BriTon Leap, Inc.

Embrilliance

User Guide

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TABLE OF CONTENTS

Welcome 1
Getting Started 5
    Running Embrilliance 5
    5 Easy Steps: 5
Create Lettering 7
    Customize the Basic Monogram 8
    Stitch Properties 12
Embrilliance and Regular Designs 14
    Embrilliance Designs 14
    Merge Stitch File 15
Size and Move Design Elements 17
    The Status Bar 18
    View Toolbar 23
Navigation and Zoom 25
Document Windows and Design Pages 27
Working with Files 29
    Merge A Working File 29
    Saving Your Finished Design 29
Stitch Simulator 32
Views and the View Menu 34
    Setting the Hoop Size 35
Printing a Design Template 36
Measurement and Calibration 37
Docking Pane Interface 39

Embrilliance

Welcome

Hi! Welcome to the Embrilliance User Guide. Thanks for reading it! Since you're here, let us tell you some things about this exciting program because Embrilliance represents a giant step forward in embroidery.

For starters, it is a small, yet feature packed program that is easy to install. It has versions for both Mac OSX and Windows. Windows versions exist for XP, Vista and Windows 7 (including 64-bit version.) It requires no hardware dongle and can be installed on multiple systems requiring only your personal serial number to be typed in for the program to run. Once you enter a serial number, you can register the program which provides several benefits. One of those benefits is that if you ever lose your serial number, we can recover it for you.

Let's take a look at some of the features in Embrilliance:

- 10 starter Fonts for monogramming and lettering.
- Sample Embrilliance designs. These designs are scalable and recalculate their stitches as you interactively transform them.
- Unlimited lines of letters or monograms can be combined.
- You can mix and match fonts and sizes.
- Merge existing embroidery files into your design. If you overlap designs, Embrilliance will remove the overlapped stitches so the design will sew.
- Browse designs in folders and inside .ZIP files.
- Resize existing embroidery files with stitch recalculation. You can resize embroidery within Embrilliance up to 250% and down to 50%.

Embrilliance

- Colorize any embroidery design. You can change the colors one at a time, or convert the entire design or any selected part of it to a different thread brand with just a few mouse clicks.

- Simulate the sewing of any design. The simulator can play in 3D, plays forward and backward, has variable speed and it has a slider so that you can scroll forward and backward through the design to any point without waiting. You can even insert a color stop in the sewing process.

- Convert any design from one format to any of the supported types, which include:

  Read: ART, CND, CSD, DST, EMD, EXP, GNC, HUS, JAN, JEF, JEF+, PCM, PCS, PEC, PES, PHC, SEW, SHV, TAP, VIP, VP3, XXX

  Write: CSD, DST, EXP, HUS, JEF, PCS, PES (v1.0 – 8.0), SEW, SHV, TAP, VIP, VP3, XXX

- Create a working file (.BE extension) to save your design as an editable and merge-able file. Your working file is saved for you automatically when you save a stitch file so you don't have to 'Save' twice every time you make some changes – once for the stitch file and once for the working file.

- Embrilliance has an advanced program interface that's super easy to use yet offers features normally reserved for very expensive programs.

- Real Scale zooming allows you to view your designs on screen at the actual size that they will stitch out.

- A Docking Pane interface lets you position the windows around your screen wherever you want them, and your layout is remembered from when you last ran the program.

- A docking Navigation Window which provides instant control over the zoom and scroll in the program's view.

- Sewing Order control allows you to re-sequence the designs to sew in the order you want them to sew.

- Adjustable Mouse Wheel attribute for Zoom or Scroll.

- Simple centering in the hoop, plus advaced alignment.

- Automatically check for updates.

- Digital Rights Management (DRM) so that you can preview embroidery designs before you purchase them!

- More information about the fonts in Embrilliance:

  •These fonts give you enormous control over them. The specifics vary depending on which lettering style you're using, but in general, you can adjust the font, color, size, aspect, center, rotation, mirroring, slant, kerning, layout, stagger, sequence, envelope shape, amount and stitching properties including density, underlay, underlay density and compensation (which can be used to increase boldness) for the design as a whole. And you can adjust the color, size, position, rotation, kerning, aspect and mirroring down to the individual letter.

  •You can adjust the letter sequence for Monograms so that letters may overlap exactly how you want them. And if you do overlap your letters within a Monogram, the hidden stitching is automatically removed for you so that the design sews out nice and flat.

  •You can slant the letters, or change the envelope of the lettering. And for fast and easy Monogram setup, you have 14 Quick Styles to layout your design, including Vertical, Square Oval and Diamond.

•When making letters larger, rather than having long satin stitches to snag on things, your letters automatically switch to a fill-like satin stitch. This looks like a fill, but unlike a fill, the stitches maintain the beauty of the curved satin column. Another benefit of this is that the fonts do not have any program restriction on how large they can be made.

•To make the fonts even more versatile in size, automatic adjustments are made for you to help the letters sew smaller than they would in other programs. For instance, when you make the letters smaller, narrow satin stitching is automatically adjusted to keep long-enough stitches to actually sew. And although some small designs look good on screen, they won't embroider well. The fonts in Embrilliance protect your stitching automatically.

•Multi-Line text offers line spacing, and in Circle Text, you can keep on typing, righ into a spiral!

And Embrilliance can further be extended by adding font and design packs, available from your dealer or online at www.Embrilliance.com.

Welcome to Embrilliance, and let the fun begin!

Getting Started

In subsequent sections of this guide we'll cover all aspects of the program. But, for those of you who want a quick example, let's sew out a monogram:

Running Embrilliance

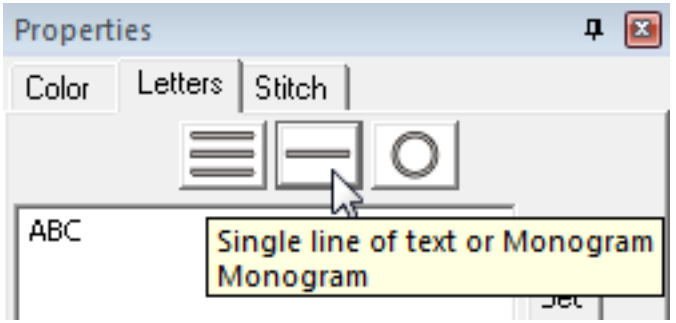
To run Embrilliance, double click the icon on your desktop, or click 'Start', then 'Programs' or 'All Programs'. Next you'll be able to click through the menus to 'BriTon Leap' and 'Embrilliance'.

