The Deer's Embroidery Legacy

Design Doodler

Design Doodler
User's Guide

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CHAPTER 1

About the Workspace

Before you start using the software, we recommend that you understand the Design Doodler design workspace and learn a few of the basic components outlined in this section.

Topics covered in this chapter:

- Overview of the Workspace, including a brief description of all the tools icon.
- Description of the toolbar icons
- Setting up the design workspace environment.

Parts of the Workspace

The Design Doodler workspace contains several areas. The image below shows the workspace, and the sections that follow give a brief description of the properties/functions of each.
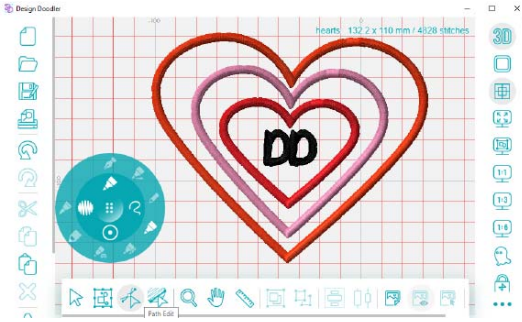
The Toolbars

Around the outside of the workspace, you will see the Design Doodler toolbars. On these toolbars, you will see icons for all the tools that you can use to open, save, print, edit, and adjust properties of the designs you create - as well as many other functions.

Note that you can "hover-over" each tool icon to see a tool tip which identifies that tool; these tool tips are not available on the iPad version of the application, however.
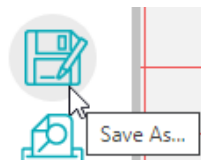
The table identifies each or these tool icons, and lists a brief description of each.
For more detailed information on each of these tools, please refer to the corresponding procedures, later in this guide.

Tool	What it does
	New: Creates a new untitled design with the Normal style settings.
	Open Design: Opens an existing design file.
	Save As: Opens the "Save as" dialog, which allow to select the format and directory in which to save the current design.
	Print Preview: Opens the print preview window, which in turn will let you print the current design.
	Undo: Reverses your last action.
	Redo: Reverses the action of the Undo command.
	Cut : Cuts the selection and copies it to the clipboard.
	Copy: Copies the selection to the clipboard.
	Paste: Pastes the clipboard contents into the design, at the end of the design sequence.
	Delete: Deletes the currently selected segment.
	Text: Inserts a text segment into the design.
	Close Shape: Closes an open shape by joining the end points.
	Automatic Branching: Optimizes the sequence of segments in a design to minimize the number of trims and jumps needed overall.

Tool	What it does
	Snap to Anchors: Turns on the "snap to" functionality. When enabled, the initial point of a segment you draw will be "snapped" to the end anchor point of an existing segment, if they overlap.
	Select: Selects objects in the design window.
	Select All: Selects all objects in the current design workspace.
	Path Edit Use to select and edit anchor points to modify outlines.
	Inclination Edit: Use to change the angle of the inclination line in Fill segments
	Add Hole: Use this tool to place a hole in an existing fill segment by placing anchor points.
	Zoom: Increase or decrease the magnification of the design in the workspace window.
	Pan: Allows you to move the design area around.
	Ruler: Measures the distance across any two points.
	Group: Combines several segments into a group so that they can be treated as a single unit.
	Ungroup: When a set of grouped segments is selected, Ungroup will separate them into individual segments again.
	Align: Opens a pop-up list of the alignment tools.
	Distribute: Opens a pop-up list of the distribute tools.
	Load Backdrop: Opens a dialog that allows you to import an image into the design workspace.

Tool	What it does
	View Backdrop: Toggles the view of a backdrop image on and off.
	Select Backdrop: Allow you to select the background image, so that it can be moved, resized, and/or rotated.
	Canvas Color: Allows you to change the color of the design window, set a fabric pattern as the "canvas".
	3D: Realistically renders your design onscreen.
	Hoop: Displays the design as it fits relative to the embroidery hoop. Clicking this button a second time will turn the view off.
	Grid: Displays a background grid, which helps with alignment. This grid can be used for the alignment of items on the display.
	Zoom 1:1: Zooms the design to its actual size.
	Zoom 1:3: Zooms the design to 3 times its actual size.
	Zoom 1:6: Zooms the design to 6 times its actual size
	Ghost: Displays any hidden segments/ stitches in light gray color in the workspace.
	Auto Tie: Adds tie-on and tie-off stitches where needed in the current design.
	Color Palette: Shows and hides the color palette panel, which allows you to apply thread colors to the selected segment.
	Properties: Opens the properties pane to display properties of the design - such as artwork fill properties, artwork pen properties, text properties, and so on.

Tool	What it does
	Sequence View: Opens the Sequence View panel, which displays all of the segments the current design grouped by thread color.
	Widget: Shows and hides the Widget palette, which gives you access to the various Design Doodler drawing tools.
...	**Menu** ("dots") tool: Open a menu which allows you to show and hide items in the workspace, e.g. stitches, stitch points, and entry/exit point.

Status Line

The Status Line appears at top-right corner of the design workspace. When there are no items (segments) selected, the Status line displays the overall dimensions of the design (width × height), along with the number of stitches.

Star DD   6.5 x 4.56 in / 1688 stitches

When the you have selected an individual segment, or a group of segments, the status line will display the dimensions and stitch number for that selection only. (Note that the line will be preceded by the word "Selection" in this case; when no segment or segments are selected, it will be labelled with the name of the open design)

Opening and Saving Designs

When you open Design Doodler, you can immediately begin creating a new design by drawing in the workspace with the Widget tools. If a design is already open in the workspace, and you want start a brand-new design, simply press the New design icon. You will see a dialog, asking if you want to save the current design, or discard your changes (if there are any changes since it was last saved). Choose "Discard" to immediately open the new design, or "Cancel" to return to the current design to save it.

Opening Designs

To open an existing design:

1   To open an existing design, click the Open Design tool.
    You see the Open Design dialog.

2   In the **Look in** list, browse to the location of the file you want to open.

3   Click in the **Files of type field**, select the desired file type from drop-down list.

4   In the File name box select the file you want to open by clicking the file.

5   (Optional) Check the Convert to Outlines box; this option will only be applicable if the design is in a stitch (machine-type) file. When selected, the design's stitch segments will be converted to outlines, allowing you to select the segments individually and edit them.

6   Click Open.

Saving a Design

You can use the Save As to save designs as an outline format in a number of different machine file formats.

If you saving your design using the tablet version of Design Doodler, you can only save them in the .JDS format. In order to save a design in machine format, you must open the .JDS file in the desktop version of the software and save it from there.

The Save As tool permits you to save the current design in its current form and start a different, new embroidery design. By default, the file will be saved in the .JDX format, also known as the "working file" format. However, you can also use this function to save a design in a wide variety of embroidery machine formats.

To save a design:

1 Click the Save As ![tool icon] tool.

You see the Save As dialog box.

2 In the Save in list, browse to the location you want to save your file.

3 In the File Name box, enter the file name for the design you want to be saved.

4 In the Save As type list, click the down arrow on the right to select the file type you want the design to be saved as.

5 Click Save.

Another way to save is by clicking the dots ••• icon on the toolbar, and selecting **Save** from the list of options.

Workspace Viewing Options

The Menu tool gives access to a list of show/hide various aspects of the current design, including stitch points, stitches, commands and entry/exit beads.

To show and hide the beads and commands, click the dots ••• icon to open the list of available workspace symbols.
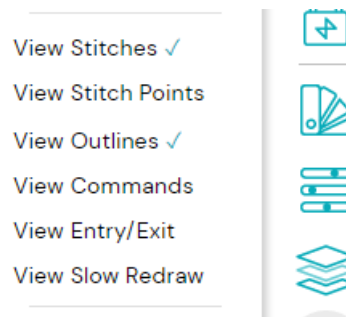
Click on the item you want to have shown in the workspace, or if it is already visible, click to hide it. The list will close automatically after you select an item to show/hide.

- **View Stitches**: Displays a preview of the stitches in the workspace.
- **View Stitch Points:** Displays the penetration points of the stitches; the points appears as small black dots.
- **View Outlines**: Displays the paths, or outlines, of each segment.
- **View Entry/Exit:** Shows the position of the first and last points in the sewing of a segment.
- **View Commands:** Displays the icons that for color changes and trims.

- **View Slow Draw:** Shows the "Slow Redraw Bar'" which allows you to navigate through the design's stitches in sew order. When enabled, the Slow Draw bar appears along the bottom of the workspace. For more details on how to use the slow draw bar, see the following section.

Slow Draw Bar

The Slow Draw bar is located along the lower edge of the design window. You can use this tool to preview the sew-out of your design on-screen.

The Slow Draw bar simulates the whole design, as it will be sewn-out on the embroidery machine. There are three controls on the Slow Draw bar.

- Press the **Play** ▶ button to start the sewing simulation; the simulator will start with the first stitch in the design and proceed in order to the stop point.

- Press the **Stop** ■ button to stop the simulation (the simulator will go to the design end point, i.e. all stitches will be shown).

- Press the **Rewind** ◀◀ button to go back to the beginning of the design; the simulator will return to the starting point of the design.

Sequence View

Sequence View allows you to view information that takes the form of branches. For instance, each color in your design will have different lines of stitching in that color. You can also select outlines and stitches in the Sequence View by clicking on them.
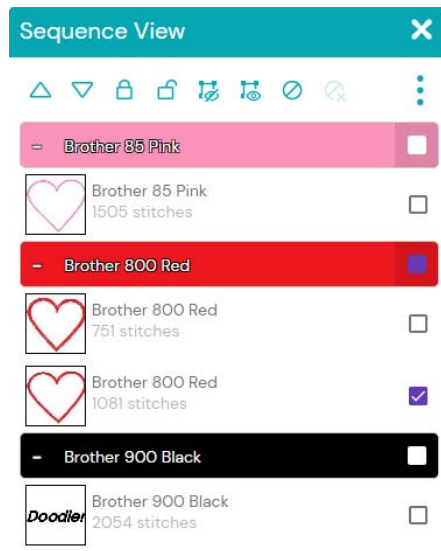
The Sequence View control allows you to expand and contract branches (colors) allowing you to show or hide the individual outline segments inside them. You open and close the branches of the control by clicking on the + (plus) and – (minus) signs in front of the branch name.

The sequence view also displays the number of stitches in each individual segment. This information appears underneath the thread color name.

To show or hide the Sequence View, click the Sequence View ⬚ tool.

Color Palette

The Palettes panel displays a list of the thread colors that are available to use in the current design. The this panel also allows you to choose from a list of different thread color charts that come loaded with the software.

Selecting the Thread Chart

Design Doolder comes with a large variety of the most popular manufacturers' thread charts installed. In the dialog, you can choose from the list of charts, and this will become the current thread palette. You will then be able to use these new colors in the design.

To select a new thread chart:

1   Select the Palettes [icon] icon.
    You see the Palette dialog.

2   Click the Menu ••• tool at the top of the color palette.
    You see drop-down list of the available thread charts in the application.
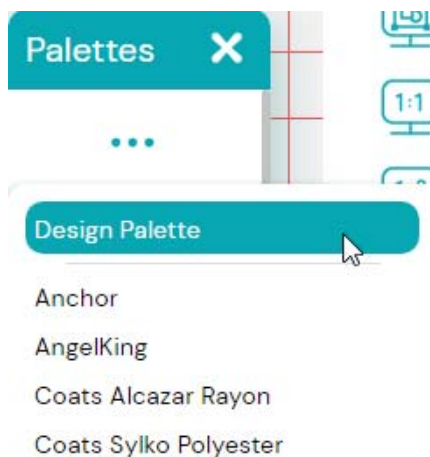
3   Scroll down the desired chart, and click on the name to select it.
    The colors in the Palette dialog will be updated accordingly.

