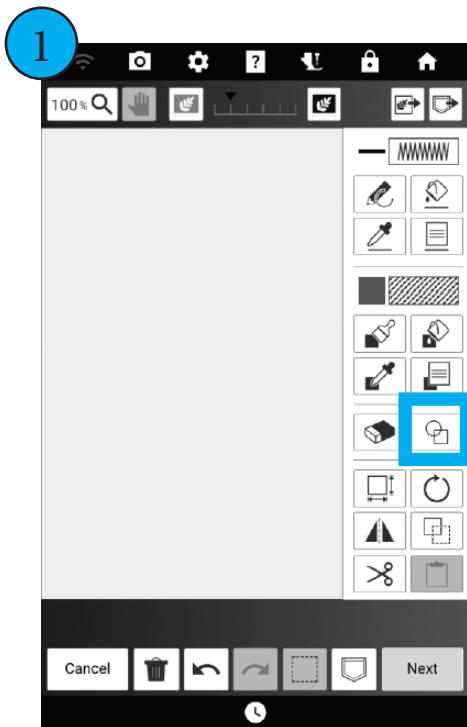
The Outline created using the Shape Creation/Stamp/Outline Key is now located in the Saved Outlines category in IQ Designer and will be used to create the applique. For this exercise, an embellished single-layer applique will be created which will include a stacked finishing stitch and a decorative fill stitched over the applique fabric. These are optional steps. Use creative freedom as you put your project together.

For the applique, we will take advantage of the Save feature on the IQ Designer Settings/Preview page to create both a saved artwork design in IQ Designer and an embroidery design in the Embroidery side of the machine. This will greatly reduce the number of times required to switch between IQ Designer and Embroidery, simplifying the entire process.

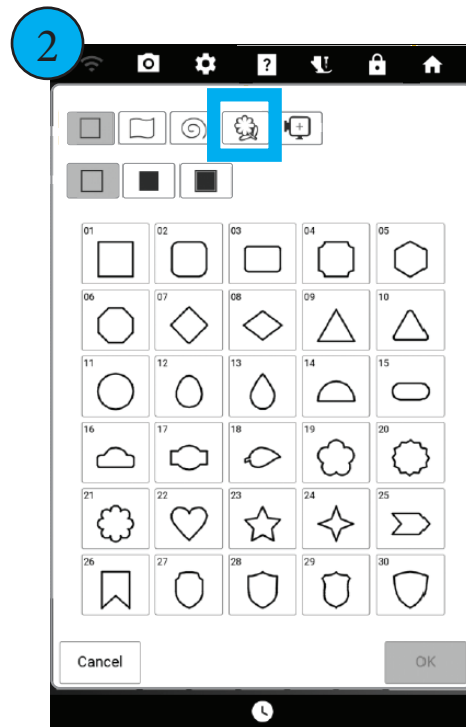


Select IQ Designer from the Home Screen.

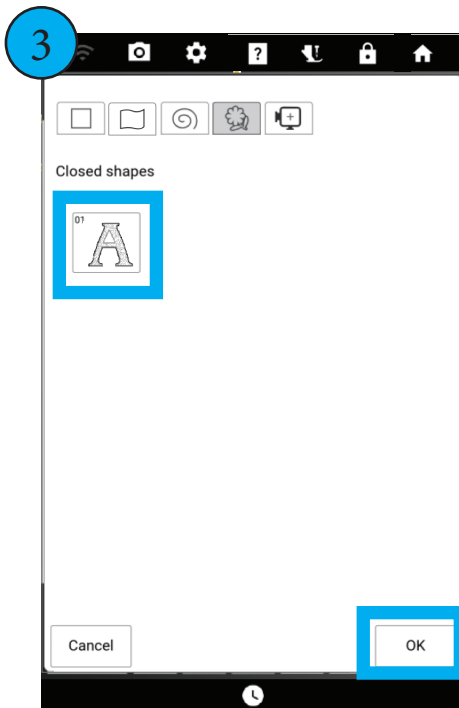
BABY LOCK RADIANCE 101 - BASIC IQ DESIGNER



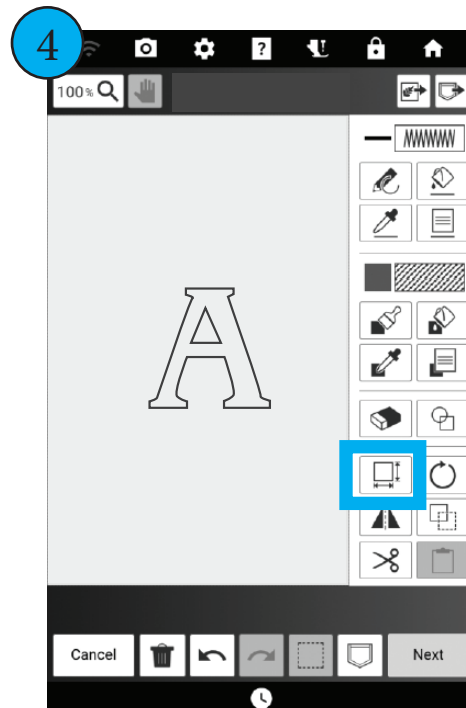
IQ Designer Home Screen will open. Select the Stamp/Shapes Key.



Select the Saved Outlines Tab.

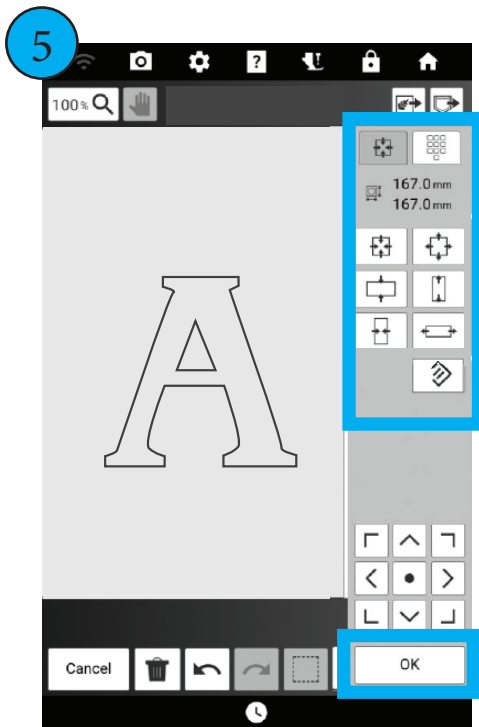


Locate and select the Saved Outline. Select OK to bring the outline into the IQ Designer screen.

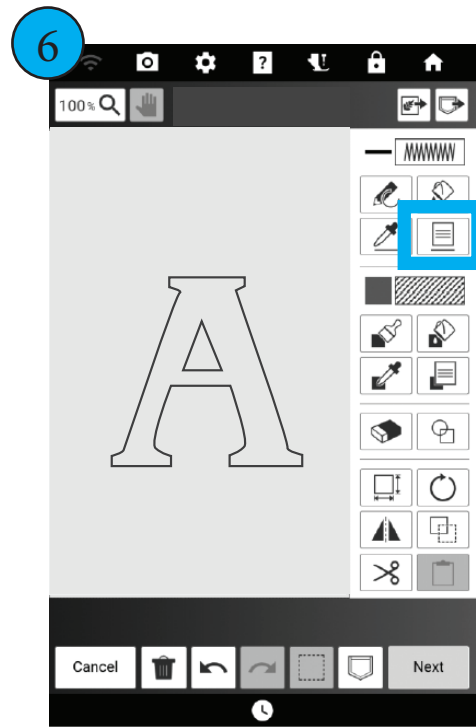


The Saved Outline will be imported into the IQ Designer Work Screen. Select Size icon.

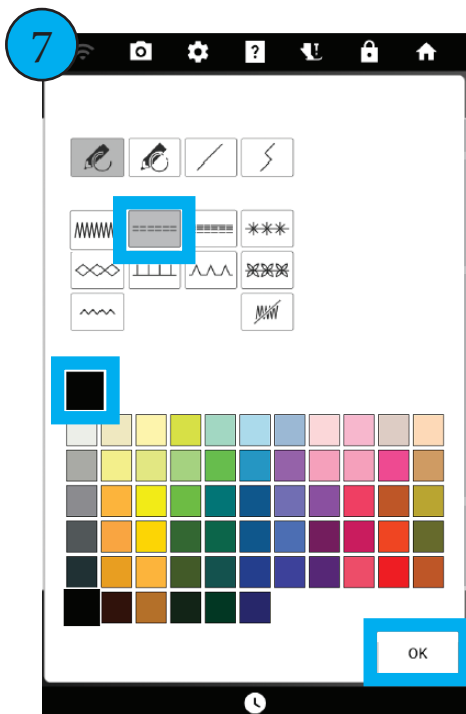
BABY LOCK RADIANCE 101 - BASIC IQ DESIGNER



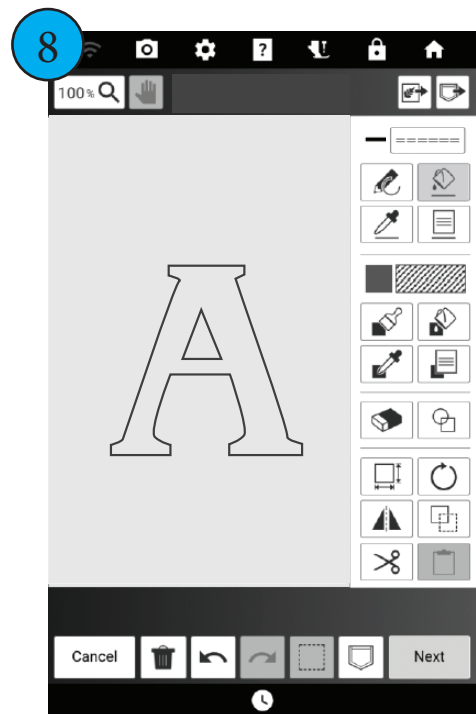
Use either the Size Tools or Keypad to adjust outline to desired size. Select OK.



