

## **Release Notes**

V8.0 - May 2016

These Release Notes contain descriptions of all features and improvements in the BERNINA<sup>®</sup> Embroidery Software product range new to this release. The BERNINA User Manual contains descriptions of all product features as of the last major release. Every effort has been made to ensure their accuracy.

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## BERNINA EMBROIDERY SOFTWARE 8 RELEASE NOTES

BERNINA Embroidery Software 8 builds on the previous release in evolutionary rather than revolutionary terms. The vision for this release is for the software to be inviting, creative, and easy ... both easy-to-use and easy-to-support.



BERNINA Embroidery Software 8 users are generally home craft embroiderers and sewing craft enthusiasts who already do machine embroidery or who are keen to learn it. You may be someone who has bought a new BERNINA embroidery machine or already own an embroidery machine for home hobby and craft purposes. BERNINA Embroidery Software 8 will appeal to...

- Complete novices, who know little or nothing about embroidery and want only the basics
- Those with some knowledge of embroidery and digitizing software and want to do more
- Home craft enthusiasts who don't currently do embroidery, but are interested
- Creative individuals with an extensive knowledge of embroidery and digitizing software.

Spend some time getting to know the creative possibilities of the latest release by reading through these notes. We recommend you look at the packaged designs to get a better idea of capabilities of the new features. You might even want to sew out some of these designs to get acquainted with the techniques involved. Then you'll be ready to make the most of your machine and software to realize your own design creations.

#### **BERNINA Embroidery Software 8 at a glance**

Below is a summary of the features included with BERNINA Embroidery Software 8. Refer to the body of the release notes for details.

#### **New features**

The main new features of BERNINA Embroidery Software 8 include:

Feature		Link
Design managemen	t	
Embroidery Library	nbroidery Library Replaces Design Portfolio. Integrated into main application. Quicker access to designs and better design management	
	Print a portfolio of designs for a design catalog	Print a portfolio of designs fo a design catalog
Automatic digitizing		
Color PhotoStitch	Automatically stitch color photographs with multiple thread colors	New Color PhotoStitch
Fancy stitching		
Elastic Fancy Fill	Fancy satin stitching	Fancy 'elastic' satin stitches
Alternate Patterns	Alternating two-motif fills	Alternating pattern fills
3D Globe Effect	3D globe effect motif fills	3D globe effects
Outline stitching		
Sculpture Outline	Create a tick-thin outline alternating single and triple stitches for a hand-stitched look.	Sculpture outline
Zigzag Outline	Create narrow, open borders with a 'zigzag' effect.	Zigzag outline
Raised embroidery		
Couching	New automatic couching. Create couching designs for the BERNINA Free Motion Couching Foot #43.	Couching
Automated layouts		
Work Area	Automatic layouts for defined work areas	Automatic layouts for work areas
Quilt Block	Automatic layouts for defined quilt blocks	Automatic layouts for quilt blocks
Quilting Background	Automated quilt background stitching	Automated quilt background stitching
Other		
Runtime	Bernina runtime calculation	BERNINA machine runtime

#### Improved features

The main improved features of BERNINA Embroidery Software 8 include:

Feature	Link
User-interface improvements	

Facture		Link
Feature		Link
Print Options	Improved print options dialog	Improved print options
Design viewing		
Travel	New Travel toolbar	New Travel toolbar
Design outlines		
Outlines and Offsets	Improved outlines and object offsets	New stitch effects with improved Outline Design
Stitch quality		
Knife	Manual cutting of objects for better stitch angles	Cutting objects manually
Automatic Corners	Improved appliqué and corner stitching	Improved appliqué and corner stitching
Hooping		
Show Hoop Template	Display Bernina hoop positioning templates	Bernina hoop positioning templates
	Manual positioning of designs in hoops	Manual positioning of designs in hoops
Basting Stitch Marker	Basting stitch reference markers	Reference markers & basting stitch markers
Multi-Hooping	Better multi-hooping UI integration	Better multi-hooping UI integration
Add Hoops Auto	Improved adding and positioning of hoops	Improved adding and positioning of hoops
Preview Hoopings	New hoopings preview	Bernina hoop positioning templates
Lettering		
Monogramming	Library of monogramming design templates	Improved monogramming
Lettering	More digitized fonts	New embroidery fonts
	Better font selection	Better font selection
	Improved stitching of TrueType fonts	
Cutwork		
CutWork	Create cutwork shapes without embroidery	Create cutwork shapes without embroidery
	Combine cutwork components in one hooping	Combine cutwork components in one hooping
	Cut slots in buttonholes	Cut slits in buttonholes
Automatic digitizing	l	
Auto Digitizer	Improved automatic digitizing with more control over sequence and details and fills, as well as color matching improvements.	Improved auto-digitizing
Other		

**Note** These Release Notes provide descriptions of new and improved features in BERNINA<sup>®</sup> Embroidery Software with links to relevant sections of the Reference Manual.

#### What's new in BERNINA Embroidery Software 8



Double-click to start BERNINA Embroidery Software 8.

To start, we look at the BERNINA Embroidery Software 8 user interface or 'GUI'. When you first run the software, you will see the workspace shown below.



The BERNINA Embroidery Software 8 interface has same style and layout as V7, including:

- Same style of button icons and toolbar organization
- Same toolbox menus on the left side
- Same command names and pulldown menus
- Same Object Properties dialog box.

#### However:

- There are new commands based on current command groupings
- Improved UI features on a case-by-case basis. See below.

#### User-interface improvements

BERNINA Embroidery Software 8 provides the following user-interface improvements.

#### User choice of large or small button icons

BERNINA Embroidery Software 8 allows you the choice of large or small button icons with or without text names.