Changing thread colors

You can easily change the colors of individual segments of your design using the Palettes dialog.

To change colors:

1   Select a design segment, or group of segments.

2   Select the Palettes [icon] icon.

3   The Palettes panel will open, displaying a list of the available colors in the current thread palette.

4   Select the color that you want to apply.
    The color of the selected segment (or group) will change accordingly.

5   Repeat the above procedure for any other segments you want to re-color.

6   Save the design.

Adjusting Workspace Settings

The settings dialog enables you to make adjustments to aspects of your work environment in Design Doodler. There are three different pages on the settings dialog:

- **General Settings**, which includes the tool settings for the "Widget", the units settings, the "AutoClose Applique" setting, and the "Show Last Stitch Marker" setting.

- **Hoop Settings**, which allow you to choose hoop type (that is, machine format) and size.

- **Grid settings**, which are used to determine the spacing, color and line style of the workspace grid.

To open the Settings dialog:

1. On the toolbar on the right side of the workspace, click the "viewing options"

   (dots) tool, which looks like this ••• .
   You see the Settings dialog.
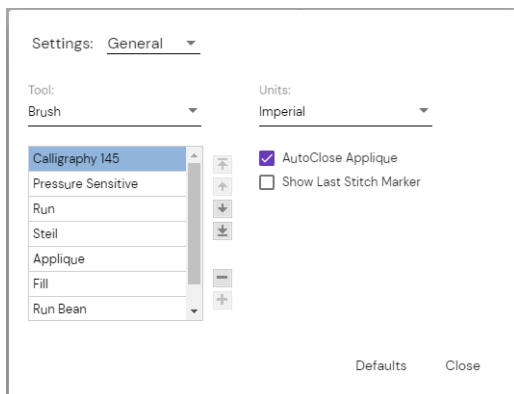
2. At the top of this dialog, you will see a "Settings" field. Click on this field, and select "General" (if it is not already selected) from the drop-down list.

3. Adjust the Widget Tools preferences: In this area, you can configure the individual tools (also called "brushes") of the Widget tool. For example, you can add new values brush width, stitch density, or stitch length values. You can also remove such values that are not useful for you.
   A detailed guide on how to configure the Widget tools is included with the procedures for using the Widget, later in this guide; please see "Drawing Designs—Widget Preferences."

4. Adjust any of the following settings:

   - From the Units list, select the units of measurement you want used for your designs: Metric or English.

     You can also select the units of measurement using the menu options available in your design workspace. Right-click on the ruler at the left or top of the window and select Metric or Inches.

5. Click Close.

Grid Settings

The Grid Settings help you align and measure artwork and design elements. You can set the grid to measure in millimeters or inches, as you prefer. Show or hide the grid by selecting the Grid tool on the toolbars.

By default, every horizontal and vertical line will be highlighted in the major grid. If you want to have additional guide lines, you can add more major grid lines as well as a minor grid. You can increase the spacing values for

the minor grid; however, zero and negative spacing values are not supported. The minor grid can also have different horizontal and vertical spacing values.

To make grid lines more visible on particular backgrounds, you can change the grid color; you can choose different colors for each of the "major" and "minor" grid.

To define grid settings:

1   Click the dots ••• icon, and select "Settings" from the list of options.
    You see the Settings dialog.
2   In the settings dialog, select "Grid"
    You see the Grid settings.

Settings: Grid   ▼

Spacing

Horizontal (in)
0.39

Vertical (in)
0.39

Grid Major

Horizontally every (lines)
10

Vertically every (lines)
10

Style

◉ Show grid as solid lines
◯ Show grid as dashed lines
◯ Show grid as dots

Defaults   Close
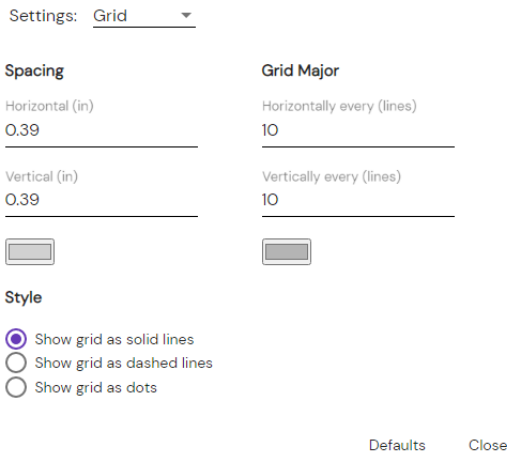
• In the Spacing area, complete the following:
    ◆ In the Horizontal spacing field, enter the size of the horizontal spacing.
    ◆ In the Vertical spacing field, enter the size of the vertical spacing.
    ◆ In the Color list, select a predefined color to use for the minor grid. If you

want to choose from a larger selection of colors, click More Colors from the color box.

3   In the Grid Major area, complete the following:
    ◆ In the Horizontal lines box, enter how often you want horizontal lines to be highlighted in the major grid. For example, if you enter 3 in the horizontal lines box, every third horizontal line will be highlighted in the major grid.
    ◆ In the Vertical lines box, enter how often you want vertical lines to be highlighted in the major grid. For example, if you enter 5 in the vertical lines box, every fifth vertical line will be highlighted in the major grid.
    ◆ From the Color list, select a predefined color to use for the major grid. If you want to choose from a larger selection of colors, click More Colors from the color box.

4   In the Style area, select one of the following grid styles:
    ◆ Show grid as solid lines
    ◆ Show grid as dashed lines
    ◆ Show grid as dots
5   Click OK.

Choosing a Hoop

On the settings dialog, you can select the appropriate hoop for your design from a list pre-loaded hoops You will notice that you can select hoops of different machine extensions, corresponding to the machine type you are going to be using to sew the finished design.

The Hoop Settings page also has an option that lets you create and save your own custom hoops. This option allows you set the width and height of the custom hoop to any value you need.

To choose a hoop:

1 Open the Settings dialog
2 From the Settings drop-down list, select Hoop.
You see hoop settings page.

Settings: Hoops   ▼

Hoop Format:
ALL   ▼   PES 100 x 100 mm

| DST 300 x 300 mm |
| EXP 300 x 300 mm |
| EXP 155 x 200 mm |
| EXP 40 x 60 mm |
| EXP 260 x 400 mm |
| EXP 100 x 130 mm |
| EXP 150 x 400 mm |

☐ Rotate Hoop

Defaults   Close
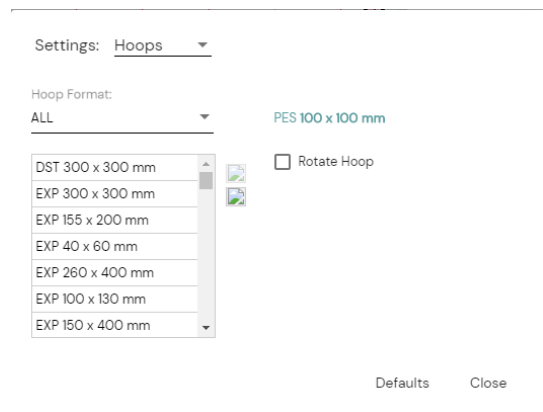
3 From the Hoop Format drop-down list, select the machine format you want to use.
The list of hoops shown will change to according the format you select.
4 On the list of hoop sizes, select the one you want to use by clicking on it.
The dimensions of the selected hoop will be displayed on the right of the Hoop settings page.

Settings: Hoops   ▼

Hoop Format:
EXP   ▼   EXP 40 x 60 mm

| 300 x 300 mm |
| 155 x 200 mm |
| 40 x 60 mm |
| 260 x 400 mm |
| 100 x 130 mm |
| 150 x 400 mm |
| 72 x 50 mm |
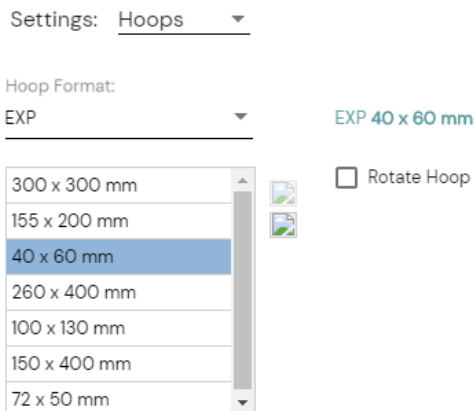
☐ Rotate Hoop

5 (Optional) Check the Rotate Hoop box to rotate the hoop by 90-degrees. Use this option if turning the hoop relative to the design helps the design fit better.
6 Click Close.
The chosen hoop will be displayed in the workspace.

To create a custom hoop:

1 Open the Settings dialog
2 From the Settings drop-down list, select Hoop.
You see hoop settings page.
3 Click the New button.
You see the "Enter hoop size" dialog.
4 Enter the custom hoop's height and width in the corresponding fields.
5 Click OK.
The dialog will close. On the Formats list, the custom hoop you have just created will appear in the "Custom" category.

Widget Preferences

On the General tab, you can configure the Widget palette to your own specifications. For example, you can add or remove brush width, stitch density, or stitch length values on the palette, or remove values that are not useful for you.

For a detailed information on how to configure the Widget Palette, see "Drawing Shapes with the Widget Tool—Widget Preferences."

Workspace View Tools

Changing the Magnification Level

Use the Zoom to increase or reduce the size of designs. When the Zoom mode is enabled you can either left-click to enlarge your design or right-click to make your design smaller.

To use the Zoom Tool:

1 On the toolbar, click the Zoom 🔍 tool to go into zoom mode.
2 To make the design appear larger (zoom-in) left-click in the workspace.
3 To make the design appear smaller (zoom-out), right-click in the workspace.
   The magnification level will be adjusted accordingly.

Other zoom options

Aside from the Zoom tool, there are a number of other tools that you can use to quickly adjust the magnification of the current design. Click on any of the following tools to adjust the zoom level as required:

- **To Fit** ⛶ Adjusts the zoom level the whole design fit in the design window.

- **Fit selection** ▣ : When selected, the magnification level will be changed to make the selection fill the window.

- **1:1** 1:1 Zooms in (or out) to make the design its actual size.

- **1:3** 1:3 Makes design appear exactly three times actual size.

- **1:6** 1:6 Makes design appear exactly six times actual size.

Showing/Hiding the Grid

You can show the grids or, if they are in the way, you can hide them.

To show the workspace grid:

- On the toolbar, click the Grid ⊞ tool.
  The grid will appear in the workspace. To hide the grid, click the Grid tool again.

Showing/Hiding 3D Stitches

The Design Doodler design workspace includes an option to view designs in 3D view.

Use the 3D 3D tool to preview a realistic 3D view of your design.

To show 3D stitches:

- On the toolbar, click the 3D 3D tool.
  The stitches will appear in 3D view. To hide the 3D stitches, click the 3D tool again.

Working with Backdrop images

You can open an image file to use as a backdrop while creating designs. Backdrop images can be used as a template, for tracing over with the Widget tools.

If you have loaded a backdrop image into a design, it will be saved along with the rest of the design information when you save the file.

Loading a Backdrop Image

When adding a backdrop image, you can select an image from the Backdrop library (installed along with Design Doodler) or use your own image. This tool will open most bitmap or vector file types (e.g. *.BMP, *.JPG, *.AI, etc.).

To load an image as a backdrop:

1 On the toolbar, click the Backdrop tool.
   You see the Load Backdrop dialog.
2 To insert an image file as the backdrop, take the following steps:
   ◆ In the Look in list, browse to the location of the image you want to load.
   ◆ In the Files of type list, select a file type for the image you want to open.
   ◆ Select the specific image you want to use.
3 Click Open.
   The selected backdrop image will appear the workspace window.

Showing/Hiding the Backdrop Image

During the course of design editing, you may find it useful to temporarily hide a backdrop image.

Use the View Backdrop tool to show and hide the backdrop without actually removing it from the design. Click the Backdrop tool a second time to restore the image.