Next, we will change the line type to create the placement stitch.
Select Line Properties.

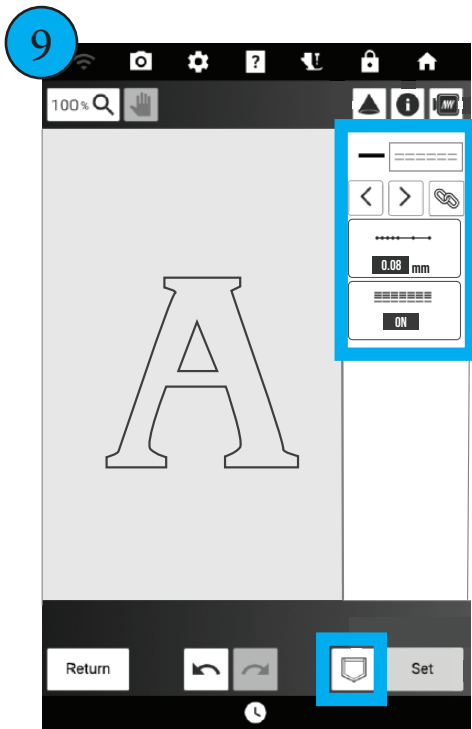


Select the Running Stitch. Select the Color of choice. Select OK.

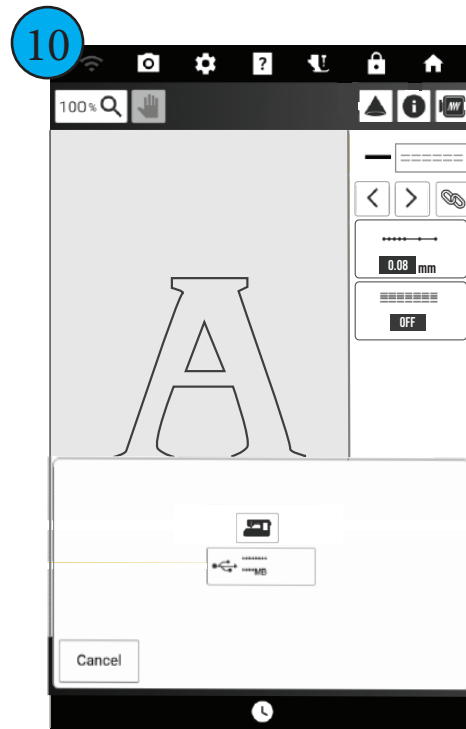


Select the Line Application key.
Touch the outlines of the letter to apply the Running Stitch. Select Next.

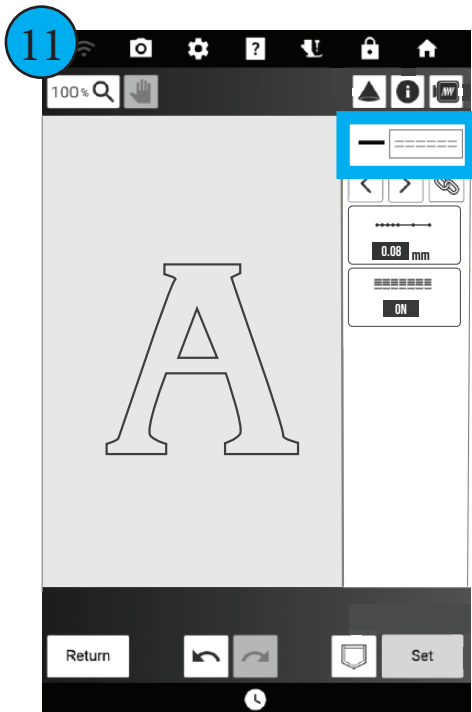
BABY LOCK RADIANCE 101 - BASIC IQ DESIGNER



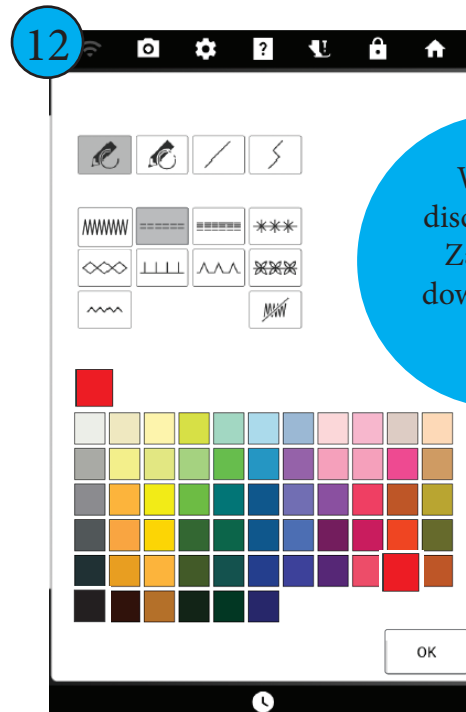
Adjust Run Pitch (Stitch Length) and Underlay, if desired. Use Link if needed. Select Memory.



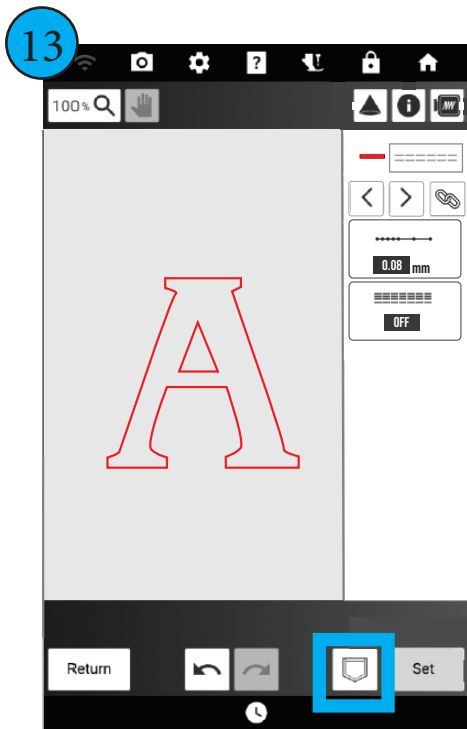
Select location for saved file. An embroidery file will also save.



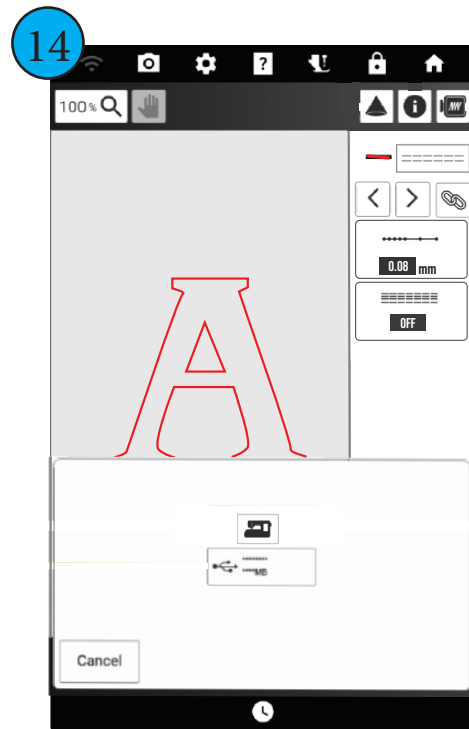
Next, create the Tack-Down. Select Line Properties.



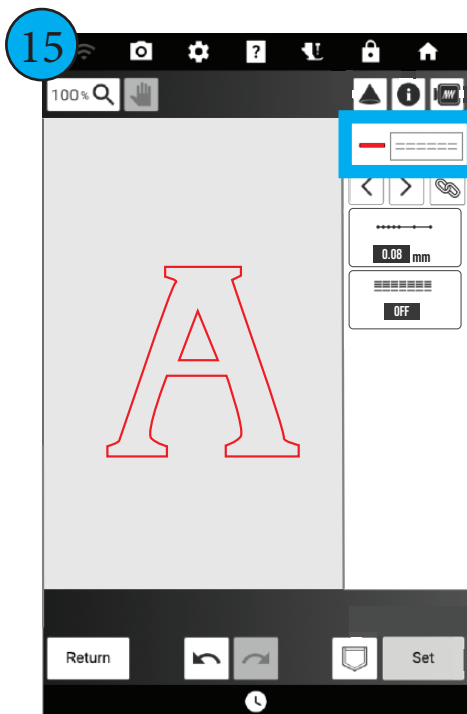
Select a New Color. Select OK.