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Choice of large or small button icons with or		Auto-save	esign every:	10.	.00 💽 m	inutes	
without text names		Toolbars					
		Show tool na	ames				
		Show large i	cons				
		Show digitizing po	sition	-			
		Relative					
		Absolute					
		Other					
		Apply closes	t join while di	igitizing			
		V Show measu	ire tooltip				
		Hide Object	Properties wh	hen Effi	ects dialog is (	displayed	
		🔽 Group design	ns on insert				

#### Application launcher moved to toolbox

For easier access to sub-applications, an **Applications** toolbox has been added.

	Applications
Portfolio XXXX Cross Stitch Quilter Ctrl+Q	XXX Cross Stitch
V7 Application Launcher	V8 Application Launcher

**Note** BERNINA Embroidery Software 8 includes a new Embroidery Library which replaces the Design Portfolio application. The library is integrated into main application. See New design management for details.

#### **Extended Open and Save dialogs**

BERNINA Embroidery Software 8 implements improved **Open Design** and **Save Design** dialogs.



Features include:

- Large, re-sizeable **Open Design** dialog with full folder browsing.
- Windows Explorer search capability within the dialog.
- More extensive design preview info panel like Windows Explorer.
- Design thumbnails and preview ranging from small to extra large.

#### Design tabs for multiple open designs

BERNINA Embroidery Software 8 makes it easy to see and switch between open designs with new design tabs. This also makes it easy to copy/paste between designs, including drag and drop operations. Optionally, you can tile multiple design tabs.



#### Improved design viewing

BERNINA Embroidery Software 8 provides an improved interface for viewing designs.

#### New Stitch Player replaces Slow Redraw

BERNINA Embroidery Software 8 provides an improved Stitch Player tool for handling stitchout simulations. See also Viewing stitch sequence in the Reference Manual.



Features include:

- Typical 'media player' buttons for play, pause, rewind operations
- Progress bar showing thread colors in sequence in proportion to number of stitches per color
- Progress bar marker which can be dragged forward or backward
- Auto scrolling at high zoom.

#### New Travel toolbar

BERNINA Embroidery Software 8 provides a new **Travel** toolbar with buttons to travel through the stitch sequence by object and color block. See also Viewing stitch sequence in the Reference Manual.

Travel	
14 1	🕨 🌄 🏪 🖑
	Travel Forward
	Click Forward to travel forwards through a design.
	Press <f1> for more help</f1>

Use in combination with existing keyboard arrow keys to travel by stitches. Commands include:

- Travel Forward, Travel Backward
- Jump by Object
- Jump by Color
- Jump to Start / End



Note Does not work in Artistic View.

#### Improved interface for color handling

BERNINA Embroidery Software 8 provides an improved interface for color management.

#### New 'My Threads' docker

A new 'My Threads' docker makes it easy to select and assign thread colors. See also Assigning thread colors in the Reference Manual.



Features include:

- Easily choose which thread charts to display.
- Sort thread colors in the docker by numerical code or by color shade dynamically.
- Locate desired colors in the chart using a color scroll bar.
- Key in color code to locate a specific color.
- Double-click to assign selected thread color to current design color in palette.

#### Improved color palette

While preserving the main characteristics of V7, the **Color Palette** in BERNINA Embroidery Software 8 has been improved. See also Changing thread colors in the Reference Manual.



Features include:

- Color palette positions numbered for easier reference
- Used colors are tagged with a blue marker
- Hide or show unused colors in the palette
- Automatically remove unused colors from palette.

However, from V7 the Color Palette preserves...

Horizontal or vertical layout

- Same default colors in palette (56 + 3 appliqué)
- Cycle Colors and Color Wheel functions.

#### Improved design background

The design background in BERNINA Embroidery Software 8 provides more pre-defined articles as well as pre-defined fabric textures. The improved dialog also allows you to change colors of the grid and guidelines as well other display colors. See also Backdrops & backgrounds in the Reference Manual.

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	Color 1:	2 Color	•	: 100 🕶 9	%				
	Color 2:	3 Color							
	Color 3:	All About Bl	anks 🔸	Para B		1			
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	Name:	Ladies	•	Boudoir_Pillo	Cloth_Dia		Dishtowel_Wh	GuestTowel-E	
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#### Improved print options

Print options give you precise control over your design printout. Different worksheet configurations are available for different purposes – design worksheet, color sequence, appliqué pattern, as well as hooping sequence. Each configuration can be further customized. Support is provided for new features such as hoop templates, work areas, as well as design information

	Print Options	×	
	Worksheets		
Select worksheet _	<ul> <li>Design worksheet</li> </ul>	Appliqué patterns	
type	Color film	Hooping sequence	
	Design Worksheet		
	V Stitches	Ноор	
	Artistic view	Hoop template	
	Connectors	Hoop position marker	
	V Outlines	Work area	
	Bitmap artwork	Grid	
	Vector artwork	Guides	
	Start & end crosshairs	Design information	
	Background	Thread usage	
	Design boundary	Machine runtime	
Select a preset _	Quilt block	Print on separate page	
configuration	Standard	rrent View	Choose preset
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	Font	OK Cancel	

such as thread usage and machine runtime. See also Setting worksheet options in the Reference Manual.

#### Artistic View preview images for fill stitch types

BERNINA Embroidery Software 8 displays an **Artistic View** preview of pre-defined fills in the **Object Properties** dialog for easier visualization and selection.



#### Popup menu for easy editing

In V7, right-clicking a design or selected object displays the **Object Properties** dialog. In BERNINA Embroidery Software 8, a right-click invokes a popup menu for object editing.



#### New design management

BERNINA Embroidery Software 8 includes a new Embroidery Library which replaces Design Portfolio. The library is integrated into main application. This makes it much quicker to access designs and provides functionality to better manage designs.



#### Browse designs across all folders

Browse designs across all folders at same time, or folder-by-folder.