Adjusting the Backdrop Image Manually

You can select a backdrop image in the workspace using the Select Backdrop tool. When it has been selected, it will be enclosed in a selection frame with handles; you can use these handles to resize, stretch, or rotate the image.

To adjust a backdrop image manually:

1 Click the Select Backdrop tool.
2 Click the backdrop image.
   You see the backdrop image enclosed in a selection frame.

You can adjust these values in one of two ways: either by typing directly into the corresponding field, and then pressing "Enter" on the keyboard, or by "hovering over" the field and clicking the up/down arrows to increase/decrease the value.

Properties

Left:	0.25 ↕	in
Top:	0.8	in

3 Do one or more of the following to adjust the backdrop.

- Click and drag the corner handles to resize the image proportionally.
- Click and drag the top or bottom (center) handles to change the vertical size.
- Click and drag the left or right (center) handles to change the horizontal size.
- Click and drag the rotation handle (located on the "branch" extending from the top of the selection frame) to rotate the image.

The backdrop image will be adjusted accordingly.

Adjusting the Backdrop in the Properties Panel

When you select the backdrop image, the properties panel will display the current properties of the image -- its position, size, angle, and opacity. Using the controls on the Properties panel, you can to make fine adjustments to any of these properties.

To adjust properties of the Backdrop:

1 On the toolbar, choose the Select

Backdrop 🖼 tool

2 Click on the Backdrop image to select it.
You see the backdrop image enclosed in a selection frame.

3 Click the Properties 🗏 icon on the toolbar.
The properties panel will display the properties of the backdrop.

4 Adjust any the following properties:

- **Left:** Sets the horizontal displacement of the backdrop relative to the center point (0, 0) of the grid
- **Top:** Sets the vertical displacement of the backdrop relative to the center point (0, 0) of the grid.

The "Left" and "Top" values both measure the displacement from the grid center to the top-left corner of the backdrop image

- **Scale**: This setting determines size of the Backdrop image as percentage of the original size.
- **Width:** Sets the horizontal size of the backdrop.
- **Height**: Sets the vertical size of the Backdrop.

> The "Maintain Aspect Ratio" option will be selected (that is, enabled) by default. This setting ensures that the height and width will be scaled proportionally when you adjust either dimension in the properties panel. Note that this does <u>not</u> apply to changes to height or width made manually using the frame handles.
> Uncheck "Maintain Aspect Ratio" if you want to change one dimension without changing the other.

- **Angle**: Enter the value (in degrees) to rotate the Backdrop by.
- **Opacity:** This setting determines how opaque the backdrop will appear; by default, the image will appear at 100% opacity, but you can drag on the slider to the left to make it more transparent (0% opacity = completely transparent).

5   Press Enter to apply the changes.

The backdrop image will be adjusted accordingly.

CHAPTER 2

Drawing Designs

This chapter includes instructions for using the Design Doodler creative tools, including the Widget brushes and the text tool. After creating these embroidery segments, you can use the properties panel to adjust their properties, such as stitch density, stitch length, and many others (depending on the segment type selected).

Topics covered in this chapter:

- Using the Widget tools for drawing and tracing lines.
- Customizing the Widget tools.
- Adding text to your design.
- How you can adjust the properties of the various embroidery segment, including runs, steil segments, complex fills, and appliqués.

Widget Tools

You can use the Widget tools to input linear embroidery segments into a design directly, either via touch-screen or using the mouse to click and drag. The are a number of different widget brushes, each of which creates its own embroidery effect.

The Widget Interface

When you click/tap the Widget 🕸 icon, the Widget palette appears in the lower-left corner of the design workspace. When you click the brush icon on the palette, you will see a list of all the brush types available.

Select the brush type of segment needed, and click/drag or draw the segment.

Broadly-speaking, the Widget tools fall into four categories:

- **Steil-type tools**: These brushes sketch a line that consists of zig-zag stitches that are placed perpendicular to the outline that you draw with your mouse or stylus. This Appliqué

- **"Calligraphy" brushes**: These brush tools generate a segment that is much like a steil, except that (unlike a steil stitch), the width does not have to be constant. For example, in the tapered ends or pressure sensitive brushed, the column width can vary along the length of the segment. This set of tools includes the Tapered ends, Calligraphy 145, and Pressure sensitive brushes.

- **Run Brushes**: These create a linear run stitch that follows the contour that you draw; this style includes the Run and Run Bean brushes.

- **Fill Brush**: This tool creates an embroidery segment consisting of a complex fill of parallel rows of stitches. Once created, you can choose the properties such as the fill type, the density of the fill. You can also adjust the direction that the lines of the fill with the Inclination edit tool.

Each of the above types has slightly different properties, and so the precise order of steps that you need to follow will be slightly different, depending on the type of brush that is chosen. The procedures for drawing with each type are outlined below.

Drawing with the Run Brushes

The "Run-type" tools (Run and Bean Run

) can be used to create either linear, open segments or closed shapes. You can draw either simple run segments or bean segments. In the Widget palette, you can also select the stitch length of the run you are creating.

To draw with the brush tools:

1   Click the Widget tool.
    The Widget interface opens in the lower-left corner of the workspace.
2   Click the brush icon.
    On the outer Widget circle, you see the list of Brush styles.

3   From the list of brushes, click either the Run or Bean brush tool.

4   In the palette inner circle, click the Stitch length icon.
    The outer circle of the palette now displays the stitch length options.

5   Click the icons to select the desired stitch length.
    The default stitch length will be adjusted correspondingly.
6   On the palette "inner circle", select the Shape icon.
    The outer circle displays the various shape icons (Free Draw, Circle, Square, etc.)
7   Select the shape tool you want to use.
8   Draw in the workspace with the mouse or a stylus to create the shape.
    The stitches are generated automatically.

Drawing with the Steil and Applique Brushes

The Widget includes Steil and Applique

 drawing tools. When you draw with these brushes you can choose the width of the line and the stitch density for each segment you draw.

To draw with the "steil-type" brushes:

1 Click the Widget tool.

The Widget interface opens in the lower-left corner of the workspace.

2 Click on the Brush icon

On the outer palette circle, you see the list of Brush styles.

3 Select the icon corresponding to the brush style you want to use.

4 Click the width icon to choose a brush width.

The outer palette circle shows the available brush widths.

5 On the "outer circle" click one of the width icons to select a width.

The width of the brush will be changed correspondingly; notice that the dot in the center of the mouse pointer also changes to match.

6 To change the segment density, click the density icon.

Icons showing the available density values appear on the palette's "outer circle".

7 Select the density you want by clicking the corresponding icon.
The selected density is now "loaded" on to the brush tool.

8 On the palette "inner circle", select the Shape icon.
The outer circle displays the various shape icons (Free Draw, Circle, Square, etc.)

9 Draw in the workspace with the mouse or a stylus to create the shape you want to draw.
The stitches will be generated automatically as you draw.

Drawing with the Calligraphy-type Brushes

These brushes include the Tapered End ,

Calligraphy 145 , and Pressure Sensitive

 brushes. These types of brushes create linear, open segments. In the case of the

Pressure sensitive brush, the segment width can vary along the length of the outline, depending on how much pressure is exerted on the screen.

To draw with the "calligraphy-type" brushes:

1 Click the Widget tool.
The Widget interface opens in the lower-left corner of the workspace.

2 Click on the Brush icon
On the outer palette circle, you see the list of Brush styles.
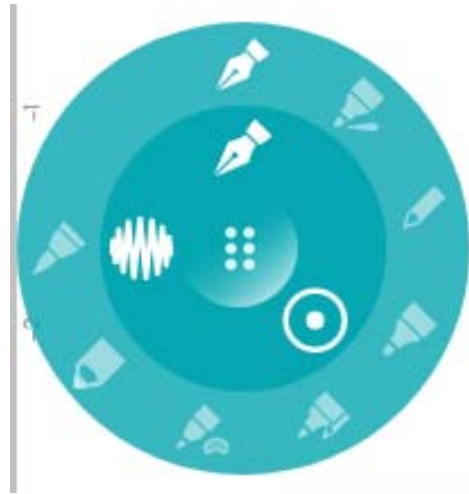
3 Select the brush style you want to use - Tapered Ends, Calligraphy 145, or Pressure Sensitive.

4 Click the width icon to choose a brush width.
The outer palette circle shows the available brush widths.

5 On the "outer circle" click one of the width icons to select a width.

The width of the brush will be adjusted accordingly.

6 To select the segment density, click the density icon.

Icons showing the available density values appear on the palette's "outer circle".

7 Select the density you want by clicking the corresponding icon.

The selected density is now "loaded" on to the brush tool.

8 Sketch the lines in the workspace with the mouse or a stylus.

The stitches will be generated automatically as you draw.

Drawing with the Fill Brush tool

The Fill Brush [icon] tool create complex fill shapes. When you create a fill segment, you can use the Widget controls to set the fill density before you draw the segment. You can also chose a pre-determined shape to apply (see the following section for details) or draw a free-form shape.

To draw with the fill brush:

1 Click the Widget [icon] tool.

The Widget interface opens in the lower-left corner of the workspace.

2 Click the Brush icon.

On the outer Widget circle, you see the list of Brush styles.

3 From the list of brush icons, select Fill.

4 To set the fill density, click the density icon.
Icons displaying the density values appear on the palette's "outer circle".

5 Select the density you want by clicking the corresponding icon.
The selected density is now "loaded" on to the fill tool.

6 On the palette "inner circle", select the Shape icon.
The outer circle displays the various shape icons (Free Draw, Circle, Square, etc.)

7 Click on the shape tool you want to employ, and draw your shape.
The fill stitches will be generated automatically.

8 Save the design.

Adjusting the Inclination Line in Fill Segments

Fill segments are unique in that they contain an Inclination line, which determines how the embroidery will be oriented relative to the design workspace. By default, this line will be horizontal, parallel to the to the grid lines in the workspace. However, by using the Inclination Edit 🖊 tool, you can move this line to any angle that you want.

To change the inclination angle of a fill segment:

1 On the toolbars, select the Inclination Edit

   ![tool icon] tool.

2 Click on a Fill segment.
   The inclination line will appear as a black line across the fill segment, with black beads at either end.

3 Click one end of the inclination line to select it.
   When selected, the bead will be highlighted with a black circle
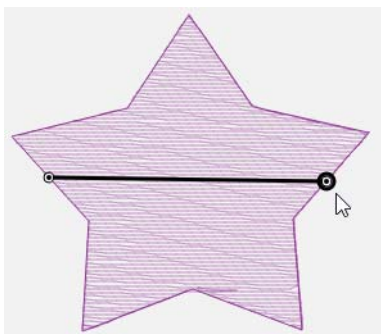
4 Drag the selected bead to move the inclination line to make the desired angle.
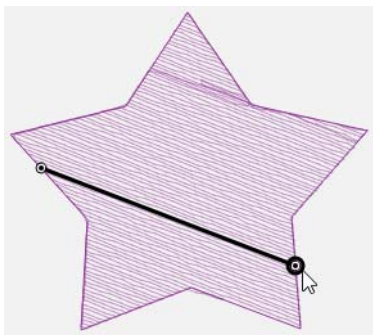
5 Release the bead.
   You will now see that the fill lines will be re-generated to follow new angle of the inclination line.

6 Save the design.

Drawing Shapes

You can use the various shape option on the Widget tool to draw embroidery in specific shapes, such as squares, arrows, and hearts.

The default setting for the shape is a simple "free" line drawing tool - on this setting, the palette will show the "Free draw" ![free draw icon] icon. However, there are a number of different shapes that you can select – for example, a square, circle, or star. To draw straight lines, select the straight line ![straight line icon] tool; this creates a simple line like the "free draw" tool, except that it is constrained to be straight.

When you select the shape and embroidery type, you simply click and drag to set the size and orientation of the shape.