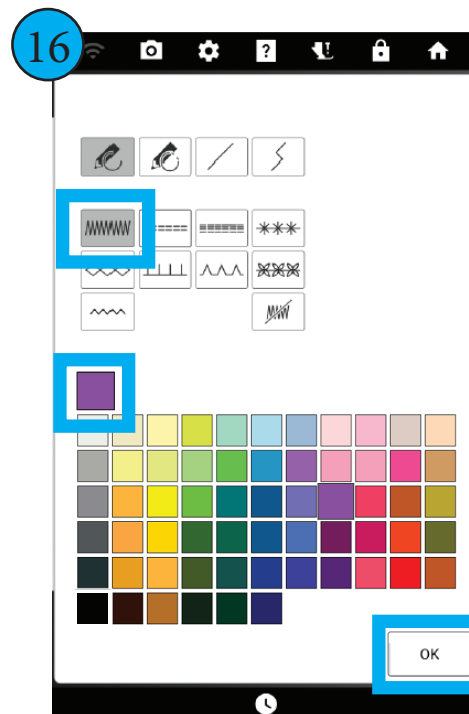
The letter will be updated to new color. Previous settings remain.
Select Memory.



Select location for saved file. An embroidery file will also save.

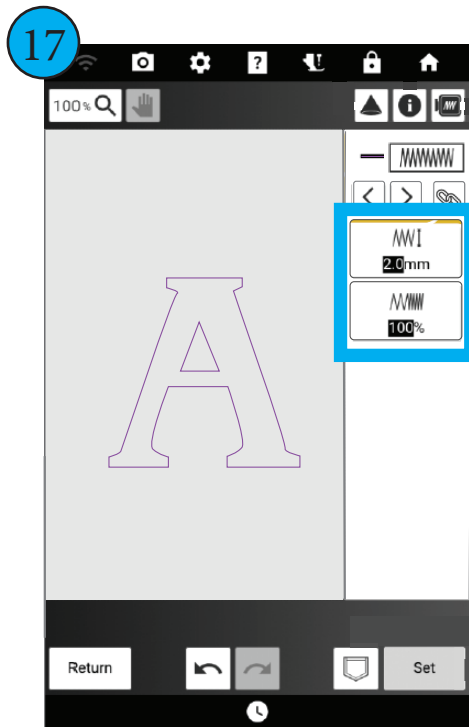


Next, create the Satin Stitch.
Select Line Properties.

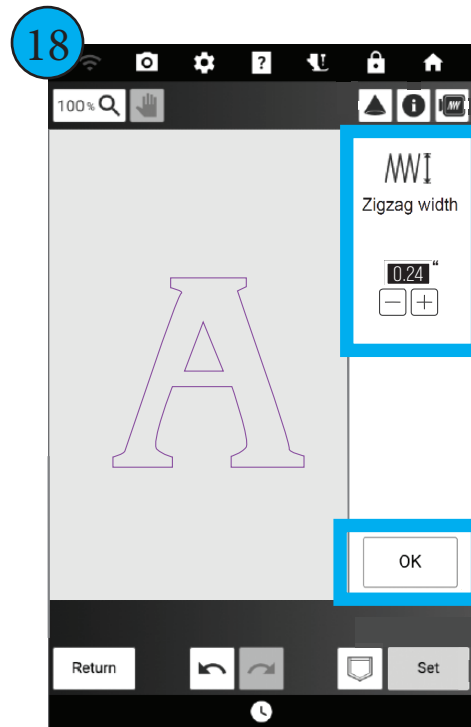


Select the Zig-Zag Stitch/Satin
Stitch. Select a New Color. Select
OK.

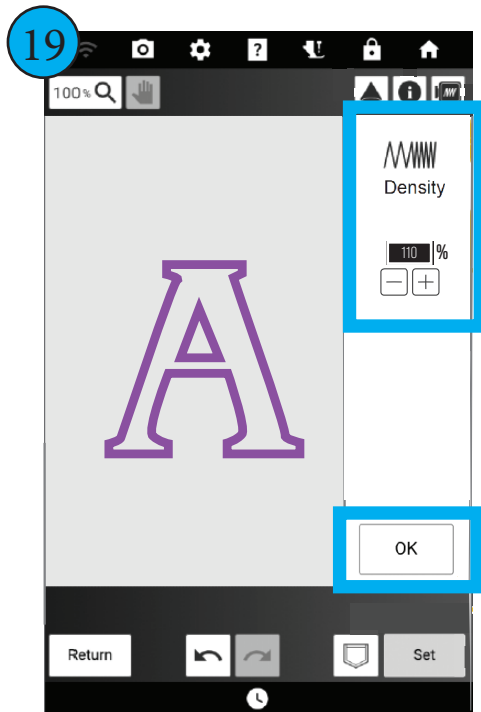
BABY LOCK RADIANCE 101 - BASIC IQ DESIGNER



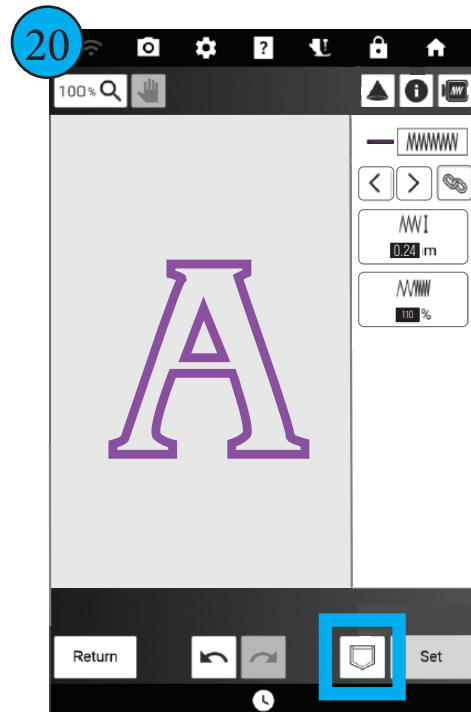
Zig-Zag Width and Density can be adjusted as needed.



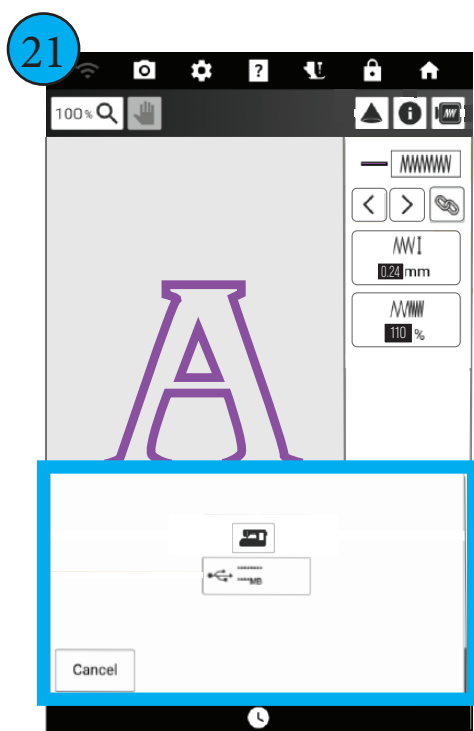
Adjust Zig-Zag Width as desired. Select OK. Wider Zig Zag stitches are better for appliques.



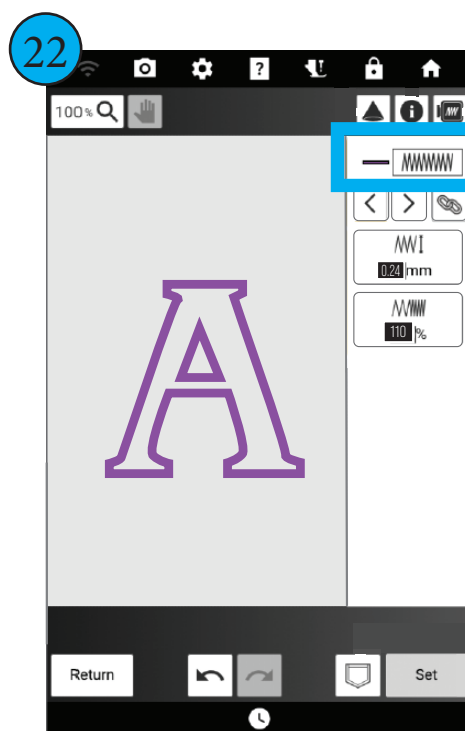
Adjust Density as desired. Density can only be adjusted up/down 10%. For Applique, set at 110%. Select OK.



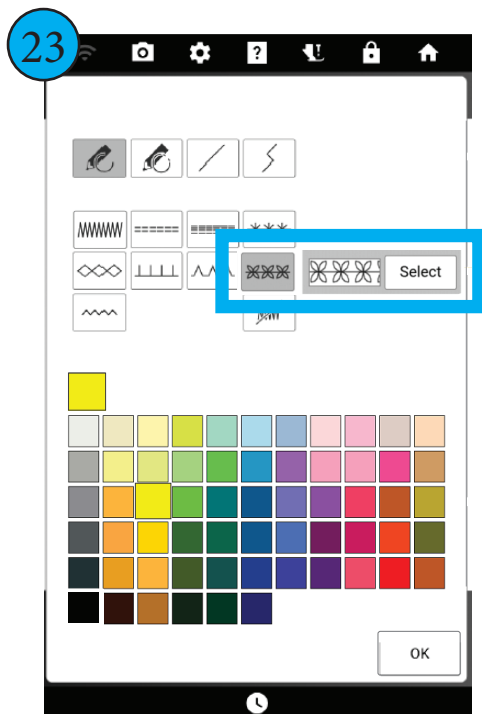
Select Memory.