Note: The menu also holds an easy way to uninstall Embrilliance.

5 Easy Steps:

1. Create the generic monogram using the Create Monogram Tool.

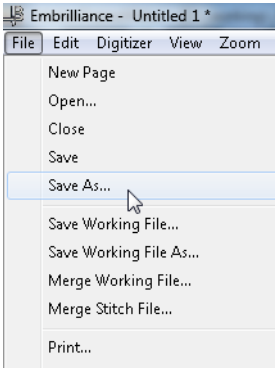
2. Enter the monogram letters using the Text Entry Box.

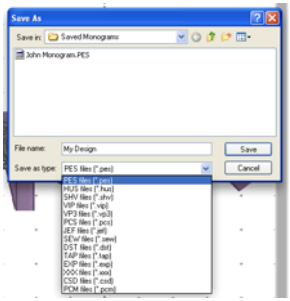


3. Select a Font from the Font Combo Box.

4. Select a Style from the Quick Style Combo Box. There are 14 “Quick Styles Available”.

5. Save in a Format for your machine by Choosing Save As from the File Menu and then selecting your machine format from the Save As Dialog.





You are now ready to sew your first monogram!

Create Lettering

Creating a simple letter design or monogram is, well, simple! Just click the Create Text tool (Figure 1) found on the Design Toolbar (Figure 2). This action will place the monogram in the center of the design page (Figure 3) and display the monogram Property Page (Figure 4).

Figure 1

Figure 2

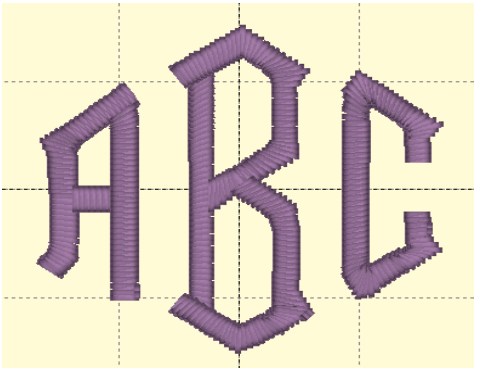


Figure 3

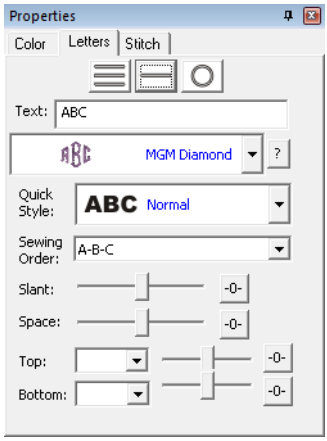


Figure 4

Now, set the monogram to your desired value by typing into the Text box (Figure 5) and pressing the <Enter> key.

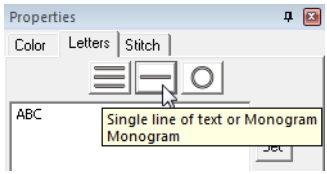


Figure 5

Customize the Basic Monogram

The Letters Property Page provides a number of tools that allow the monogram to be customized.

Font and Quick Style: The font and style are changed using the selections in the Font (Figure 6) and Quick Style (Figure 8) boxes. Clicking the '?' button to the right of the Font box will display all characters available in the selected font.

When the monogram is initially placed on the page, the letters are automatically kerned (letter spacing) for a good visual effect.

Figure 6

Figure 7

Figure 8

Slant and Space: The slant of the monogram and the spacing of the monogram letters are controlled with the Slant and Space slider controls (Figure 9). If you use these controls and want to return the monogram to its default settings, simply click the zero control. This will restore the default setting. The Slant gives an italic effect to the monogram.

Figure 9

Enveloping: The envelope (the containing top and bottom outlines) of the monogram can be individually customized. The Envelope Type box and Envelope Slider (Figure 10) control the envelope.
There is an Envelope Slider control for the envelope top and there is an envelope slider control for the envelope bottom. There are four styles of envelope: Curve, Grow, Peak and Shrink.

If you use these controls and want to return the monogram to its default settings simply click the zero control.

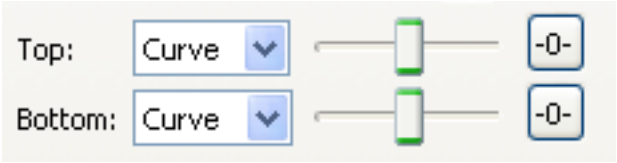


Figure 10

Curved Top and Bottom Envelope

Thread Brand and Color: The thread brand and color are changed by first selecting the Color tab (Figure 11) on the Property Page. When the monogram is selected, each color in the

monogram will display in the Color List. Two buttons, Change All... and Convert Thread... are displayed.

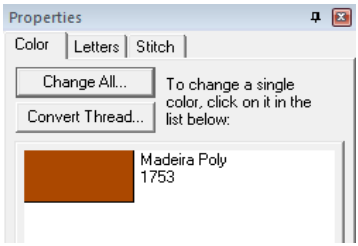


Figure 11

To change a single color, click on that color in the color list. The Thread dialog will be displayed (Figure 12). This dialog lets you choose a thread brand, sort the thread brand by color or number and search the thread brand using color or number key words. When the desired color is found, click the OK button to apply the color. Reselect the monogram for the new colors to appear in the list.

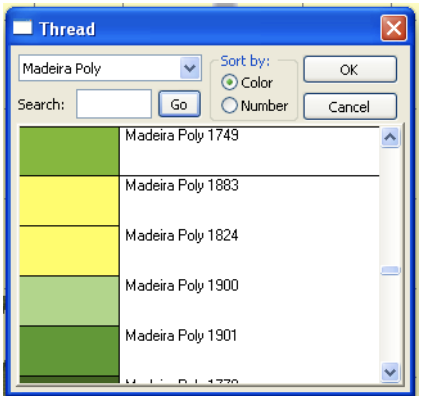


Figure 12

The color of all letters in the monogram are changed by clicking the Change All... button and using the Thread Dialog as previously described.

