# PE-DESIGN VERSION 3.0





### IMPORTANT INFORMATION: REGULATIONS

# Federal Communications Commission Compliance Notice (for U.S.A only)

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

#### Important - About the Interface Cable

This equipment has been certified to comply with FCC standards, which are applied to the U.S.A. only. A shielded interface cable should be used according to FCC 15. 27(C).

#### Caution

Changes or modifications not expressly approved by the manufacturer or local sales distributor could void the user's authority to operate the equipment.

# Canadian Department of Communications Compliance Statement (for Canada only)

This digital apparatus does not exceed the Class B limits for radio noise emission from digital apparatus as set out in the interference-causing equipment standard entitled "Digital Apparatus", ICES-003 of the Department of Communications

# Radio Interference (220–240V area only)

This machine complies with EN55022 (CISPR Publication 22)/Class B.

#### For users in the UK, Eire, Malta and Cyprus only

#### **Important**

The wires in this mains lead are coloured in accordance with the following code:

BLUE NEUTRAL BROWN LIVE

#### Note

As the colours of the mains lead of this appliance may not correspond with the coloured markings identifying the terminals in your plugs, proceed as follows:

- Connect BROWN wire to terminal marked L or coloured RED.
- Connect BLUE wire to terminal marked N or coloured BLACK.

#### When using A.B.S. 1363 fused plug, a 3 Amp. fuse must be fitted.

If the terminals of the plug are unmarked, consult a qualified electrician before use.

#### Important (in the United Kingdom)

- Mains Supply (AC 230/240V, 50Hz only)
- DO NOT cut off the mains plug from equipment. If the plug fitted is not suitable for the power point
  in your home or the cable is too short to reach a power point, then obtain an appropriate safety
  approved extension lead or consult your dealer.
- BE SURE to replace the fuse only with an identical approved type, as originally fitted, and to replace the fuse cover.
- If nonetheless the mains plug is cut off, ensure to remove the fuse and dispose of the plug immediately, to avoid a possible shock hazard by inadvertent connection to the mains supply.

# Congratulations on choosing our product!

Thank you very much for purchasing our product. To obtain the best performance from this unit and to ensure safe and correct operation, please read this Instruction Manual carefully, and then keep it in a safe place together with your warranty.

# Please read before using this product

#### For designing beautiful, wider embroidery patterns

 This system allows you to create wider embroidery patterns and supports wider ranges for the setting of the sewing attributes (thread density, sewing pitch, etc.). However, the final result also depends on your sewing machine. We recommend that you make a trial sewing sample with your sewing data before sewing on the final material.

#### For safe operation

- Do not use AC adapters other than the model specified for this unit.
- Plug the AC adapter directly in the wall outlet. Do not use extension cords.
- Avoid dropping a needle, a piece of wire or other metallic objects into the unit, or into the card slot.
- Do not store anything on the unit.
- Remember to unplug the AC adapter after each use, and when the unit is not going to be used for a long period.

### For a longer service life

- When storing the unit, avoid direct sunlight and high humidity locations. Do not store the unit close to a heater, iron or other hot objects.
- Do not spill water or other liquids on the unit, AC adapter or cards.
- Do not drop or hit the unit or AC adapter.

### For repairs or adjustments

In the event malfunction occurs or adjustment is required, please consult your nearest service center.

#### Notice

This Instruction Manual does not explain how to use your computer under Windows. Please refer to the Windows manuals.

## Copyright acknowledgment

MS-DOS and Windows are registered trademarks of Microsoft Corp.

IBM is a registered trademark of International Business Machine Corporation.

#### **Important**

Using this unit for unauthorized copying of material from Embroidery Cards, newspapers and magazines for commercial purpose is an infringement of copyright which is punishable by law.

#### Caution

The software included with this product is protected by copyright laws. This software can be used or copied only in accordance with the copyright laws.

#### "SAVE THESE INSTRUCTIONS"

"This product is intended for household use."

# **New features of Version 3.0**

#### General

- Realistic Preview function
- Function for scaling and rotating patterns numerically
- Function for moving patterns and points using the arrow keys
- Moving patterns and points vertically and horizontally by dragging the mouse

#### **Design Center**

· Function for drawing horizontal and vertical lines using the Pen and Line tools

#### **Layout & Editing**

- Function for converting TrueType font text to embroidery data
- Vertical arrangement of text
- Function for aligning objects
- Function for selecting objects using the Tab key
- Function for exporting filesin other formats (Dst, Hus, Pcs, and Exp)
- Undo and Redo buttons added to Toolbar
- Realistic Print function

### **Programmable Stitch Creator**

• Editing functions (Cut, Copy, Paste, Mirror, ...)

File Utility

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# **Programmable Stitch Creator**

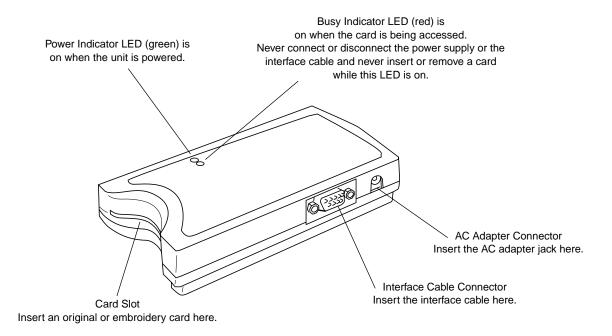
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# **Before Using**

# **Principal Parts**



# **Accessories**



CD-ROM



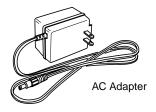
Instruction Manuals



Original Card (1)



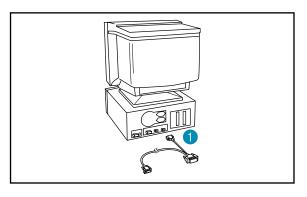
# **Options**





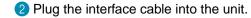
Original Cards

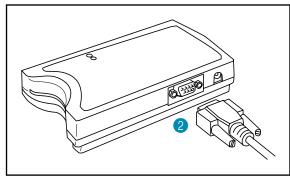
# **Setting Up**

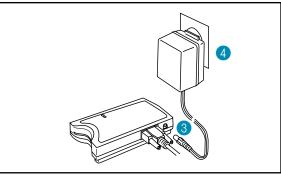


IMPORTANT: Be sure the PC is turned off before making any connection.

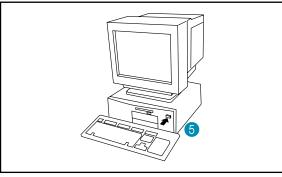
- 1 Plug the supplied interface cable into an RS-232C serial port of your PC.
- Choose a port that is not used for another peripheral.
- In the File Utility application, choose the default port AUTO if no other peripheral is connected. Choose the first available COM port if other peripherals are connected to your computer. See Serial Port Setting on page 188.
- The PC end of the interface cable has two different pin connectors. Use the appropriate pin connector for your computer.







- 3 Connect the AC adapter to the unit.
- 4 Plug the AC adapter into a wall outlet to turn it on.



Turn the PC on.

IMPORTANT: It is not recommended to turn a peripheral on/off while the PC is on. Make it a habit to turn on all the peripherals (this unit, the printer, the CRT display...) before you turn your PC on, and to turn the PC off before turning the peripherals off.

File Utility

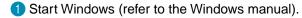
# **Installing the Software**

### System Requirements

Before you start installing the software on your PC, check that your system meets the following requirements. If it does not, consult your dealer.

PC	IBM-PC or compatible
CPU	486 or Later (we recommend Pentium or higher)
Windows	Windows 95 or Windows 98
Memory	32M or more (we recommend 64M or more)
Hard disk free space	15M or more
Display	SVGA (800 $\times$ 600) or more, High color (65536 colors) or more
Serial port	An RS-232C port that is not used with other peripherals
Mouse	A mouse that is supported by your version of Windows.
Printer	A graphic printer that is supported by your system (if you wish to print your images)

### Installing



- If you have other Windows applications running, click Cancel to exit, close all the other applications and start again.
- If a previous version of this software is already installed, uninstall it before installing this version of the software.
- Insert the CD-ROM into the CD-ROM drive. The installer starts up automatically and displays a dialog allowing you to select the language.

If the installer does not start up automatically:

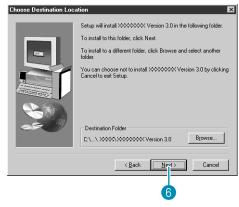
- Click Start .
- Click Run on the menu. The Run dialog appears.
- Type the full path of the installation program.
   Example: D:\Setup if the CD-ROM is in drive D, or E:\Setup if the CD-ROM is in drive E.
- 3 Select the desired language, and then click **OK**.



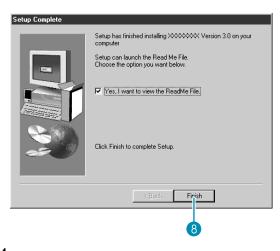
Programmable Stich Creator











- 4 Wait until the panel shown here is replaced with the **Welcome** dialog shown next.
- 6 Click Next to proceed with the installation.
- If you have other Windows applications running, click Cancel to exit, close all the other applications and start again.

- 6 Click Next to install in the default folder.
- If you want to install into another folder, click
  Browse. Select a drive and a folder (if necessary,
  type the name of a new folder). When the desired
  folder is selected, click OK. The Choose Destination Location shows the selected folder. Click Next
  to install in that folder.
- Click Back to move back to the previous step.
- Click Cancel to exit.

When you click **Next** on the **Choose Destination Location** dialog, installation starts.

- Wait until this panel is replaced with the next dialog.
- Click Cancel to exit.

When the setup is completed, this dialog appears.

- 8 If you want to display the README file, just click **Finish**.
- If you don't want to display the README file, click the check box to delete the check, then click Finish.



The installation is complete. The program group window shows the icons for the applications installed.

To start the installed applications:

Double-click the icon of the application you want to start.

#### NOTE:

You may also set up the program in either of the following ways:

- Access the Setup.exe file by double-clicking the My Computer icon, then the name of your CD-ROM
  drive and finally the Setup.exe file or by selecting the name of your CD-ROM drive, then the
  Setup.exe file in the Windows Explorer window.
- Select Add/Remove Programs in the Control Panel window, then click Install in the Install/Uninstall tab and follow the installation prompts.

### Note on the use of Version 3.0 and the Internet Explorer

Version 3.0 does not work properly on a PC which is running Internet Explorer Version 4.0. It does work properly, however, with Internet Explorer Version 4.01 (version nr. 4.72.2106.8 and later versions).

If your PC is currently running Internet Explorer Version 4.0, please change it to Version 3.x or Version 4.01 (version nr. 4.72.2106.8 or later versions) before using your applications.

# Tips and Techniques for Creating Embroidery Patterns

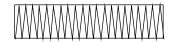
When Satin stitch is used in a wide area, the stitched area may shrink after sewing, depending on the material and the type of thread used. When this happens, switch to this alternate method: Select Fill stitch and use a stabilizer material on the reverse side of the fabric.



Note: When using Satin stitch in a wide area, the needle may move out of position by about 10 mm with some machines. To avoid this, use the above mentioned alternate method.

To limit shrinking, set the stitch direction perpendicular to the larger edge of the area.





Shrinking more likely to occur

Shrinking less likely to occur

After creating an embroidery pattern made of several different parts (in Design Center or Layout & Editing), make sure that you check the sewing order and correct it if necessary.

With Design Center, the default sewing order is the order in which the sewing attributes are set. With Layout & Editing, the default sewing order is the order in which the elements are drawn.

There are two ways of enlarging or reducing an imported embroidery pattern in Layout & Editing. You may choose to simply scale your pattern with the selection cursor or apply the Stitch to Block function to the pattern and then scale it.

When you scale an imported pattern, the number of stitches that will be sewn remain the same, resulting in a change of embroidery quality if the size of the pattern is greatly changed.

Selecting the Sew – Stitch to Block command, then scaling a pattern allows you to keep the original embroidery quality of the pattern, as the number of stitches that will be sewn automatically adapt to the new size. Selecting the "Normal" sensitivity setting of the Stitch to Block function will allow you to maintain the embroidery quality in most cases. Selecting a finer density setting in the Stitch to Block Sensitivity dialog will allow you to obtain a more complex embroidery; selecting a coarser density will create a simpler embroidery.

When a pattern is scaled only moderately, it may not be necessary to apply the Stitch to Block function.

This system allows you to create a wide variety of embroidery patterns and supports wider ranges for the setting of the sewing attributes (thread density, sewing pitch, etc.). However, the final result also depends on your particular sewing machine model. We recommend that you make a trial sewing sample with your sewing data before sewing on the final material. Remember to sew your trial sample on the same fabric, using the same needle and the same machine embroidery thread as your final material.

# **Getting Started**

### Introduction

This package contains four applications:

### Design Center

Design Center is used to create embroidery patterns from bitmap images. The bitmap images may come from scanning a printed image or can be created with an application like Paint<sup>®</sup>. They must be uncompressed, 16-color bitmaps (file name extension **bmp**). Design Center automatically detects outlines in the bitmap image and replaces them with broken lines that can be edited and assigned sewing attributes. The procedure is divided in four steps:

- ◆ Stage 1 Original Image: You open the bitmap image file and select one or more colors that the application will use to retrace the outlines.
- ◆ Stage 2 Line Image: The original color bitmap image is replaced with a black and white bitmap image (the colors selected in Stage 1 become black, and all the other colors become white). You can edit this image using pens and erasers of different thicknesses. (You can also start at this step and draw a complete black and white image by hand.)