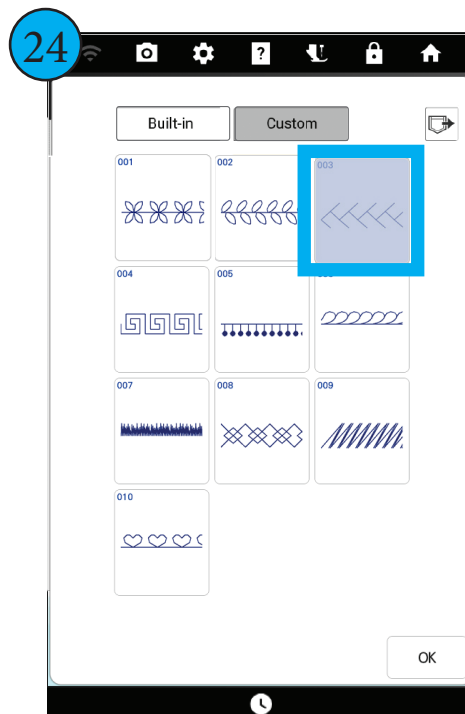
Select location for saved file. An embroidery file will also save.



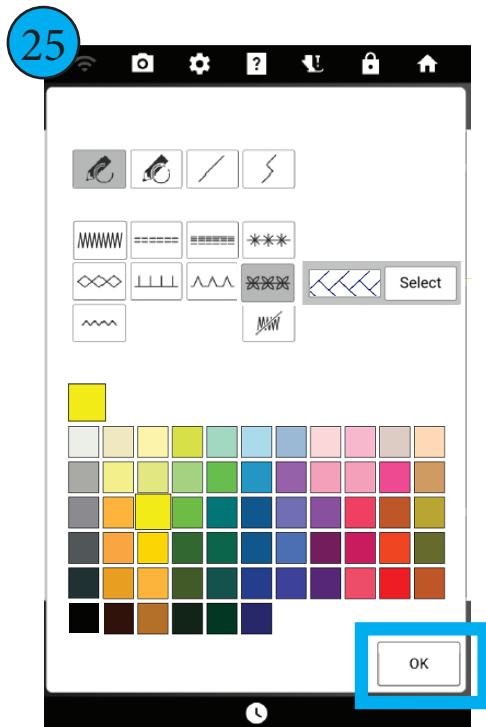
Select Line Properties.



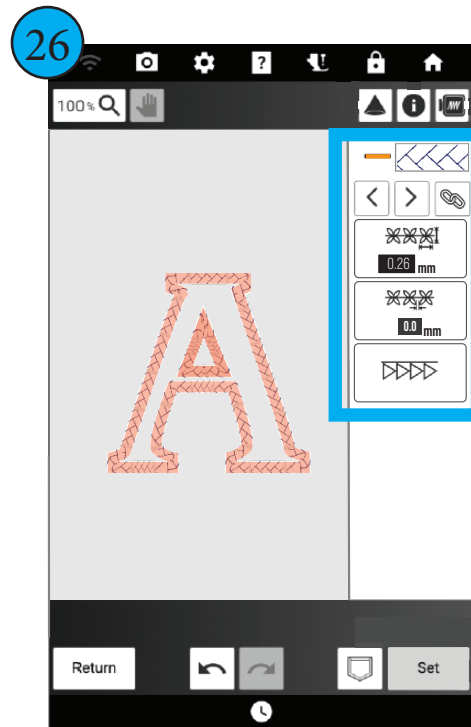
Select the Motif Line Type and the Select tab that opens to the right.



Select the Motif of choice. For the sample, Motif 003 will be used. Select OK.



Select Color of Choice. Select OK.



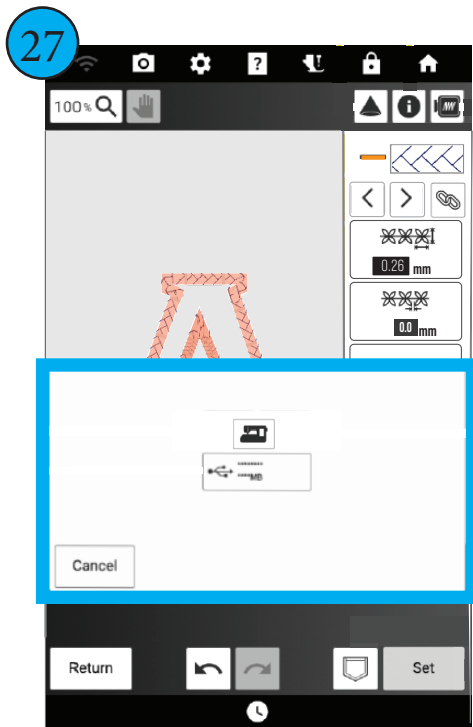
Make any desired adjustments to Size, Spacing, & Flip. Select Memory.

GOOD TO KNOW

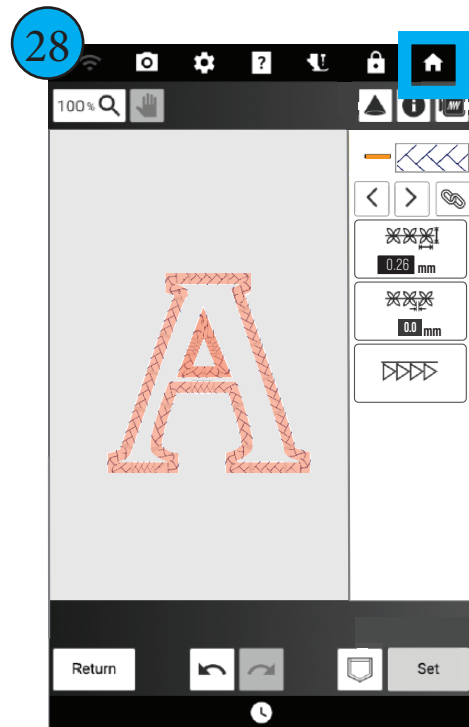
When using a Decorative Motif to stack on top of a Zig-Zag/Satin Stitch, it is important to use sizes on both of the stitch types that work well together. Generally speaking, the Decorative Motif should be one size larger than the Zig-Zag/Satin Stitch width.

In this example, the Zig-Zag/Satin Stitch Width has been adjusted to 6.0mm/0.24". The corresponding size for the Herringbone Decorative Motif was adjust to 6.5mm/0.26". The extra width on the motif allows the stitch to "hug" the underlying stitch. If you want the decorative stitch to mirror the bottom stitch, the same size can be used. Testing combinations of stitches and sizes is important to ensure successful results.





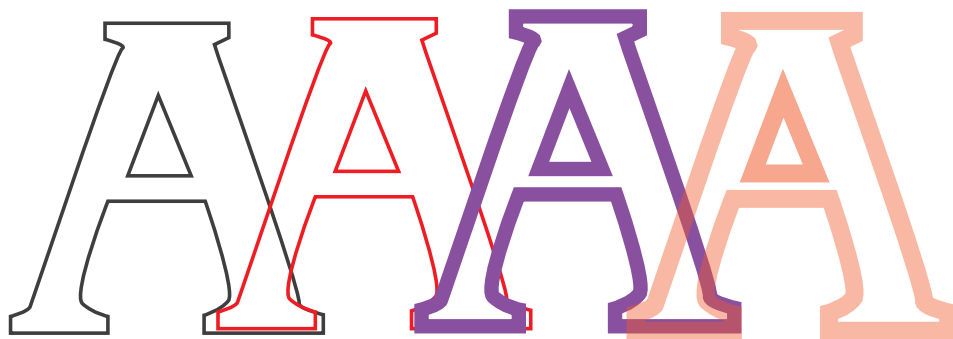
Select location for saved file. An embroidery file will also save.



Select the Home Key.

All of the parts of the Applique have now been created. One optional step would be to add a Decorative Fill to the Applique. If you would like to add this, the steps will be covered next.

If you don't want to add the Decorative Fill, skip those steps and move to the Building the Applique section. Not adding the Decorative Fill will not have any impact on the construction of the applique.



