

Melco Laser Registration Instructions

Scaling Designs with Laser Registration

Designs with a vector line with specific properties added in DesignShop can be scaled and rotated using the procedure for Laser Design Registration. This can be a useful tool when creating mixed-media designs in which specific reference points would be required. It can also be used when adjusting designs to fit within panels on a garment such as a sports uniform.

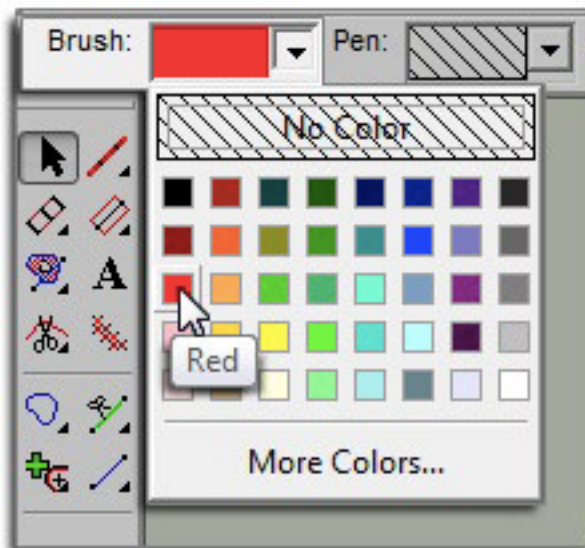
Setting Up the Design in DesignShop

Vector Line Properties

For a design to be scalable in Melco OS, it must contain a vector line element with the brush color of “Red” and a pen color can be any color. It is suggested to set the pen as red as well



If you're not sure which color swatch is “Red”, hover over the swatches in the drop-down palette to see the name of the colors. The vector line must use these exact properties to work for the scaling feature.



Vector Line Placement

Find two points in your design that you want to use as reference points. These points can be inside or outside of the stitching area, but they need to be within the hoop limits of the hoop you are planning on using to embroidery the design. The line between them can also be at any angle. You may want to consider the application for which you are planning on using the design. If you are going to be lining up to a horizontal line in a garment, you may want to place your reference points on a horizontal line. If you are lining up embroidery to a screenprint or digital print on a garment, you may want to have the image in the behind your embroidery in DesignShop. This way, you can find distinctive features in the print to line up with.

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In the example below, print will be combined with embroidery to create a mixed-media design. Using points that are farther apart will help with accuracy when scaling or rotating on the machine. Points that are closer together are more affected by slight differences in how the operator references these points on the machine. Using the vector line tool, create a vector line between your two chosen reference points. Once an embroidery file has the vector line with Red for the brush color, the file can be loaded to the machine.



Below the embroidery elements of the design were hidden to make it easier to find reference points on the print. The vector line was input with the point on the left first, then the point on the right. Notice that the points fall on the two white marks of the print. This will make them easier to line up to with the final print on the embroidery machine.