The thread brand is changed by clicking the Convert Thread... button and choosing a thread brand from the thread brand box (Figure 13). Click OK to apply the selected thread brand.

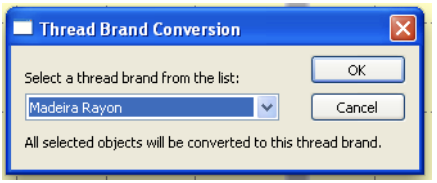


Figure 13

Changing the Color of one Letter

You can change the color of one letter by selecting that one letter. To select it, first make sure the monogram is selected, then click on the green handle which appears centered over the letter you want to change. Once a single letter is selected, you can change the color(s) of just that one letter using the color property page as described previously.

Stitch Properties

The stitch properties are adjusted in two places. On the MGM tab there is a Sewing Order box (Figure 14). Choose the order in which the letters are sewn from this control. For a simple monogram you probably do not want to change the default order. However, when we move into Enhancing a Monogram, there may very well be reason to change the sewing order.

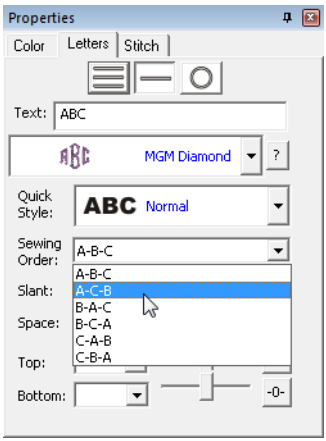
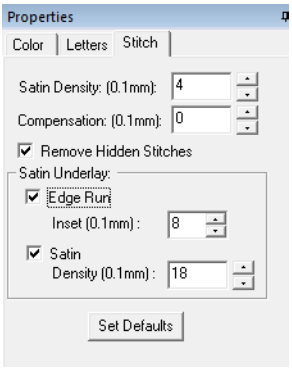


Figure 14

Second, on the Stitch tab are controls for the actual stitch.



Stitch Controls

Satin Density Control: This control ranges from 3 to 20 with each tick being one tenth of a millimeter. So the range in millimeters is .3 to 2.0 mm. The smaller the density number the closer together the satin stitches will be. 0.4mm is normal.

Compensation: This control ranges from 0 to 10 with each tick being .1 millimeter. As the value increases the stitch length increases, in effect 'fattening' the stitching. This is useful on fabrics that have a loft or nap, and can also be used to make a font more bold.

Remove Hidden Stitches: When selected, stitches that are completely hidden by top stitches will be removed. This process allows the design to sew out in a flatter manner. Note that this only affects stitching within the monogram itself.

Edge Run: When checked, this adds a running stitch underlay. This setting is the amount of inset for the edge run and ranges from .1 to 1.2 mm.

Satin: When checked, this adds a satin underlay. When checked, it applies the density value which ranges from .3 to 2.0 mm just like the satin stitch.

The Set Defaults button restores each of these controls to their default values.

Embrilliance and Regular Designs

There are two main features of Embrilliance that let you go beyond creating lettering. These features, Embrilliance Design Collections and Merge Stitch File provide the flexibility for you to create truly unique designs.

Embrilliance Designs

Clicking the Merge Embrilliance Design tool (Figure 15) found on the Design Toolbar will display the selection dialog (Figure 16). The dialog has a scrolling list on the left that shows the collections. Select a collection from the list and designs in that category display in the selection area. Select a design and click OK. The design will be placed in the center of the Design Page (Figure 17).

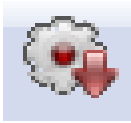


Figure 15

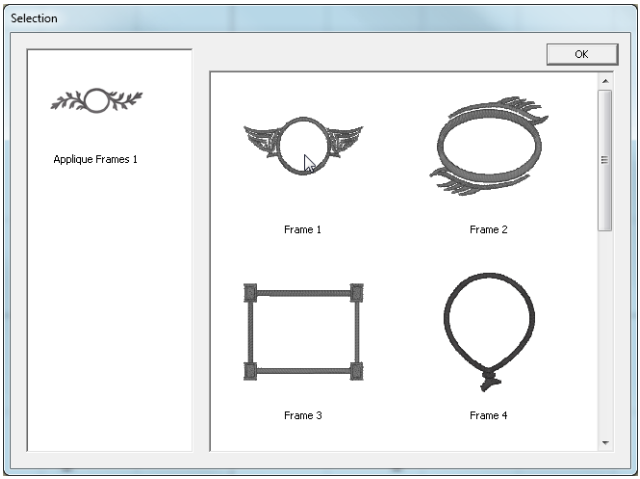


Figure 16

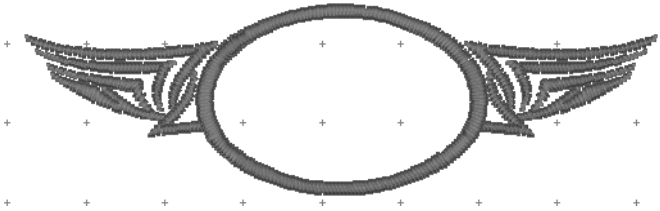


Figure 17

Frame/Design Thread Brand and Color: The frame thread brand and color are changed just as described in the create monogram section.

Merge Stitch File

Clicking the Merge Stitch File tool (Figure 18) found on the Design Toolbar or selecting Merge from the File menu (Figure 19) will display the Open Design Files dialog (Figure 20). Here you browse for embroidery designs to add to the Design Page.