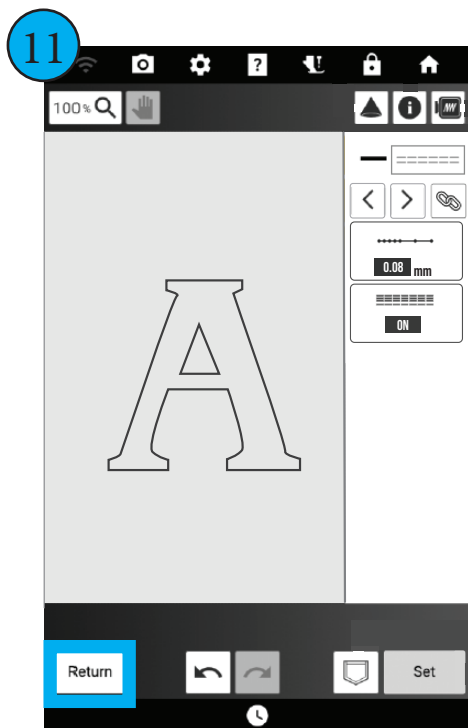
From Left to Right: Placement Stitch, Tack-Down Stitch, Zig-Zag/Satin Stitch, Decorative Motif

ALTERNATE TACK-DOWN STITCH

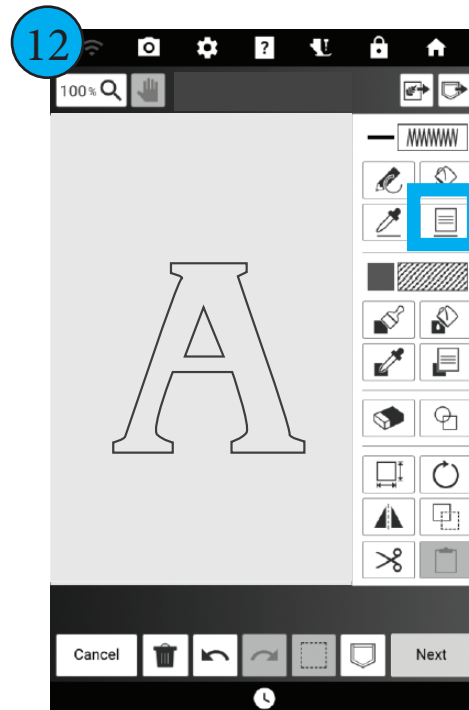
Decorative Fills can be used to create a more unique and personalized applique. The fill would be placed on top of the applique prior to stitching the finishing stitches such as a Zig-Zag/Satin Stitch. This allows the edges of the fill to be nested under the finishing stitches to create a clean edge. With the decorative fill being located in this position, it can actually be used to replace the Tack-Down Stitch. The Outline option on Decorative Fills can be turned on to create a solid running stitch around all edges of the fill to assist in the trimming of the extra applique material.

Should you choose to use a Decorative Fill as a Tack-Down layer, follow the next several steps. These steps will replace Steps 11-14 of the previous walk-through. Once the Tack-Down Fill has been created, return to Step 15 of the previous walk-through and continue creating the design.

This is an OPTIONAL step and does not have to be used. A standard Tack-Down Stitch is perfectly acceptable and even preferred in certain applications.

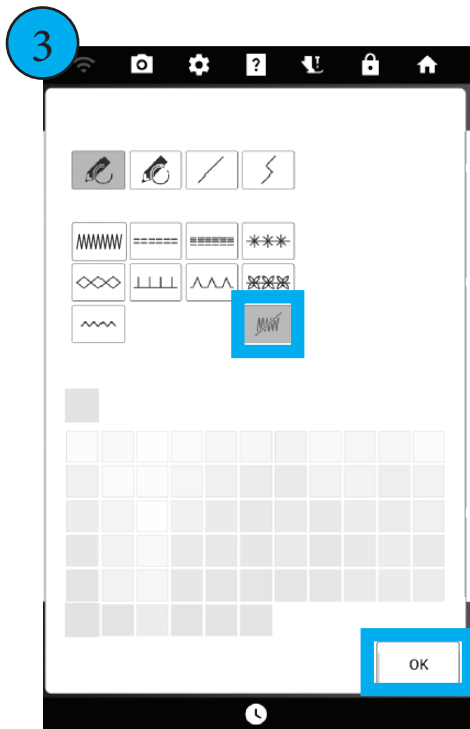


Next, create the Tack-Down.
Select Return to go back to the
IQ Designer Home Page.

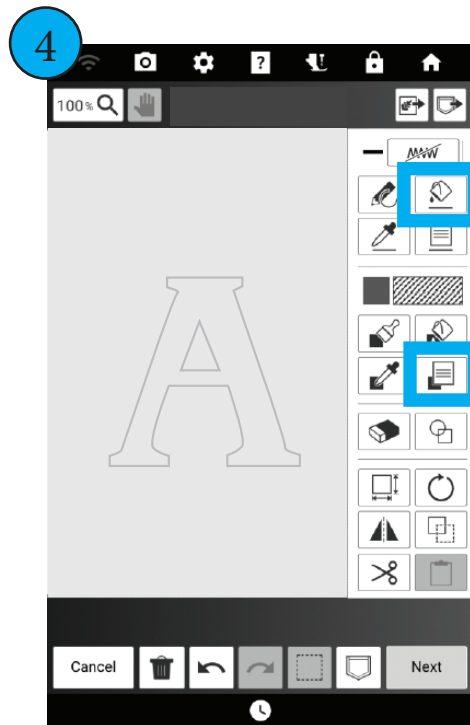


Select the Line Properties.

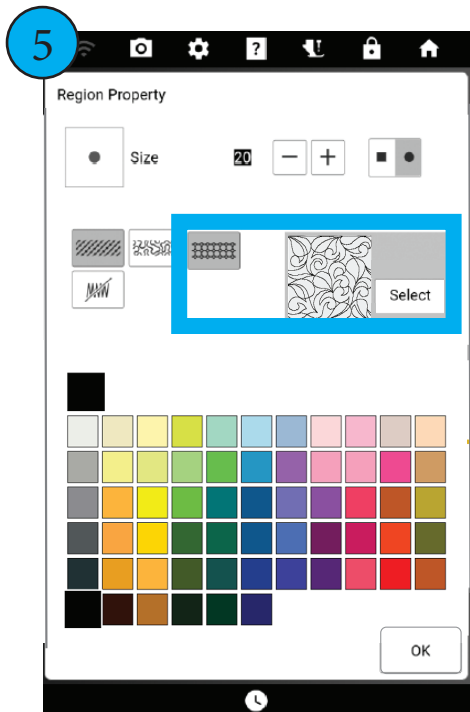
BABY LOCK RADIANCE 101 - BASIC IQ DESIGNER



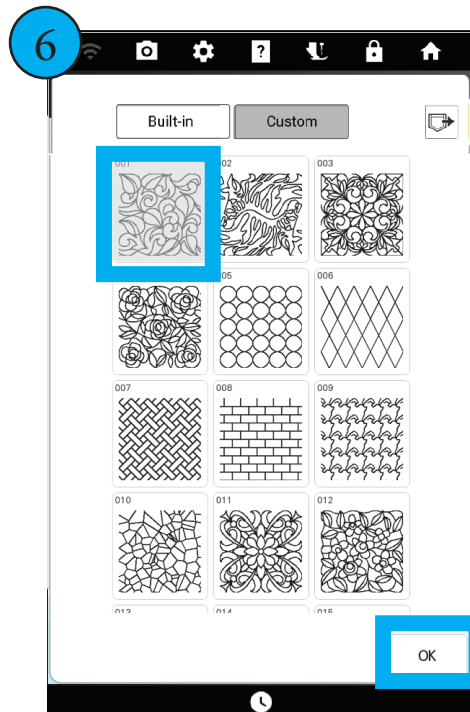
Select No-Sew. Select OK.



Select the Line Properties Application Icon/Bucket. Touch the lines to apply No-Sew. Select Region Properties.

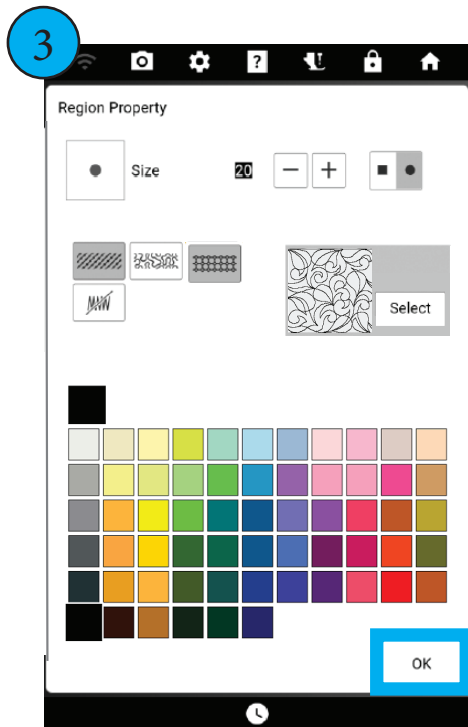


Select the Decorative Fill icon and the Select Key to open the selection window.

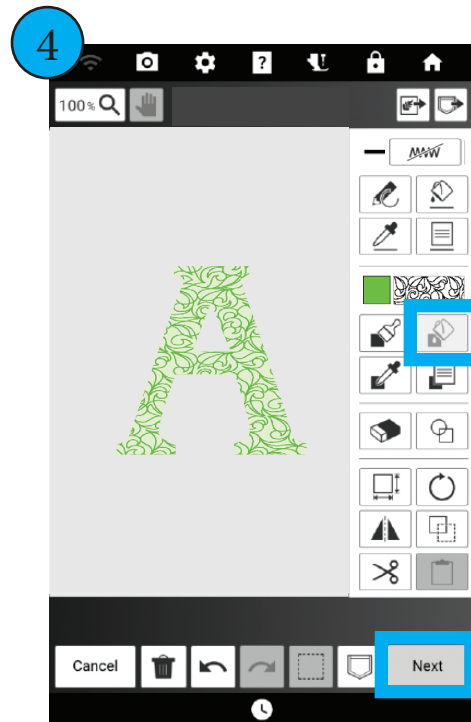


Select the Decorative Fill of choice. Select OK.

