




The Deer's  Embroidery Legacy
Digitizer's 101
Cheat Sheet

1. What is Digitizing
2. The 3 Main Stitch Types
3. Density
4. Understanding Underlay
5. Understanding Distortion
6. Proper Registration
7. Pathing / Mapping
8. Color Changes and Trims
9. What is Fabric Assist

The Building Blocks of Quality Embroidery

1. What is Embroidery Digitizing:

The process of using your software and your software tools to create an embroidery design that runs flawlessly on your machine. The key is to create a design without unnecessary trims or jumps ensuring the machine runs smoothly.

2. The Three Main Stitch Types: Running, Satin, Fill

Can be used for designs with fine detail or realistic features

Running Stitch:

Is the foundation stitch and can also give you the most creativity by controlling the stitch length

Minimum stitch length - 0.5 mm

- if you go below this the machine will think it is stitching in the same place creating stitch intensive designs and thread breaks

0.5 mm

1 mm

1.5 mm

Safe zone - 1 mm - promotes smooth running designs

Maximum zone - 1.5 mm - there are two maximums depending on whether the item is to be worn or not
For wearable items - 5 mm to 7 mm. Any longer and the stitches will loop and snag
Non-wearable items - 7 mm to 12.1 mm If longer the machine will auto trim the stitches

Satin Stitch:

Follow the same rules as the running stitch, don't let your stitches become too far apart

Depending on the fabric and whether it's a wearable or non-wearable item.

1 mm space between stitches will be smooth and sit on top of the fabric but fabrics with a high pile like terry cloth or sherpa fleece will need more space.



1.5 mm is the safe zone

1.5 mm up to 5.7 mm for wearable
7 mm to 12.1 mm for non-wearable

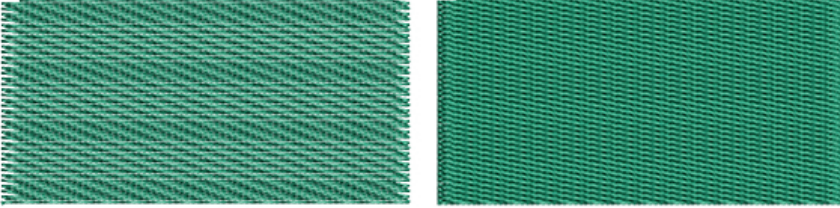


You can control the direction and spacing of the stitch, this is the density. Which is meant to be changed depending on the width of the stitch or the type of fabric you are putting it on.

Fill Stitch:

Meant to cover large areas. Minimum length - 4 mm

Keep stitches longer as too many short stitches will ripple or waffle after laundering



Control the random effect to create a smooth, texture or pattern fill

3. Density - Space Between Each Stitch

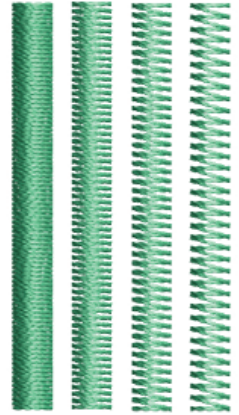
The default is 0.4 mm which is slightly larger than the width of a thread so it looks like you have full coverage on a garment.

You may need more or less density depending on the fabric type

Vinyl or leather requires less density - too much will puncture holes in the fabric

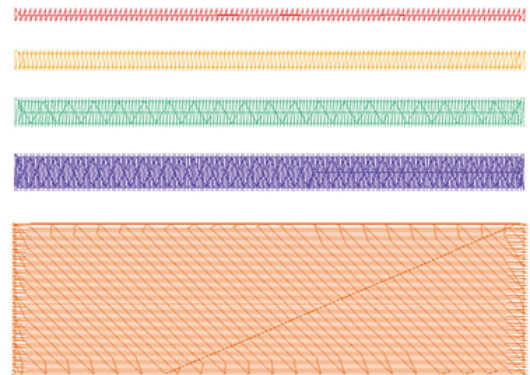
Fabrics with high pile like, sherpa fleece and terry, require more density

Density is meant to be changed!



4. Understanding Underlay

You don't see it but it's the most important part of the design. It's the foundation to lay everything that is on top. There are many types of underlay including combinations of underlay depending on the stitches it's supporting. Underlay acts as a break wall keeping the stitches looking clean and helps with distortion.

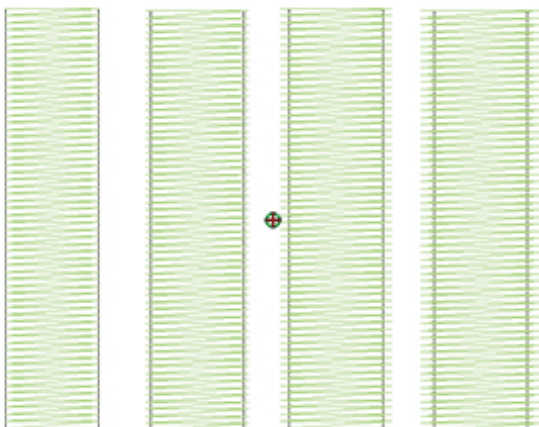


5. Understanding Distortion

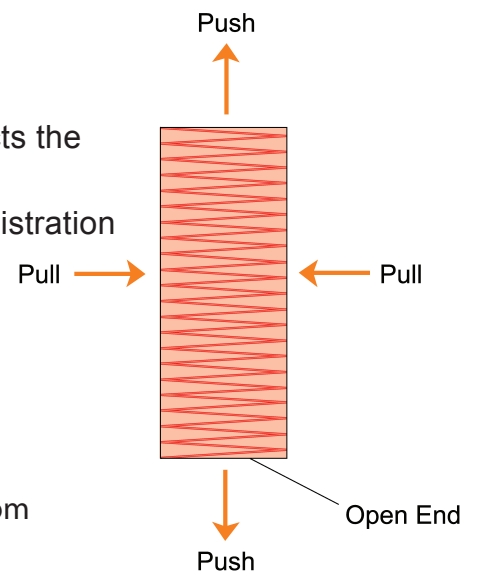
Proper tension creates flat smooth stitches, too much tension and your design will look distorted.