Figure 18

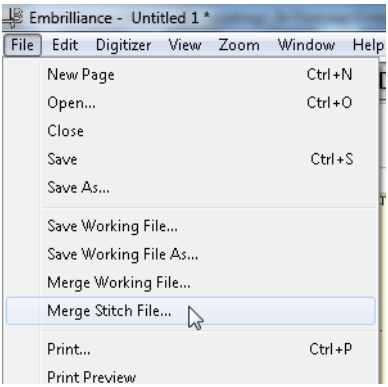


Figure 19

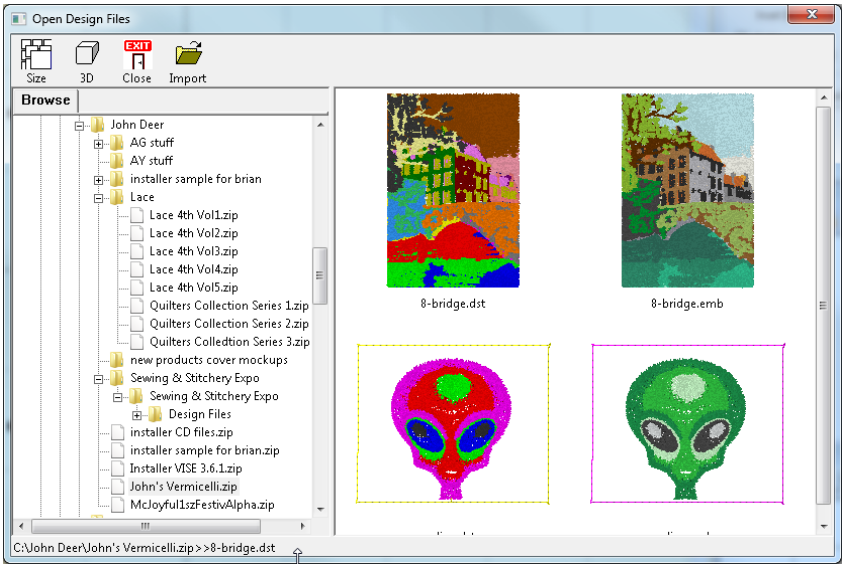


Figure 20

The Size control of this dialog determines the preview size of the design thumbnails (the design does not have to be selected for the determined size). The 3D control shows the preview in 3D, i.e. it shows simulated stitches.

Click the Import control to bring the selected design into the Design Page. The imported design will be centered on the Design Page.

Merged Stitch File behind Monogram

Size and Move Design Elements

The lettering, the Embrilliance designs and the merged stitch files can all be sized and moved, including the front to back ordering, independently.

Existing embroidery files can be resized with stitch recalculation. You can resize embroidery within Embrilliance up to 250% and down to 50%.

When any of these elements is selected a number of handles will be displayed (Figure 21).

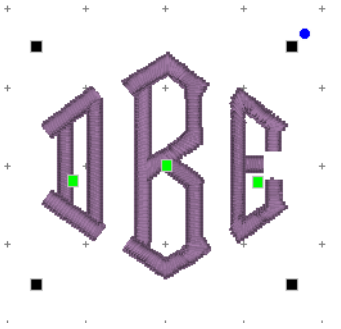


Figure 21

Click and drag on a black handle to resize the design. If you hold the shift key while dragging you can scale the design proportionally.

Click and drag the blue handle to rotate the element.

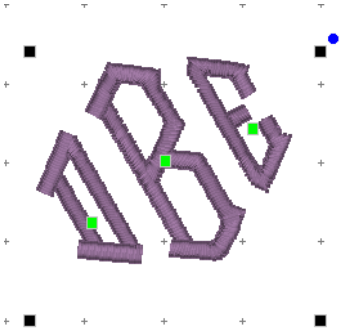
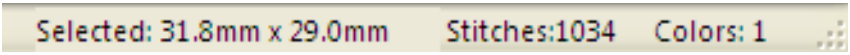


Figure 22

Click and drag anywhere on a design element to move it. As the design is moved off the page, in any direction, the page will automatically scroll if the cursor is in the ruler area of the page.

The Status Bar



The status bar is located at the bottom of the program window. Size, stitch count and color count information appears on the right side of the status bar. If you have no design selected, then the display will contain information about the entire design page. If you have something selected, then the information contains the word, 'Selected' and represents only those selected items.

You can double-click on the size information in the status bar to quickly switch between metric and inches on the design page and status bar.

The status bar also has a line of text on the right which can provide additional information about an onscreen control. Hover the mouse over a control, specifically a toolbar button, and the status bar may provide additional clarification of what the button does.

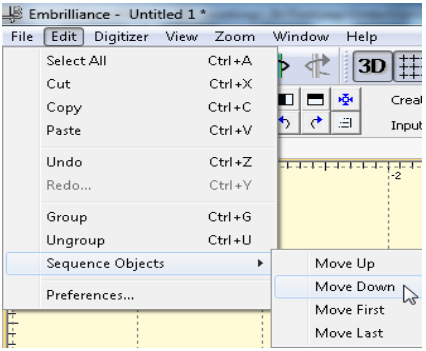
Auto-Fill

The auto-fill feature causes the re-sized design, either the Lettering or Embrilliance designs, to recalculate its stitches using a satin-fill where necessary. This prevents the satin stitching in the design from getting too long. This takes place when the satin stitches exceed 7.2mm. (Something similar happens when resizing regular embroidery designs.)

Sequencing

To change the front-to-back ordering of design elements (imported design files and lettering) choose one of the options from the Sequence Objects sub-menu of the Edit Menu. (The ordering of

individual letters in monogram is selected on the monogram property page.)



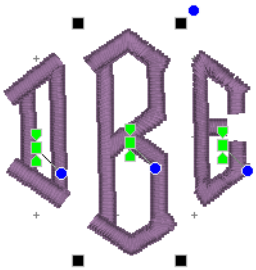
Sequence Objects Sub-Menu

Note the keyboard shortcut for each operation. Objects can be moved up a layer, down a layer, to the first layer and to the last layer.

Individual Letter Handles

The letters have additional control handles that display when the lettering is selected (Figure 21).

Figure 23



- Center Green Handle: This handle that appears in the center of a letter when the lettering is selected is used to move the individual letter. Simply click on it and drag the letter to the desired position.