  When the image is ready, you set and start the automatic retracing process.
- ◆ Stage 3 Figure Handle: The black and white bitmap image is replaced with a set of outlines made of editable broken lines. You can edit the broken lines by moving, inserting or deleting points.
- ◆ Stage 4 Sew Setting: In this final step, you apply sewing attributes (thread color and stitch type) to the outlines and regions inside.

At any stage, you can save your work to retrieve it later. Up to stage 2, the file will be a bitmap image saved with the extension **pel**. In stages 3 and 4, the file will be saved with the extension **pem**. Saving your work as you move through the stages will be helpful if you make changes and then decide to use the original pattern again.

When your image has reached stage 4, you can import it in Layout & Editing. The image will be considered a single object by Layout & Editing, which means that you will be able to move and scale it, but you will not be able to edit the outline. You can however change the pattern and some of the sewing attributes after applying the Stitch to Block function.

## Layout & Editing

Layout & Editing is used to assemble a complete embroidery image from various components. These components include:

- Embroidery patterns created with Design Center.
- ♦ Embroidery patterns purchased on Embroidery cards from your dealer (installed using the File Utility application). Note that some patterns cannot be read.
- ◆ Embroidery patterns in the Tajima, Melco, Pfaff and Husqvarna formats.
- ◆ Patterns created within Layout & Editing itself. These patterns include text, circles and related shapes, rounded boxes, polygonal lines, curves and manual punching patterns.

After gathering the different components of your embroidery picture, you can use the layout functions to modify their relative position, orientation and scale.

When an embroidery image is complete, you can save it (the file name extension will be **pes**) and write it to an Original card. The Original card can then be inserted into your sewing machine and the embroidery process continued.

### Programmable Stitch Creator

Programmable Stitch Creator allows you to create, edit and save stitch patterns, which you can apply to the enclosed regions of patterns, both in Design Center and Layout & Editing. The fill stitch pattern files are saved as **pas** files. The application comes with a number of **pas** files, which you can use as such or edit to enhance your embroidery patterns.

### File Utility

This application is used to handle file exchanges between your disk and the card module. It has two functions:

- ◆ Install Embroidery Card: This is used to transfer embroidery data from an optional embroidery card to your hard drive or another disk.
- Write to Original Card: Transfers embroidery data files created with Layout & Editing to an original card.

# **About this Chapter**

The next three sections of this chapter are organized as a tutorial to provide you with a hands-on introduction to the different features of the applications.

You will first create a pattern using Design Center.

Next, the pattern will be imported into Layout & Editing. You will learn how to add a few components to the embroidery image and to organize the layout.

In the third section, you will then learn how to use Programmable Stitch Creator to edit a programmed stitch in order to create your own.

File Utility

# **Using Design Center**

In this section, we are going to create an embroidery pattern. That pattern will be created by automatic retracing of a bitmap image. This pattern will be used later as the stepping stone to creating a more complex embroidery picture.

The complete procedure will take us through the different steps of a normal working session with Design Center and will introduce you to its most important features.

Step 1	Starting Design Center	page 10
Step 2	Opening a Bitmap Image	page 11
Step 3	Converting to Line Image	page 12
Step 4	Editing Lines	page 13
Step 5	Converting to Figure Handle Image	page 15
Step 6	Moving to Sew Setting	page 16
Step 7	Setting Sewing Attributes	page 16
Step 8	Previewing the Image	page 20
Step 9	Saving the File	page 21

Please follow these instructions step by step, in the sequence given. If you have to interrupt your training for any reason, it is recommended to save the file (see Step 9). You will be able to retrieve it later and resume your work.

File Utility

# Step 1 Starting Design Center

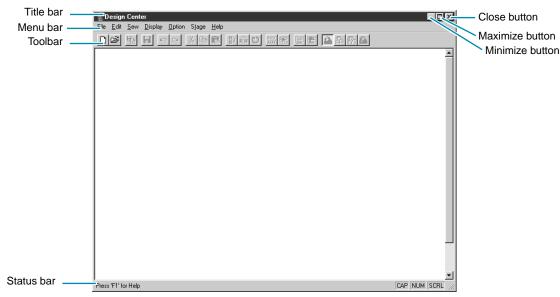
To start Design Center, click the start button, then select Programs, Version 3.0, then double-click Design Center to open the Design Center window.

You may also double-click the Design Center icon in the program group.



You can also click **Option** on the menu bar of Layout & Editing, then click **Design Center** on the submenu.

The Design Center window appears.



The window size will be smaller than the display area on the screen of your personal computer.

2 To make the Design Center window fill up the available space on your screen, click the maximize button on the right side of title bar.

If you are working with other programs, you can reduce the Design Center window temporarily to an icon (see icon below) by clicking the minimize button on the right side of the title bar. You can then access the other windows and icons on the display screen by using the mouse.



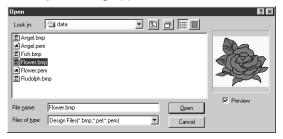
To return to the Design Center window, click the icon, bearing the name of the opened document, at the bottom of your screen.

**Step 2** Opening a Bitmap Image

We are now going to open a bitmap image and convert it into an embroidery image.

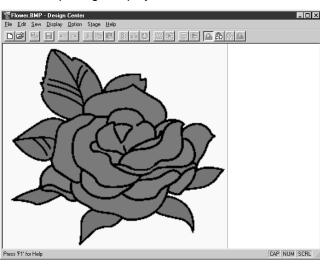
Click File on the menu bar, then click Open on the submenu.

The Open dialog appears.



- Select the file flower.bmp in the Data folder.
- If the Preview check box is checked, the contents of the selected file displays in the Preview window.
- ◆ Click **Open** to open the file.
- Double-clicking the file name will also open the file and close the dialog.

The bitmap image displays and is maximized to fit the work area.



Quik Reference

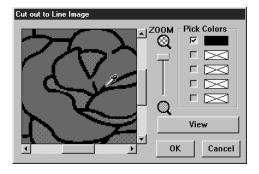
# Step 3 Converting to Line Image

Move to line image: Click Stage on the menu bar, then click To Line Image on the submenu. You can also click the button of the Toolbar shown below:



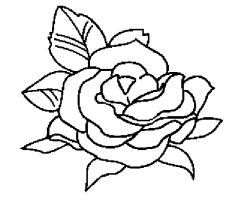
NOTE: Many menu functions can be activated by clicking a button on the Toolbar.

The **Cut out to Line Image** dialog will display. In this dialog, you will select the color(s) that will be used to make the outline of the bitmap image.

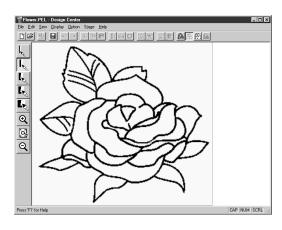


- If necessary, scroll and zoom the image.

  - When the outline of the bitmap image uses more than one color, you can repeat to select a total of five colors. If you try to select more, colors are scrolled down, and the color that was at the bottom is deselected.
  - If you selected a color by mistake, simply click its check box to deselect it.
- ◆ Click View to see the effect of your selection.
- If you wanted to select another choice of color, click Cancel. The bitmap image displays again and you can repeat this step with another color.
- If your preview image looks like the one shown here, click OK to confirm the outline of your pattern.
- Click Cancel to exit and go back to the bitmap image.



When you click OK, the line image displays.



 At this stage, the data can be saved as a \*.pel file.

# **Editing Lines**

At this step, you might normally need to correct a few lines. You should especially make sure that the lines around regions are completely closed or intersect to form a region. You may also wish to edit a line image and either add or remove some details or your image. You can do this at this stage using the pens and erasers of the Tool Box.

In this example, you are going practice how to use an eraser to remove some of the outline.

- 1 To make your editing job easier, enlarge the image using the zoom function.
  - Click | ♥ on the Tool Box. The shape of the cursor changes to ⊕ when you move it over the work area.
- 2 Drag the cursor over the pattern and click. The area is enlarged as soon as you release the mouse. You can repeat this step several times. To zoom in on a specific area, position the cursor to a point just next to the area, then click the left mouse button and hold it down as you move the cursor diagonally. A dotted box appears as you drag and the selected area will be magnified when you let go of the mouse button.

For a more complete description of the zoom features, see "Zoom-in Mode", "Zoom-out Mode" and "Fit Design Page to Window" on page 58.

- on the Tool Box. The shape of the cursor changes to 🔪 when you move it over the work area.
- f 4 Position the cursor over the first line you want to erase. Click and hold the right button of the mouse. The shape of the cursor changes to 🍳
- 5 Carefully erase the line, then move the cursor to the next line to erase and scroll the image as needed. Repeat this procedure to delete a few petals and leaves.

#### NOTE:

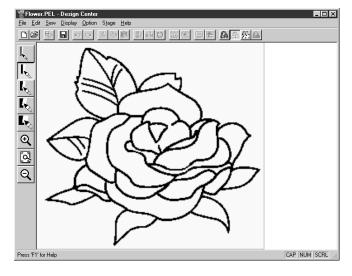
If you deleted parts of the outline by mistake, you may need to redraw some of lines. To do this, simply hold down the left mouse button and start drawing the line. If you are not satisfied with your editions, you can go back to Stage 1, convert your pattern and start editing again.

6 After editing your image, you will want to zoom out again to view the whole picture. There are two ways of proceeding.

Click on the Tool Box. The shape of the cursor changes to when you move it over the work area. Click a point of the Design Page and the image shrinks toward that point. Repeat this step several times.

File Utility

Click on the Tool Box. The Design Page fits the Design Center window automatically. Your window may now look like the following:



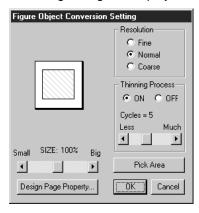
# **Step 5** Converting to Figure Handle Image

In Stage 2, the image is just a collection of dots or pixels. Editing in Stage 2 means adding or removing black dots. When you move to Stage 3 (figure handle image) the application automatically follows adjacent black dots to detect paths and replaces them with broken lines. Those broken lines can then be edited.

① Click Stage on the menu bar, then click To Figure Handle on the submenu. You can also click the button of the Toolbar shown below:



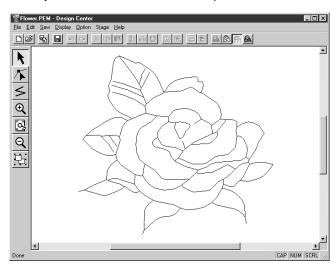
The following dialog will display.



This dialog allows you to preview how the image will fit in the selected Design Page. The Design Page size is the actual size of the area to be sewn.

- Leave all settings unchanged and click OK.
- For more details about the settings, see "Design Page Property" on page 93 and "To Figure Handle" on page 97.

2 When you click **OK**, the conversion process starts. After a while, the figure handle image appears.



The Tool Box provides editing tools to draw lines, move, delete points or insert new points, as well as zooming tools. In this example, we will however leave the image as is. For details on how to edit the figure handle image, see "Using the Stage 3 Tool Box" page 59.

#### NOTE:

You may also change the Design Page properties at this stage using the menu command Option - Design Page Property, which will open the Design Page Property dialog.

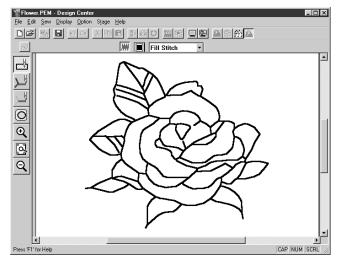
# Step 6 Moving to Sew Setting

① Click Stage on the menu bar, then click To Sew Setting on the submenu.

You can also click the button of the Toolbar shown below:



The Sew Setting window appears.



In this stage, you can set and check the sewing attributes of each part of the pattern. You can also set a pair of patterns for hole sewing in order to avoid sewing twice at the same place. The other tools available are for zooming.

- 2 To zoom in and out, use the and buttons on the Tool Box in the same way as you did at the Figure Handle stage.
- 3 To maximize the Design Page so that it fits the window, click on the Tool Box.

# **Step 7** Setting Sewing Attributes

We are now going to apply sewing attributes to the different parts on the picture.

## Setting the outlines

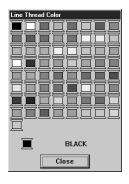
Click on the Tool Box.

The shape of the cursor changes to  $\triangleright$  and is displayed together with a small figure of the Tool Box button.

The Sewing Attributes bar now looks like this:



2 To set the outline color: Click the Line color button on the Sewing Attributes bar to display the Line Thread Color dialog.



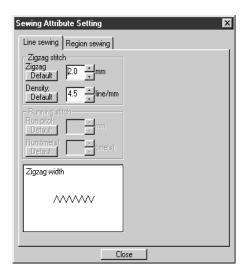
- Click the desired color if you want a color other than black.
- Click Close only if you want to remove the dialog from the screen.
- Place the cursor on the title bar; click and drag the dialog box to a more convenient place on the screen.

The Line color button **I** shows the selected color.

- 3 To set the stitch type: Click the **Line sew type** selector Running Stitch on the Sewing Attributes bar, then click **Zigzag Stitch**.
- ◆ To set the characteristics of the zigzag stitch, click Sew on the menu bar, then click Sewing Attribute on the submenu. You can also click the button of the Toolbar shown below.