Features include:

- Automatically find and display folders which contain embroidery designs
- View designs with large and extra-large high-res Artistic View thumbnails
- Group designs by date modified, # stitches, embroidery size, file type, folder, etc.

#### Sort designs in the Embroidery Library

The Embroidery Library allows you to quickly sort designs by date modified.



- Most recent designs are sorted to the top of the list, regardless of which folder they are in.
- Sort by folder or across the entire Embroidery Library.

#### Search the entire library to locate designs

The Embroidery Library also provides powerful new search capabilities to find designs by text.



For instance, search:

- Any text string in filename, folder name, or
- Text properties within ART files (Design Properties > Summary tab).

**Note** The **Find** field is very powerful. Search on any criterion displayed on the Info panel. For example: 'colors: <5 stitches: <3000'.

#### **Open design files**

Use Manage Designs > Open Selected to open design(s) selected in the embroidery library.



Use Manage Designs > New From Selected to create new designs based on designs selected in the embroidery library.

Using the **Embroidery Library**, you have the option of opening one or more selected designs in their own design tabs. Simply select a design or designs by holding down **Ctrl** as you click, and then click **Open Selected**. This command opens the original file. Alternatively, click **New from Selected**. The only difference for practical purposes is that **New From Selected** creates a copy which opens in a new design tab, thus preserving the original design file.

# **Caution** Be careful not to open too many designs simultaneously. Potentially you could select all designs in the library and click **Open Selected**. This operation cannot be stopped and may result in the computer running out of memory.

#### Print a portfolio of designs for a design catalog



Use Manage Designs > Print Selected to Catalog to print selected designs to a catalog.

- Use the new **Embroidery Library** to select a set of designs.
- Bulk print the selected designs as a catalogue to a PDF printer or an actual printer. The actual format of catalogue has several options.
- Optionally Print Index pages.
  - as a matrix as currently displayed in Embroidery Library
  - as a matrix of thumbnails with basic design information beside, including filename, Width, Height, Colors, Stops.
- Optionally print each design one to a page. Include graphic and more text info. Use an existing Design Worksheet layout.



**Note** Only bulk printing to an actual printer is currently implemented.

#### New sample designs

Use the new **Embroidery Library** to explore the new design inclusions. Over 50 new designs have been added.



#### Improved auto-digitizing

Auto-digitizing in BERNINA Embroidery Software 8 has undergone a major overhaul with the addition of one-click auto-digitizing and improved **Magic Wand** tools. But pride-of-place goes to the new **Color PhotoStitch** tool.



#### Improved image preparation

Use Canvas > Artwork Canvas to import, edit or create vector artwork as a backdrop for embroidery digitizing, manual or automatic.

Use Auto-Digitize > Crop Background to crop bitmap artwork for use with auto-digitizing.



Use Auto-Digitize > Adjust Image to adjust image lightness and contrast.



Use Auto-Digitize > Touch Up Bitmap Artwork to edit images in a third-party graphics application.

BERNINA Embroidery Software 8 provides ready access to cropping and touch up functions. The functions are still available from the **Artwork** menu but can now be readily accessed from the **Auto-Digitize** toolbox. The **Crop Background** tool opens a new **Crop** toolbar which in turn provides ready access to all cropping functions. See also Editing imported artwork in the Reference Manual.



The new **Adjust Image** function allows you to adjust image lightness and contrast, primarily for use with the new **Color PhotoStitch** tool. See below.

#### **New Color PhotoStitch**

Use Auto-Digitize > Color PhotoStitch to automatically turn photographs and other bitmap artwork into multi-colored embroidery.

Amongst new and improved auto-digitizing features, BERNINA Embroidery Software 8 provides a powerful new **Color PhotoStitch** tool. See also Auto-digitizing with Color PhotoStitch in the Reference Manual.



Process:

- Import a photo/picture.
- Optionally, crop the image.
- Optionally cut out/mask background from the foreground with the cropping functions.
- Optionally adjust lightness and contrast in the image.
- Set the number of thread colors to use.

- Map image colors to selected thread chart.
- Optionally, adjust stitching resolution to high, medium, or low. High resolution allows greater detail but with a higher stitch count.
- Choose between several image variations: Normal, Sepia, or Gray.
- Automatically convert to stitching using multiple thread colors.



#### New one-click auto-digitizing

Use Auto-Digitize > Instant Auto-Digitize to automatically digitize bitmap artwork instantly.

In addition to the 'interactive' auto-digitize tool, BERNINA Embroidery Software 8 now provides an **Instant Auto-Digitize** tool. This uses default settings to create instant embroidery from a bitmap. Objects can be edited afterwards as necessary. See also Auto-digitizing with Auto-Digitize in the Reference Manual.



#### Improved image processing

Use Auto-Digitize > Auto-Digitize to automatically digitize prepared bitmap artwork.

BERNINA Embroidery Software 8 provides greater user control over bitmap preparation and stitch type assignment, as well as color matching improvements. See also Image Processing in the Reference Manual.

#### Improved bitmap preparation

An improved **Bitmap Preparation** tool lets you locate and merge colors in the processed image selectively for more control.



#### Improved stitch type assignment

Compared to V7, BERNINA Embroidery Software 8 gives you better control over stitch type assignment.



#### Better quality satin stitch conversion

BERNINA Embroidery Software 8 converts to satin more consistently and with better stitch angles.



#### Additional commands for Magic Wand



Use Auto-Digitize > Magic Wand Turning Satin to digitize narrow column artwork shapes with satin stitch.

Use Auto-Digitize > Magic Wand Fill without Holes to digitize large artwork shapes with tatami fill, ignoring any holes within.

Use Auto-Digitize > Magic Wand Centerline to digitize centerlines in artwork with run stitching.