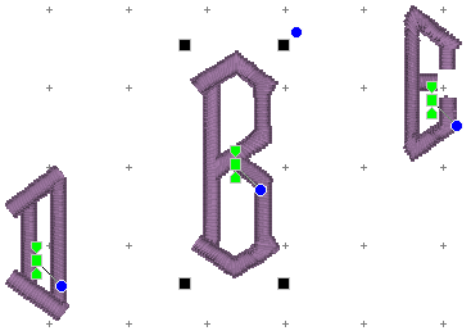
- Clicking on the green center handle will display up to three additional handles (Figure 23).

NOTE: Clicking the center green handle also allows you to change the color of that letter only, leaving the others untouched.

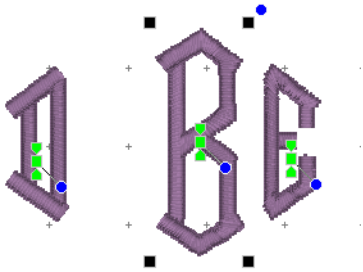
Embrilliance

These handles give a wide range of control over the positioning of the letters. The handles work on the selected letter and all letters to the right of the selected letter. Let's take a closer look at these handles.

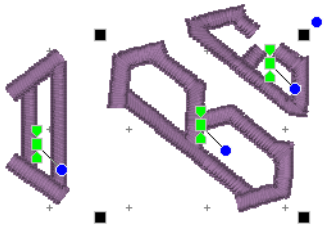
- Top Green Handle: This handle staggers the letters and changes the spacing simultaneously. The example below shows a stagger upward.



- Bottom Green Handle: This handle moves the letters to a new location without affecting the spacing.



- Blue Circle: This handle rotates the letter around its center.



Moving and Panning

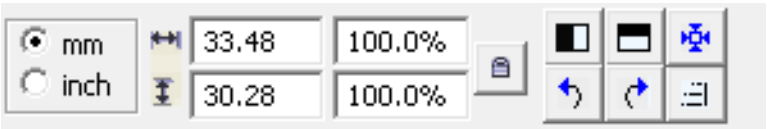
There are keyboard controls for moving elements and panning the design.

Arrow Keys: The arrow keys will move the selected design elements in the direction of the arrow. For finer control of this movement, hold the control key. This will 'nudge' the selected element.

Space Bar: Holding the space bar down will change the cursor to a 'hand' which when dragged will pan the entire design page.

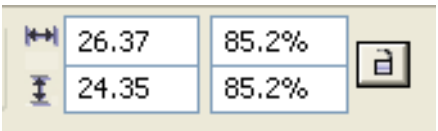
Accurate Size and Position

Sizing and positioning of design elements can also be accomplished using the Size and Position controls panel.



The first control on this panel sets the unit of measure for the design page. The choices are millimeters and inches.

The width and height of a selected design element can be precisely set by entering the desired value in the width and height text box and pressing the enter key. If an exact size is not known, the element can be sized as a percentage of its original size by entering a percent value in the percent text box and pressing the enter key.



Precision Size Controls

These controls are also updated as a design element is moved or re-sized using its handles.

The element is scaled proportionally if the Scale Proportionally control is locked, otherwise height and width changes are applied individually.

Locked - Scale Proportionally

Unlocked - Size Height and Width Individually

Note: If you have sized an element and want to return to its original size, simply lock the Scale Proportionally control and enter a value of 100 in either of the percentage fields.

Mirror and Rotate

The next four controls (Figure 24) mirror and rotate selected elements. Mirroring is about the horizontal or vertical axes. Rotation is clockwise or counter clockwise in 90 degree increments.

Figure 24

Centering

Design elements can be centered on the design page by selecting them and clicking the Center to Hoop tool.

View Toolbar

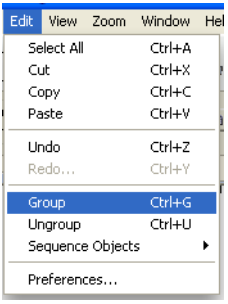
Selecting Design Elements

Design elements are selected by clicking on them using the arrow control. The arrow is located at the right side of the View Toolbar. You can tell if one element is selected because there will be handles around the design. To select more than one element, use the ‘Ctrl’ key while clicking on the designs. To select all the designs, you can type ‘Ctrl+A’ or use the Edit menu command, ‘Select All’. You can also drag a rectangle around a set of designs to select them.

Grouping Design Elements

Design elements can be grouped together. When elements are grouped movement and sizing operations are applied to all elements in the group. To group elements select them and press <ctrl-g>. To ungroup elements select the group and press <ctrl-u>.

There are also items in the Edit menu for grouping and un grouping.



Edit Menu - Group / Ungroup

Undo and Redo

After moving or sizing design elements, you can always go back to a previous state by using the Undo feature.

The Undo feature is activated by pressing <ctrl-z> or clicking the Undo Tool found in the Main Toolbar.

Undo Tool

A previously undone operation can be redone by pressing <ctrl-y> or clicking the Redo Tool.

Redo Tool

Navigation and Zoom

The Overview window (Figure 25) shows the current design page and provides a Zoom slider control and a Pan control, the red rectangle, for easy navigation and zooming. The Pan control is moved by clicking anywhere in the Overview window and/or dragging. The mouse position will be the center of the view.

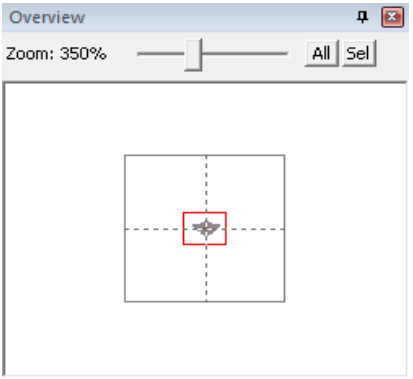


Figure 25

Dragging the slider control zooms the design. The slider control also responds to numeric key entry. For example, pressing 5 will move the slider control to 500%.

Zooming can also be enabled by Menu (Figure 26) and Toolbar controls.

‘All’ zooms to all objects on the design page.

‘Sel’ zooms to selected objects on the page.

From the Zoom menu specify what should be zoomed: the Hoop, All elements or the Selected element. Then choose the amount of zoom.