To draw shape with the Widget:

1 Open the Widget tool, if it is not already open.
   The Widget appears in the lower-left corner of the workspace.

2 Click the Brush icon.
   The outer circle of the Widget will display the list of brushes.

3 Select the brush type you want to apply.

Note that not all of the brush types allow you to use the shape option; specifically, this option is not available for the Tapered ends, Pressure Sensitive, or Calligraphy 145 brushes.

4 On the "inner" palette circle, click the

shape icon.

The outer palette circle now displays the available drawing shapes; circle, square, heart, etc.

5 Click the shape you want to use.
6 In the design workspace, click, hold, and drag to create the shape you want.
As you drag, note that the shape appears in outline, showing its size and orientation.
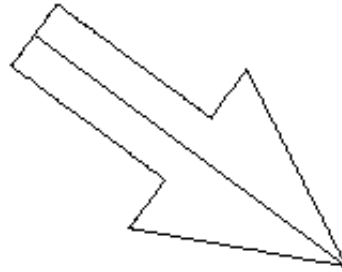
7 Release the mouse button to place the shape.
The stitches will automatically be generated.
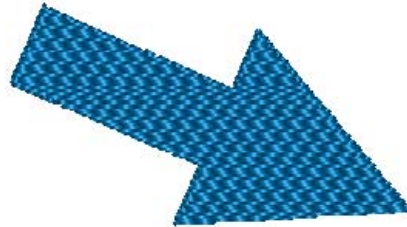
Using the "Snap to Anchors" Option

If you are drawing design using one of the linear shape tools (that is, Free Draw or Line shapes), you can apply the Snap to Anchors option to join the ends of adjacent segments. This has the effect of creating a single, continuous segment in place a series of separate segments, thus reducing the number of stops and jumps.

To draw a continuous line segment:

1 On the toolbar, click the Snap to Anchors

tool to enable it.

2 On the Widget, click the Brush icon.
   The outer circle of the Widget will display the list of brushes.

3 Select the brush type you want to apply.

**4** On the "inner" palette circle, click the shape icon.

5 On the "outer" circle, select either the Free Draw tool or the Line tool.

6 Click in the workspace to draw the line, as normal.
   The linear segment will be generated.

7 With the drawing tool still active, hover over the end of the existing segment.
   You see a small red dot with a circle around it; this indicates that your tool is on top of the anchor of that segment.
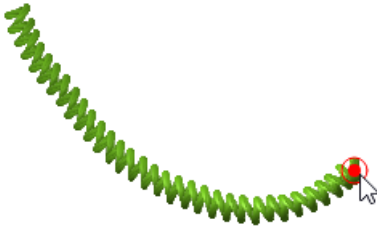
8 Click and drag to create a new line
   The two lines will be "snapped" together to form a continuous line.

9 Repeat steps 7-8, as required, to draw the whole shape you need. When done, save the design.

Adding a Hole to a Fill Segment

Using the Add Hole tool, you can trace out a hole in a fill segment. When you create a hole, all the fill stitches within the designated area will be removed. Note that this tool can only be applied to fill segments.

To create a hole in a fill segment:

1 Select a Fill segment.
   The selected segment will be enclosed in a selection frame.
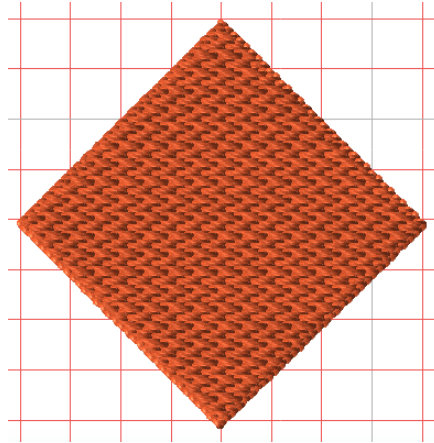
2 On the toolbar, select the Add hole tool from the pop-out list.
   The "cursor" will now appear with a small + symbol next to it.

3 Click inside the fill segment to place the points that determine the hole's shape.
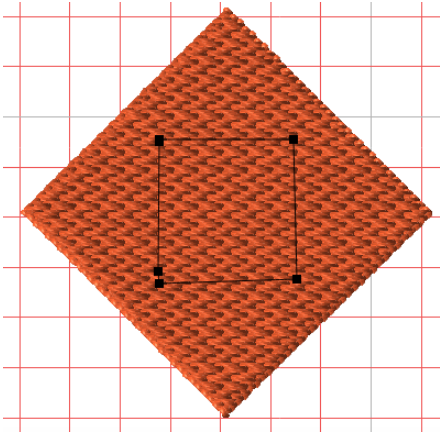
4 When all the points have been placed, right-click anywhere in workspace to complete the outline.
When you right-click, the outline will automatically be closed.
The hole will appear in the fill.
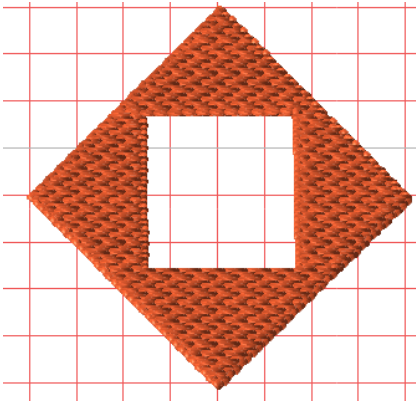
5 If desired, you can create additional holes in the segment by repeating steps 2-4.

> You can change the shape of the hole by selecting the individual anchor points and changing their properties; for example, you can change a hole with right-angled corner to a hole with rounded corners. Use the Path edit ✎ tool to select the anchor points that you want to edit. See "Design Editing-- Changing the Properties of an Anchor Point" for details.

6 Save the design.

Widget Preferences

You can configure the Widget palette to your own specifications using the Widget Preferences dialog. You can add width, stitch density, or stitch length values to the palette, or remove values that are not useful for you. When you add a value, the palette's outer circle will display a new icon corresponding to the new value.

The settings dialog can also be used to add or remove brushes from the palette's set of options; in this case however, you are not able to create new brush types, only replace ones that you previously removed.

To add a new value to the Widget palette:

1 Click the "dots" icon and select Settings from the list that appears.
You see the Settings dialog.

2 Click in the Tool field to select the setting type you want to modify, either Width, Density or Stitch length.
In the dialog, you see the values that are currently configured for the tool; if you have

not *previously configured the palette, these will be the default values.*
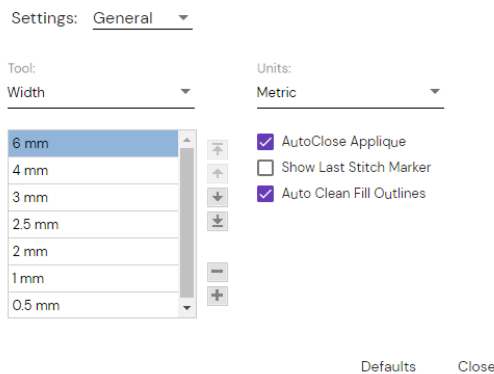
3 Click the small + sign to the right of the list.
You see the Add value dialog.

4 Enter the value you want to add, and then click OK.
The value you added now appears on the list.

5 To change the placement of the new value relative to the existing ones, select it and click the arrows to the left of the list to move it up or down in the list of values.

6 Click OK to close the Widget settings dialog.
The new value will be included in the palette's "outer circle."

To remove a value from one the Widget Properties:

1 Open the settings dialog.
You see the Widget settings dialog.

2 Click in the "Tool" field, and select one of the setting categories: Width, Density or Stitch length.
The dialog will display the values that are currently available for use.

3 Select the value you want to remove.
The value will be highlighted.

4 Click the small - sign next to the list.
The value will be removed from the list, and will not appear in the Widget palette.

AutoClose Appliqué

The Widget Preferences page also includes the **AutoClose Appliqué** option. This option, when enabled, ensures that any line you draw with the Appliqué brush will be closed when you complete the segment. Since appliqués are, in most circumstances, meant to be closed, this setting is set to "on" by default.

If you need to draw an appliqué with open ends, uncheck this setting, and click OK to close the Preferences dialog.

Show Last Stitch Marker

The "last stitch marker" enables you to easily find the end in any design; this marker appears as a black circle superimposed on the last stitch of the final segment of the design. As you add more stitch segments (or change the segment sequence) the position of the marker will be updated accordingly.

The "Show Last Stitch Marker" setting will be turned on by default. If you want to disable it, open the Widget settings dialog, and uncheck the "Show Last Stitch Marker" box.

Auto Clean Fill Outlines

The "Auto Clean Fill Outlines" setting helps to improve the overall quality of shapes created with the Fill Widget tool. This setting works by trimming off any extraneous small loops and "fish tails" that may inadvertently be created when tracing out the path of a fill segment. This setting will be enabled by default; you can disable it by "unchecking" the check box
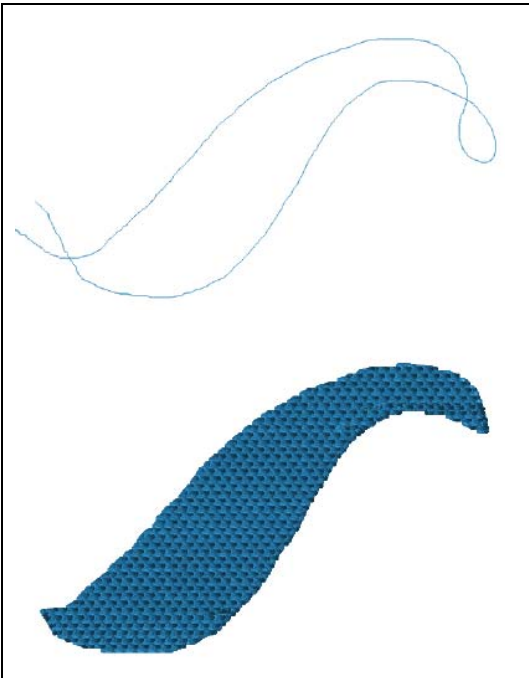
At the top, an example of an drawn shape with some extraneous path included; below, the same shape rendered into a fill segment with the "Auto Clean" setting enabled.

Note that this setting applies to Fill segments only, and not to any other kind of segment.

Using the Text Tool

You can add a text message to designs using the Text ⒜ tool. This tool places a generic string of text (literally, "Text") in the design, which you can subsequently modify in the properties panel.

To use the Text tool:

1 In the toolbar, click the Text ⒜ tool.
   The default string "Text" appears in the workspace.
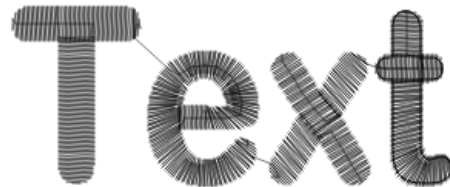
2 Click the Select tool and select the text segment.

3 Click the Properties ☰ icon.
   You see the text properties.

Properties

Text: Doodler

Height: 0.98 in

Font:
Block Rounded

Density: 0.02 in
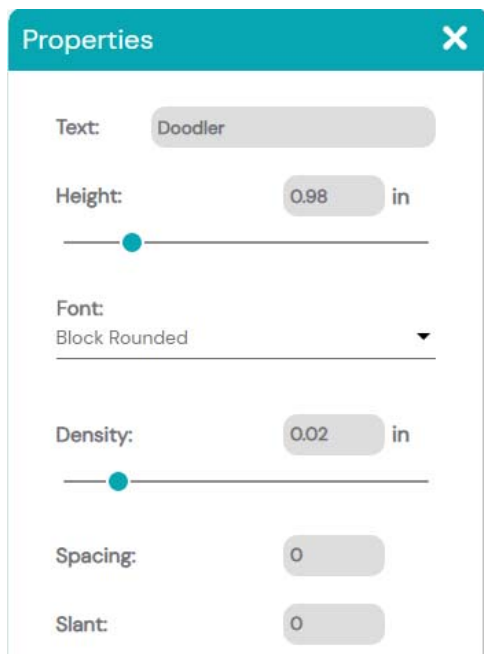
Spacing: 0

Slant: 0

4 In the **Text** field, type in the desired text string.

5 Modify any other properties of the text segment, including the height, font, density, spacing, and slant.
In the workspace, the text segment will be adjusted accordingly.