BERNINA Embroidery Software 8 provides three new commands for Magic Wand interactive auto-digitizing:

- Magic Wand Turning Satin
- Magic Wand Fill without Holes
- Magic Wand Centerline

See also Auto-digitizing with Magic Wand in the Reference Manual.

#### **Turning Satin**

New Magic Wand Turning Satin generates turning satin stitching with auto-splits activated. Stitch angles can be edited interactively afterwards if desired.



#### Centerline

New **Magic Wand Centerline** lets you click each line to auto-digitize to centerline straight stitching. The sample below shows a scanned bitmap converted to centerline stitching.



### 3D and creative stitching effects

BERNINA Embroidery Software 8 continues the 3D theme from V7, introducing additional 3D and creative stitching effects.

#### Fancy 'elastic' satin stitches

Use Effects > Elastic Fancy Fill to create fancy fill patterns that follow stitch angles and are scaled according to object width.

Satin now comes with many predefined pattern effects. These can be applied to satin outlines or fills. See also Creating elastic fancy fills in the Reference Manual.



With **Elastic Fancy Fill**, needle penetrations turn with the shape rather than conform to a fixed fill direction as with normal fancy fills.



#### Alternating pattern fills

Use Stitch > Pattern Fill to create decorative fill stitching. Choose from pattern library.

New **Alternate Patterns** allow you to fill shapes with repeating lines of alternating patterns. There are many predefined twin-patterns to choose from. See also Creating alternating pattern fills in the Reference Manual.





Use alternating pattern fills together with Wave effect or new 3D globe effect.

#### **3D globe effects**



Use Effects > 3D Globe Effect to create contoured stitches to produce a 3D appearance. Choose from pattern library.

Pattern fills can be enhanced with new **3D Globe Effect**. The effect can also be applied to **Candlewicking** and **Lacework** fills. It can also be applied to alternating pattern fills. See also Creating 3D globe effects in the Reference Manual.



**Note** Edges can be sharpened with the addition of outline stitching around the fill shape. Single run, triple, backstitch, stemstitch, or satin stitch as desired.

#### **Outline stitching**

BERNINA Embroidery Software 8 provides improvements in outline stitching and object offsets.

#### New outline stitch types

Several new outline stitch types have been added.



#### Sculpture outline



Use Stitch > Sculpture Outline to create a tick-thin outline alternating single and triple stitches for a hand-stitched look.

For a more hand-stitched appearance, use the new **Sculpture Outline**. This variant stitch type alternates single and triple stitching for a thick-thin outline. See also Creating simple outlines in the Reference Manual.



#### Zigzag outline

Use Stitches > Zigzag Outline for narrow, open borders with a 'zigzag' effect.

New zigzag outline stitch creates V-shape stitching whereas satin outline creates N-shape stitches. See also Creating functional outlines in the Reference Manual.



Features:

- > Zigzag stitch spacing and width independent of satin parameters
- Works with automatic corner processing.

#### New stitch effects with improved Outline Design

Use Edit > Outlines & Offsets to create outlines and offsets of any type for any filled embroidery object.

The improved **Outline Design** dialog, now called **Outlines and Offsets**, now allows you to auto-outline designs in backstitch, stemstitch, pattern run, as

well as sculpture stitch and zigzag. See also Creating outlines & offsets in the Reference Manual.



There are more choices for auto-outlines and offsets:

- Independent stitch type settings for object outlines vs offsets
- Option to merge outlines of overlapping shapes or outline them independently
- Choice of sharp corners vs rounded corners.

#### Stitch quality

BERNINA Embroidery Software 8 provides improvements in stitch quality.

#### **Cutting objects manually**



Click Edit > Knife to cut objects along a digitized line, preserving stitch settings and colors in resulting objects.

The **Knife** tool is used to manually cut filled objects into smaller fragments. This is important where changes in stitch direction are necessary. Cut objects are generated with stitching – parallel or turning – appropriate to their shape. See also **Splitting objects** in the Reference Manual.



**Note** The **Knife** tool cuts object outlines and **not** the stitches. The system then regenerates the stitches inside the new shape that is created.

#### Always trim

The **Object Properties > Tie in/off** tab now includes an **Always Trim** option. When activated, a tie-in and tie-off is inserted between selected objects, regardless of connector length. Select all objects and apply the setting to trim all connectors in the design. You can also use it to force trims within lettering objects. See also Connecting embroidery objects in the Reference Manual.



#### Improved appliqué and corner stitching

Use Effects > Automatic Corners to toggle mitre or cap corners in line objects with sharp turns. Can be turned on/off object-by-object.

- Improved default processing for automatic corners
- User on/off control for special effects
- Included for appliqué as well as normal embroidery

See also Controlling corner stitching in the Reference Manual.

#### New & improved lettering

In BERNINA Embroidery Software 8, embroidery alphabets are now referred to as 'fonts'. Native fonts are digitized for use with embroidery. Graphic TrueType fonts from Windows and other sources are converted to stitching upon use.

#### Improved monogramming

Use Digitize > Monogramming to create personalized monograms using a selection of pre-defined monogramming styles, border shapes and ornaments.

You build monograms using the **Monogramming** docker. The simplest way to get started is to select a base design from the new **Designs** tab. This tab gives you a selection of design templates ranging from lettering only, with borders,

or with ornaments. Select one as a starting point and then modify by means of the other tabs. See also Monogramming in the Reference Manual.



#### New embroidery fonts

BERNINA Embroidery Software 8 includes 12 new embroidery fonts, making a total of 99 native embroidery fonts in the software. These include six puffy fonts for 3D foam and six normal embroidery fonts. See also Embroidery Fonts in the Reference Manual.