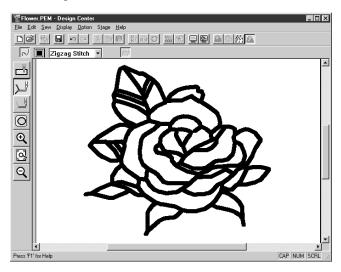


The **Sewing Attribute Setting** dialog appears. The dialog displays the default settings for the line stitch (**Line sewing** tab).



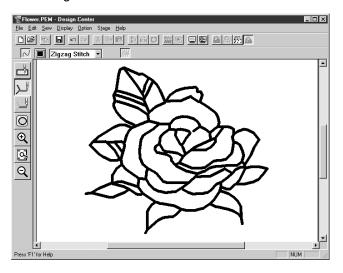
- ◆ To change the width from 2.0 mm to 1.5 mm, for example, type or select 1.5 in the Zigzag width selector.
- Click Close if you want to remove the dialog from the screen.

**6** Click on the outline of the pattern to apply the settings (color and stitch type) to the outlines. Your image now looks like this:



If you think that the outline is still too thick, you can change it now.

- 6 To change the width of the outline: Click on the outline using the mouse's right button. The **Sewing Attribute Setting** dialog displays. Proceed in the same way as described in point 4 to change the Zigzag width from 1.5 mm to 1 mm.
- Click on the outlines to apply the new setting. Your image now looks like this:



## Setting the regions

1 Click on the Tool Box.

The shape of the cursor changes to  $\triangleright$  and is displayed together with a small rectangle. The Sewing Attributes bar now looks like this:



Alphabetic Index

For the leaves:

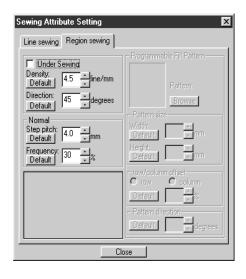
Click the **Region color** button 🔳 on the Sewing Attributes bar to display the **Region Thread Color** dialog, then select the **LEAF GREEN** color. Refer to the list of color names on page 204.

The Region color button I shows the selected color.

Click the Region sew type selector Fill Stitch on the Sewing Attributes bar, then click Fill Stitch. To set the characteristics of the fill stitch, click Sew on the menu bar, then click Sewing Attribute on the submenu. You can also click the button of the Toolbar shown below.



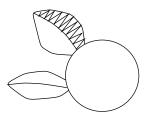
The **Sewing Attribute Setting** dialog appears. The dialog displays the default settings for the region stitch (**Region sewing** tab).



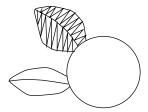
- Set the direction of the fill stitch as explained in the "NOTE" below.
  - Click on the regions of the leaves to which you want to apply a setting.
- ◆ Repeat the same operation for each stitch direction.

#### NOTE:

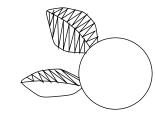
Using different directions for different regions can add contrast and improve the appearance of the embroidery.



Set the direction to 45° and click.



Set the direction to 90° and click.



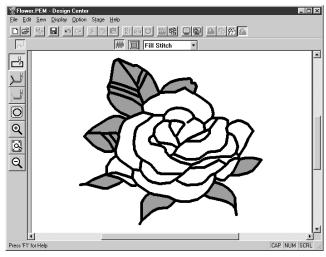
Set the direction to 135° and click.

#### NOTE:

To be able to apply the sewing settings to a region, the region has to be closed. If you cannot apply any setting to a given region, go back to the Figure Handle stage and make sure that region is closed. Edit any faulty line with the Point Edit tool. For details on how to edit the figure handle image, see "Point Edit Mode" on page 62.

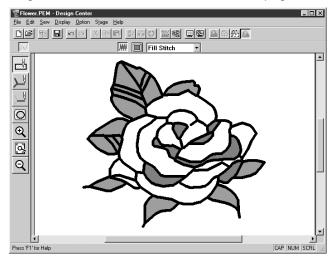
Programmable Stich Creator

After applying the sewing setting to the leaves, your image will look like this:



2 For one side of the petals:

Select the **CARMINE** color and set the direction, then click each region you want to apply the settings to. Refer to the list of color names on page 204.



3 For the other side of the petals:

Select the **RED** color and set the direction, then click each region you want to apply the settings to. Refer to the list of color names on page 204.

# **Step 8** Previewing the Image

To see how the pattern will look like once sewn, you can use the preview feature.

#### Operation:

1 Click Display, then Preview.

You can also click on the button of the Toolbar shown above.

A preview of your embroidery pattern will appear.

2 To return to the normal working screen, click Display, then Preview or the Toolbar button again.

#### NOTE:

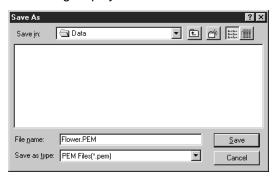
You cannot do any editing on the preview screen.

Layout & Editing

# Step 9 Saving the File

This image will be used as the basis of a more complex embroidery picture. For that reason, we need to save it.

① Click File on the menu bar, then click Save As on the submenu. This dialog displays.



- A default name Flower.pem is displayed.
- If necessary, change the drive and folder.
- Click Save to save the file.

#### NOTE:

To save the file under its default file name and in the same folder as the original bitmap file, you could use Save instead of Save As.

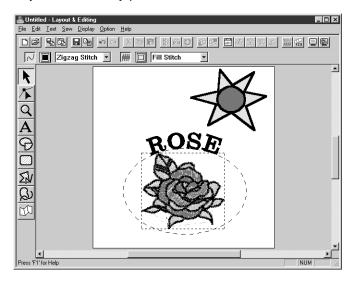
If you did not save the line image data, you will be asked whether you want to save it as a \*.pel file.

# **Using Layout & Editing**

In this section, we are going to compose a complete embroidery file combining a pattern imported from Design Center as well as patterns created with Layout & Editing, one of which we will apply a programmed stitch to.

The complete procedure will take you through the different steps of a normal working session with Layout & Editing and will introduce you to some of its most important features.

At the end of this session, your embroidery picture will look like this:



Step 1	Starting Layout & Editing	page 23
Step 2	Importing Embroidery Patterns from Design Center	page 24
Step 3	Zooming In and Out	page 25
Step 4	Moving the Embroidery Pattern	page 28
Step 5	Adding an Oval	page 29
Step 6	Adjusting the Size and Location of the Oval	page 30
Step 7	Adding Text	page 31
Step 8	Fitting the Text around the Oval	page 33
Step 9	Moving the Oval and Text	page 34
Step 10	Adding a Circle for Drawing the Sun	page 34
Step 11	Selecting a Programmed Fill Stitch	page 36
Step 12	Adding Broken Lines for Drawing the Sun Rays	page 38
Step 13	Changing the Sewing Order of Sun and Rays	page 39
Step 14	Adjusting the Rays	page 39
Step 15	Setting Hole Sewing	page 40
Step 16	Previewing the Sewing Image	page 41
Step 17	Transferring the Data to a Card	page 42
Step 18	Saving the File	page 42

Please follow these instructions step by step, in the sequence given. If you have to interrupt your training for any reason, feel free to save the file (see Step 18). You will be able to retrieve it later and resume your work.

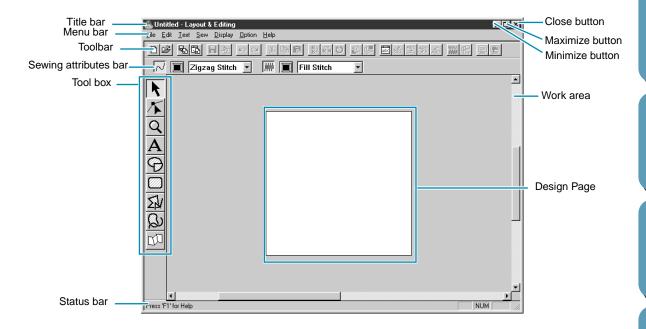
# Step 1 Starting Layout & Editing

To start Layout & Editing, click the start button, then select Programs, Version 3.0, then double-click Layout & Editing to open the Layout & Editing window.

You may also double-click the Layout & Editing icon in the program group.



The Layout & Editing window appears.



The window size will be smaller than the display area on the screen of your personal computer.

2 To make the Layout & Editing window fill up the available space on your screen, click the maximize button on the right side of title bar.

If you are working with other programs, you can reduce the Layout & Editing window temporarily to an icon by clicking the minimize button on the right side of title bar. You can then access the other windows and icons on the display screen by using the mouse.



To return to the Layout & Editing window, click the icon.

#### NOTE:

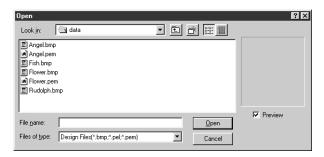
If needed, you may change the Design Page properties at this point using the menu command Option - Design Page Property, which will open the Design Page Property dialog. However, we will leave the settings as is in this example.

# Step 2 Importing Embroidery Patterns from Design Center

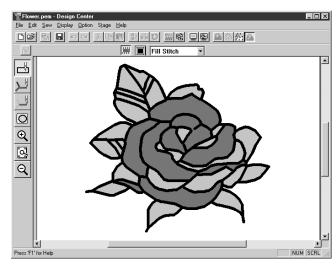
The first components of our embroidery picture will be a pattern imported from Design Center. If you interrupted the exercise and closed the Design Center window, you will have to start the application again and open the saved **Flower.pem** file again.

- To start Design Center, click Option on the menu bar, then click Design Center on the submenu.

  The Design Center window displays.
- 2 Click File on the Design Center menu bar, then click Open on the submenu. An Open dialog similar to this will display.



- Select the drive, the folder and the file name (Flower.pem), then click Open.
- If the Preview check box is checked, you may view your files in the Preview window.
- Be sure to select a pem file saved in stage 4. You cannot import another file type from Design Center.
- 3 The embroidery pattern appears on the Design Page of the Design Center application.



- 4 Click on the Layout & Editing window to bring it in the foreground of the screen.
- **5** Click **File** on the Layout & Editing menu bar, click **Import** on the submenu, then click **from Design Center**. You can also click the button of the Toolbar shown below.

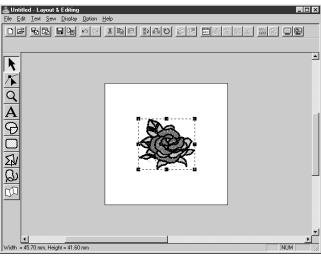


6 The Import Size dialog appears.



- ◆ Select **70** %, for example.
- Leave the default orientation setting as is.
- ◆ Click Import.

The embroidery pattern is imported into the Design Page of Layout & Editing.



The dotted line and the handles that appear around the image mean that the image is selected. An imported image is always selected as a single object. It is not possible to select a part of an imported image separately.

# Step 3 Zooming In and Out

The quality of the display depends on the screen resolution of your computer. By default, the window is set so that the entire Design Page is visible. If you need to work on a specific part of the Design Page, you might wish to see a more detailed display of that part. This can be achieved by zooming in. When you want to see the whole Design Page again, you can zoom out.

We are going to show how to zoom in on a portion of the picture and how to return to the standard display.

For a more complete description of the zoom features, see "Zoom Mode" on page 109.

1 Click Q on the Tool Box.

Five buttons appear: (Q Q 1:1 🔆 Q

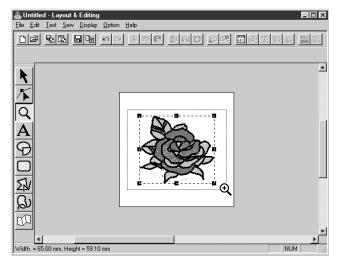
② Click ①

The shape of the cursor changes to  $\bigoplus$ .

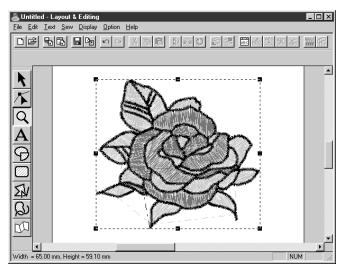
Programmable Stich Creator

3 Drag the cursor across the area that you want to enlarge and click.

Alternatively, position the cursor at a corner of the rectangular area that you want to enlarge, then click the mouse's left button and keep the button down while moving the mouse toward the opposite corner of the area. A dotted-line rectangle showing the selected area appears.



Release the mouse's button when the dotted-line rectangle matches the area that you want to enlarge. When you release the mouse's left button, the selected area is enlarged.



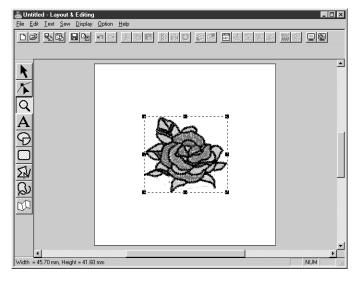
The whole picture is enlarged at the same time. Repeat this procedure to enlarge the pattern even more.

f 4 To display the image with its real dimensions, click f Q on the Toolbar.