Two types - pull compensation and push compensation. Adjust pull compensation in your machine settings depending on the fabric type. The top thread and the bobbin both create tension.

Pull compensation



Push compensation effects the open ends of the design.
Distortion is improper registration



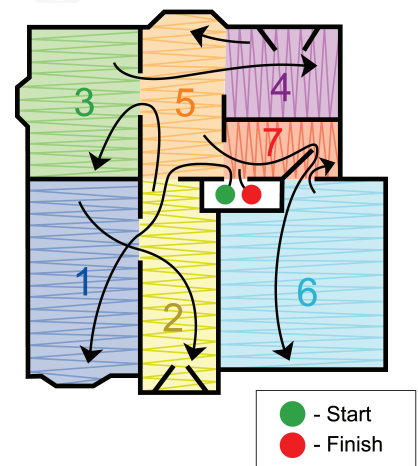
6. Proper Registration

Proper registration is achieved when the design is mapped / pathed out correctly from start to finish.



7. Pathing / Mapping

A design needs to be logically thought out so the design is not jumping from place to place. Look at the design and decide on the best place to start and stop to get to the next object.



8. Color Changes and Trims

Correctly used this promotes good registration.

Sometimes an extra color change is necessary to finish areas as you move forward (Proper Pathing).

Unnecessary trims results in lost production time.

Each time there is a trim the machine has to slow down, stop, trim, cuts, moves over, ties in, then speeds up, that's a big waste of time, when unnecessary trims can be avoided.

9. Fabric Assist

A Wilcom Hatch built-in software tool for the .EMB format that changes all the properties to run better on certain fabrics with just one click.

10. Digitizer's Dream Course

Want more quality education to take your embroidery to the next level? Learn how to create & edit your own custom embroidery designs quickly & easily with our fan favorite 'Digitizer's Dream Course' today! Find more info at www.DigitizingMadeEasy.com

Continue Your Embroidery Digitizing Journey

Do You Own Embroidery Software & Like It?

YES | **NO**

Enroll in Our Fan-Favorite Digitizer's Dream Course



Want to further personalize your next embroidery project? **Imagine being able to create your friends, customers, & family personalized embroidery designs for ANY occasion.**

We've taught thousands of embroiderers how to digitize their own custom designs and have guaranteed proven results! If you'd like to learn this beautiful art and want results fast, our fan-favorite Digitizer's Dream Course is perfect for you.

[Learn More](#)

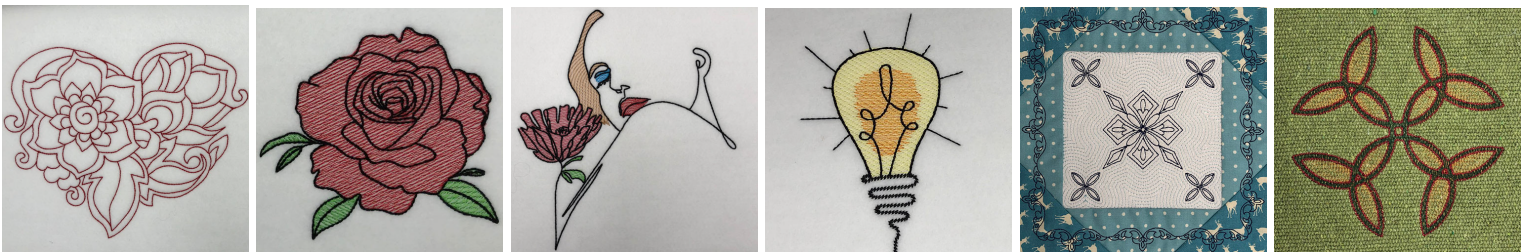
Download a Free Hatch Software Trial



Ready to go wherever your imagination takes you? **Hatch is an easy-to-use machine embroidery & digitizing software program that'll quickly transform your creative ideas into reality with professional results.** With this trial, you'll get full access to ALL of Hatch's top features so you can "Use it like you own it". Be sure to **download your free trial through Embroidery Legacy for exclusive bonuses.**

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Exclusive Bonus: Embroidery Digitizing Made Easy Challenge



For downloading your Hatch trial through Embroidery Legacy, you'll receive access to our Embroidery Digitizing Made Easy Challenge for free (\$99.95 value!)

This 30-day Challenge will take you by the hand and show you how easy it can be to create and edit your own designs using the 30-day free trial of Hatch embroidery software. In this free Challenge, you'll get 7 bite-sized video lessons with John Deer and create 6 designs yourself from start to finish!

[Learn More](#)

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www.DigitizingMadeEasy.com