By selecting the Zoom tool in the View tool bar (Figure 27) you can zoom in by left-clicking and zoom out by right-clicking on the design page.

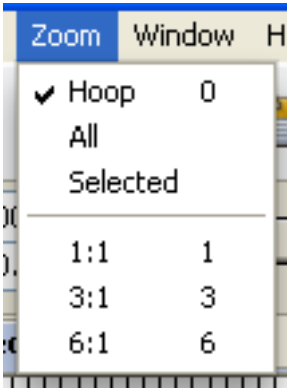
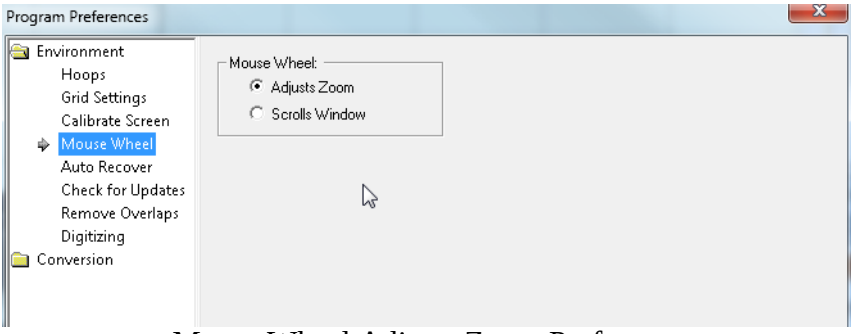


Figure 26

Figure 27

At the 100% or 1:1 zoom factor the design is in actual size. At other zoom factors the design is that actual size, ergo a zoom of 3:1 means the design appears on the screen at three times its actual size.

The mouse wheel can be used to zoom the design by selecting Adjusts Zoom in the Mouse Wheel preference.



Mouse Wheel Adjusts Zoom Preference

Document Windows and Design Pages

Design pages are displayed in the document window of the program. There can be multiple design pages open at any given time. For each page in use, a Tab control is displayed at the top of the document window (Figure 28). Design pages are added to the document window by clicking the New control (Figure 29) in the Main tool bar (Figure 30), by pressing Ctrl-N, by choosing New Page from the File menu (Figure 31) or choosing New from the Window menu (Figure 32).

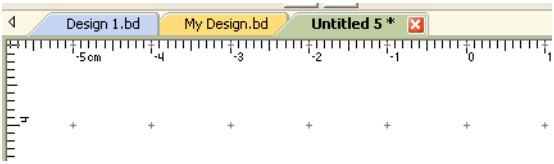


Figure 28

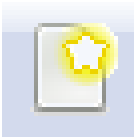
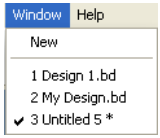


Figure 29

Figure 30

Figure 31

A design page is activated by clicking its Tab control or by selecting it from the list in the Window menu.



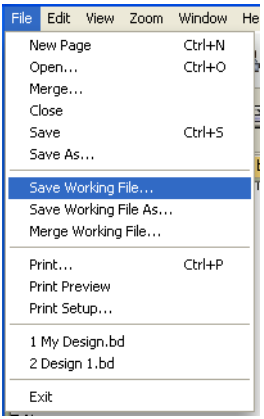
Window Menu

The Tab control will display the name of the file associated with the page once it has been saved otherwise it is named “untitled x” where x is a running number.

Working with Files

Saving Your Work-In-Process.

While in the process of creating a design, you may want to stop work and come back to it at a later time. To facilitate this process Embrilliance uses a Working File. A Working File has an extension of (.be) and differs from an embroidery file in that it can be saved and later opened for continued editing. The File menu provides items for saving and opening Working files.



File Menu - Working Files

Merge A Working File

A previously saved working file, perhaps from another project, can be merged with the current design. Choose Merge Working File from the File Menu to select a working file to merge.

Saving Your Finished Design

To save your finished design choose Save or Save As... from the File menu (Figure 32) or click the Save tool (Figure 33) in the Main tool bar.

When you save the finished design in a format for your machine, a working file as described above is also saved so you can always go back and edit the design.

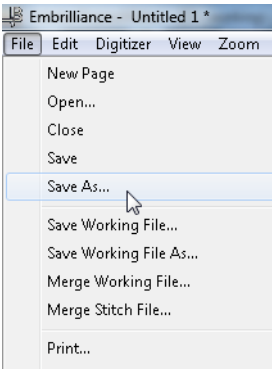


Figure 32

Figure 33

All of these actions will display the Save As dialog (Figure 34) if the design had not been previously saved. If the design had been previously saved, the Save option from the File menu will save the file without displaying the Save As dialog.

When saving the design choose from the file type pop-up the format suitable for your embroidery machine.

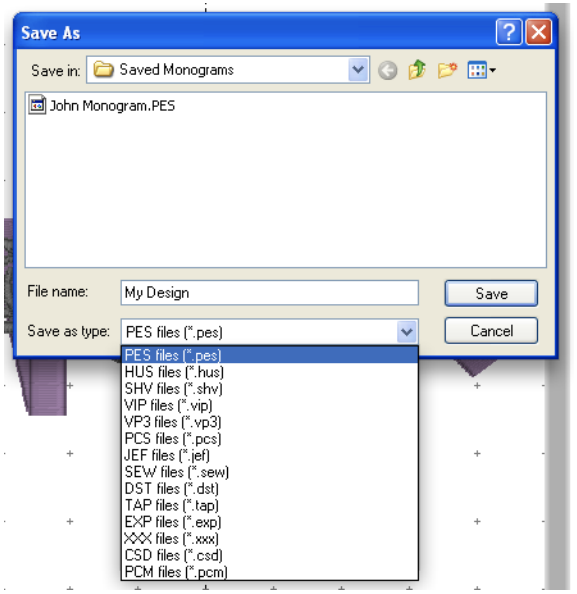


Figure 34

File Conversion

When saving your finished design the program can save to the following file formats.