> Note that you can also use the Properties panel to adjust commands to the text and add underlay stitches. For details on these properties, look under the "Commands Properties" and "Underlay Properties" headings, later in this chapter.

6 Close the Properties Panel.
7 Save the design.

Segment Properties

You can use the "Properties" panel to adjust the attributes of the embroidery segments you have created with the Widget tools - properties such as stitch length, stitch density, spacing etc. Depending on what kind of segment is selected (e.g. Run, Steil, Fill, Appliqué, or Text), the properties you see will be different. The following sections describe the properties that can be adjusted grouped by the type of segment.

To view and adjust segment properties

1 To open the properties panel, click the

Properties ⚏ icon on the toolbar.

2 Click the ⏶ Select tool.

3 Click the segment that you want to adjust.
The panel will now show the properties of the selected segment.

> Be sure to select only one type of embroidery segment when you want to adjust its properties; if you inadvertently select two different types, the properties panel will only display the properties that pertain to <u>one</u> segment type.

Calligraphy-style segment properties

There are special segment properties that apply to segments that are created with the "Brush" tools, that is, the Calligraphy 145, Tapered Ends and Pressure Sensitive tools. There will be a set of default settings (for density, stitch angle, etc.) which will be applied when you initially use each of these tools, but you can modify all of these using the corresponding fields in the Properties Panel.

To adjust properties of "Calligraphy"-type segments.

1 Select a Calligraphy, Tapered ends, Pressure sensitive segment.

2 Click the Properties 🗇 icon.

The Properties panel will display the applicable set of properties.

Properties   ✕

Applique Type:
Satin   ▾

Width: 2.5   mm
———————●————————

Density: 0.4   mm
—●——————————————

Inset: 50   %
——————————●————

Corner Type:
Sharp   ▾
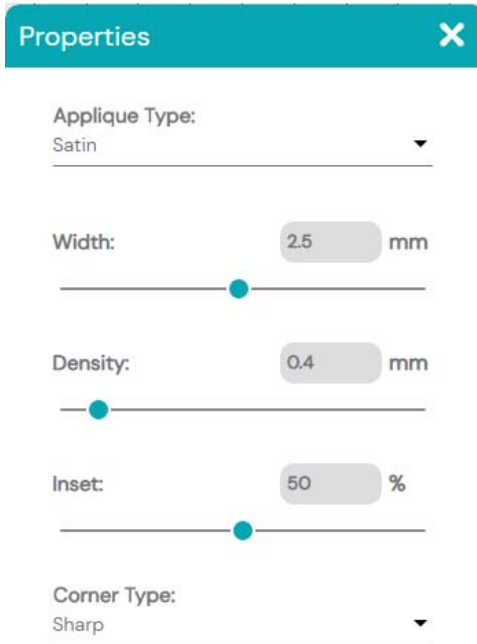
3 In the Properties Panel, adjust any of the following settings.

- **Brush width**: Default width of the column stitch.
- **Density**: Sets the density of the stitches, in mm.
- **Tapered end type:** Determines at which ends of the segment, the column width will taper to a point; select None, Start, End, or Both.

- **Angle type:** Select either "Fixed" or "Orthogonal."
  - **Orthogonal:** The direction of the zig-zag stitches will remain at right angles to the direction line of the drawn outline.
  - **Fixed:** The orientation of the stitches will be constant, independent of the direction of the drawn outline.
- **Brush angle:** This setting only becomes active if the Angle type is set to "Fixed". This parameter determines the angle of the zig-zag stitching, relative to the workspace grid.

*In the design, the selected segment will be updated automatically as you adjust its properties.*

4 Save the design.

Run Properties

When a run segment is selected, the properties panel will display the properties that are specific to Run stitches.

To adjust the properties of Run segments:

1 Select a Run stitch segment.

2 Click the Properties 🗇 icon.

The Properties panel will display the Run segment properties.

Properties

Stitch Length: 3 mm

Run Style:
Run

Bean Style:
None

Drop Run Stitch:
None
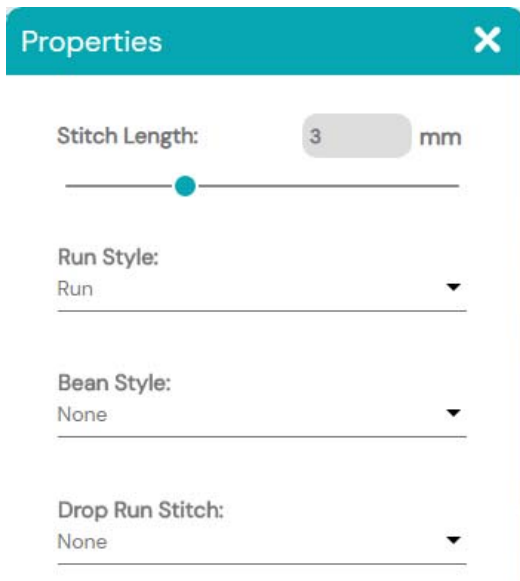
3 Adjust one or more of the following:

- ◆ **Stitch Length:** To change the default stitch length for the running stitch, enter a new value (in mm) in this field.
- ◆ **Run Style:** Choose either Run (the default) or Double Run.
- ◆ **Bean Style:** Select None (generates a "normal" single running stitch) or Bean to apply a repeating run stitch
- ◆ **Bean Repeats:** If the Bean Style is set to "Bean" above, the Bean Repeats setting becomes active. Use this setting to determine how many times the bean stitch will be repeated.
- ◆ **Drop Run Stitch**: Use the "Drop Run Stitch" property to determine how individual stitch penetrations will be placed as the run goes around sharp corners.
  Select one of the following options:

- ◆ **None**: No adjustment to stitch length is made at sharp corners.
- ◆ **At Anchor**: A stitch penetration is placed at the anchor point at the top portion of a curve, and the remaining stitches are placed accordingly on either side of that point.
- ◆ **Chord Gap:** The stitches are shortened at the top portion of a sharp corner, so that the run goes more smoothly around the curve.

In the design, note that the properties of the selected segment will be updated automatically as you adjust them.

4 Save the design.

Steil Properties

When a Steil segment is selected, you can use the Properties Panel to adjust properties such as the segment with, stitch angle, corner type, and others.

To adjust Steil properties:

1 Select the Steil segment.

2 Click the Properties icon.

The Properties panel will display the Steil properties.

Properties

Stitch Width: 2.5 mm

Density: 0.4 mm

Angle: -10 °

Inset: 50 %

Corner Type:
Sharp ▾

Corner Style:
Mitered ▾

3 Adjust the following settings:

- **Stitch Width:** This property controls the overall width (side to side) of the steil segment.

  Note that the absolute length of stitches in the segment will be independent of this value, because it will also depend on the Angle parameter.
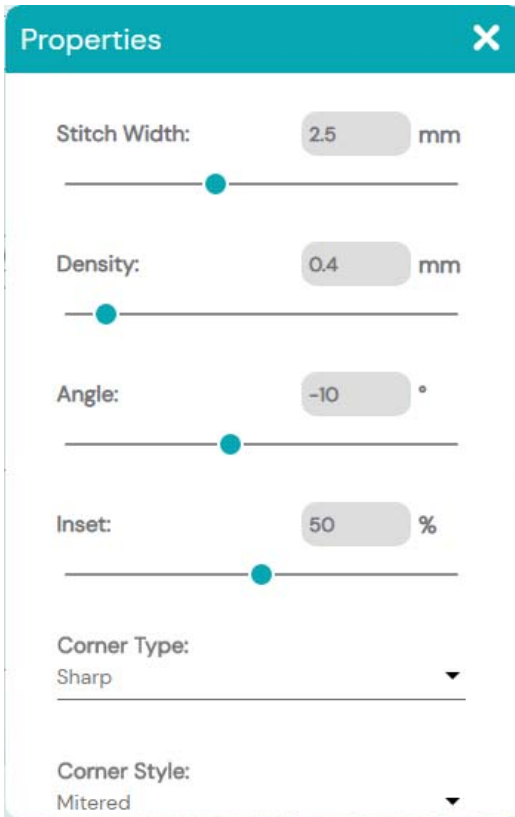
- **Density:** Sets the stitch density (in mm) of the segment.

- **Angle:** Determines the angle of the stitches in the segment; the available range is between -60º and 60º.

- **Inset percentage:** This quantity determines how the Steil stitches will be placed relative to the segment outline. By default, this will be set to 50%, meaning that the stitches will be evenly distributed on either side of the outline.

- **Corner type:** Determines the shape of corners in the Steil path. In the Corner field, select one of the following:
  - Sharp.
  - Bevel.
  - Round.

- **Corner Style**: This setting determines how the stitches will be sewn out as they go around a corner. Choose one of the following options:
  - **Mitered**: Stitches stay at the same angle as they approach the corner, but are shortened to a point (like the corners on a picture frame). This setting is best for sharp corners (60º or less).
  - **Autoturn:** As the stitches approach the corner, they turn such that they sew at right angles to the outline on the other side of the corner.
  - **Lapped:** Stitches will maintain their respective angles as they approach the corner, but will overlap completely. This corner will be applied when the angle of the turn is under 60º; for larger angles, the Autoturn style will still be applied.

  For mitered corners, a small amount of overlap is applied to prevent gaps from appearing inside of the corner. By default, this value will be set to 1.0 mm, but it can be adjusted in the Mitered Distance field.

- **Start Cap** and **Stop Cap**: These two fields determine the shape of the steil segment ends. Select the desired end type from the drop-down list in the corresponding field.
  - Standard
  - Rounded
  - Sharp Point
  - 45 Cut Point
  - 135 Cut Point
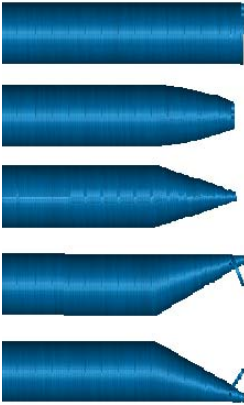
The different steil ends options. From top to bottom, Standard, Rounded, Sharp Point, 45 Cut Point, and 135 Cut Point.

  The properties of the selected steil will be updated automatically.

4 Save the design.

Appliqué Properties

For Appliqué segments, you can set the following parameter for the selected segment: Note that which properties are applicable depends on the type of Appliqué border stitch that you select - Satin, Blanket or Motif (Run).

Note that for any "numbered" property in the settings (e.g. stitch length, density or inset percentage) it is possible to adjust the value by clicking and dragging the slide controls, as well as by enter numbers in the boxes.

To adjust appliqué properties:

1 Select the Appliqué segment.

2 Click the Properties ⬚ icon.

  The Properties panel will display the applique properties.

3 In the **Appliqué Type** field, select one of the following to set the border type:

- ◆ Satin
- ◆ Blanket
- ◆ Motif

4 If Satin appliqué is selected, adjust the following settings:

- ◆ In the Width field, enter the desired width of the satin border.
- ◆ In the Density box, enter the stitch density of the border.
- ◆ In the Inset (%) field, enter the desired inset percentage.

A 50% offset (the default value) means that the satin exactly straddles the outline; a 0% offset means that it is just outside the outline; and a 100% offset means that i is entirely inside the outline.

5 If the Blanket Appliqué border is selected, adjust the following segment settings:

- ◆ In the **Width** field, enter the desired width of the Blanket stitch border.
- ◆ In the **Density** field, enter the desired spacing between the blanket stitches.

