

# Image to Embroidery in IQ Designer June 8, 2022

#### **Supplies**

- o Image for Transfer to Machine (see notes below)
- o USB drive, IQ Positioning App or Scanning Frame for Transferring Design to Machine
- o Embroidery Supplies shown in video: Floriani Color Keep and Quilter's Select 80 Weight thread

#### Instructions

#### Select a Copyright Free Non-Licensed Image

Look for a cartoon-like image for creating an embroidery in IQ Designer using the Illustration Design wizard. The image could be from the internet, a coloring book or an image that you draw yourself on paper or with computer aided design programs. When searching for an image be aware of copyright infringement. Usually any artwork that is available for your use will be clearly labeled as copyright free. Copyright free images are for personal use only unless otherwise specifically stated and any embroidery design or item with the embroidery design from these images should not be sold. Licensed designs such as artwork from movies, artist renderings or any other media is the property of the holder of the license. Special permission and (usually) a fee is required to use these designs for personal or commercial use.

Simple images render the best in IQ Designer. Two wizards are available in IQ Designer to convert images into artwork. Images with colors and simple shading will work best in the "Illustration Design" wizard, but can also be transformed by using the "Line Design" wizard or by tracing the image using the tools in IQ Designer. Detailed photographs are best converted into embroidery with the use of software. See the video and handout for "Photostitch in Palette 11" for information on converting a photo into embroidery. The same criteria applies to photograph copyright and licensing of photographs as it does for illustrations.

### Select a Clean Image



After finding an image, look carefully to check that the image is clearly drawn, without fading or blurriness and minimal shading. Look at the flag image included and note the following:

- o Any unwanted lines and colors in the artwork can be edited after importing into the machine, but this is time consuming and can be frustrating. Images with many fine details will not produce good embroidery and may not render well when translated into thread. In the flag image, some grey color is included in the stripes and not just on the pole.
- o Remember that thread has a thickness and tiny areas will stitch up bulky. The stars in the image may not look crisp in the final embroidery especially when the image is reduced in size.
- o The background of an image can be automatically removed in the Illustration Design wizard or allowed to remain. If part of the image has the same color as the background the machine may see this as background and not render that part of the design. In the case of the flag image, the white stripes are contained with a grey line

- and they will probably be rendered even if the grey is not. The area to the left of the flag next to the flagpole is background, but the machine may see it as part of the design. If this area is filled, the stitching can easily be removed with the "no-sew" region feature on the workspace.
- o Unwanted colors can be eliminated by only allowing the machine to render a limited amount of colors in any given image. In the case of the flag, limiting to three colors, Red, White and Blue will eliminate the grey entirely from the design. The flagpole can be replaced by drawing or using a shape in the IQ Designer workspace to recreate the flagpole cleanly and the unwanted grey in the stripes of the flag is automatically cleaned up.
- o The image should be at least 5mm square or larger, but not very large. When using the IQ Positioning app this is not even a consideration. The app does all the work of checking the size. Double check when transferring an image with a USB. After selecting an image and if the image does not indicate the size, open it in the computer by double clicking on it. This will generally open any artwork program in the computer and allow you to see the design's size and probably the ability to zoom in to check details.
- o Digital images come with different file formats and can be a raster image or a vector image. Vector images are created with mathematical formulas in special computer drawing software. They are very clean images
  - drawing software. They are very clean images and are easily re-sized. Raster images are a series of small "dots" called pixels. They are not easily re-sized because the computer must "guess" where the parts and pieces of the new image go. When using the IQ positioning app,
  - special knowledge of the file format is generally not required. If on the mobile device you can "see" the image, then it will be transferred to the machine without issue and in an appropriate size to fit into the workspace. Any file with a .bmp or .jpeg format will work and simply check any others by seeing if the machine will read them. The flag image is a .png file and it is transferred easily into IQ Designer using the IQ Positioning app. Isn't technology wonderful?

SVG

CDR

PNG

GIF

o The faint lines in the flag pole will be converted to a separate color or into lines if choosing that option in the Illustration Design wizard. Check any image for these hidden areas that are not easily seen at first glance. Using a textile as an image also produces unwanted extra areas. Look for the video and handout "Refrigerator Art Frame" for notes on this technique.

#### Transfer the Image to IQ Designer

Depending on the model machine you own, there are different ways to transfer the image into IQ Designer. Check your owner's reference guide for specific ways that your machine can use to transfer the image. Most machines will accept the image from a USB drive inserted into the machine. Transfer the image to the USB drive with your computer and then insert the USB into the machine. The image format that your machine will accept also depends on your machine and the version of the machine. The version of the machine will change when an update has been applied to the machine. Check for your machine on the company website for your machine and check for any updates. The website will have specific instructions for updating the machine. Follow them specifically. If you are unsure, call your retailer for assistance. Your machine will display it's current version in the settings pages.

Some machines can also use a scanning frame to import an image. The scanning frame will be included with the machine if this feature is available. The scanning frame inserts like a hoop, but it has a solid surface with magnets to hold the image printed on paper (or any other media that is flat) onto the frame during scanning. The frame has black and white areas that should not be covered during scanning.

Some machines, like the Baby Lock Altair use the IQ Positioning app on a smart device with a camera to import an image. The app can use either an image stored in the device or take a picture of the image.

o Select "IQ Designer/Photo frame for creating design" to take a photo of an image. To take a picture of an image, the image needs to be within a specially marked hoop of the machine. Each hoop that comes with the machine has these special markings. The app will detect the white and black areas on the hoop in relationship to the image. Just as with scanning, the white and black areas should not be





- covered while taking the picture of the image. The app will direct when it has captured the image and guide you with prompts to complete the image transfer. The machine and the smart device with the app need to be connected and active on the same network. (In other words, make sure the machine is turned on.)
- o Select "IQ Designer/Select image for creating design" to use an image saved on the device. This is the option for using an image that has be emailed and saved, saved from the internet or texted and saved into the smart device.