CSD
DST
EXP/EXP+
HUS
JEF
PCM
PES including versions 1.0-8.0
SEW
SHV
TAP
VIP
VP3
XXX

Stitch Simulator

The Stitch Simulator (Figure 35) lets you see how the design will sew out by sewing on the screen. It is activated by clicking the Stitch Simulator tool (Figure 36) in the View tool bar or selecting Stitch Simulator from the View menu (Figure 37).

Figure 35

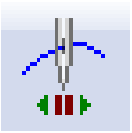


Figure 36

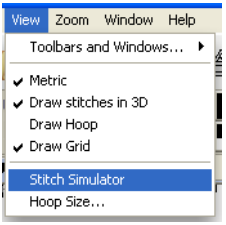


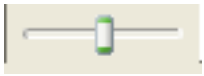
Figure 37

Stitch Simulator Controls: The controls are easy to use and give complete control of the simulated sewing process.

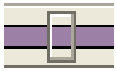
Player Control: This control lets you sew forward, backward and stop. The right arrow starts sewing forward. The double bars stop sewing. The left arrow starts sewing backward.

Step Stitch Control: This control lets you sew one stitch at a time forward or backward. Right arrow forward. Left arrow backward.

Speed Control: Use the slider to change the speed of sewing. Move to the left for slower to the right for faster.



Manual Control: Click and drag this control forward or backward to quickly move a particular section of the design.

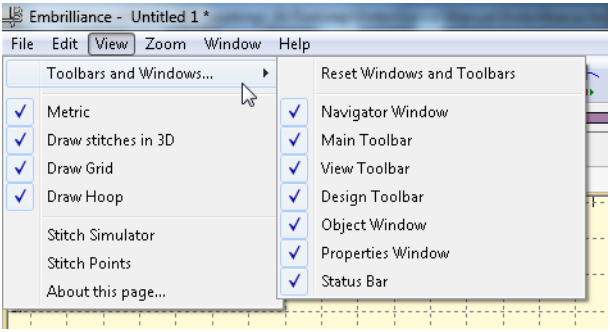


Stop Control: Click the Stop button to insert a color stop in the design. This allows you to change colors on the fly. Or creatively use this to isolate parts of the design that you want to remove or isolate.

Views and the View Menu

The View Menu controls the visibility and style of elements.

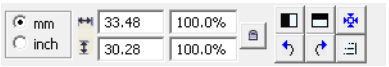
The first item, Toolbars and Windows displays a sub-menu that controls the visibility of all toolbars, the property window and the navigation window. If there is a check mark next to the entry, it is visible.



- Metric: Sets the unit of measure for the design to be metric.
- Draw Stitches in 3D: The design will be drawn to simulate actual stitches.
- Draw Hoop: An outline of the hoop will be drawn.
- Draw Grid: The grid will be drawn using grid setting preferences.
- Stitch Simulator: Displays the Stitch Simulator.

All of the above items have an equivalent tool in the View Toolbar or the Size and Position Toolbar.

View Toolbar



Size and Position Toolbar

Setting the Hoop Size

Click the Preferences button to show the Preferences Window.

The Hoops Dialog is where you choose an appropriate hoop. At the top choose the file format your machine uses. The file format selected controls the list of hoop sizes to choose from. Click OK when you have the desired hoop selected.

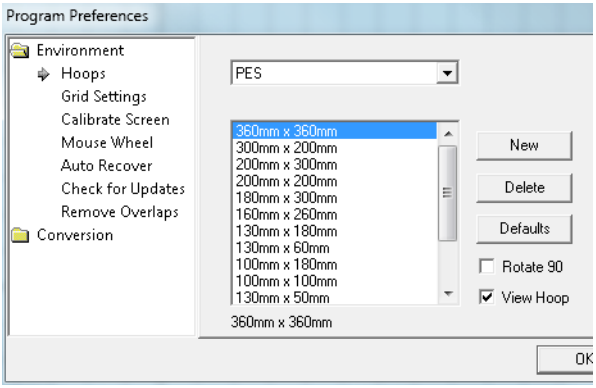


Figure 38

In addition to selecting from pre-defined hoops you can add a custom hoop size by clicking the New button. This displays the New Hoop dialog (Figure 39). In this dialog you specify a name and size for a new hoop. Click OK and the new hoop will appear in the hoop list.

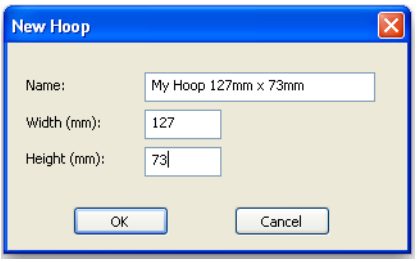


Figure 39

Printing a Design Template

A design template showing the design at full size and with registration marks can be printed. Just choose print from the File menu.

The template can be previewed before sending the output to the printer. Below is a sample template with a monogram surrounded by a frame. Note the registration marks. And, the design is printed at the left side of the page to save paper!

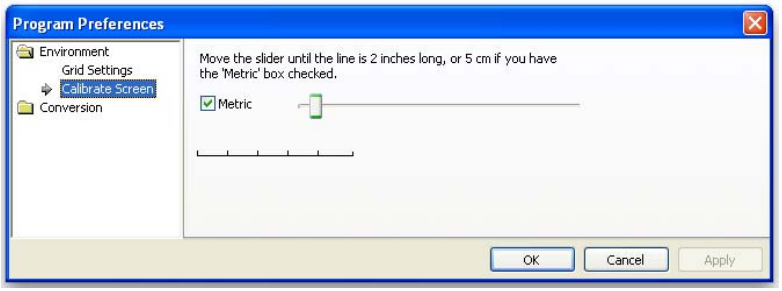
Template - Page Placement

Template - Close Up

Measurement and Calibration

For accuracy in sewing the finished design two tools are included. These are: 1) a tool for measuring the design on screen and 2) a tool for calibrating the screen.

Screen Calibration: Choose Preferences from the Edit menu, this displays the Program Preferences dialog. Choose Environment and Calibrate Screen. Follow the instructions in the dialog and your screen will now be properly calibrated.