- 3D Brush Script
- 3D Emphatic
- 3D Futuro

- 3D London
- 3D Monoglyceride
- 3D Sofachrome
- Flourish Light
- Hand of Sean
- Monoglyceride
- Monoglyceride Bold
- Sofachrome
- Turncoat

#### **Better font selection**

Use Digitize > Lettering to create embroidery lettering directly on screen.

BERNINA Embroidery Software 8 includes improvements in font selection. Fonts are listed in category groups for easier identification – e.g. All, Block Fonts, Serif Fonts, Script Fonts, Decorative, etc. This makes it easier to find a suitable font for a particular purpose in mind. See also Adding lettering to embroidery designs in the Reference Manual.



#### Auto kerning for lettering

BERNINA Embroidery Software 8 introduces automatic kerning for embroidery lettering. Kerning is automatically adjusts spacing between pairs or triplets of letters. This can improve readability and appearance. Unlike character spacing,

kerning is defined in the actual font. See also Applying auto kerning in the Reference Manual.



#### Couching

Couching in embroidery refers to the technique of fixing a thick cord or yarn onto the fabric, usually for decorative purposes. See also Couching in the Reference Manual.

#### Support for free-motion couching foot

BERNINA Embroidery Software 8 lets you create couching designs for use with the BERNINA Free Motion Couching Foot #43.



The free-motion couching foot is a specialist needle attachment for use with cords, yarn and ribbon. The cords are fed directly to the needle through a hole in the sole and can be sewn on in any direction. The tool can be used to embellish table linens, garments and bags with attractive cord decorations. See also Support for free-motion couching foot in the Reference Manual.

#### **Couch stitching**



Use Effects > Couching to add couching cord for use with the BERNINA Free Motion Couching Foot #43.

Couching may be combined with existing outline stitch methods. See also Creating couching designs in the Reference Manual.



Couching designs are typically made up of straight running stitch outlines:

- These may cross over themselves or other objects in a continuous fashion.
- It is best to avoid long runs of overlapping cord.
- It is ok to have couching objects separated by a trim/jump.
- It is ok to have sharp corners but avoid extremes.
- It is possible to create couching-only designs with no other embroidery stitching.
- It is possible to use some existing fill stitch methods for couching if you set object properties for open density with no underlay.



 It is possible to combine normal embroidery and couching in the same design.



#### **Design layouts**

BERNINA Embroidery Software 8 provides tools to improve productivity with design layouts. There are also new features for embroidering quilt blocks.

#### Improved support for large design layouts

Design layouts are not restricted to the hoop area. Everything for design layouts can be done within the software in a single design file. This can then be output to machine, hoop-by-hoop. With BERNINA Embroidery Software 8:

- Large work areas up to 3m x 3m or 10' x 10' can be defined and designs arranged within a single layout.
- There is no limit to the number of hoops that can be defined as part of a large layout.
- Layout templates, printed at 1:1, can be used to lay out the overall design on the work piece or garment.
- Each hoop has a hoop position marker at the center that allows location and orientation of the hoop when used with the hoop template.
- Multiple page layouts have reference numbers so they can be pieced together to form a large layout template on small format printers (A4/Letter).
- Simplified design printing (outlines only) makes printed positioning markers easier to see.
- Hoop templates can be displayed in the software as a direct reference to the physical hoop template.
- Hoop templates are automatically adjusted according to the machine model and embroidery foot selected.
- Design extents, start and end points and registration marks are printed for each hoop in the design.

#### New Mirror-Merge tools

The latest release provides two new **Mirror-Merge** tools for quick production of design layouts.

#### **Design arrays**

Use Mirror-Merge > Array to duplicate designs, such as badges, re-sequencing color blocks for efficient multiple design stitchouts.

Use the **Array** tool to create multiple copies of designs, such as badges, spaced in rows and columns for easier stitchout. Color blocks are resequenced



to minimize color changes. See also Creating design arrays in the Reference Manual.

#### **Decorative borders**



The **Reflect** tool is similar to the **Array** tool. However, because it also mirrors duplicate selections, it is particularly useful for decorative borders. As with other **Mirror-Merge** tools, color blocks are resequenced to minimize color changes. See also Creating decorative borders in the Reference Manual.



**Note** Use **Array** and **Reflect** with column and row repeats to automatically generate continuous embroidery designs. See also Manual continuous embroidery in the Reference Manual.

#### Automatic layouts for work areas

Use View > Show Work Area to show or hide a work area defined under Layout.

Use Layout > Define Work Area to define a rectangular or circular work area of a specified size.

Use Layout > Lay out to Rectangular Work Area to create copies of selected object/s in each corner of the work area.



Use Layout > Lay out around Circular Work Area to create copies (specified by number of repeats) of selected object/s around a circular work area.

Define a work area – rectangular or circular – and create layouts automatically – e.g. for a tablecloth. See also Creating design layouts in the Reference Manual.



Process:

- Create or open a design or element that fits in one hoop.
- Define a work area rectangular or circular.
- Create and lay out copies of the design around the work area, placed and rotated automatically.
- Define multi-hooping of the design.
- Automatically split the design into separate stitching files.
- Include reference marks for positioning stickers.

#### Automatic layouts for quilt blocks

Use View > Show Quilt Block to show or hide a quilt block defined under Layout.



Use Layout > Define Quilt Block to define a quilt block of a specified size.

Use Layout > Lay out to Quilt Block to create copies of selected object/s in each corner of a quilt block.

Using the above technique, it's a simple matter to define and display a quilt block work area. From here it's simple to auto-layout designs to corners of a

quilt block, with or without a central design motif. See also Creating quilt block layouts in the Reference Manual.



#### Automatic re-sizing

Use Layout > Auto Fit to Quilt Block to automatically fit selected object/s to the quilt block.

Automatic re-sizing makes it easy to maximize a design within a defined quilt block.