**Quik Reference** 



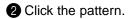


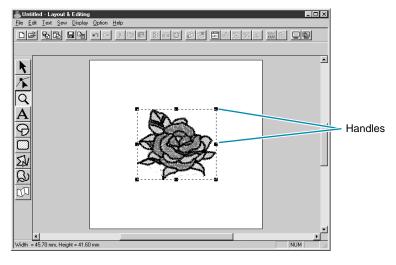
#### Step 4 **Moving the Embroidery Pattern**

When you import a pattern from Design Center, Layout & Editing puts the pattern at the center of the Design Page. We are now going to see how to move the imported pattern to a different location.

1 Click on the Tool Box.

The shape of the cursor changes to  $\mathbb{R}$ .



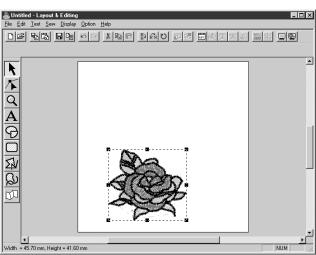


The Status bar shows the dimensions (width and height) of the selected pattern.

3 Move the cursor over the selected pattern.

The shape of the cursor will change to

You can now drag the pattern to another location.



The next component of our embroidery picture will be an oval. Since this oval will be used only as a guide to fit text that we will add later, we must set it so that it is not sewn.





on the Tool Box.

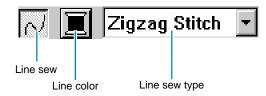
The shape of the cursor changes to + and displays together with a small ellipse. The Sewing Attributes bar now looks like this:

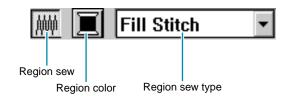


If you keep the cursor for a while on a button or selector of the Sewing Attributes bar, a small label indicating the function of the button will display.

The Arc shape selector allows you to select the shape of the pattern. For example, Circle is used to draw circle and ellipses. The other options are used to draw circle-related patterns such as arcs. For more details, see "Circle and Arc Drawing Mode" on page 112.

The Line stitch and Region stitch groups of buttons are for setting the stitch type and thread color for the outline (Line stitch) and for the region inside (Region stitch).





If you click on the Line sew button, the Line color button and the Line sew type selector disappear. This means that the outline will not be sewn. To make the Line color button and the Line sew type selector reappear, click the **Line sew** button again.

Select the shape: Since the default shape is Circle, you don't need to change the setting in the Arc shape selector.

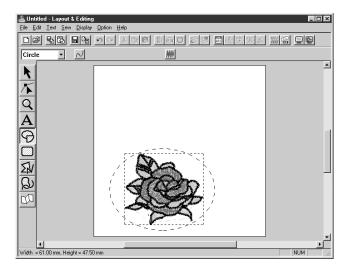
#### NOTE:

When drawing a circle or other circle-related pattern, you must always select the shape that you want before drawing. You cannot, for example, draw a circle and change it to an arc afterward.

- 3 Disable the outline: Click the Line sew button. The Line color and Line sew type buttons disappear.
- Disable the region inside: Click the Region sew button. The Region color and Region sew type buttons disappear.
- **5 Draw the oval**: Move the cursor to a point, click and drag.

As you drag, an outline of the oval is drawn. The final oval (outline and region inside) appears when you release the mouse's button.

Do not worry now about the position, size or aspect ratio (ratio between the height and width) of the oval. We will adjust them later.



If, for any reason, you want to delete the oval and draw it again, click on the oval to select it, then press **Delete** or click **Edit – Delete** on the menu bar.

If you wanted to attribute a color or a stitch type to the oval after drawing it, click on the Tool Box, then click on the oval to select it and click on the Line sew and Region sew buttons. The Sewing Attributes bar for the oval will show the current settings and allow you to change them.

## **Step 6** Adjusting the Size and Location of the Oval

We are going to adapt the size and aspect ratio of the oval and move it to its final position.

## ■ To change the size of the oval

If your oval looks very different from the one shown in the illustration above, proceed as follows to modify its size and proportions.

- 1 Click on the Tool Box.
- $oldsymbol{2}$  Click the oval to select it. The shape of the cursor changes from  $\begin{tabular}{ll} \line \end{tabular}$  to  $\begin{tabular}{ll} \line \end{tabular}$  .
- 3 Move the cursor over one of the handles of the oval.
  The shape of the cursor will change to ←→ , ↑ , √ or ✓ , depending on the handle the cursor is on.
- Orag the handle in the direction of the arrow to scale the pattern.
  - - is for scaling the height.

To center the oval on the pattern

If your oval is not well centered, on the pattern, proceed as follows to move it.

1 Click on the Tool Box.

The shape of the cursor changes to  $\mathbb{R}$ .

- 2 Click the oval to select it.
- Move the cursor over the oval.

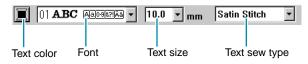
  The shape of the cursor will change to
- 4 You can now drag the oval to its final location.

## Step 7 Adding Text

The next component of our embroidery picture is a piece of text.

① Click A on the Tool Box.

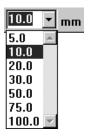
The shape of the cursor changes to \(\) and this appears on the Sewing Attributes bar:



- 2 Set the text color: You can set the text color at this step. For this example, we are not going to change the default black color.
- Set the font: You can set the font at this step. For this example, we are not going to change the default font, but if you click on the Font selector, you can scroll through the many different font styles available.



4 Set the text size: Click on the Text size selector and select the desired size of the characters (for this example, we will keep the default size of 10.0 mm). The value indicates the height of the characters.

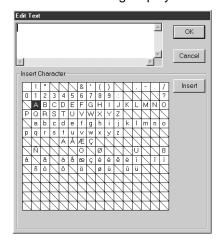


**5** Set the text stitch: Click on the Text sew type selector and select the desired stitch for the text. For this example, we will keep the default stitch Satin stitch.



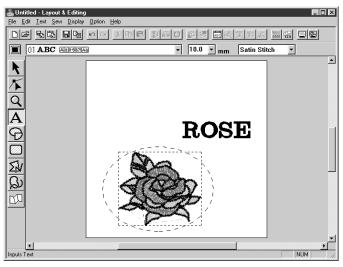
For more precise setting of the text attributes, see "Text Attribute Setting" on page 153.

**6** Enter the text: Click anywhere in the Design Page. The actual location does not matter, because we can move the text after creating it. The Edit Text dialog displays.



- ◆ Type your text ("ROSE", for example).
  - You can also enter a character by clicking it on the character table, then clicking Insert or simply by double-clicking it. This is specially useful if you have to enter accented characters that are not available on your keyboard.
- ◆ Click **oK** to confirm.
  - Click Cancel to exit.

The text appears on your Design Page when you click **OK**.



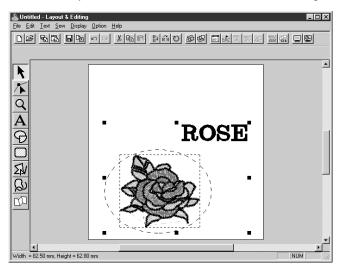
If you want to edit the entered text, click on the Tool Box, then click on the text to select it and click Text – Edit Text Letters on the menu bar to open the Edit Text dialog. You may then edit your text as necessary. If you simply wanted to delete the text, select it, then press Delete.

If you want to change the text color, font or other attributes after entering the text, you can do so while in the text mode or after clicking on the Tool Box, and selecting the text. The Sewing Attributes bar for the text pattern will show the current settings and allow you to change them.

## **Step 8** Fitting the Text around the Oval

We are going to fit the text around the oval.

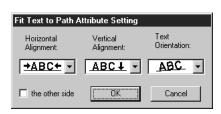
- lacksquare On the Tool Box to set the cursor in selection mode  $\c\c\c$  .
- 2 Click the text ("ROSE") to select it.
- 3 Press the **Shift** key and hold it down while clicking on the oval. This allows you to select the oval without deselecting the text.



4 Click Text on the menu bar, then click Fit Text to Path Setting on the submenu. You can also click the button of the Toolbar shown below.

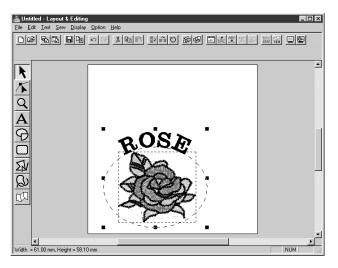


This dialog appears.



- Click OK without changing any setting.
- For more details about this setting, see "Fit Text to Path Setting" on page 154.

5 Your text now fits nicely on the oval.



## **Step 9** Moving the Oval and Text

Once the text is fit to the oval, you can move both patterns as a group, without affecting their relative position, or you can move the text alone to change its position on the oval.

### To move both patterns as a group

- Click on the Tool Box, then click on the oval to select it.
- 2 Move the cursor over the oval, to change the shape of the cursor to
- 3 Drag the oval: The text moves together with the oval.

### ■ To move the text over the oval

- ① Click on the Tool Box, then click on the text to select it.
- 2 Move the cursor over the text to change the shape of the cursor to
- 3 Drag the text: The text can only move along the oval.

## **Step 10** Adding a Circle for Drawing the Sun

The next component will be a sun. We will first draw a circle to get the basic shape.

- 1 Draw a circle.
  - To draw a circle, proceed as you did to draw the oval, but hold the **Shift** key down while dragging.
  - If you need to modify the size of the circle, drag a handle at one of the corners.
- 2 Set the stitch color and type of the outline.

To do this, you must first select the circle using the button. Next, click on the Line sew button

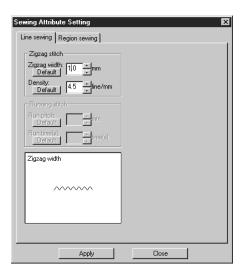
so that the Line color button and the Line sew type selector Sigzag Stitch appear and select a line color and stitch.

**Design Center** 

3 Set the sewing attributes of the outline stitch. Select Sew – Sewing Attribute Setting. You can also click the button of the Toolbar shown below.

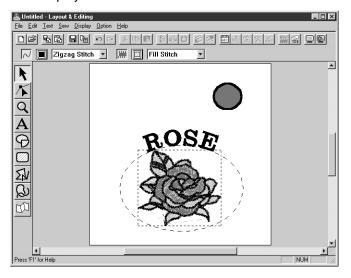


The Sewing Attribute Setting dialog opens.



- Set the width of the zigzag stitch to 1.0 mm.
  - Click Apply.

Set the sewing attributes of the region. Click on the Region sew button so that the Region color button and the Region sew type selector substitch. In this example, we will leave the other sewing attributes of the region as is. Your display will look as follows.

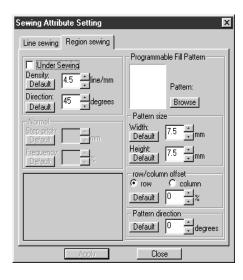


## Step 11 Selecting a Programmed Fill Stitch

You are going to see how to select a special stitch pattern (fill stitch) created with the Programmable Stitch Creator application, how to change its settings and how to apply it as the region stitch for the rays, which you will draw in Step 12. Stitch patterns are arranged in a tile-like manner within the selected regions, creating very decorative fill stitches.

- 1 Select Prog. Fill Stitch in the Region sew type selector.
- 2 Click Sew Sewing Attribute Setting on the menu bar to open the Sewing Attribute Setting dialog. You can also click on the Toolbar button shown hereafter.

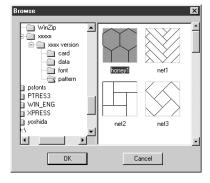




- Click the Region sewing tab to display the region sewing attributes.
  - Click Browse to open the Browse dialog.
- ◆ Select the path Program Files/Version 3.0/Pattern.

The Pattern folder contains the programmed stitch files. These files have the extension **pas**.

The **Browse** dialog shown hereafter now allows you to preview and browse through the existing **pas** files.



- Browse through the illustrated stitches and click on the wave1 illustration, which is then highlighted.
- Either double-click the illustration or click OK to select that stitch. The dialog closes and the selected stitch can now be previewed in the Sewing Attribute Setting dialog.
- 3 Change the stitch pattern size. Select a width and height of 10.0 mm by clicking on the "up" arrow. NOTE:

As soon as you click an arrow in this dialog, an illustration of the stitch pattern as well as the type of setting you are selecting are displayed in the other preview window of the dialog. You can see how each click on an arrow affects the pattern.

You may also type in a value. In that case however, you cannot preview the setting immediately as you set it.

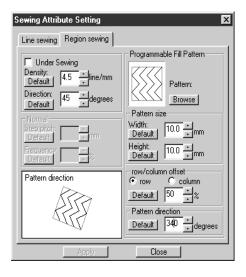
**Quik Reference** 

Change the row offset. Make sure the row button is selected, then set a row offset of 50 % by clicking and holding the mouse button down on either arrow or by typing the value directly in the edit box window.

#### NOTE:

You can only choose to change either the row or the column offset for a given pattern. You cannot select both for the same stitch pattern.

**6** Change the direction of the pattern. Rotate the pattern to the right by clicking on the "down" arrow until a value of **340 degrees** is selected. The **Sewing Attribute Setting** dialog will look like this:



- For more information on the different settings of a programmed stitch, see "Sewing Attribute Setting" on page 159.
- 6 Click Apply.

The stitch and its settings are set. Until they are changed again, those sewing settings, just like any other, will be applied to every new region that you draw.

Finish setting the remaining sewing attributes for the ray pattern that you will create in the following step.

Select a region color using the Region color 🔳 button.