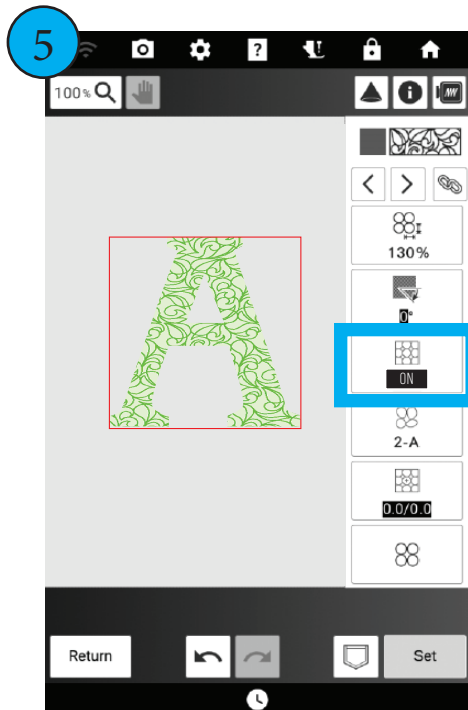
BABY LOCK RADIANCE 101 - BASIC IQ DESIGNER



Select the Color of Choice. Select OK.



Select the Region Application/ Bucket. Touch inside the letter. Select Next.



Make any desired changes on the Stitch Settings/Preview Page. Change Outline to ON. Select Memory. Continue with Step #15.

Return to Step #15 in the “Creating the Parts of the Applique” section and complete the process as outlined.

Using a Decorative Fill can help embellish solid color or lightly colored fabrics, but keep in mind that busier prints or graphics will not blend well with a Decorative Fill. Thread choice also plays a big part in the final appearance of an applique when using a Decorative Fill. Use a bright or high contrast thread if you want the fill to “pop” or stand out. To make the fill fade away into the fabric and just provide some subtle texture, use a thread that blends with or matches the applique fabric.

These steps can be repeated to create a layered decorative fill. By combining two Decorative Fills together, using either one or two thread colors, you can create custom fills. If you own Palette 11, you can also create your own custom Decorative Fills to use here as well. Baby Lock Design Suites can also be purchased and used here.

PUTTING IT ALL TOGETHER

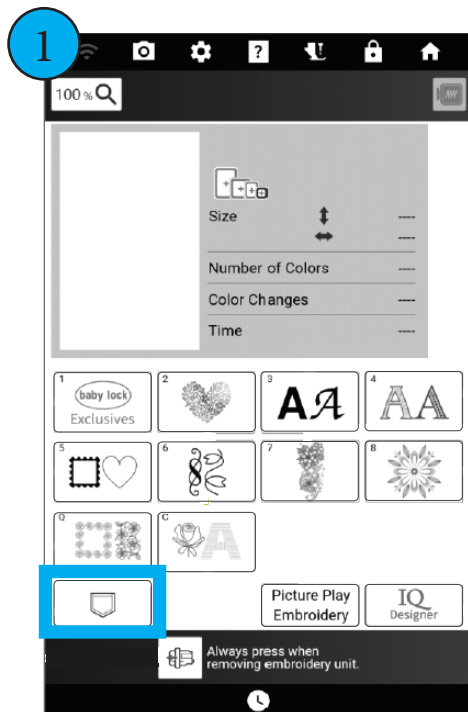
All parts of the applique have now been created and are waiting in the memory to be put together. The number of steps you have created and saved will depend on choices you made throughout this tutorial, but the general step order for the applique design is as follows:

- Placement Stitch - Single Running Stitch
- Tack-Down Stitch - Either a Running Stitch OR a Decorative Fill
- Finishing Stitch - Zig Zag/Satin Stitch AND (if created) Accent Stitch
- Decorative elements from the scanned artwork.

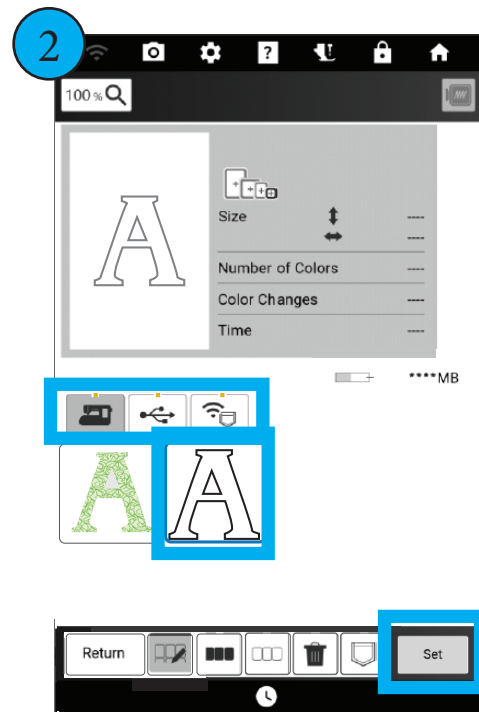
Since each part of the design was created and saved individually, they will all be pulled into embroidery as independent designs. This will allow the Re-sequencing Tool to be used if necessary.



Select Embroidery from the Home Screen.

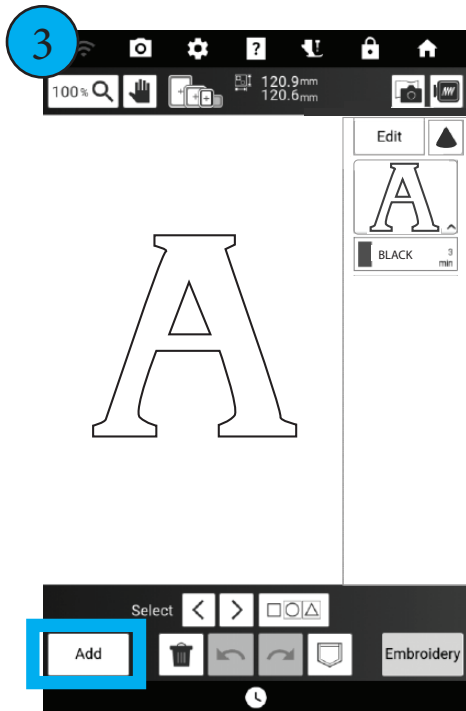


From the Pattern Selection Screen, select Recall from Memory.

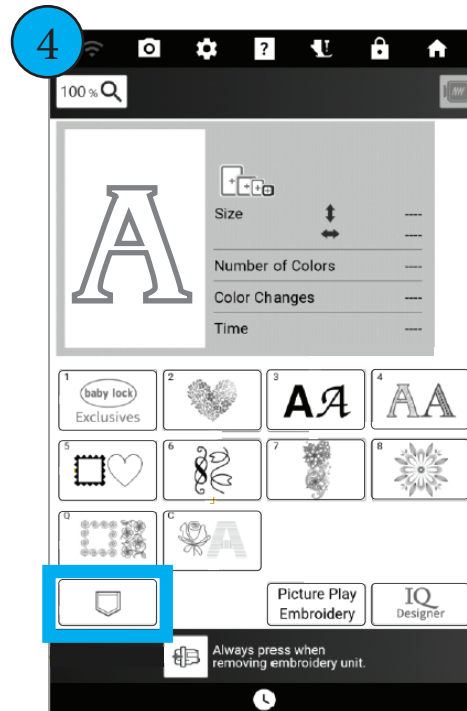


Select the location used to store the various parts of the design. Select the Placement Stitch design. Keep in mind you may have to scroll to find the correct design. Select Set.

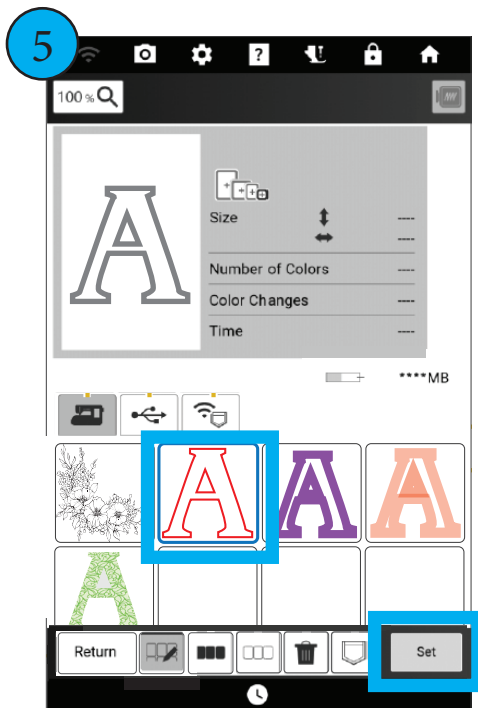
BABY LOCK RADIANCE 101 - BASIC IQ DESIGNER



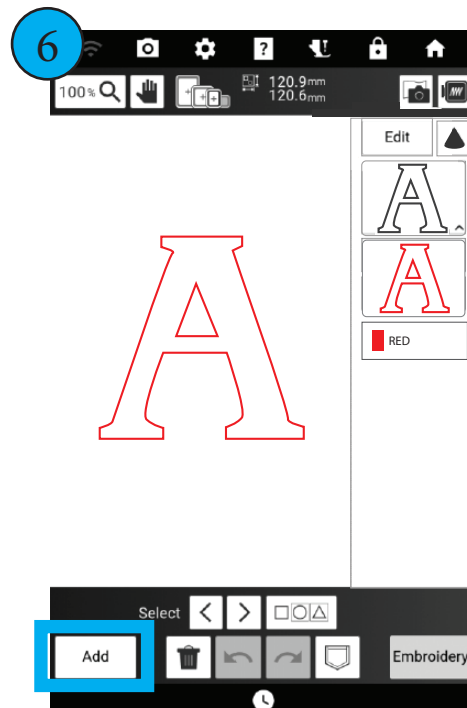
The design is added to the workspace. Select Add.