#### Automated quilt background stitching

Use Edit > Quilting Background to create 'echo' quilting blocks.

The **Outline Design** tool is sometimes used to create 'echo' quilting designs. However, the new **Quilting Background** feature provides a better alternative. Use it, for instance, to create stipple quilting to fill quilt blocks. See also Creating quilting backgrounds in the Reference Manual.



**Tip** Optionally, add separate offset outlines around a design before background quilting. See New stitch effects with improved Outline Design for details.

#### Create quilting with parallel offsets

Create separate parallel offsets or connected spiral offsets, clipped or non-clipped.



**Note** When using the **Quilting Background** tool, you are limited to one quilting background per design. A quilting background cannot be applied to a second object. When creating mixed quilting, you will need to create a new design via **File > New**.

#### Improved design hooping

BERNINA Embroidery Software 8 provides improvements in the positioning of designs within hoops.
# Bernina hoop positioning templates



Click View > Show Hoop to show or hide hoop. Right-click for settings.

Click View > Show Hoop Template to show or hide hoop template. Right-click for settings.

When it comes to stitching out, it is important to align the fabric squarely in the hoop, with even pressure on all sides, and fabric patterns and weaves running perpendicular to the hoop. Otherwise, fabric bias allows stretch. This can distort stitching and result in puckering. Each hoop contains vertical and horizontal centering marks on the frames. These help with aligning both the fabric and the design.



Bernina hoops also come with a clear plastic template overlay. These include alignment lines, with tiny holes which allow you to create for positioning marks. Positioning templates for all Bernina hoops are now included in BERNINA Embroidery Software 8. Hoop templates can be toggled on or off independently of the hoop itself.





The software also lets you specify which foot you are using with your selected hoop. It then adapts the allowable sewing area according to the selected hoop, template, and foot. See also Selecting hoops in the Reference Manual.



Uses...

- Templates are displayed with alignment and registration guide markings.
  This allows you to align the design in the hoop on screen, relative to the markings.
- Templates are printed with alignment and registration guide markings. This allows you to cut out the printed design and align it in the hoop with the physical template.

# Manual positioning of designs in hoops

BERNINA Embroidery Software 8 allows you to move and rotate a design within the hoop. It allows you to position the design, off-center the design, and work with absolute and relative center / coordinates. Newer machines support off-center design positioning and orientation. Use the **Manual** hoop position in the **Options > Machine & Hoop** tab to enable this feature.



### Auto centering at start needle position

BERNINA Embroidery Software 8 now allows you to auto-center the hoop around a designated start needle position. If using this option, you should turn off the 'Maintain Automatically' option in **Auto Start & End**. See also Centering hoops in the Reference Manual.

### Machine file export

Bernina users can thereby set the center / origin of a design and export it in multiple formats such as ART, EXP and DST. See also Exporting machine files in the Reference Manual.

Options		<b>×</b>					
Appliqué & PunchWork Remove Overlaps	Scrolling	Multi-Hooping					
General Grid	General Grid Machine & Hoop						
Machine & Hoop							
Machine:							
BERNINA 5 Series							
DERIVITA 5 SETES							
Hoop: BERNINA Jumbo Hoop for B780/B750		<b></b>					
BERNINA Jumbo Hoop for B780/B750		<b>^</b>					
BERNINA Maxi Hoop, 210 x 400		_					
BERNINA Mega Hoop, 400 x 150 BERNINA Large Oval Hoop, 255 x 145							
BERNINA Large Hoop for 165/170/180, 20	BERNINA Large Oval Hoop, 255 x 145 BERNINA Large Hoop for 165/170/180, 200 x 155						
BERNINA Medium Hoop, 130 x 100							
BERNINA Free Arm Hoop, 50 x 72		=					
BERNINA Free Arm Hoop for 165/170/180	, 40 x 60						
	bernette hoop square 40 x 40						
	bernette hoop square 100 x 100						
bernette hoop 110 x 170							
bernette hoop 110 x 126 bernette hoop 200 x 140							
bernette hoop 200 x 140							
bernette hoop 220 x 190							
artista Giant 400 x 155							
Brother 200 x 300							
Brother 260 x 160							
Brother 300 x 180							
Brother 300 x 200							
OK	Cancel						

### **Reference markers & basting stitch markers**



Use Digitize > Basting Stitch Marker to insert a reference marker at any angle and position.

Use Digitize > Insert Graphic Marker to insert a graphic marker representing adhesive stickers attached to the fabric to indicate location and orientation.

BERNINA Embroidery Software 8 includes two types of reference marker:

• Graphic reference markers representing the different styles of positioning stickers available in the market.

- Add basting stitch markers
- Basting stitch markers of various shapes and sizes.

You can select and manually place reference markers in a design at any angle and position. Alternatively, auto-place reference marks at predefined positions – e.g. hoop template reference points. See also Adding manual reference markers in the Reference Manual.



Tips...

- Stitch reference marks first to help align a fabric in the hoop.
- Sequence them to the start of the design.
- Attach physical adhesive stickers to the fabric to indicate hoop location and orientation.
- Use basting stitch reference markers to match these stickers.

### Improved multi-hooping

BERNINA Embroidery Software 8 better integrated multi-hooping, better manual positioning, and improved output. See also Creating multiple hoopings in the Reference Manual.

# **Better multi-hooping UI integration**

Multi-hooping has now been incorporated into the main toolbox.

Multi-Hooping		
Ð	Select a Hoop	
*Ð	Automatically Add Hoops	
	Add Splitting Line	
Ø	Preview Hoopings	
7	Calculate Hoopings	
*	Multi Hooping Options	
Ð	Add Hoop	
×	Delete Hoop	
Ð	Add Hoop Right	
Ð	Add Hoop Left	
Ð	Add Hoop Down	
Ð	Add Hoop Up	
+	Add 4 Hoops Around	
÷	Add 8 Hoops Around	

New toolbox commands for main workflow steps include:

- Preview hooping sequence
- Multi-hooping options shortcut to the existing Options dialog
- Save complete design
- Save as multi-hooping files

# **New Add Hoops Auto**

Use Multi-Hooping > Automatically Add Hoops to add hoop positions automatically.

