

# Computerized Sewing Machines

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## SEW-lutions Guidelines

Your Guide  
to  
Successful  
Sewing

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If the very word "computer" sends chills up your spine, take a deep breath and look at computerized machines and the great features they have to help you with your sewing and embroidery.

### What is a computerized machine?

Many of today's machines come with on-board computers that allow for a large number of helpful features. Much like your desktop or laptop, they operate with the information you enter, and offer many more features and precision not available in mechanical machines. Not all computerized machines are top-of-the-line models, so shop around for one that meets your needs and your budget. Listed below are some features to look for.

### Display monitor

Like your computer monitor, the machine offers the same look, only on a slightly smaller scale. On some models, you can even adjust the image size for better viewing, and perhaps the screen brightness and angle. Various things are displayed on the LCD screen, ranging from full-size decorative and utility stitches to colorful embroidery motifs and specific stitch settings.

The monitor may operate as a touch screen, allowing you to make adjustments to the settings using your fingers or a stylus. On interactive screens, you can often move stitches around to other locations by dragging them across the screen and releasing, i.e. drag and drop.

There may be multiple menus accessible on your touch screen, so you can find the stitch function you need, i.e. appliqué or scallop, then search for just the right stitch. You may even be able to retrieve a machine tutorial on your screen, making it easy to check out settings you're not sure of, or answer operational questions. Some displays even offer a screen saver.



Photo courtesy of Husqvarna Viking;  
Designer Diamond

### Memory

The computer memory allows you to save your favorite stitches for easy recall, and it allows you to save customized stitches. For example, you can create a combination of built-in stitches that you like, save them to the memory and stitch them out anytime you want in the exact way they were saved. Until you delete them, they'll always be there for you to retrieve.

Some machines include a clock so you can track the number of hours you've been sewing, or how long a specific project takes to complete.

### Stitch width

Most computerized machines offer wider stitches than non-computerized versions. In addition, they may allow you to have multi-motion stitches, meaning that the machine actually sews not only forward, but also sideways and backward to help sew wide, intricate designs.

### Start pattern/Single pattern

If you're trying to line up multiple rows of a design, computerized machines offer the option to begin exactly at the start of a decorative stitch or motif for precise placement.

Should you only want to stitch a single star or a single duck, there's a "single-motif" option. The machine will stitch one complete motif only and tie off the threads at the end to secure the stitching.

### Needle positioning/Needle Stop

Computerized machines allow you to adjust the needle position from center to the left or the right, usually in very tiny increments. This allows for ever-so-slight adjustments in seam allowance width or topstitching locations.

The computer also allows you to set whether or not the needle stops up or down (or neither) when you stop stitching. This feature is handy for pivoting at corners, adjusting the fabric location, or chain piecing.



Photos courtesy of Bernina America; Bernina 830

### Tension

Most computerized machines have automatic tension adjustment depending on the type of fabric and the thickness. On-board "advisors" display proper needle size, thread type and any special foot needed for the selected fabric/stitch, in addition to adjusting the tension, and perhaps the presser foot pressure.

### Updatibility/Internet Accessibility

Many computerized machines interface with your home computer and Internet to allow you to download new stitches or updated programs from the manufacturer; some connect directly through a USB port, others use a jump drive, CD or disk for this purpose. You can also download embroidery designs in the proper format for the machine to read. Some sewing machines have their own mouse, just like your desktop so you can navigate the screen. It's a good idea to keep your machine near your computer or Internet connection to maximize these features.

### Stitch regulator

If you're a free-motion quilter, some machines now offer a computer controlled stitch regulator so all of your

stitches will be the same size as you move the fabric around the machine bed, no matter what the speed. No more tiny and large stitches within the same quilting pattern.

### Mirror imaging

Want your ducks to face the opposite direction? Use the mirror imaging function on the machine. Most computerized machines allow you to mirror image a design or stitch both side to side, and up and down. This is helpful in building large design areas, making repeated motifs and when placement and direction of the fabric bulk is an issue.

### Sensors

If you're running out of bobbin thread or top thread, the machine will send you a warning message visually on the touch screen, and/or an audible message to remind you to remedy the situation before you run out.

The machine may also warn you if you have an incompatibility between the presser foot and the stitch you selected. For example, you can't use a straight stitch foot with a zigzag stitch or you'll break the needle. Or, it may let you know that the embroidery design you've selected will not fit in the hoop you have installed on the machine.

### Embroidery

Computerized embroidery functions are amazing! Depending on the machine, you may be able to do all or part of the following on the display screen: zoom in for a closer look, see it sewn out in a 3-D view; edit the design by changing colors, size or removing some of the stitches; group designs together, duplicate designs, see how much time it takes to embroider a design, see how many stitches you've sewn and how many are left, and many other embroidery options.

### Service

Because of the complexity of a computerized sewing machine, it's important to have it serviced by a certified technician for the brand. Service people go through extensive training just on the computer portions of the machine to keep it running well for your sewing pleasure. Double check credentials before you leave it with a technician. 🐼