## Transform the Image into Artwork — Step One Frame the Image and Select the Colors

On the IQ Designer workspace, select Illustration Design (this may be worded differently on your machine). The screen will open with a selection of icons to direct the machine where to look for the image. On the video, we sent the image via the IQ Positioning app so we will select the wireless symbol. Select the image from the list. The latest image will be at the top of the list. Select "Set" to send the image to the next screen. This screen will look different than the import screen when using the Line Image wizard.



Use the cropping arrows to remove any parts of the image not needed for the embroidery. The image can be cropped at any time while on this screen. Make some decisions to tell the machine how to create the artwork to transform into embroidery:

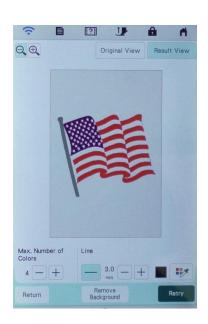
- o Number of colors tells the machine how many of the colors in the design to convert into embroidery. In the example of the flag image select four colors. The machine will look for the four most dominant colors, in this case Red, White, Blue and Grey. Use this feature to eliminate any unwanted colors or colors that may not transfer will into embroidery. In the optical illusion image of the hole, selecting only two colors will eliminate the

  - grey shading in the illustration and result in a crisp pattern. It is easy to change the number of colors to see the effect in the design.
- o Lines tells the machine if the areas of the image need to be bordered by a line. Use caution when selecting this feature because ALL the areas of the design will be encircled with a line. This feature is undesirable for very small areas or with areas that create a shading effect. The line used will default into a thick-ish zig zag line. This can easily be changed in the workspace after the image has been transformed into artwork. The icon with the color chip and the eyedropper is for selecting the color of the outlines generated. After selecting the line icon the size of the zig zag and the color of the outline can be selected. Touch the colors of the image and can be selected by moving the eyedropper with the arrow keys. Lines can also be added after

- the image has been transformed into artwork on the IQ Designer workspace by using the "Line Design" wizard.
- o Remove Background tells the machine to remove the areas around the image that it thinks are the background. Some background areas on the interior of an image may not be removed in the conversion to artwork, but can be easily removed on the workspace. "Remove Background" is automatically selected by default. When the "Remove Background" icon is de-selected, the area around the image, but within the framing box will be converted into an area filled with stitching.
- o Size of the artwork will be displayed on the screen. This can be changed after the image has been converted into artwork at the workspace.

### Transform the Image into Artwork — Step Two Modify Selections

After making initial selections touch "OK" to check the results. You will see a progress bar while the image is transformed into artwork. Be patient, the machine is doing a lot of work and this will take a little bit. The results of the selections will then be shown along with two new icons "Original View" and "Result View". The original view will display the image before transformation. Make any changes to the selections and touch "Retry" to see the modifications. Get the artwork as close as you can. On the workspace, many changes can be easily made to the artwork. After leaving this screen, all the changes to the artwork will be made in the IQ Designer workspace. To re-visit this area, close IQ Designer and then re-open the "Illustration Design" icon.



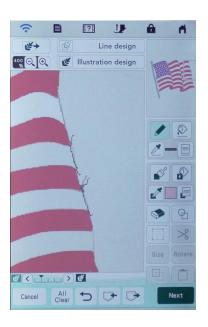
When the artwork looks good, touch "Set" to send the artwork to the workspace.

On the workspace the image has now been transformed into artwork the machine will use to create a design. No stitches will be applied until the artwork goes through the next screen where stitch properties are applied and then on past "Preview" into the embroidery section of the machine. Save the artwork from the workspace or the stitch properties screen. Artwork can always be recalled and modified in IQ Designer. From the stitch properties screen, "Preview" shows the stitches applied to the artwork. Saving from this screen will be in the machine's memory as an embroidery design. "Return" to make any changes to the Stitch Properties or to the artwork on the workspace. Check the design carefully before

touching "Set" especially if the artwork has not been saved. Selecting "Set" exits IQ Designer and sends the embroidery design to the embroidery area of the machine. Any embroidery design *cannot be modified* with IQ Designer, but if you saved the artwork that can be recalled and easily transformed.

#### Transform the Image into Artwork – Step Three Use All the Tools on the Workspace

Now that the artwork is on the workspace all of the tools can be used to further hone the image into the desired embroidery. The wizard made selections to speed up the process of transforming the image into the artwork IQ Designer uses to create embroidery. Check other handouts in this series to see the many tools and choices available on the IQ Designer workspace. Change the size, change the fill to a stipple or decorative stitch, change any lines to a different style or remove any unwanted areas with the eraser or changing them to "No Sew". To work on an area that may be difficult to see against the background, such as the white stripes on the flag temporarily change the color of the artwork. If the line option was not selected using the



"Illustration Design" wizard, add lines by selecting the "Line Design" wizard and using the same image.

The wizard can miss some areas, such as the white stripes in the flag that the wizard interpreted as background. These areas need to be contained to hold the fill stitches. Only



areas that are entirely and completely bound by a line can be filled with stitching. In the case of the flag, draw any boundary lines needed with a no sew line from the line properties box. Refer to the photo to see these lines drawn in. These lines need not be pretty so there is no need to be careful when drawing them. To check that an area has been filled, select a fill pattern with a different color from the region properties box. Using the paint bucket, touch inside the area. If the fill pattern spills out onto the background, select Undo and find the hole in the line. Use the magnification feature if necessary to find even the tiniest hole.