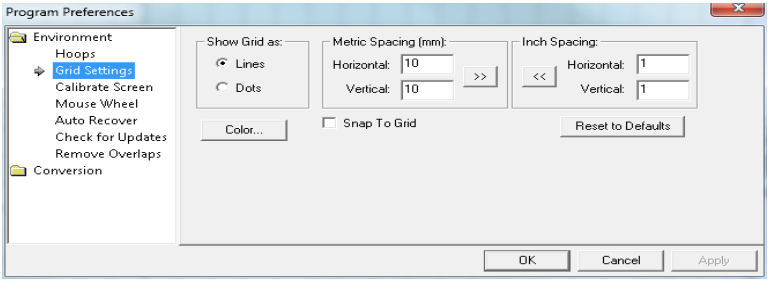
Screen Calibration

On Screen Measurement: You can check actual design sizes by using the Measure On Screen tool. Select the tool and click and drag over the design. The size of the area you are creating will display in the status bar.

Note: The status bar can switch between inches and metric by double-clicking on the measurement.

Environment Preferences

Environment preferences are Grid Settings and Calibrate Screen. (See Measurement and Calibration for details on the Calibrate Screen preferences). Grid Settings allows you to specify how the grid is displayed in the design page.



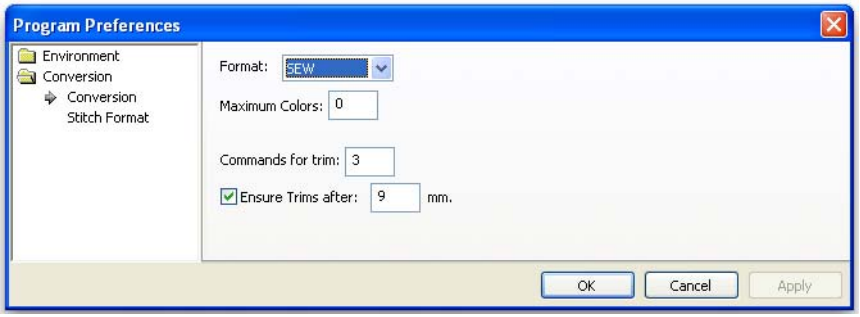
Environment - Grid Settings

Note: The arrow buttons, labeled ">>" and "<<", will copy the settings from inches to metric and vice versa. Thus, you can set up a grid that has metric spacing for machine/hoop accuracy, but can display information to you in inches.

Metric and Inches

Although there are preferences for Metric and Inch grid settings, this is not where you switch your view for that setting. You can change the main view by double-clicking on the status bar or using the View menu.

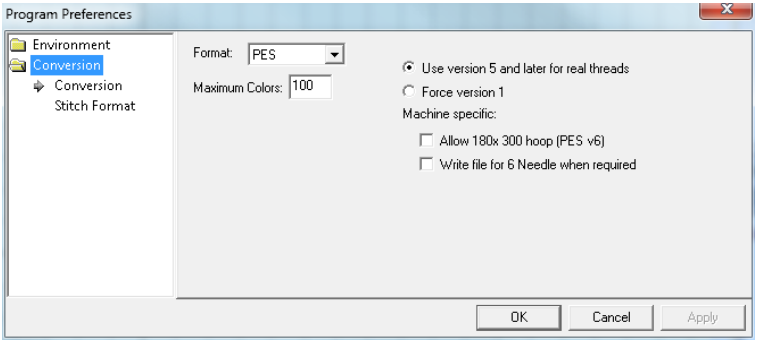
Conversion preferences allows you to specify tie off and cycle trimmer behavior for all supported file formats. There are two entries, Commands for Trim and Ensure Trims after.



Letter Tie Off and Cycle Trimmer Preferences

Also note that certain formats, such as PES, have their own specific settings, which may not be visible when other formats are selected. For instance, in PES there are two machines (as of this writing) that support a hoop of 200mm x 300mm in both orientations. The 6 needle machine holds that hoop sideways; however, it can embroider a rotated design. The single needle machine uses the

same hoop, however it holds the hoop upright. So if you are going to be using the 6 needle machine, please check the box.



PES Conversion Preferences

Docking Pane Interface

The Properties Window and Navigator Window use a docking pane interface. This interface is can be configured and the configuration is persistent, i.e. it is remembered between program invocations.

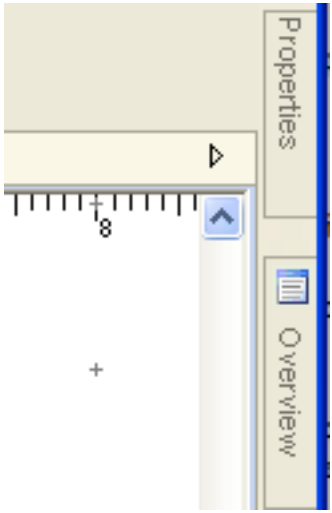
The controls for this interface consist of a Pin, a Close Box and a Tab. The Pin and Tab are related. When the Pin is “unpinned” (Figure 40) the window slides into the main window frame and presents a Tab with the window name. When the Pin is “pinned” (Figure 41) the window stays open and the Tab goes away.

In the unpinned configuration hovering the cursor over the Tab reveals the window. When the cursor is moved out of the window it slides back into its unpinned position.

The Close Box dismisses the window altogether. To restore a dismissed window you must use the View Menu, Tools and Windows item to restore the dismissed window (Figure 42).

Figure 40 - Unpinned

Figure 41 - Pinned



Unpinned Tab Controls

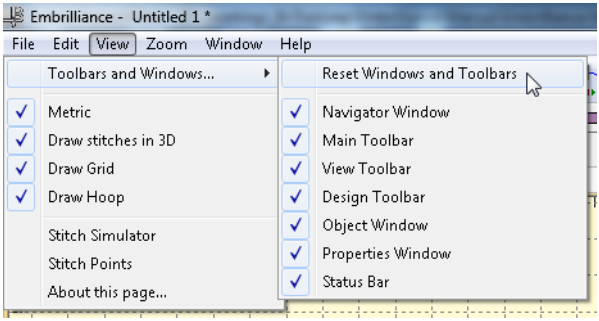


Figure 42 - Restore Window