File Utility

## Step 12 Adding Broken Lines for Drawing the Sun Rays

Let's draw a few rays around the sun. There are, of course, many ways to do this. You could, for example, draw a single straight line for each ray. Here, we are going to use a closed polygonal line (broken line) to make all the rays in one star-like pattern.

Olick on the Tool Box. The shape of the cursor changes to — and displays together with a miniature image of the tool button. The Sewing Attributes bar now looks like this:



2 Be sure Close path is selected in the Path shape selector.

When drawing a closed path, the first point and the last point are automatically joined. The pattern has an outline and a region and you can apply sewing settings to both.

With an open path, the broken line is left open (the first and last point are not automatically joined). The pattern will not have a region, thus you can only apply sewing settings to the outline.

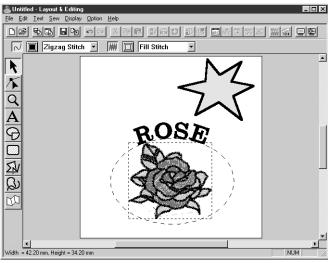
3 Draw the broken line around the circle using the circle as a guide.

Move the mouse to the starting point and click. Move the mouse to the end point of the first straight line and click again.

#### NOTE:

You can always remove the last-entered point by clicking the mouse's right button.

A Repeat until you arrive at the last ending point. At that point double-click. As soon as you have double-clicked, the display will look like the following.



If, for any reason, you want to delete the pattern and draw it again, click on the Tool Box, click on the pattern to select it, then press **Delete** or click **Edit – Delete** on the menu bar.

If you want to change the pattern path shape, color, or stitch after drawing it, click on the Tool Box, then click on the pattern to select it. Then change the settings at the Sewing Attributes bar or the **Sewing Attribute Setting** dialog.

Now that the rays are drawn, you might want to have a quick preview of the programmed stitch pattern at this stage and come back to this exercise later. To see how to preview an embroidery pattern, refer to Step 18 "Previewing the Sewing Image".

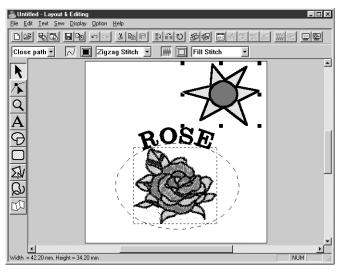
Step 13 Changing the Sewing Order of Sun and Rays

Since we have drawn the broken line after drawing the circle, the broken line pattern is in the foreground of the screen, and the circle is behind. A pattern that is in the foreground of the screen is sewn last. Since we do not want the embroidery to show the part of our broken line that is inside the circle of the sun, we are going to reverse the sewing order.

- ① Click on the Tool Box, then click on the ray pattern to select it.
- 2 Click Edit on the menu bar, then click Sew First on the submenu. You can also click on the Toolbar button shown hereafter.



This will move the ray pattern to the back of the circle.



If necessary, move the circle so that it looks centered relative to the ray pattern.

## **Step 14** Adjusting the Rays

At this step you might wish to modify slightly the rays. You can do that by moving, deleting and adding points on the broken line pattern.

- Click on the Tool Box and select the ray pattern.
- 2 Click on the Tool Box.

Two buttons appear:

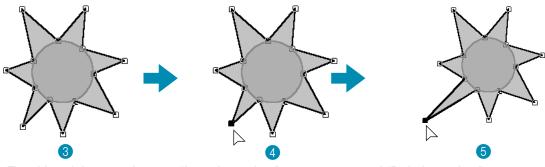
3 Click /

The shape of the cursor changes to  $\triangleright$  and the existing points of the pattern are marked with small empty squares.

Click the point that you want to move.
The selected point is marked with a small black square.

**5** Drag the point to a new position.

The point remains selected, so that you can drag it again.



To add or delete a point, see "Inserting points" on page 107 and "Deleting points" on page 108.

## Step 15 Setting Hole Sewing

If the sun is sewn according to the current setting, the complete broken line for the rays will be sewn first, then the circle will be sewn on top of the pattern of the rays. To avoid sewing twice at the same place, you can set the pair of patterns (circle and broken line) for hole sewing. This way, the part of the rays that is hidden behind the circle will not be sewn.

- ① Click on the Tool Box, then click on the sun's circle to select it.
- 2 Hold the **Shift** key down and click on the sun's rays. The circle and the broken line are now selected together.
- 3 Click Sew on the menu bar, then click Set Hole Sewing on the submenu. This message displays:
  - ◆ Click **OK** to remove the message.



When a pair of patterns are set to hole sewing, they cannot be moved separately. If you need to readjust their relative position, you must first select the circle or the broken line with the selection

#### NOTE:

The Hole Sewing setting is not possible if one of the patterns in the pair is not completely inside the other pattern.

## Step 16 Previewing the Sewing Image

Our embroidery image is now complete. You can preview it to have a more realistic view of how it will look once sewn. The preview function also shows how sewing will actually proceed. For example, you will be able to see clearly that the part of the broken line that is behind the circle is not sewn and how the selected programmed stitch fills the rays.

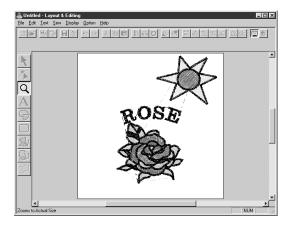
To preview a single pattern, or a group of patterns, select the pattern(s).

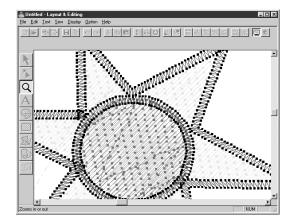
To preview a region for which you selected programmed stitch pattern, select it and zoom in on it.

2 Click **Display** on the menu bar, then click **Preview** on the submenu. You can also click on the button of the Toolbar shown below:



The preview display will appear.





3 To return to the normal display, repeat step 2 or press the Esc key.

#### NOTE:

You cannot do any editing on the preview screen.

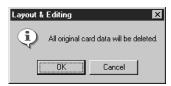
## Step 17 Transferring the Data to a Card

Before you can actually sew your embroidery pattern, you must transfer it to an Original card.

- 1 Insert an Original card in the module.
- 2 Click File on the menu bar, then click Write to Card on the submenu. You can also click on the button of the Toolbar shown below:



This dialog will display.



- If the card is not brand new, make sure that you want to erase the data that is already stored on the card and click OK.
- ◆ Click Cancel to exit.

If the card module is not correctly connected or powered, if the card is not inserted or is defective, you will see an error message. Refer to "Write to Card" on page 138 for more details.

#### NOTE:

You can also save the data to your disk as explained next, and then use the File Utility application to transfer the data to the card. See "Writing to an Original Card" on page 184.

## Step 18 Saving the File

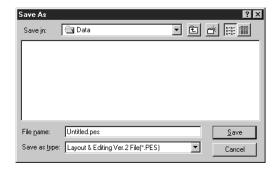
Before quitting the application, you should save your file on disk to be able to retrieve it later.

① Click File on the menu bar, then click Save on the submenu. You can also click on the button of the Toolbar shown below:



If the file already exists on the disk (the file has been saved at least once), the file is saved immediately.

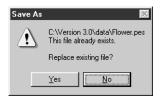
2 If the file name is still **Untitled** or if, for any other reason, the file cannot be found on the disk, the application will ask you to enter a file name and select a target folder.



- Select the drive, the folder and type the file name.
- Click Save to save.
- ◆ Click Cancel to exit.

**Quik Reference** 

If the new file name already exists, this dialog will appear:



- ◆ Click Yes to overwrite.
- Click No if you do not want to overwrite the existing file. You can then enter another file name.

The new file name displays in the title bar of the Layout & Editing window.

Layout & Editing

## **Using Programmable Stitch Creator**

This application allows you to design your own fill stitch patterns, which you can set as sewing attributes to enclosed regions of patterns, both in Design Center and Layout & Editing. The stitch patterns fill the regions in a tile-like manner, resulting in particularly decorative embroidery patterns. You may create your own fill stitch patterns or use the many stitches delivered with this application with or without editing them.

In this exercise, you are going to see how to edit an existing stitch pattern.

The complete procedure will take you through the different steps of a normal working session with Programmable Stitch Creator and will introduce you to its most important features.

Step 1	Starting Programmable Stitch Creator	page 45
Step 2	Opening a Programmed Stitch File	page 46
Step 3	Drawing Lines to Edit the Programmed Stitch	page 47
Step 4	Saving the Edited Programmed Stitch	page 48
Step 5	Quitting Programmable Stitch Creator	page 48

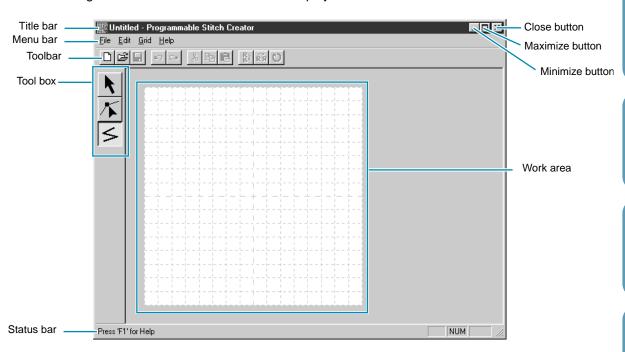
Please follow these instructions step by step, in the sequence given. If you have to interrupt your training for any reason, feel free to save the file (see Step 4). You will be able to retrieve it later and resume your work.

#### Step 1 **Starting Programmable Stitch Creator**

■ To start Programmable Stitch Creator, click the start button, then select Programs, Version 3.0, then double-click Programmable Stitch Creator to open the Programmable Stitch Creator window. You may also double-click the Programmable Stitch Creator icon in the program group.



The Programmable Stitch Creator window displays.



The window size will be smaller than the display area on the screen of your personal computer.

2 To make the Programmable Stitch Creator window fill up the available space on your screen, click the maximize button on the right side of title bar.

If you are working with other programs, you can reduce the Programmable Stitch Creator window temporarily to an icon by clicking the minimize button on the right side of title bar. You can then access the other windows and icons on the display screen by using the mouse.



To return to the Programmable Stitch Creator window, click the icon.

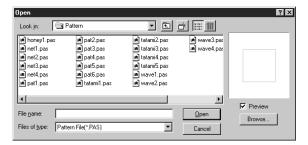
File Utility

## Step 2 Opening a Programmed Stitch File

① Click File on the menu bar, then click Open on the submenu. You can also click on the Toolbar button shown below.



The **Open** dialog opens.



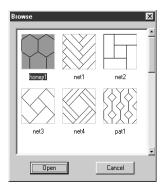
If you know which file you want to open:

- Select a pas file in the Pattern folder by clicking on it.
- The contents of the selected file displays in the **Preview** window, provided its check box is checked.
- Double-click the selected pas file or click Open to open the file.

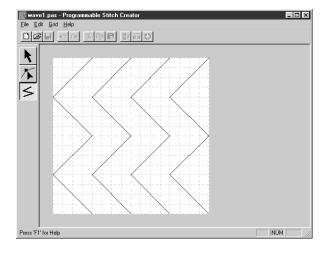
If you want to scroll through the available files before opening one:

- Click Browse to preview all the available pas files in the selected folder.
- Browse through the files with the help of the scroll bar.
- Select a stitch pattern by clicking on it.
   The selected pattern is highlighted.
- Double-click the selected pattern or click Open to open the file and to close both the Open and the Browse dialogs.

The Browse dialog opens.



The stitch pattern displays on the work area of the Programmable Stitch Creator application.



We are going to draw a wave between the displayed ones using the Line drawing tool of the Tool Box. To draw these waves, we will use the grid setting **medium** with which the **pes** file stitch pattern was saved.

#### NOTE:

Grid types should be selected according to the details you want to draw. Select a narrower grid for more detailed stitches and a wider grid for more simple ones.

For more information on the grids and on how to select them, refer to "Grid Menu" on page 201.

- ① Click Son the Tool Box. Move the cursor over the work area. The shape of the cursor changes
  - to + and displays together with a miniature illustration of the tool button.
- 2 Move the mouse to the second vertical grid line following a wave and click.

#### NOTE:

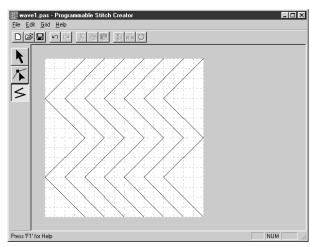
The horizontal and vertical lines that you draw on the work area always follow the grid. The points you create by clicking the mouse are inserted at the intersection of the horizontal and vertical lines of the grid, enabling you to draw diagonal lines as well. So, regardless on where you click, a point will automatically be inserted at the nearest intersection.

3 Move the mouse to the first angle and click again.

#### NOTE:

You can always remove the last-entered point by clicking the mouse's right button.

- 4 Repeat until you reach the end of the line and double-click.
- **5** Repeat the procedure to add two more waves. Your display may look somewhat like the following.



If you want to edit some points of the pattern that you drew, you can do so in the Point edit mode, which you were introduced to in the Layout & Editing window. The Point edit mode lets you move, insert and delete points (see "Point Edit Mode" on page 193 or go back to Step 15 "Adjusting the Rays" on page 39).

## Step 4 Saving the Edited Programmed Stitch

In order to apply your edited stitch pattern to a region in Layout & Editing or Design Center, you must first save it as a **pas** file. To do this, proceed as follows.