Select Recall from Memory.

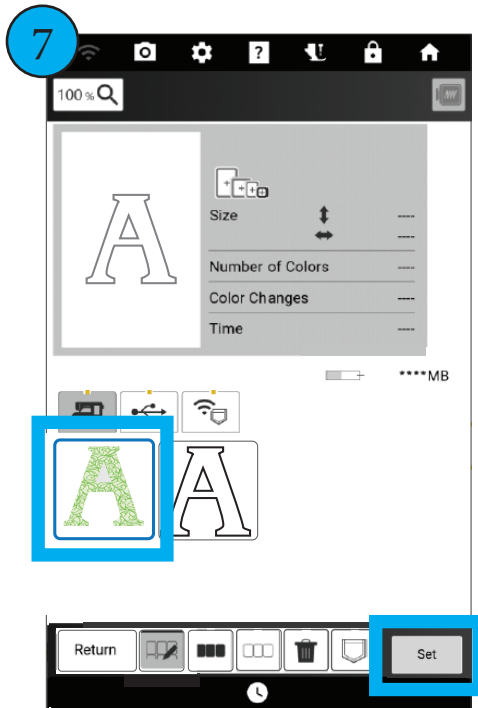


Locate and select the Tack-Down Stitch. Remember this can be a Running Stitch or a Fill. Select Set.

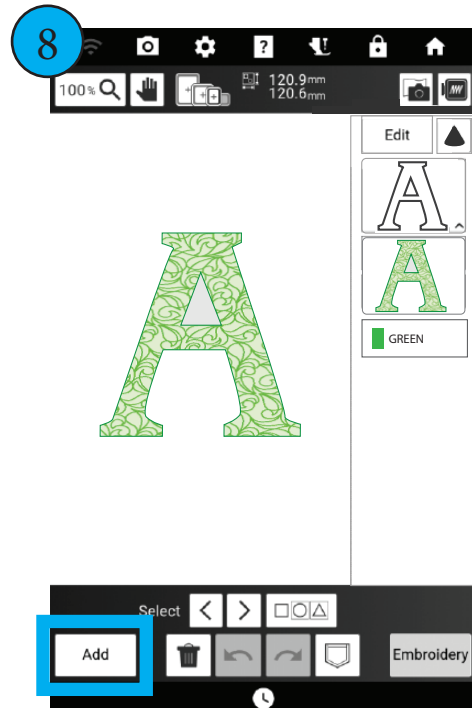


The design will be added to the workspace. You now have two designs on the screen. Select Add.

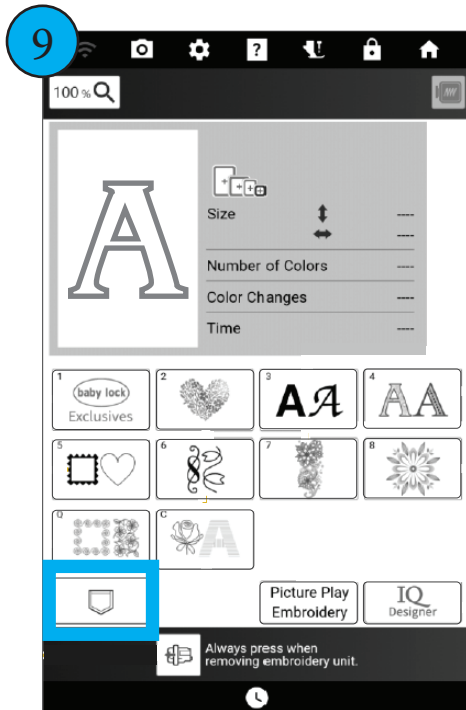
BABY LOCK RADIANCE 101 - BASIC IQ DESIGNER



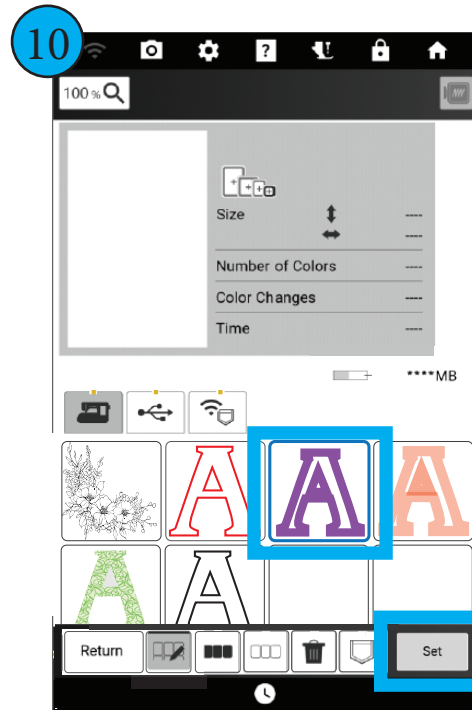
ALTERNATE TACK-DOWN
If using the Decorative Fill, locate and select it. Select Set.



The Decorative Fill Tack-Down is added to the workspace. Select Add.

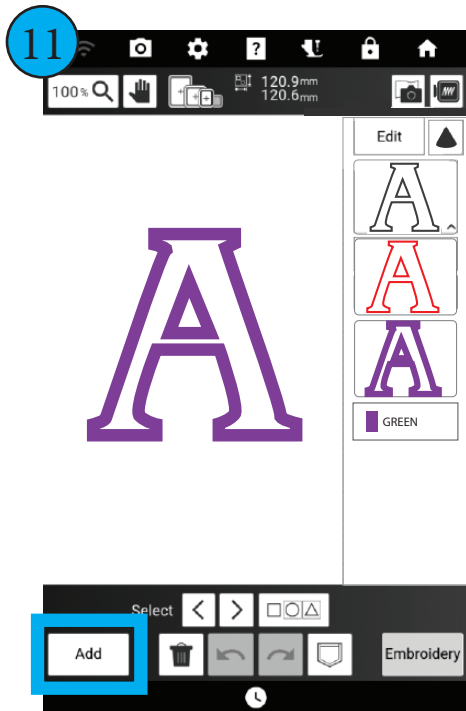


Select Recall from Memory.



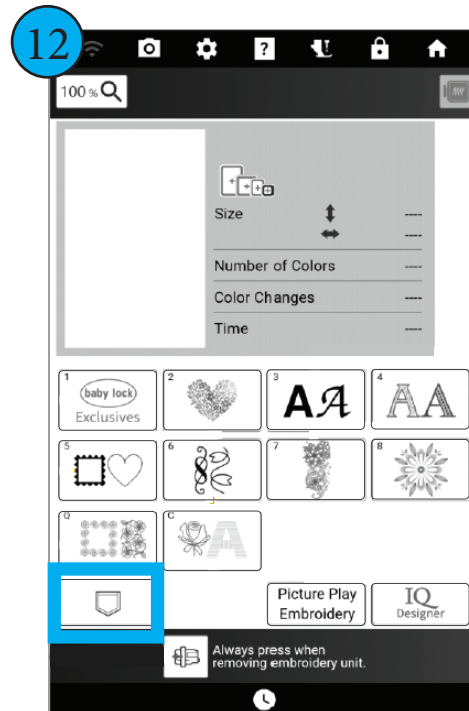
Locate and Select the Zig Zag stitch. Select Set.

BABY LOCK RADIANCE 101 - BASIC IQ DESIGNER

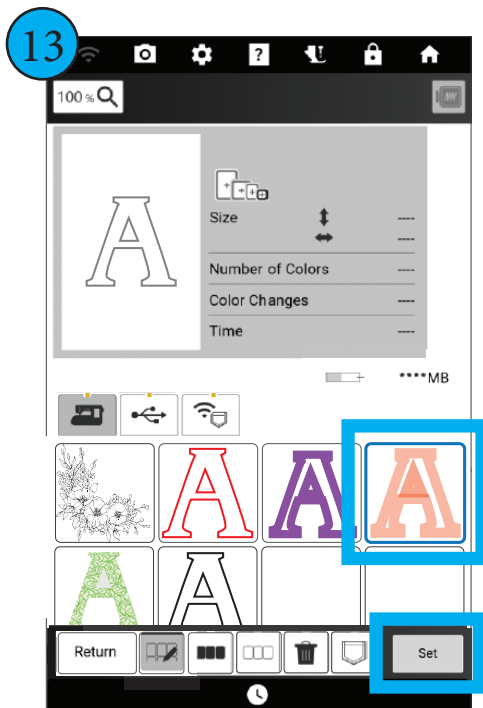


The Zig Zag design has been added to the workspace. Select Add.