6 If a Motif border has been selected, adjust the following properties:

- ◆ In the **Motif Stitch Length** box, set the length of the positioning and tack down run stitches.
- ◆ In the **Motif Pattern** field, click the down-arrow to select a pattern from the drop-down list motifs.
- ◆ In the **Motif Size** field, adjust the size of the repeated unit in the motif pattern.
- ◆ In the **Inset** field, set the percentage that the motif stitch border will be inset relative to the outline of the original Appliqué segment. This setting

determines by how much the motif stitches overlap the Appliqué fabric.

7 From the **Corner Type** drop-down list select one of the following:

- ◆ Sharp.
- ◆ Bevel.
- ◆ Round.

8 **Sew Placement/Sew Tack Down/Sew Border** check boxes. Each of these check boxes controls whether or not the corresponding portion of the applique segment will be generated.
By default, all three of these will be checked, meaning that a full applique segment will be generated; however, if you do not want any of the three components to be sewn out, uncheck the corresponding box to omit it.

The applique segment will be adjust accordingly.

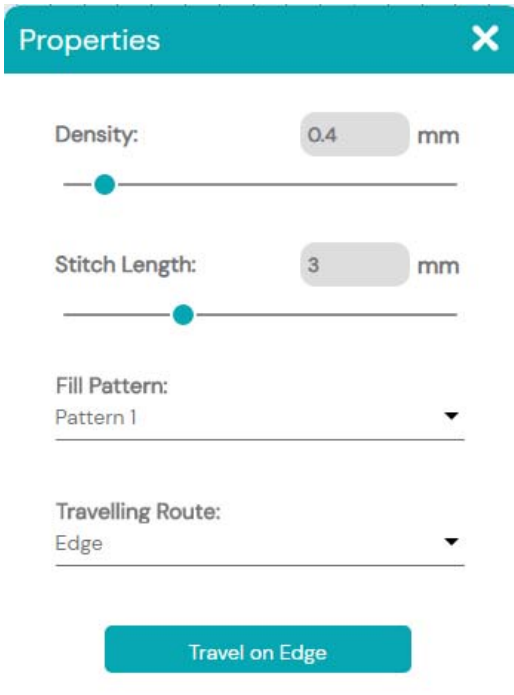**9** Save the design.

Fill Properties

Use the "Properties" dialog to adjust properties of shape that you have created using the Fill brush. These include the density, pattern, and stitch length.

To adjust fill properties:

1 Select a Fill segment.

2 Click the Properties ![icon] icon.

The Properties panel will display the fill properties.

Properties ✕

Density: 0.4 mm

Stitch Length: 3 mm

Fill Pattern:
Pattern 1 ▾

Travelling Route:
Edge ▾

Travel on Edge

3 In the **Density** field, enter the desired density value; this adjusts the spacing between rows of stitches in the fill.

4 In the **Stitch Length** field, adjust the length of stitches in the fill.

> For both density and stitch length, you can also adjust the values by clicking and dragging the corresponding slider control.

5 In the **Fill Pattern** the drop-down list, select from a list of many different types of fill patterns available.

6 **Travel on Edge:** This is an option that allows you to change the route of the fill segment's "Traveling run stitches" so that it goes along the edge of the fill segment. By default, the "Traveling run stitches" take the shortest route, which will usually go through the middle of the fill. However, if the fill is very light (i.e. "not dense") these stitches may show through. In this case, you may want to select this option, which re-routes the "travelling run" stitches to the edge to the shape, where they will be hidden.

> If needed, you can change the traveling route back to going through the middle of the segment.
> On the Properties panel, in the "Traveling Route" field, select "Middle". The traveling stitches will be regenerated accordingly.

The fill segment will be adjusted accordingly.

7 Save the design.

Underlay Properties

Underlay stitches are laid down before other design elements to help to stabilize the surface. This can be used to hold down the raised nap of fabrics such as corduroy. Underlay can be applied to Steil, Fill, and Text segments by way of the Properties panel– Underlay tab.

To adjust the properties for underlay:

1 Select the a Steil or Fill segment.

2 In the Properties pane, expand the Underlay area.

3 Select one or more of the following underlay type you want to use by checking any of the following: Perpendicular, Contour, Parallel or Zig-Zag.

> Note that the list of underlay types will vary depending on the type of segment.

4 In the Density field, enter a density value.

5 In the Stitch Length field, enter the stitch length for the underlay stitches.

6 In the Inset box, enter the amount of distance you want.

> The inset distance changes the amount of underlay coverage that will be applied. It determines how far the underlay stitches will be inset from the edge of the top stitching.

7 Click Apply.

Commands Properties

The Commands settings for individual segments may be adjusted on the Properties panel. In this area, you can change the commands at the start end of each segment (change the command to a Stop, Frame out, etc) and also add lock stitches, if desired.

Selecting a Segment's Start and End Commands

Use this property to add specific machine commands to the start and/or end of embroidery segments, such as trims, stops, and jumps.

To add a machine command:

1 Select a segment.

2 Press the Properties ☰ icon.
   You see the Properties dialog.

3 In the Properties dialog, open the Commands area (you may need to scroll down to see this).
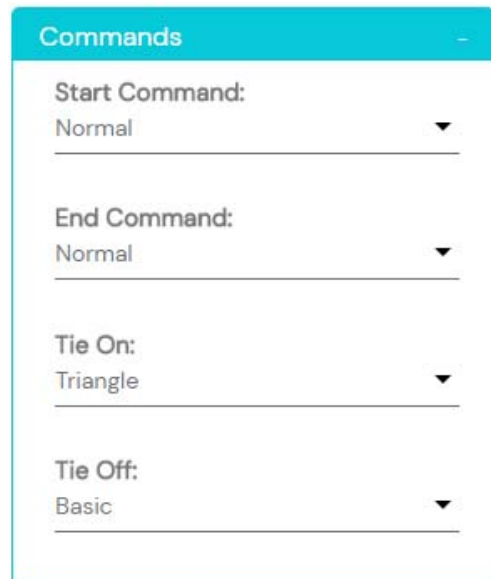
4 In the Start Command list select one of the following commands:

- ◆ **Normal:** Inserts a normal stitch.
- ◆ **Trim:** Trims the thread.
- ◆ **Jump:** Inserts a jump command, creating a stitch with the needle up.
- ◆ **Stop:** Stops the machine.
- ◆ **Frame Out:** Moves the embroidery machine's frame out to allow the operator to adjust the item being sewn on; very useful when placing an appliqué on a garment.

5 Repeat the step above for the End Command.
   The commands will be updated accordingly.

Adding Tie in and Tie off Stitches

To keep the end stitches of a segment from 'pulling', you can add Tie in and/or Tie off stitch commands. These commands add a short series of overlapping stitches at the entry and exit points of the segment, effectively pinning down either or both ends of the selected segment.

To add or remove Tie in and Tie off segments:

1   Select a segment.

2   Click the Properties ▤ icon.
    You see the Properties dialog.

3   In the Properties dialog, open the Commands area (you may need to scroll down to see this).
    You see the Commands settings.

Commands   —

Start Command:
Normal   ▼

End Command:
Normal   ▼

Tie On:
None   ▼

None
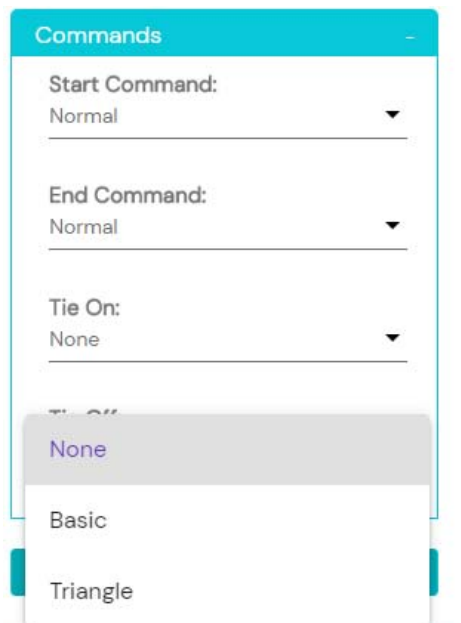
Basic

Triangle

4   To add a Tie-On stitch, do the following:
    ◆   Click on the small "down arrow" to the right of the Tie-on field.
        You see a drop-down list.
    ◆   Select the desired tie-on stitch type ("Basic" or "Triangle").
    The Tie On stitches will be added at the beginning of the segment.

5   To add a Tie-On stitch, do the following:
    ◆   Click on the small "down arrow" to the right of the Tie-off field.
        You see a drop-down list.
    ◆   Select the desired tie-on stitch type ("Basic" or "Triangle").
    The Tie Off stitches will be added at the end of the segment.

To Remove a Tie-on of Tie-off stitch.

1   Select a segment.
2   Click on the small "down arrow" to the right of the Tie On or Tie Off field.
    You see a drop-down list.
3   Choose None from the drop-down list.
    The Tie On or Tie Off stitches will be removed from the segment.

Auto Tie

The AutoTie tool is a quick way to ensure that all the required Tie-in and Tie-off stitches are placed in the design. Tie in/Tie off stitches will be added to the beginning or end of segments in these circumstances:

- Before and after each trim.

- After a color change.

- Before or after a jump stitch, where the jump stitch is longer than the set "minimum lock distance" of 5mm.

When enabled, the AutoTie tool will add lock stitches to each segment as you add them to the design.

To enable automatic tie-in and tie-off stitches:

- On the toolbar, select the AutoTie icon.

Transform Properties

Any object in the design can have their height, width and rotation adjusted. The Transform Tab in the Properties panel input fields for height and width. When adjusting the height or width, you can preserve the object's shape by selecting the "Maintain aspect ratio" option.

To transform objects using the Properties box:

1 Click the Select tool and select one or more objects you want to resize.
2 In the Properties panel, expand the Transform tab.
3 In the Width field, enter the width you want for the selected object(s).

4 In the Height field, enter the height you want for the selected object(s).
5 To maintain the proportions of an object while resizing it, select Maintain aspect ratio if not already selected.
The selected segment will be resized accordingly.

CHAPTER 3

Design Editing

Design Doodler has a variety of tools that allow you to edit designs (or individual segments of designs) in the workspace. Using the properties box, you can modify various stitch properties such as stitch type and thread color for any segment.

Topics covered in this chapter:

- Using the Select tools
- Copying and moving segments.
- How to align and distribute segments within the design.
- Sequencing outline segments to change the sewing order of designs.

Editing Segments

In the design window, you can edit a design's individual or grouped outline whenever you select them with the Select or Select All tools.

Selecting Segments

The Select ⟍ tool allows you to select and modify individual or grouped segments (design objects). Select outline segments by clicking on them, or by clicking and dragging to draw a box around parts of the design.

The Select All ⬚ tool select all segments in the design simultaneously.

Once you select a segment, you can change its properties in the properties panel. You can also resize, stretch, and rotate the segment using the handles the selection frame.

To select segments using the Select tool:

1 Press the Select ⟍ tool.
2 To select a single segment, click on it.
   The active segment is enclosed in a selection box with handles.
3 To select multiple segments click and drag across all the segments you want to select.
   The segments are enclosed in a selection box with handles.

To select all segments:

• Do one of the following:

   ◆ On the toolbar, press the ⬚ icon.

   ◆ Press Ctrl + A on the keyboard.
   All segments in the design will be selected, and enclosed in a single selection frame.