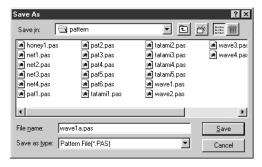
1 Click File on the menu bar, then click Save on the submenu.

You can also click on the button of the Toolbar shown below:



Since the **pas** files that come with your program are "Read Only" files and cannot be overwritten, the **Save as** dialog opens.

2 Type in a file name and select another target folder if you want to save your own stitch pattern files separately.



- Select the drive, the folder and type the file name.
  - ◆ Click Save to save.
- ◆ Click Cancel to exit.

## **Step 5** Quitting Programmable Stitch Creator

Now that you have created a stitch pattern, you may close this application as you will no longer need it for this exercise.

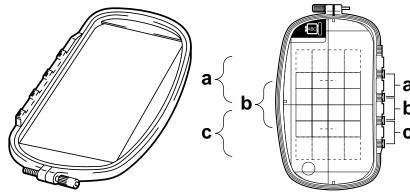
1 Click File on the menu bar, then click Exit on the submenu.

If you have saved your file as recommended in the previous step, the application will close immediately. If you have changed anything after the last time you saved the file, you will be asked whether you want to save the file. Click **Yes**, then proceed as explained in the previous step.

File Utility

## Creating data for the extra-large frame

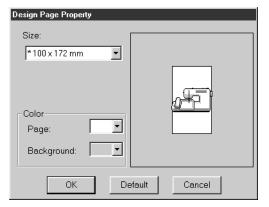
By attaching the enclosed (or optional) **extra-large frame** ( $130 \times 300$  mm or  $100 \times 172$  mm) at each of its three installation positions, extra-large designs can be embroidered.



Although the size of the pattern that can be embroidered using an extra-large frame is  $130 \times 180$  mm (or  $100 \times 100$  mm, depending on the sewing area of the embroidery machine), first determine which of the three installation positions (indicated as a, b, and c in the illustration above) the extra-large frame will be installed at and determine the orientation of the data.

### Select the Design Page size

1 In Layout & Editing, click Option, then Design Page Property.



- ◆ From the Size selector, choose a Design Page size of 130 × 300 mm, 300 × 130 mm, 100 × 172 mm, or 172 × 100 mm.
  - (Settings for extra-large frames are indicated by "\*".)
- Choose the appropriate setting after checking the size of the embroidery frame available for your machine.

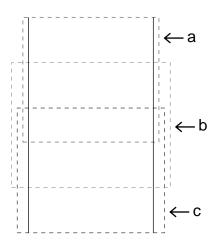
#### NOTE:

The Design Page size shown above is not available in Design Center since the maximum sizes for a single pattern are  $130 \times 180$  mm and  $100 \times 100$  mm.

Programmable Stich Creator

### Create the pattern

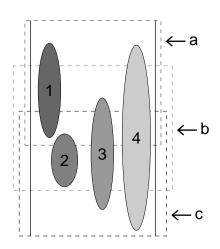
1 The Design Page appears on the screen as shown below.



- ◆ Explanation of a, b, and c:
  - a: Embroidering area when the embroidery frame is installed at the top installation position.
  - b: Embroidering area when the embroidery frame is installed at the middle installation position.
  - c: Embroidering area when the embroidery frame is installed at the bottom installation position.

The broken lines indicate each area.

2 Create the pattern, making sure that it meets the following conditions.



- ◆ The size of one pattern must be no bigger than 100 × 100 mm (or 130 × 180 mm). (If the pattern is imported from Design Center, only these size settings are available.)
- ◆ Each pattern must completely fit within one single area (a, b, or c).
  - 1: This pattern is correct since it fits completely within area a.
  - 2: This pattern is correct since it fits completely within either area b or area c.
  - The size of this pattern is acceptable, but its position must be corrected since it does not fit completely within any of the areas.
  - 4: This pattern must be corrected since it is too large.

#### NOTE:

If a pattern does not meet the conditions mentioned above, a warning will appear when continuing to the next step.

 Specify the sewing order in the same way that it is specified for a normal frame.

With the **Optimize hoop change** setting, the actual sewing order (including the embroidery frame installation order) is optimized as explained below.

(The **Optimize hoop change** setting can be found on the Sew menu. The setting is turned on when a check mark appears in front of the setting.)

• When the Optimize hoop change setting is turned on:

Programmable Stich Creator

The sewing order that you have set is optimized to reduce the number of times that the embroidery frame installation position is changed.

When the Optimize hoop change setting is turned off:

Each pattern is sewn according to the sewing order that you have set. Therefore, since the number of times for changing the embroidery frame installation position is not optimized, it may be changed more often than if it was optimized.

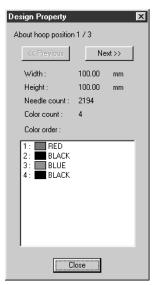
#### NOTE:

Since the pattern may not be sewn correctly or the fabric may not feed evenly if the embroidery frame installation position is changed too often, we recommend turning on the Optimize hoop change setting. Since turning on this setting will change the sewing order that you have set, check the sewing order before you begin embroidering.

#### Check the data

1 Click Option, then Design Property.

At the same time that the **Design Property** dialog appears, the Design Page is automatically enlarged or shrunk to fit in the entire window.



- The first line of the dialog shows the position in the embroidery frame installation order for the currently displayed design.
- Only the designs that would be sewn at the current position in the embroidery frame installation order appear in the Design Page. In addition, the embroidering area for the current frame installation position is outlined in red.
- Click Previous or Next to display information for the designs at other positions in the embroidery frame installation order.
- At this time, the corresponding pattern and embroidery frame position appear in the Design Page.

#### NOTE:

If an object is larger than the embroidering area or if an object is positioned so that it does not completely fit within an embroidering area, the error message "Please change the object size or position." is displayed instead of this dialog. After the object causing the error appears selected, change its size or position. (If more than one object causes the error message to appear, the objects will appear selected in the sewing order.)

#### NOTE:

Make sure that no pattern has been selected before clicking this command. If a pattern has been already been selected, only the information for that pattern is displayed.

2 To preview the image, click **Display**, then **Preview** or click on the Toolbar.

#### NOTE:

Just like for the command **Option – Design Property**, if an object is larger than the embroidering area or if an object is positioned so that it does not completely fit within an embroidering area, the error message "Please change the object size or position." is displayed instead of displaying a preview of the image. After the object causing the error appears selected, change its size or position.

File Utility

(If more than one object causes the error message to appear, the objects will appear selected in the sewing order.)

#### NOTE:

Make sure that no pattern has been selected before clicking this command. If a pattern has been already been selected, only that pattern is previewed.

#### Save the data

1 Click File, then Save or Save As, and then save the data.

All of the data is saved as one file (\*.pes).

If the file size or the number of color changes is larger than the specified number or if one of the patterns do not completely fit within an embroidering area, the message "Please change the object size or position. Do you want to save the data anyway?" is displayed.

#### NOTE:

The saved file cannot be opened in a previous version (ver. 2.0x or earlier) of Layout & Editing.

#### NOTE:

If a Design Page for an extra-large embroidery frame (130  $\times$  300 mm, 300  $\times$  130 mm, 100  $\times$  172 mm, or 172 × 100 mm) is selected, you can select only "PES Version 2.5" as the File Type.

### Write the data to an original card

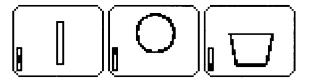
① Click File, then Write to Card or click 🔄 on the Toolbar, and then write the data to an original card.

Data for an extra-large embroidery frame is created by considering the data for each embroidery frame installation position as one pattern and combining them.

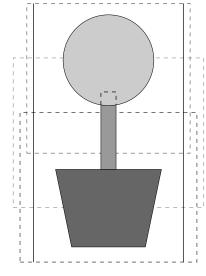
Therefore, when this type of data is written to an original card, all of the data for one extra-large embroidery frame pattern is saved as a combination of multiple patterns.

(For more details on the number of patterns that is written to a card, refer to "3. Check data".)

If the pattern shown below at the right is written to an original card and the written pattern is checked on the embroidering machine, it will appears as follows.



- : This pattern is sewn when the embroidery frame is installed at the top installation position (position a).
- : This pattern is sewn when the embroidery frame is installed at the middle installation position (position b).
- : This pattern is sewn when the embroidery frame is installed at the bottom installation position (position c).



Therefore, the frame installation position sewing order for the pattern shown above is b, a, then c.

2 Writing data to an original card using File Utility.

When writing data to a card using File Utility, all of the data is written at the same time, like 1 explained above.

However, the difference is that if there is space on the card, other patterns can also be written to the card.

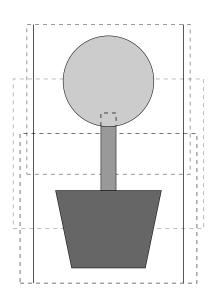
File Utility

### Notes on embroidering using the extra-large embroidery frame:

- Before embroidering your project, sew a trial sample of the pattern on a scrap piece of fabric that is the same as that used for your project. In addition, use the correct needle and thread.
- Be sure to affix stabilizer material to the back of the fabric and tightly stretch the fabric within
  the embroidery frame. When embroidering on thin or stretch fabrics, use two layers of stabilizer
  material. If no stabilizer material is used, the fabric may become over-stretched or wrinkled or
  the embroidery may not be sewn correctly.
- Use the zigzag stitch for sewing the outlines in order to prevent embroidering outside the outlines.



 For patterns that require the embroidery frame to be installed at different installation positions, design the embroidery pattern data so that the various parts of the pattern overlap in order to prevent misalignment while embroidering.



# **Design Center**

Design Center is used to create individual patterns from bitmap image files created with other applications. You can also apply stitch patterns created with Programmable Stitch Creator to regions of images displayed in Design Center. The resulting embroidery pattern can then be imported into the Layout & Editing Design Page and combined with other patterns.

The embroidery pattern is created in four stages:

#### ◆ **STAGE 1**: Original bitmap image

You can open a bitmap image that you purchased from a commercial source, created using an application such as Paintbrush or scanned from a printed source using a scanner and the appropriate software. The image file must be in the uncompressed Windows DIB format, its file name extension must be BMP, and it must be of the 16-color type.

Note that graphic files in other formats can be converted into the specified format if you have the proper conversion software.

In Stage 1, the image is displayed with its original colors and you cannot modify it.

#### ◆ **STAGE 2**: Line image

To move from Stage 1 to Stage 2, you select maximum 5 colors of the bitmap data that will be converted into black outlines. Unselected colors will be converted into white. You can then correct the black and white image using pens and erasers of different thicknesses.

If you save the file in Stage 2, its file name extension will be PEL.

#### ◆ **STAGE 3**: Figure handle image

When you move to Stage 3, the application automatically detects the outline of the black areas and replaces it with a set of broken lines. The broken lines can be edited (you can move and delete points or insert new points).

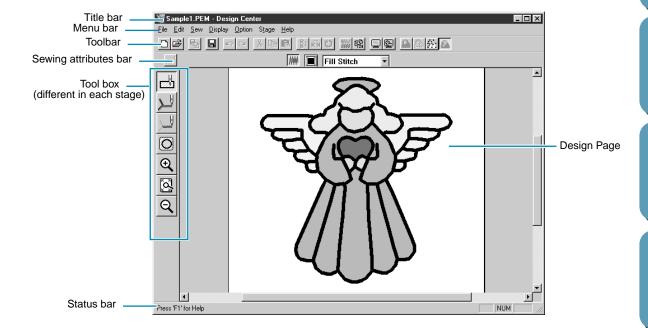
If you save the file in Stage 3, its file name extension will be PEM.

#### ◆ STAGE 4: Sewing settings

You can set the stitch, thread color, etc. for the outlines and regions to complete the embroidery data If you save the file in Stage 4, its file name extension will be PEM.

If you have to interrupt your work at stage 2, 3 and 4, save the file and retrieve it later to resume working.

## **The Screen**



Menu bar	Gives access to the functions.
Toolbar	Shortcut for the menu functions.
Sewing attributes bar	Sets the sewing attributes (color, stitch) of the patterns (displays in Stage 4 only)
Tool box	Used to select and edit the image. Stage 1 has no Tool Box; the other stages all have a different Tool Boxes.
Status bar	Provides short information.
Design Page	The actual part of the work area that can be saved and sewn.

## **Using the Stage 2 Tool Box**

In Stage 2, the Tool Box is used to modify the line image generated from a bitmap image or to create a line image from scratch.



The five first buttons are used as pens and erasers of different thicknesses.

Cursor shape when moved or dragged over the work area:

for the pens and 🔪 for the erasers.

When you start the application, the number 2 Pen tool is active by default.

Sets the cursor in zoom-in mode.

Cursor shape: 🕀

Maximizes the selected Design Page to fit in the window.

Sets the cursor in zoom-out mode.

Cursor shape:

## **Drawing and Erasing**

## Drawing

1 Click the button with the desired pen thickness on the Tool Box. The cursor changes to



2 To add a dot, click; to draw a line, drag with the mouse's left button.
If the Shift key is held down while moving the mouse, only vertical or horizontal lines will be drawn.