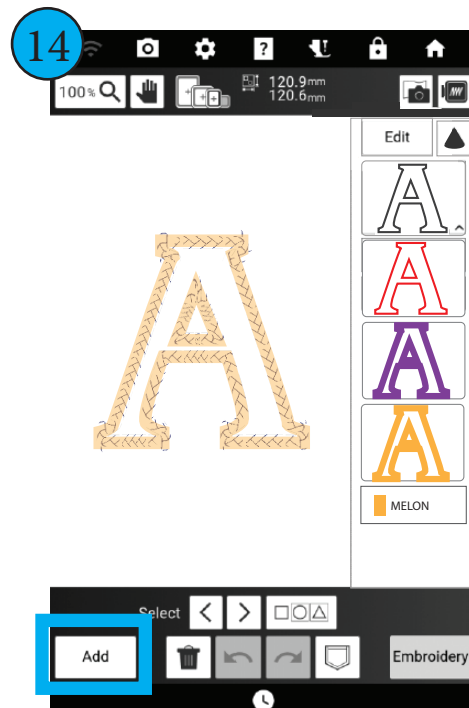
If the Decorative Motif was added, follow the next two steps. If not, skip the next two steps.



Select Recall from Memory.

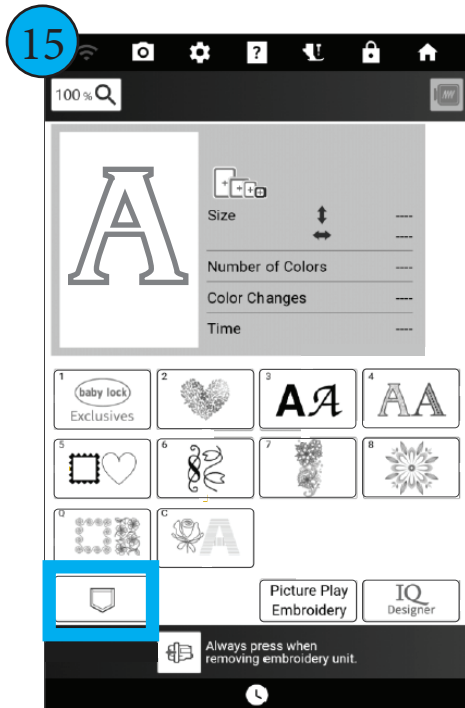


Locate and Select the Decorative Motif Stitch. Select Set.

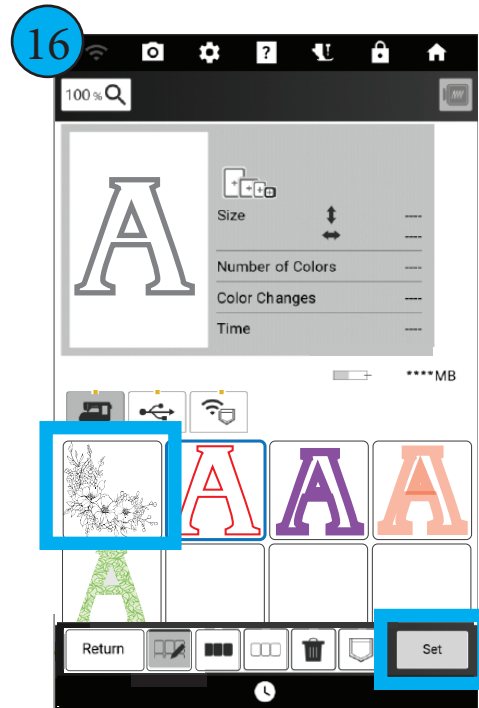


The Decorative Stitch Design has been added to the workspace. Select Add.

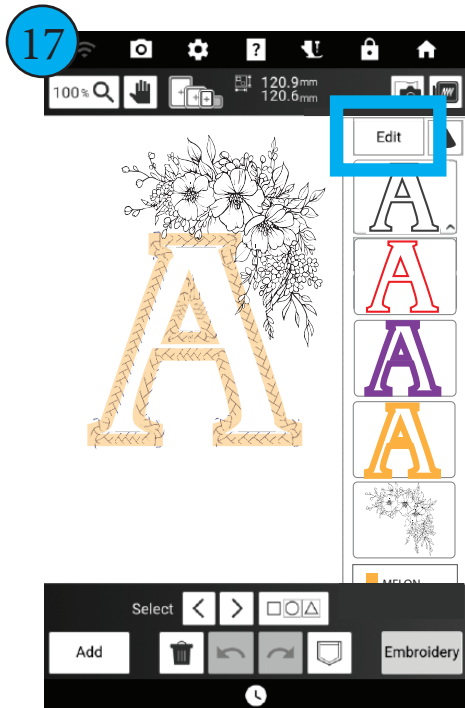
BABY LOCK RADIANCE 101 - BASIC IQ DESIGNER



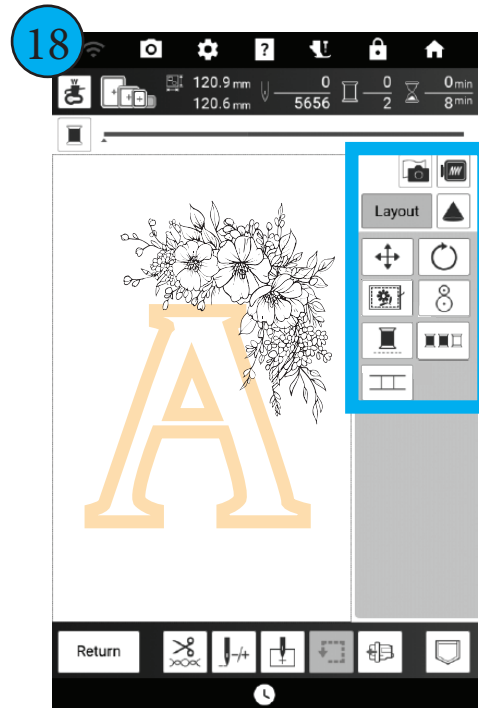
Select Recall from Memory.



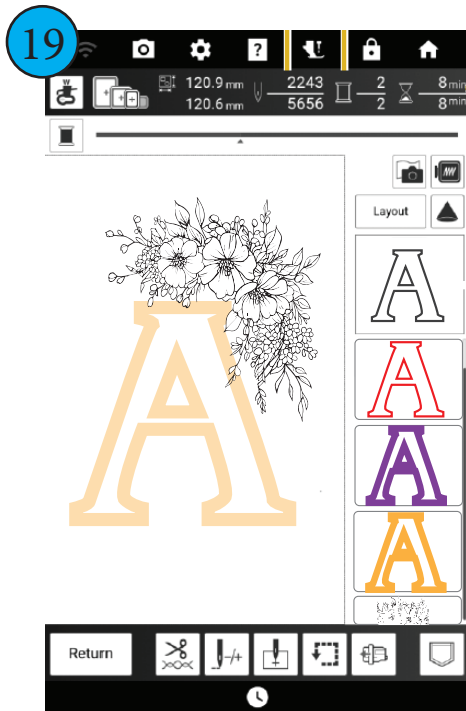
Find and Select the Floral Accent Design.
Select Set.



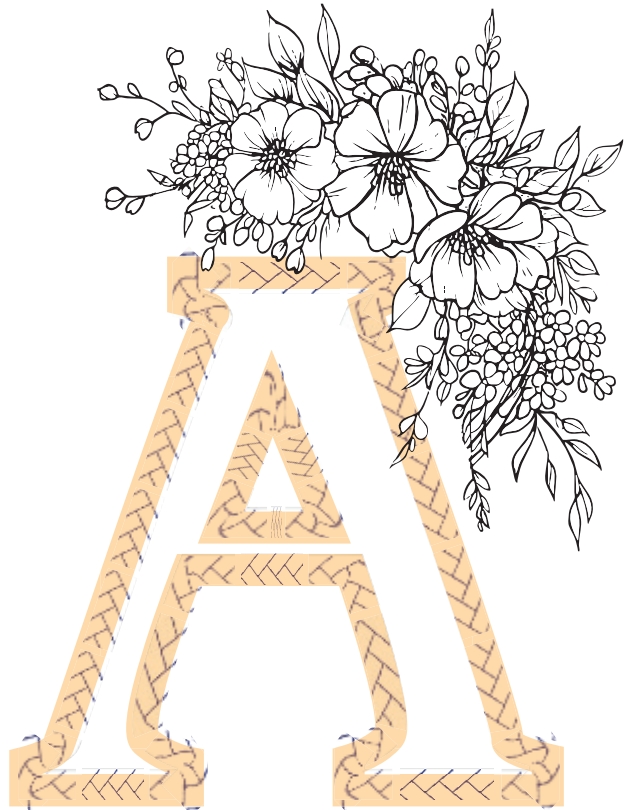
Using the Edit Features, make any adjustments desired. In the example, the Floral Accent has been rotated and moved.
Select Embroidery.



On the Embroidery Settings/Layout screen, everything is grouped. Select Layout and Move to recenter the full design



The design is ready to stitch.



The build of the design is complete. Make sure to add the final design to Memory for future use. If you are ready to stitch, select the appropriate frame and hoop a piece of stabilizer and the background fabric. Load the frame onto the machine. Thread the machine in the appropriate color. Lower the presser foot and press the start icon to begin stitching. Once the Placement Stitch is complete, place the applique fabric down so it fully covers the Placement Stitch. Run the Tack-Down Stitch. Remove the frame from the machine and carefully trim all fabric that is outside the Tack-Down . Return the frame to the machine and run the Zig Zag Stitch and Decorative Motif (if used). The final step will be stitching the Floral Accent Design. The design is complete and ready to be used in whatever manner you choose.



Images from Left to Right - Using the Projector to Place Design, Placement Stitch, Tack-Down Stitch, Tack-Down Stitch with Trimmed Fabric, Finishing Stitches, Finished Design.