The new **Automatically Add Hoops** command automatically places hoops to cover the entire design, fitting as many objects as possible into each hoop position.



# New hoopings preview

Use Multi-Hooping > Preview Hoopings to preview hoop positions in the Hooping Sequence docker.

Use the new **Preview Hoopings** tool to preview hoop positions in the **Hooping Sequence** docker. Click and hold to isolate the hooping in the design window.



- Designs are displayed like the preview instead of green and black.
- Hoops are fully displayed when dragging into position to allow for easier alignment.

### Improved adding and positioning of hoops

- Use Multi-Hooping > Add Hoop to add a new hooping to a multi-hooping layout.
- Use Multi-Hooping > Add Hoop Right to place a new hooping to right of selected hoop. Allows a 10mm overlap between sewing fields.
- Use Multi-Hooping > Add Hoop Left to place a new hooping to left of selected hoop. Allows a 10mm overlap between sewing fields.
- Use Multi-Hooping > Add Hoop Up to place a new hooping above selected hoop. Allows a 10mm overlap between sewing fields.
- Use Multi-Hooping > Add Hoop Right to place a new hooping below selected hoop. Allows a 10mm overlap between sewing fields.
- Better default position of first hoop position.
- New Add Hoop commands Add Hoop Left, Add Hoop Down.
- The Add Hoop command offsets the second hoop from the first rather than placing on top of the current hoop.
- Add Hoops are oriented correctly to a rotated hoop.

### Assists for manual positioning of hoops

• Design start and end points are displayed prominently in multi-hooping.

• Option to display hoop template inside hoops during multi-hooping.

# **Extended cutwork support**

Use General > Cutwork to show or hide the Cutwork Border docker. Use in conjunction with Cutwork toolbox.

Use Cutwork > Digitize Piece to digitize a cutout piece in hooped fabric, together with supporting embroidery. Right-click for settings.

Use Cutwork > Digitize Hole to digitize a hole in hooped fabric, together with supporting embroidery. Right-click for settings.

Use Cutwork > Digitize Cut to digitize a simple open or closed cut in hooped fabric. Right-click for settings.

BERNINA Embroidery Software 8 provides extended cutwork support allowing you to create cutwork shapes with or without embroidery. Create and edit forms that can be cut out with the BERNINA CutWork Tool and used in cutwork and stumpwork designs. You will be amazed at the gorgeous effects you can achieve, whether on garments, accessories, or quilts. See also Digitizing cutwork in the Reference Manual.



Features:

- Five (5) variations of predefined cutwork holes with embroidery.
- Cut shapes on embroidery machine using four angled needle cutters, integrated with embroidery sequence.
- Choice of outline stitches around cutwork.

#### Create cutwork shapes without embroidery

BERNINA Embroidery Software 8 generates all cutting and stitching parameters required for different cutwork shapes, including:

Stabilizing runs

- Cuttings runs
- Tackdown runs
- Net fills
- Embroidery settings



### Combine cutwork components in one hooping

There could be dozens of cutwork objects in an entire design. Components belonging to separate cutwork objects can be sequenced to minimize cutting needle changes. Cutting is optimized so that the four cutting tool positions are only employed once per design.



# Cut slits in buttonholes

Use Digitize > Buttonhole to digitize a single buttonhole with all necessary stitching.



Use Cutwork > Cut Buttonhole Slit to generate a cutting line for selected buttonholes.

Buttonholes have been improved with the addition of cutting lines (optional) to automatic button holes. Slit length and width can also be defined. See also Creating buttonholes in the Reference Manual.



# **Miscellaneous improvements**

BERNINA Embroidery Software 8 provides a number of other software improvements.

#### **BERNINA** machine runtime

Machine runtime is now calculated according to the currently selected Bernina machine model.

Select the relevant machine.



• Calculated runtime is shown in the **Design Properties** dialog.

esign Thread Colors Summar	ry	
Design name:	21013-18	
Version:	8.0	
Stitches:	7234	
Color changes:	5	
Colors:	6	
Trims:	5	
BERNINA machine runtime:	0:11:09	Calculated machine runtii

• Times also included on the **Design Worksheet**.

	bric type:			nit Light Weight	
Re	quired stabilia	er:		ing: Wash Away	
L				ing: Poly Mesh x 2	
	al bobbin:		80.9	5ft	
	lor Film:				
#	Chart			Name	Thread
1.	Isacord «			Grass	2.90ft
2.	lsacord 4	-		Bird Wing	2.56ft
3.	Isacord 4	40	0151	Bird and Bear Face/ Ears/ Tummy/ Paws	43.86ft
4.	Isacord 4	40	3820	Butterfly Wings	9.52ft
5.	Isacord 4	ŧ0	0970	Butterfly Body	2.73ft
6.	Isacord 4	40	3612	Butterfly Spots and Outlines	8.30ft
7.	Isacord 4	40	1055	Bear	46.44ft
8.	Isacord •	ŧ0	2152	Wolf Tongue	2.08ft
9.	lsacord 4	40		Wolf Ears/ Face/ Tummy/ Feet	30.84ft
10.	lsacord 4	40	0142	Wolf Head/ Body/ Tail	37.37ft
11.	Isacord 4	ŧ0	0112	Wolf Shading	13.18ft
12.	. 🧧 Isacord 4	40	0080	Bird Beak and Feet	1.82ft
13.	Isacord 4	40	1055	Bear Paw	3.67ft
14	Isacord 4	40	6156	Bird Eve and Outlines	5.04ft
15.	Isacord 4	40	3355	Wolf Eves/ Nose/	13.52ft
	_			Outlines	
16.	. 📕 Isacord 4	40		Bear Eyes/ Nose/ Outlines	11 <u>.46ft</u>
Ma	chine runtime	1	0:25:	38	

### **Updated formats**

- Latest Brother PES formats for Brother machine users.
- BERNINA Embroidery Software 8 now reads Janome/Elna All-in-One JAN design files.
- BERNINA Embroidery Software 8 now reads and writes Wilcom All-in-One EMB design files.