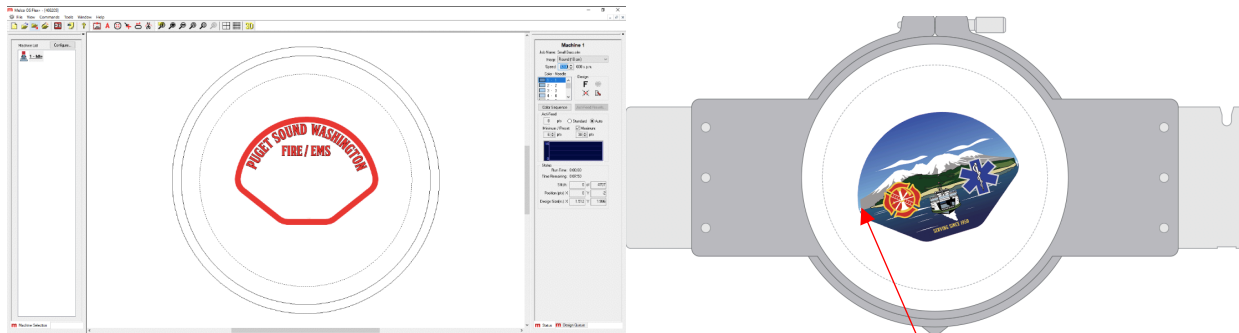


Using Laser Registration to scale and rotate the design in Melco OS

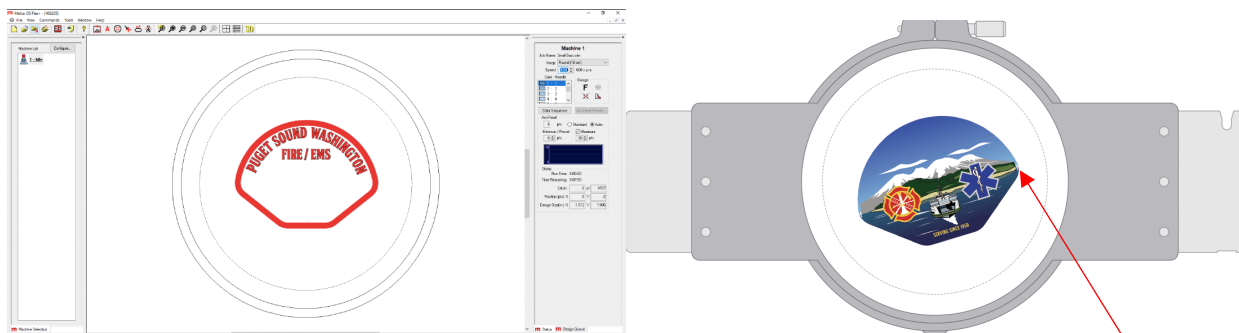
Now that the design is set up with the vector line and loaded to your machine, you can use the laser registration feature to rotate and scale the design.

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In the example below, the print design was not hooped as straight and level as it could have been. Laser Registration can be used to compensate for this.



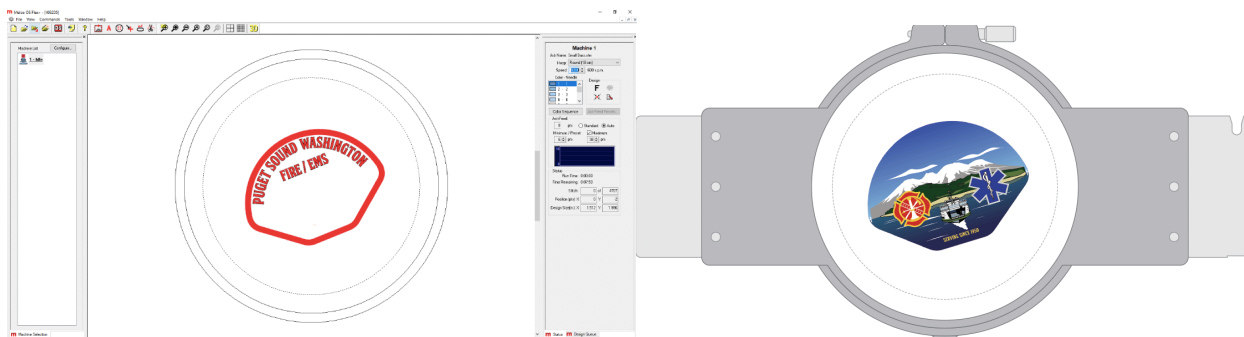
Using the hoop and the arrow keys on the machine keypad, move the hoop on the machine so that the laser light is on the first reference point on the left side of the print. Once the laser is lined up to the first reference point, press the laser and left keys on the machine keypad at the same time. The machine will give an audible signal of two short beeps as well as two blinks from the LED on the keypad indicating that the first point has been entered.



Now that the first point has been entered, use the hoop and the arrow keys on the machine keypad to move the hoop on the machine so that the laser light is on the second reference point on the right side of the design. Once the laser is lined up to the second reference point, press the laser and left keys on the machine keypad at the same time. The machine will give an audible signal of two short beeps as well as two blinks from the LED on the keypad indicating that the first point has been entered.

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Lastly, press the laser and center (bullseye) keys simultaneously on the machine keypad. The machine will give the same two short beeps/ two blinks from the LED on the keypad again, and Melco OS will process the information. It will reload, scale, rotate, and reposition the design in the hoop to match the reference points entered.



The design can now be traced and sewn.

Here is the link to download the Epson DTG print, Roland print/cut, and Melco embroidery files for this example: <https://spaces.hightail.com/receive/SECMK11QC6>