## Erasing

- 1 Click the button with the desired eraser thickness on the Tool Box.
- 2 To erase, drag while pressing the mouse's right button. The cursor changes to

### Zoom-in Mode

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- 2 Click on the area you want to enlarge or drag the cursor across the area that you want to enlarge, then release it. You can repeat this step several times.
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## Fit Design Page to Window

This feature allows you to maximize the selected Design Page so that it will fit in the window.

① Click on the Tool Box. The Design Page is enlarged or shrunk automatically to fit the window.

### **Zoom-out Mode**

- ① Click Q on the Tool Box. The shape of the cursor changes to Q .
- Click on the area you want to shrink or drag the cursor across the area that you want to shrink, then release it. The image shrinks toward that point. You can repeat this step several times.

Layout & Editing

## **Using the Stage 3 Tool Box**

In Stage 3, outline data that has been generated automatically can be edited using the Tool Box. Clicking a button of the Tool Box changes the cursor mode and shape. The left side of the Status bar tells you what you can do in each cursor mode.

	Sets the cursor in selection mode. When you start the application, the selection mode is active by default. Cursor shape:	page 57
- 1	tion mode is active by default. Cursor shape:	2000 60
1	Sets the cursor in point edit mode.  Cursor shape:	page 62
5	Sets the cursor in line drawing mode.  Cursor shape:	page 63
<b>Q</b>	Sets the cursor in zoom-in mode.  Cursor shape:	page 63
	Maximizes the selected Design Page to fit in the window.	page 64
IQΙ	Sets the cursor in zoom-out mode.	page 64
	Cursor shape: Q	
	Fills the display with the selected objects.	page 64

### **Selection Mode**

The cursor selection mode is used to select one or more outlines. Once an outline is selected, you can move it, scale it, and change its direction by rotating it or inverting it.

### Selecting patterns

- ① Click on the Tool Box. The shape of the cursor changes to
- ② Click the pattern that you want to select. The cursor changes 

  when it touches an outline.

  You know that the object is selected when handles are displayed and the outlines display in blue.

Note that a pattern will not be selected if you click on a transparent part of it.

■ ■ ■ Handles

- 3 To deselect the pattern, select another one, click on the white space or click another button of the Tool Box, except a Zoom tool.
- 4 To select an additional pattern, click it while holding the Shift key down.

  Note that you can also select patterns by dragging the cursor across the whole pattern that you want to select. As you drag, a dotted rectangle appears. When you release the mouse button, all patterns that are completely contained in that rectangle will be selected.

### Moving patterns

- 1 Select the data that you wish to move.
- 2 Position the cursor over the data and click (a dotted box appears around the data), then drag to a new destination.

Holding down the **Shift** key while dragging the pattern moves the pattern horizontally or vertically. **NOTE:** 

By pressing the arrow keys, the selected pattern can be moved 0.5 mm (about 0.02 inch) to the left, right, up or down.

## Scaling patterns

1 Move the cursor over one of the handles of a selected pattern or group of selected patterns.

The shape of the cursor will change to  $\longleftrightarrow$ ,  $\updownarrow$ , or  $\nearrow$  , depending on the handle the cursor is on.

- ② Drag the handle in the direction of the arrow to scale the pattern.
  - → is for scaling the width.
    - is for scaling the height.

### Flipping a pattern horizontally or vertically

1 Select the data that you wish to flip horizontally (up/down) or vertically(left/right). The buttons below become active.



2 To flip horizontally, select the command Edit – Mirror – Horizontal or click on the Toolbar.

To flip vertically, select the command Edit – Mirror – Vertical or click on the Toolbar.

### Rotating a pattern

1 Select the data that you wish to rotate. The button below becomes active.



- 2 Select the menu command Edit Rotate or click on the Toolbar. The handles around the selected pattern are replaced by smaller boxes on the four corners of the selected area.
- 3 To rotate the pattern, move the cursor on one of the four rotation handles.

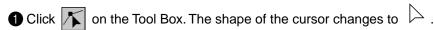
The shape of the cursor changes to as soon as your cursor touches a rotation handle. Click on a rotation handle and a lined box appears around the selected the pattern. You can rotate the pattern clockwise or counterclockwise by dragging the mouse.

A simple dragging of the mouse will rotate the pattern by 1° increments. Pressing the **Shift** key will rotate it by 15° increments.

### **Point Edit Mode**

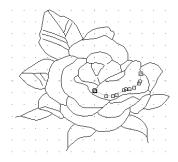
The point edit mode allows you to move, insert and delete points in an outline.

### Moving points



2 Click the outline that you want to edit.

The selected line displays in pink and existing points of the selected line are marked with small empty squares. The starting and ending points of a line are marked by bigger squares.



3 Click the point that you want to move.

To select an additional point, click that point while holding the **Shift** key down.

The selected points are marked by filled squares.

#### NOTE:

If you click on the line instead of a square, a new point is inserted.

4 Drag the cursor to a new position. All the selected points move in the same direction.

Holding down the **Shift** key while dragging the point moves the point horizontally or vertically. **NOTE:** 

By pressing the arrow keys, the selected point can be moved 0.1mm (about 0.01 inch) to the left, right, up or down.

## Inserting points

- lacktriangled Olick lacktriangled on the Tool Box. The shape of the cursor changes to lacktriangled .
- 2 Click the outline that you want to edit.

The selected line displays in pink and existing points of the selected line are marked with small empty squares. The starting and ending points of a line are marked by bigger squares.

3 Click where you want to insert a new point on the outline.
A new point appears, marked by a filled black square. The new point can be edited.

## Deleting points

- 2 Click the outline that you want to edit. The existing points of the outline are marked with small empty squares.
- 3 Click the point that you want to delete.

To select an additional point, click that point while holding the **Shift** key down. The selected points are marked by filled squares.

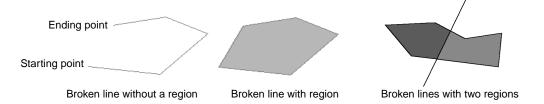
4 Press the **Delete** key to remove the point from the outline. Note that the points marked by red squares cannot be deleted.

## **Line Drawing Mode**

The line drawing mode allows you to add broken lines to your pattern. A broken line is made of one or more contiguous straight lines, the ending point of a straight line being the starting point of the next one. If the broken line you drew did not create enclosed regions, it remains a simple outline and you can only set sewing attributes for the line itself in Stage 4.

If the broken line did create enclosed regions, you can assign stitches and colors to both the outline and the regions in Stage 4.

If you draw a line through an existing region, creating two separate regions, you will be able to set sewing attributes to both separately, as well as to the separating line.



### Drawing a broken line

1 Click on the Tool Box.

The shape of the cursor changes to \_\_\_\_ and is displayed together with a small image of the tool button.

2 Draw the line.

Move the mouse to the starting point and click.

Move the mouse to the ending point of the first straight line and click again.

#### NOTE:

You can always remove the last-entered point by clicking the mouse's right button. If needed, use the grid to help you draw the lines. You can set the grid so that each of its vertical and horizontal lines are visible. For more information on the grid, refer to "Grid Setup" on page 90.

3 Repeat until you arrive at the last end point. At that point double-click.

If the **Shift** key is held down while moving the mouse, only vertical or horizontal lines will be drawn.

### **Zoom-in Mode**

The zoom-in mode is used to magnify a part of the outline so that you can check it and edit it more easily.

1 Click ( on the Tool Box.

The shape of the cursor changes to  $\bigoplus$ .

2 Click on the area you want to enlarge or drag the cursor across the area that you want to enlarge, then release it. You can repeat this step several times.

# Fit Design Page to Window

This feature allows you to maximize the selected Design Page so that it will fit in the window.

① Click on the Tool Box. The Design Page is enlarged or shrunk automatically to fit the window.

### **Zoom-out Mode**

The zoom-out mode is used to return to the normal display after zooming in.

1 Click Q on the Tool Box.

The shape of the cursor changes to  $\bigcirc$ .

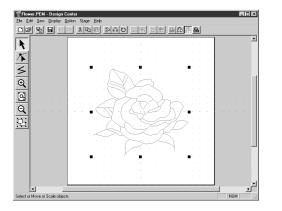
2 Click on the area you want to shrink or drag the cursor across the area that you want to shrink, then release it. The image shrinks toward that point. You can repeat this step several times.

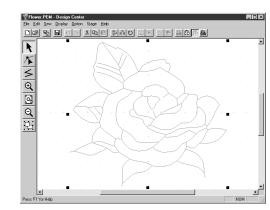
# **Enlarging Selected Outlines to the Screen Size**

The last button of the Tool Box allows you to quickly enlarge a selected outline to the screen size.

- Select one or more outlines.
- 2 Click on the Tool Box.

The selected outlines now occupy all the available space on the screen.





# **Using the Stage 4 Tool Box**

In Stage 4, outline data from Stage 3 are assigned line and region sewing attributes. This is done by using the Tool Box and the Sewing Attributes bar.

Clicking a button of the Tool Box changes the cursor mode and shape. The left side of the Status bar tells you what you can do in each cursor mode.

	Sets the cursor in region setting mode.	page 65
J.L	When you start the application, this tool is active by default	
	Cursor shape: , with a miniature of the button	
- II	Sets the cursor in line (all) setting mode.	page 66
,, <u>*</u> *V	Cursor shape:  , with a small image of the button	
. [1]	Sets the cursor in line (single) setting mode.	page 68
\\	Cursor shape: , with a small image of the button	
(ZES)	Sets the cursor in hole sewing mode.	page 69
	Cursor shape: > , with a small image of the button	
$\bigcirc$	Sets the cursor in zoom-in mode.	page 70
Œ	Cursor shape:	
<b>E_7</b>	Maximizes the selected Design Page to fit in the window.	page 70
$\overline{}$	Sets the cursor in zoom-out mode.	page 70
$ \mathbf{Q} $	Cursor shape: Q	

# **Region Setting Mode**

In this mode, you can apply the current sewing attributes to an enclosed region. You can also change the sewing attributes applied to a region.

# Applying the sewing attributes to a region

1 Click on the Tool Box.

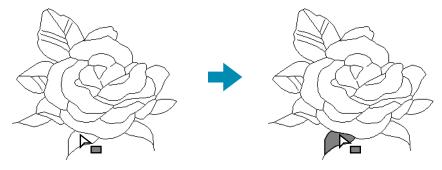
The shape of the cursor changes to  $\triangleright$  and is displayed together with a small rectangle. The Sewing Attributes bar now looks like this:



You can select the color and stitch at this step or after applying them to the region. See "Color" on page 73 and "Stitch" on page 73.

You can also use the menu (see "Sewing Attributes" on page 85) or the following method to define the density and other characteristics of the stitch. If you do not make these settings at this stage, the current settings will be applied, but you can modify them later.

2 Click the enclosed region that you want to set.
The color and stitch selected on the Sewing Attributes bar are applied to the region.



# Checking the sewing attributes of a region

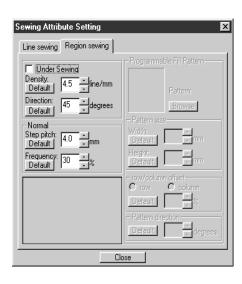
1 Click on the Tool Box.

The shape of the cursor changes to  $\triangleright$  and is displayed together with a small rectangle.

**2** Click the enclosed region using the mouse's right button.

The Sewing Attributes bar shows the color and stitch for the selection. You can change the color and stitch at this step (see "Applying the sewing attributes to a region").

The **Sewing Attribute Setting** dialog for the selected stitch displays.



- ◆ If necessary, change the settings. See "Sewing Attributes" on page 85.
- To restore the default value of a setting after changing it, click the Default button at the left of that setting.
- To apply the new settings to the region, click each region you want to apply those settings to using the left button.
- Click Close to remove the dialog from the screen.

# Line (all) Setting Mode

In this mode, you can apply the current sewing attributes to the outline of patterns. You can also change the sewing attributes applied to outlines.

# Applying the sewing attributes to an outline

Click on the Tool Box.

Programmable Stich Creator

The shape of the cursor changes to And is displayed together with a small figure of the Tool Box button. The Sewing Attributes bar now looks like this:

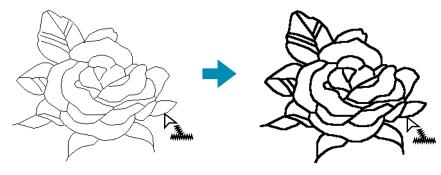


You can select the color and stitch at this step or after applying them to the outline. See "Color" on page 73 and "Stitch" on page 73.

You can also use the menu (See "Sewing Attributes" on page 85) or the following method to define the characteristics of the stitch. If you do not make these settings now, the current settings will be applied, but you can modify them later.

2 Click the outline that you want to set.

The color and stitch selected on the Sewing Attributes bar are applied to the clicked outline.



# Checking the sewing attributes of an outline

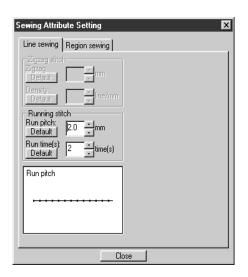
1 Click on the Tool Box.

The shape of the cursor changes to  $\triangleright$  and is displayed together with a small figure of the Tool Box button.

② Click the outline using the mouse's right button.

The Sewing Attributes bar shows the color and stitch for the selection. You can change the color and stitch at this step (see "Applying the sewing attributes to an outline" above).

The Sewing Attribute Setting dialog for the selected stitch displays.