### Improved issue reporting

BERNINA Embroidery Software 8 now provides a built-in mechanism to report an issue following a system crash.



#### **Improved Object Properties and Auto Fabrics interactions**

- Ability to turn Auto Fabrics off by default.
- When inserting a design into a blank design or another design, you are able to choose whether to change or not.

### Updated thread charts

BERNINA Embroidery Software 8 includes new and updated thread charts.



BERNINA Embroidery Software 8 includes new Benartex fabrics.



#### Include hoop, template, and foot information in Design Worksheet

In addition to optional graphic display of hoops in the worksheet, X/Y lines of the hoop center can be included.

# System requirements

In order to run your software, you need to ensure that the following pre-requisite system requirements are met.

### **PC** specifications

Check that your PC meets the system requirements. Check CPU/RAM as well as hard disk space. The table below provides minimum system requirements.

Component	omponent Minimum		Recommended	
CPU		Intel® Core 2 Duo or AMD Athlon™ 64	3GHz + Latest 64-bit (x64) multi core processor	
Operating system \$\$\$ Windows® 7 (32-bit or 64-bit Editions) with lates service packs installed.		Windows® 7 (32-bit or 64-bit Editions) with latest service packs installed.	Windows® 10 (64-bit Edition) or Windows® 8.1 (64-bit Edition), with latest service packs.	
Browser		I.E. 9.0 or Later	I.E. 11.0 or Later	
Memory		4 GB	8 GB or more	
Hard disk size		80 GB	256 GB or More (Solid State Drive)	
Free disk space	†	40 GB	60 GB or More	
Graphics card		Support for Highest Color (32bit) and resolution (1366 X 768)	Support for DirectX 9 graphics with: WDDM Driver 1GB of graphics memory (non-integrated) Pixel Shader 2.0 in hardware bits per pixel Dual Monitor Capable	
Monitor	¥	1366 X 768 screen resolution	Dual monitors capable of displaying 1920 X 1080 screen resolution	
Mouse		USB mouse	USB mouse	
USB port		Required for software installation.		
Sound card		Required for online video help.		
Internet connection		Required for product activation and registration. Internet connection may also be required during installation in order to download Windows features such as .Net Framework 3.5.		

### Supported operating systems ‡

Although Windows® 7 (32-bit or 64-bit edition) is supported, we recommend updating to Windows® 10 (64-bit edition) or Windows® 8.1 (64-bit edition) with latest service packs installed. You will, however, need to uninstall any versions of CoreIDRAW earlier than X6.

### Free hard disk space †

BERNINA Embroidery Software 8 occupies up to 5GB of hard disk space, depending on options installed. CoreIDRAW Essentials also takes up an additional 3GB.

#### Screen resolution ¥

Some controls may be hidden on the user interface if you run your monitor at low resolutions. The physical size of your monitor will have a bearing on the optimum screen resolution. Larger fonts will exacerbate the problem. If you experience visibility issues, try adjusting both screen resolution and font size. For example, a resolution of 1366 X 768 with a font size of 100% or 125% should be acceptable.

### System security

The software is shipped with a product key which can be found inside the software kit. Each product key allows your system to be uniquely identified. You will be prompted to enter the product key to register and activate the product when the software is launched the first time following installation. Please keep the product key in a secure place.

**Note** Each licensed copy of the software is for a single user. It entitles you to three (3) activations: two (2) on different computers, and one (1) in case of hardware failure or replacement.

### Integration with CorelDRAW®

CoreIDRAW® Graphics Suite is the most popular vector-based drawing package for the decorated goods industry. It features 'best-of-breed' bitmap-to-vector tracing, enhanced illustration capabilities, photo-editing together with a library of professional clipart images.

BERNINA Embroidery Software 8 comes together with an installation of CoreIDRAW<sup>®</sup> Essentials X6. The built-in CoreIDRAW Graphics window includes CoreIDRAW drawing tools which offer many techniques for drafting outlines and shapes on screen. Vector objects can be converted to embroidery designs. CoreIDRAW<sup>®</sup> Essentials X6 and its sister product, Corel

PHOTO-PAINT<sup>®</sup> Essentials X6 can also be run as standalone applications.

For a full description of the tools, refer to the electronic User Guide available via the Windows **Start > Programs** group. Alternatively, use the onscreen help available from the **Graphics** mode **Help** menu.

**Note** CoreIDRAW is installed together with Windows .NET Framework. To ensure that CoreIDRAW is correctly installed with your embroidery software with the correct version of .NET, make sure you install it when prompted to do so. It can take up to 20 minutes or more to install the .NET Framework on some computers.

# Known limitations in BERNINA<sup>®</sup> Embroidery Software

The following are known limitations in BERNINA Embroidery Software 8 V8.0.

- The software may be unstable on Win 7 SP1 while Windows Updates are being installed. If this occurs, close the software, and install any important Windows updates before running it again.
- The software user interface e.g. toolbars, dialogs, text, etc may appear too small on 4K monitors at 100% display scaling. The solution is to increase display scaling to a suitable value. The optimal scaling will depend on the monitor's resolution. We also recommend using large icons together with tool names. See the **Options > General** tab for settings.