To select segments from the Sequence View:

1 Click the Sequence View ⬙ tool.
   You see the Sequence view panel.
2 In the Sequence View, scroll to located the segment you want to select.
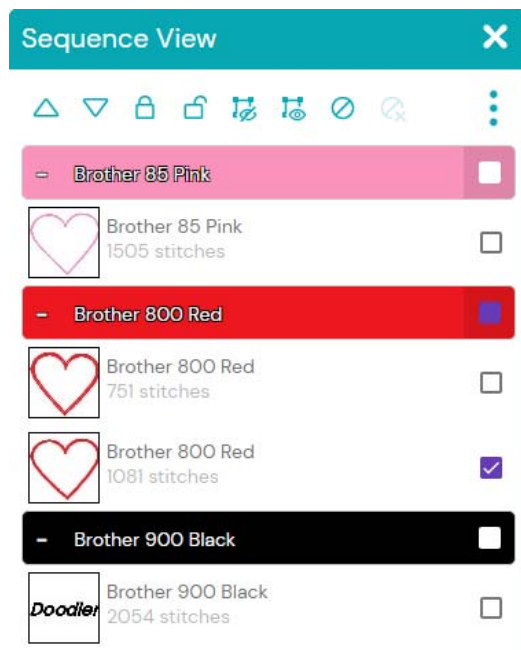
3 To select all the segments of a color group, click in the check box for that color
   In the workspace, note that all segments within that color group are now selected.

4 To select only one segment, do the following:

- ◆ Click the small + on the left side of the color group containing the segment you want to select.

  The color group will expand to show the individual segments.

- ◆ Click the checkbox to the right of the individual segment you want to select.

- ◆ Repeat the above steps to select more segments, if required.

5 When all the segments you need are selected, click the "X" on the Sequence View panel to close it.

Editing Outlines

The anchor points of a path determine the position and curvature of that shape. You can use the Path Edit tool to select and modify these anchor points. You can click and drag anchors to move them, and thereby adjust the shape of a path, or you can change the type of curvature that occurs as the path.

Moving Anchor Points

You can move and drag anchor points to adjust the shape of a curve.

To move anchor points:

1 Ensure that the "Show Outlines" option has been selected in the "dots" menu.

2 Select the Path Edit tool.

3 Click on the segment to select it.

The anchor points of the selected segment will now appear, as black squares along the outline.

4 Click and drag the anchor point you want to move.

5 Release the anchor at the point you want it to be placed.

The outline of the segment will be regenerated to follow the new anchor position.

6 Repeat the above steps, if necessary, with other anchors in the segment to create the desired shape.

7 Save the design.

Changing the properties of Anchor Points

You can change the shape of path segments by adjusting the type of curvature that takes place at the anchor points of the path. After selecting the anchor using the Path Edit tool, you can select line, cusp, smooth or symmetrical.

To change anchor point properties:

1 On the toolbar, select the Path Edit tool.

2 Click on anchor point you want to change.

3 On the toolbar, click the Properties icon.

You see the anchor properties dialog.

4 Click in the "Anchor Mode" field.

You see the list of anchor modes.

Properties ✕

Smooth

Cusp

Symmetrical

Straight
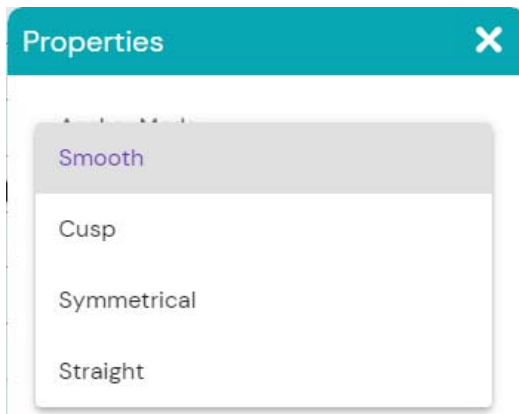
5 Select one of the following:
- **Smooth**. Constrains the angle of the direction lines to 180 degrees and allows you to vary the length of the direction line on one side of the anchor point. Creates a smooth transition between curved lines.
- **Cusp**. Allows editing of the direction line on one side of the anchor point. Adds a sharp bend to a curve.
- **Symmetrical**. Constrains the angle of the direction lines to 180 degrees so the direction lines have the same length on each side of the anchor point. Creates some curvature on both sides of the anchor point.
- **Straight.** Creates a straight point without any curved properties.

6 On the dialog, click Apply.
The segment's shape will change accordingly.

7 Repeat steps 2-6, if required, to change the properties of other anchor points.

Copying Segments

There are several methods that you can use to copy segments in designs. When modifying outline segments and doing significant design editing in Design Doodler, you should know how to avoid possibly losing your stitch edits.

To copy to the Clipboard:

1 Select a segment (or group of segments) that you want to copy.

2 Do one of the following:
- Click the Copy 🗐 tool.
- Press Ctrl+C on the keyboard.
The selected segment is copied to your clipboard.

3 To paste copied segments from the clipboard, do one of the following:
- Click the Paste 🗐 tool.
- Press Ctrl+V on the keyboard
The selection is pasted at the end of the design.

To cut to the Clipboard:

1 Select one or more segments you want to cut.

2 To cut segments to the clipboard, do one of the following:
- On the File menu, click the Cut ✂ tool.
- Press Ctrl+X on the keyboard.
IThe segments are removed from their placement.

3 To paste cut segments from the clipboard, do one of the following:

- ◆ On the File menu, click the Paste ⬚ tool.
- ◆ Press Ctrl+V on the keyboard.
  The selection is pasted at the end of the design.

Deleting Segments

Deleting a segment removes it completely from the design. Once it is deleted, the only way to retrieve a segment is apply the Undo ⬚ tool immediately after you delete it.

To delete a segment:

1 Using the Select ⬚ tool, select a segment (or group of segments).
2 Do one of the following:

- ◆ On the toolbar, select the Delete ✕ tool.
- ◆ Press Delete on your keyboard.

Showing and Hiding Segments

Design Doodler allows you to show and hide segments and segments grouped by color using the Sequence View area.

This can be useful while editing. For example, to simplify the view of the design. Note that segments cannot be moved or otherwise edited while they are hidden.

You can then use the show tool to make the hidden segments visible again.

To hide segments using the sequence view:

1 In the Sequence View, select a segment, or color group.
A check mark appears to the right of the segment or group to indicate that it has been selected.

2 Click on the Hide icon ⬚ at the top of the sequence view panel.
The selected segment(s) will be hidden in the workspace. In the Sequence view, a "hidden" ⬚ icon appears next to each hidden segment.

> If you have Ghost Mode activated, the hidden segments will still appear in the workspace, but will be "grayed out" - see the following section.

To show hidden segments:

1 In the Sequence view, click to select the hidden segments or color groups that you want to show.
A check mark appears to the right of the segment or group to indicate that it is selected.

2 Click on the Show ![icon] icon at the top of the sequence view panel.

In the design workspace, all the selected segments will be visible again.

> ![lightbulb] You can also show hidden segments one at a time by clicking the "hidden" ![icon] icon next to each one.

Viewing Hidden Segments in Ghost Mode

The Ghost mode allows you to see segments of the design that are hidden. When you turn on Ghost mode, you will be able to see the hidden segments of the design. This allows you know where any and all "hidden" parts of a design are, but not have confusion as to which parts of the design are selected for editing.

The following is an example of a design in Ghost mode, in which the center segment is currently the selected one, and the outer segments are "ghosted":

To view segments in Ghost Mode:

1 Open an existing design file.

2 In the Sequence View pane, hide the segment (or segments) by selecting them and selecting the Hide ![icon] icon.

The segment(s) that have been hidden no longer appear in the design window.

3 To enable Ghost mode, select the Ghost ![icon] tool.

The segments of the design that were hidden now appear in a light grey color.

To turn off Ghost Mode:

• Click the Ghost ![icon] tool again.

All hidden segments will be invisible.

Grouping and Ungrouping Segments

You can combine several segments into a group so that the segments are treated as a single unit. You can then edit a number of segments together without affecting their individual attributes.

To group segments:

1 Using the Select or Select All tool, select the segments you want to group.

2 Press the Group ![icon] tool.

You will be able to edit the selected them as a group.

To ungroup segments:

1 In the design workspace select a set of grouped segments.

2 Press the Ungroup ![icon] tool.

The individual segments are no longer grouped together.

Closing Open Segments

Design Doodler includes a tool that quickly closes any selected open "path" segments (for example, Run, Steil or Applique paths). When you apply this tool, the open ends of the outline path will be closed, and the stitches in the path will be joined (continuous) as well.

To close open segments:

1 Click the Select tool.

2 Select an open-ended segment.
The selected segment is enclosed in a selection frame.

3 Click the Close Shape 🖉 tool.
The gap in the selection will now be closed.

4 Save the design.

Aligning Segments Horizontally and Vertically

You can align lettering or segments either horizontally, vertically or to the center of the. You can use this feature to precisely align individual segments in the design.

To align segments:

1 Select the segments you want to align.

2 Select the Align 🔲 tool.
You see a pop-up list of Alignment tools.

3 Click any of the following icons to chose the desired alignment:

- ◆ **Align Center Each** 🔲 **:** Centers two or more selected segments relative to each other.

- ◆ **Align Center** 🔲 : Moves the selected segments to the center point of the workspace (as defined by horizontal/

vertical ruler); all segments will retain their positions relative to each other

- ◆ **Align Left** 🔲 **:** Moves all selected segments except the left-most item selected.

- ◆ **Align Right** 🔲 **:** Moves all selected segments except the right-most item selected.

- ◆ **Bottom** 🔲 **:** Moves all selected segments except the bottom-most item selected.

- ◆ **Top** 🔲 **:** Moves all selected segments except the top-most item selected.

- ◆ **Vertical Center** 🔲 **:** Aligns segments such that they are centered top-to-bottom with respect to each other, they will not be moved left or right.

- ◆ **Horizontal Center** 🔲 **:** Aligns segments such that they are centered left-to-right with respect to each other, they will not be moved up or down.

4 Save the design.

Distributing segments evenly

The Distribute tools are used to arrange the selected segments so that they are spaced evenly within the design. These tools calculate the average distance (horizontal or vertical,

depending on which tool you select) between all selected segments, and then move them so they are all separated by that same distance.

> Note that Distribute tools do not align segments, only change their separation.

To use the Distribute tools:

1 With the Select tool, select three or more objects in the design.

2 On the toolbar, press the Distribute icon.

   *You see a list of the different distribute tools available.*

3 From the fly-out menu that appears, choose one of the following:

   ◆ **Distribute Left** : Spaces the objects evenly starting from the left point of each object.

   ◆ **Distribute Horizontal Center** : Spaces the objects evenly starting from the horizontal center of each object.

   ◆ **Distribute Right** : Spaces the objects evenly starting from the right pixel on each object.

   ◆ **Distribute Horizontally** : Spaces the selected objects evenly in the horizontal direction

   ◆ **Distribute Top** : Spaces the objects evenly starting from the top pixel on each object.

   ◆ **Distribute Center Vertically** : Spaces the objects evenly starting from the vertical center pixel of each object.

   ◆ **Distribute Bottom** : Spaces the objects evenly starting from the bottom pixel of each object.

   ◆ **Distribute Vertically** : Spaces the selected objects evenly in the vertical direction.

The positions of the selected segments will be altered accordingly.
The table below gives an example of how one of the Distribute tools works.

A sample design showing the affect ns before (left) and after (right) being distributed vertically.
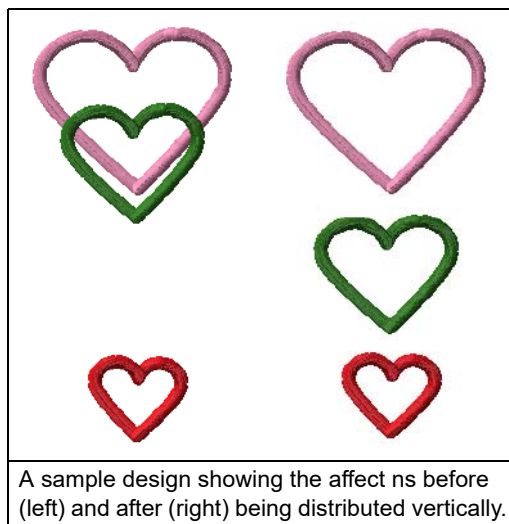
Resizing a Segment

Resizing a segment enlarges or reduces it horizontally or vertically, relative to the percentage you designate. You can resize segments manually using the selection frame, or use the setting in the Transform of the e for finer control.

To resize segments manually using frame beads:

1 Select one or more segments.
   The active segments are enclosed in a selection box with handles.
2 Do one of the following to resize segments:
   - To resize segments by width, click and drag the beads on the left or right side of the selection frame.
   - To resize segments by height, click and drag the beads on the top and bottom sides of the selection frame.
   - To resize segment proportionally (i.e., equally in the both dimensions) click and drag the frame beads located at the corners of the selection frame.
3 Save the design to preserve your changes.

To resize segments using the Transform tab:

1 Select one or more segments.

2 Click the Properties ⚏ icon on the toolbar.
   The properties dialog opens.
3 In the Properties dialog, click the + sign to open the Transform area (note: you may need to scroll down to see this area).
   You see the Transform settings.

4 In the Width box, enter the width you want for the selected object(s).

5 In the Height box, enter the height you want for the selected object(s).

   💡 To maintain the proportions of the segment while resizing it, select "Maintain aspect ratio" if not already selected.

6 Press Enter to apply the size change.
7 Save the design to preserve your changes.

Rotating Objects

Rotating a segment turns it around a fixed point that you determine. Rotating a segment is useful if your design contains elements that are rotated to the same angle, such as a logo and lettering displayed on a 30 degree angle.

To rotate segments manually:

1 Select one or more segments you want to rotate.
   The active segment(s) is enclosed in a selection box with handles.
2 Move your mouse over the rotation bead, located at the top of the selection frame.
3 Click and drag the rotation bead to the left or right to adjust the segment's angle.
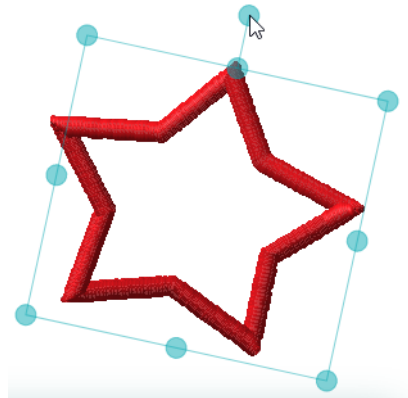
4 Release the mouse button when the segment is at the angle you want.
You see the orientation of the selected object change accordingly.

Automatic Branching

Automatic Branching is a tool that can be used to reduce the number of trims and jumps in a design made up of a large number of segments of the same embroidery type. When you apply this tool ta selected segments, it creates a single, continuous "branched" segment, in which all start/end points are optimized for the closest connections. Also, if the embroidery is a type that includes underlay, the underlay will be sewn all at once before the top stitches.

To use Automatic Branching:

1 Using the Select tool, select the segments you want to branch together.

2 Press the Automatic Branching tool.

Selected segments will be branched automatically; in the Sequence view panel, you will notice that they all now appear as one item.

Note that if you apply automatic branching to segments with different thread colors, the branched segment that results will be all one color. The color will be the color of the first of the two branched segments, going by the sequence order.

If you want to unbranch a set of branched segments, simply select them and tap on the Automatic Branching tool icon again; note, however, that the original colors will not be restored by this action.

Merging a file into the current Design

You can place external embroidery designs into the current design using the Merge command. Note that you can merge stitch files from a large number of different formats, such as Babylock, Pfaff, Singer, and many others. You can then save the merged design as a unified outline (.JDS) formats.

To merge a design:

1 Open an existing design, or create a new design.

2 Click the "dots" ••• tool, and select the **Merge** from the pop-up menu that appears.
You see an Open dialog.

3 In the Look in field, browse to locate the folder containing the file you want to merge.

4 In the Files of type list, select a design file type for the design you want to merge.

5 In the Open dialog, you will now see only those files that have the specified file extension.

6 (Optional) Select the "Convert to Outlines" box.
If this option is selected, the merged file's stitch segments will be converted to outlines, which will make it possible to select (and edit) segments individually; if not selected, the merged design will remain as non-editable stitch segments.

7 Click Open.
The merged file will be added to the design.

Exporting a design as an Image File

In the Design Doodler application you can export a design as an image file, in PNG format. The image can then be saved and shared as a preview of the finished design.

To export a design as an image:

1 Open a design, or create a new design.

2 Click the "dots" ••• tool, and select Export Image from the menu that appears.
You see the Save As dialog.

3 In the dialog, browse to the directory where you want to save this file.

4 In the File Name field, enter a name for the design.

5 Click Save.
You see the Image size dialog.

Image Size

Width (mm)

130

Height (mm)

110

Cancel   OK

6 If required, adjust the width and/or height of the image.

7 Click OK.
The image of the design will be saved to the selected directory.

Editing a Design with the Sequence View

Using the sequence view panel, you can alter the sequence (that is, sewing order) of the individual segments in designs. For example, you use these tools re-order the segments in such a way that all the embroidery of a single color occurs together.

There are also tools on the sequence view panel that allow you to hide or lock all the segments except the one you are currently editing, eliminating the possibility of making unintentional changes.

To show the Sequence View panel:

• On the toolbars, click the Sequence View

  icon.

  You see the Sequence view panel.

Sequence View Tools

The following bullet points present a summary of the functions available on the Sequence View panel:

• To shift the selected segment up in the

  sequence, click **Move up** △.

• To shift the selected segment down in the

  sequence, click **Move down** ▽.

  For more information about the Move up/ Move down tools, see "Changing the Sewing Sequence", below.

• To change the sequence manually, click and drag the segment up or down, and release the mouse button when it is in the desired position.

- Click the **Lock** 🔒 tool to lock the selected segment (or segments) so that they cannot be edited.

- Click the **Unlock** 🔓 tool to undo the lock tool on the selected segment (or segments).

- Click **Hide Selected** 🔲 to hide all the selected segments so that they are temporarily hidden in the design workspace.

- Click **Show Selected** 🔲 to show all selected segments.

- Select **Insert stop** ⊘ to insert a stop in the sequence; the stop will be placed immediately prior to the beginning of the current segment that you have selected

- Click **Remove stop** ✕ to remove any stop added between the selected segment and an adjacent segment.

  For more information about inserting/removing stops, see "Inserting and Deleting Stops between Segments", below.

In addition to these tools, there are four other functions that can be accessed by clicking the Option icon ⋮ in the upper-right of the sequence view panel.

- **Expand all**: Expands all color-groups, so that all the segments within each group will appear.

- **Collapse all**: Collapses the segments into their respective color groups.

- **Show all**: Makes all segments visible (including any that have been hidden by applying the "Hide Selected" tool).

- **Hide Other:** Hides all the segments except those that are currently selected.

Changing the Sewing Sequence

In the Sequence View panel, you will find tools that allow you to change the order of segments in a design. Simply select the segment by checking the box next to it, and move them using the "Move up" or "Move down" tools. Note that you can also move multiple segments at once by checking more boxes.

To change the order of a segment in the sequence:

1 Open the Sequence View panel.

2 Expand the color layer containing the segment you move.

3 Select the segment. In the toolbar at the top of the Sequence view panel, select one of the following:

- To move the segment one position earlier in the sequence, click the Move up △ tool.

- To move the segment one position later in the sequence, click the Move down ▽ tool

The segment's sewing order will be changed accordingly; repeat the above steps to move the selected segment more steps forward or back.

Inserting and Deleting Stops between Segments

In the Sequence view, you can insert a stop between segments of the same thread color. When you insert a stop within a segment group, the selected segment starts a new segment group using the same thread color.
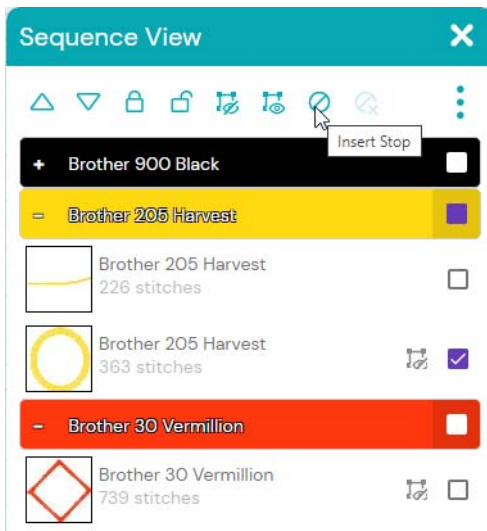
To insert stops between segments:

1 Click the Sequence View ≋ tool.
   You see the Sequence view dialog.
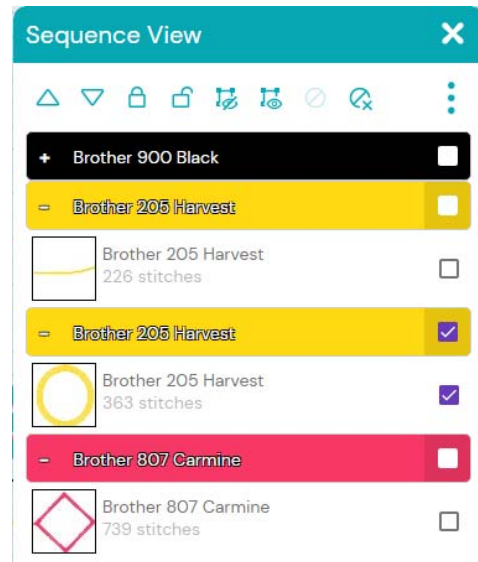2 In the Sequence view dialog, select the segment immediately <u>following</u> the place where you want to place a stop.

> There must be at least one segment of the same color earlier in the sewing order than this segment.

3 On the Sequence View dialog, select the Insert Stop ⊘ .

In the Sequence View, you now see that there is a new "color group" containing the selected segment.

4 Save the design to preserve your changes.

To delete stops between segments:

1 Click the Sequence View ≋ tool.
   You see the Sequence view dialog.
2 In the Sequence View, select a segment you want to delete a stop from.
3 On the Sequence View toolbar, choose Remove Stop ⊘ₓ.
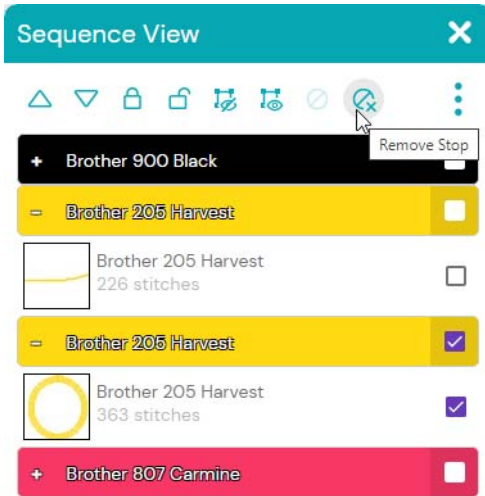
*The stop is removed and the selected
segment is added to its original segment
group.
In the image below, notice that the selected
fill segment is now part of the original
segment group.*
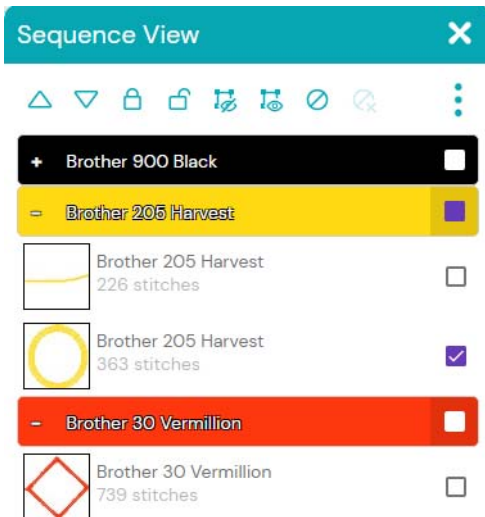
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