- If necessary, change the settings.
   See "Sewing Attributes" on page 85.
- To restore the default value of a setting after changing it, click the Default button at the left of that setting.
- ◆ To apply the new settings to the outline, then click the outline of the pattern(s) using the left button.
- Click Close to remove the dialog from the screen.

# Line (part) Setting Mode

In this mode, you can apply the current sewing attributes to a portion of the outline. You can also change the sewing attributes applied to a portion of the outline.

A single line of the outline extends from both sides of the cursor position to the next branch points.

### Applying the sewing attributes to a portion of the outline

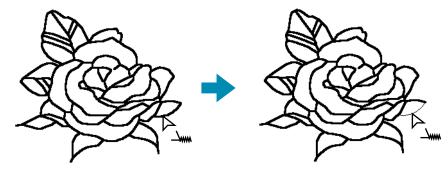
Click on the Tool Box.

The shape of the cursor changes to  $\triangleright$  and is displayed together with a small figure of the Tool Box button. The Sewing Attributes bar now looks like this:



You can select the stitch at this step or after applying them to a portion of the outline. See "Stitch" on page 73. The color cannot be set separately for a portion of the outline. If you set a portion of the outline before setting the whole outline, the default color will be black.

- You can also use the menu (see "Sewing Attributes" on page 85) or the method described below to define the characteristics of the stitch. If you do not make these settings now, the current settings will be applied, but you can modify them later.
- 2 Click the line of the outline that you want to set.
  The stitch selected on the Sewing Attributes bar are applied to the line.

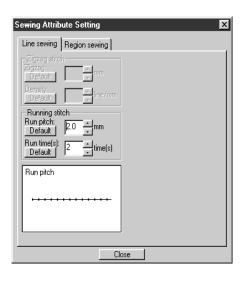


# Checking the sewing attributes of a portion of an outline

1 Click on the Tool Box.

The shape of the cursor changes to  $\triangleright$  and is displayed together with a small figure of the Tool Box button.

Click the line you want to check using the mouse's right button. The Sewing Attributes bar shows the color and stitch for the selection. You can change the stitch (not the color) at this step (see "Applying the sewing attributes to a region" on page 65). The Sewing Attribute Setting dialog for the selected stitch displays.



- If necessary, change the settings.
   See "Sewing Attributes" on page 85.
- To restore the default value of a setting after changing it, click the Default button at the left of that setting.
- To apply the new settings to single lines, click the lines you want to apply the settings to with the left button.
- Click Close to remove the dialog from the screen.

# **Hole Sewing Mode**

The hole sewing mode is used to avoid sewing overlapping areas twice. It can be set only when one of the overlapping areas is completely enclosed in another area.

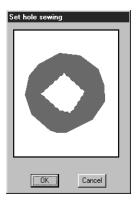
1 Click on the Tool Box.

The shape of the cursor changes to  $\triangleright$  and is displayed together with a small figure of the Tool Box button.

2 Click on the enclosing part of a pattern comprised of a region completely enclosed into another one.



This dialog will display.



- Click on the central region to toggle hole sewing on/off.
- Click OK to set hole sewing.
- Click Cancel to exit without setting hole sewing.

### **Zoom-in Mode**

The zoom-in mode is used to magnify a part of the outline so that you can inspect it and edit it more easily.

- lacktriangledown Olick lacktriangledown on the Tool Box. The shape of the cursor changes to lacktriangledown .
- 2 Click on the area you want to enlarge or drag the cursor across the area that you want to enlarge, then release it. You can repeat this step several times.

# Fit Design Page to Window

This feature allows you to maximize the selected Design Page so that it will fit in the window.

◆ Click Solution on the Tool Box. The Design Page is enlarged or shrunk automatically to fit the window.

### **Zoom-out Mode**

The zoom-out mode is used to return to the normal display after zooming in.

- 1 Click on the Tool Box. The shape of the cursor changes to
- 2 Click on the area you want to shrink or drag the cursor across the area that you want to shrink, then release it. The image shrinks toward that point. You can repeat this step several times.

# **Using the Sewing Attributes Bar**

The Sewing Attributes, available in Stage 4, bar allows you to set the color and stitch of a region or outline.

The sewing attributes which are available depend on the cursor mode.

**Example 1**: The cursor is in the region setting mode.



**Example 2**: The cursor is in the line setting mode.



When the cursor is left for a while on an element of the Sewing Attributes bar, a label indicating the function of that element appears.

(##)	Region sew: Switches the inside region on/off.	page 71
[2	Line sew: Switches line sew on/off.	page 72
	Region color, Line color: Sets the thread color for outline or region inside.	page 73
Fill Stitch  Running Stitch	Region sew type, Line sew type: Sets the stitch for outline or region inside.	page 73

# **Setting the Thread Color and Stitch**

Region sew

**Purpose:** Switches the inside region on/off.

When the inside region is switched off, it is not sewn (and you cannot set its color

or stitch).

Available: When you click on the Tool Box to put the cursor in the Region sewing

mode.

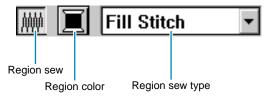
Operation:

1 Click the Region sew button.

This button has two states:

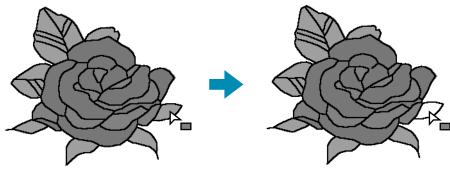
**on**: the Region color button and the Region sew type selector are displayed.

**off**: the Region color button and the Region sew type selector are not displayed.



2 Click inside a region to turn it on or off.

When you turn off the region, the region disappears.



When you turn on the region, the region gets the color displayed on the **Region color** button, and the stitch displayed on the **Region sew type** selector.

See also: "Color" on page 73 and "Stitch" on page 73

# ■ Line sew 🛭

**Purpose:** Switches the outline on/off.

When the outline is switched off, it is not sewn (and you cannot set its color or

stitch).

Available: When you click | or | on the Tool Box to put the cursor in the Line (all or

parts) sewing mode.

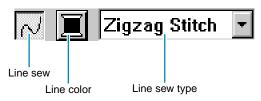
#### Operation:

1 Click the Line sew button.

This button has two states:

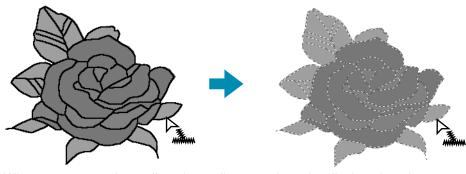
on: the Line color button and the Line sew type selector are displayed.

off: the Line color button and the Line sew type selector are not displayed.



Click an outline to turn it on or off.

When you turn off the outline, it is replaced by a dotted line that will not be sewn.



When you turn on the outline, the outline gets the color displayed on the **Line color** button, and the stitch displayed on the **Line sew type** selector.

**See also:** "Color" on page 73 and "Stitch" on page 73

Alphabetic Index

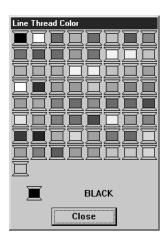
**Purpose:** Sets the thread color for outline or region inside.

**Available:** When the cursor is in Region setting mode or Line setting mode.

Operation:

1 Click the color button.

In Region setting mode, the **Region Thread Color** dialog displays and in Line setting mode, the **Line Thread Color** dialog displays. The same color settings are available in both dialogs.



- Click the desired color.
- The four last spools have a special function. See "Special colors" on page 127.
- For a list of the different color names, see page 204.
- Click Close to remove the dialog from the screen.

When you click the desired color, the new color is displayed on the **Region color** button or **Line color** button.

See also: "Region sew" on page 71, "Line sew" on page 72 and "Special colors" on page

127

Stitch Zigzag Stitch 🛨 Fill Stitch 🛨

**Purpose:** Sets the stitch for outline or region inside.

**Available:** When the cursor is in Region setting mode or Line setting mode.

Operation:

Click the sew type selector.
 The available options display.





For outlines, Running Stitch and Zigzag Stitch are available. For regions Fill Stitch, Satin Stitch and Programmed Fill Stitch are available.

2 Click the desired stitch.

The new setting displays on the selector.

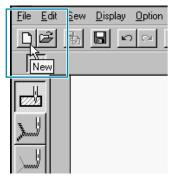
"Region sew" on page 71 and "Line sew" on page 72

# **Using the Menu Bar and the Toolbar**

File	Handles file input/output, such as opening and saving.	page 74
Edit	Performs simple actions on selected objects, such as cutting and pasting.	page 79
Sew	Allows you to control the way the pattern will be sewn.	page 85
Display	Modifies the appearance of the screen.	page 90
Option	Allows you to start the other applications and to set the Design Page size and unit system.	page 93
Stage	Allows you to move from one stage to the next or previous one.	page 95
Help	Gives you access to the on-screen help information system.	page 99

Many functions available on the menu can also be accessed by clicking an icon on the Toolbar or by pressing a shortcut key or key combination.

When you leave the cursor for a while on a button of the Toolbar, a label indicating the function of the button displays.



## File Menu

The File menu handles file input/output, such as opening, saving and printing.

New	Creates a new blank Design Page and switches to Stage 2. page 75		
Open	Opens a previously saved file (*.bmp files open in stage 1, *.pel files open in stage 2, *.pem files open in stage 3 or 4). You can open *.pel and *.pem files created with Version 1.0 of this software.	nage 75	
Save	Saves your Design Page on the disk as latest Version file (default). To read this file with Version 1.0, select the File page Type Version 1.0.		
Save As	Saves the current file under a new file name.	page 76	
Import Figure	Adds a *.pem file to your Design Page (available only in Stage 3).		
Exit	Exits the application.	page 78	

New

**Purpose:** Creates a new blank Design Page and switches to Stage 2.

Shortcut key:

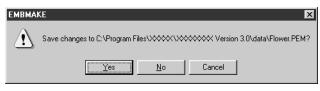
Ctrl + N

### Operation:

Click File, then New.

If the current Design Page is not edited, a new blank Design Page appears immediately.

2 If the current Design Page is edited, you will be asked whether you want to save the changes, for example:



- Click Yes to save the Design Page first.
- ◆ Click **No** to abandon the Design Page.
- Click Cancel to do anything else (for example, modifying the current Design Page or saving it with another file name).

Depending on the stage you are currently using and the editing you did, the file to be saved is a \*.pel file or a \*.pem file or both.

A new file opens automatically in Stage 2. In Stage 2, you can use the pens and erasers to create black and white drawings. You may also want to use this feature to create patterns that are easier to draw by hand, for example, free-hand writing.

**See also:** "Open", "Save" and "Save As" in this section

# Open

**Purpose:** Opens a previously saved file (\*.bmp files open in stage 1, \*.pel files open in stage

2, \*.pem files open in stage 3 or 4).

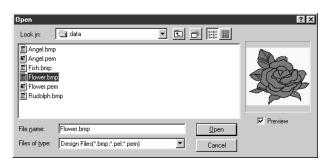
You can open \*.pel and \*.pem files created with Version 1.0 of this software.

Shortcut key: Ctrl + O

#### Operation:

1 Click File, then Open.

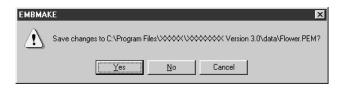
A Open dialog similar to this will display.



- Select the drive, the folder and the file name.
- Be sure to select the right type of file extensions in List Files of Type.
- If the Preview check box is checked, the content of the selected file displays in the preview window.
- Click Open or double-click the file name to open the file in Design Center.
- ◆ Click Cancel to exit.

Alphabetic Index

2 The selected file opens immediately if your current Design Page is not edited.
If the current Design Page is edited, you will be asked whether you want to save the changes.



- Click Yes to save the Design Page first.
- ◆ Click **No** to abandon the Design Page.
- Click Cancel to do anything else (for example, modifying the current Design Page or saving it with another file name).
- 3 Depending on the stage you are currently using and the editing you did, the file to be saved is a \*.pel file or a \*.pem file or both.

**See also:** "New", "Save" and "Save As" in this section

### Save

**Purpose:** Saves your Design Page on the disk as latest Version file (default).

NOTE:

Saved\*.pem files can be opened with Version 1.0 of this software when you select "PEM Version 1.0" as the File Type". Note however that some information could be lost.

Shortcut key: Ctrl + S

### Operation:

① Click File, then Save.

If the file already exists on the disk (the file has been saved at least once during the same stage as the current one), the file is saved immediately.

2 If the file name is still **Untitled** or if, for any other reason, the file cannot be found on the disk, the application automatically switches to **Save As**.

See also: "Save As" below

#### Save As

**Purpose:** Saves the current file under a new file name.

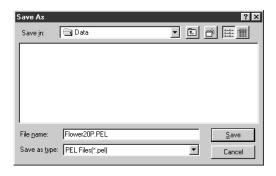
**Shortcut key:** No shortcut key for this function

**Toolbar:** No button for this function

#### Operation:

1 Click File, then Save As.

A Save As dialog similar to this will display.



- Select the drive, the folder and type the file name.
- The correct extension is automatically set.
- Click **OK** to save.
- ◆ Click Cancel to exit.

2 If the new file name already exists, this dialog will appear.



- Click Yes to overwrite.
- Click No if you do not want to overwrite the existing file.

See also: "Save" above

NOTE:

Saved \*.pel and \*.pem files can be opened with Version 1.0 of this software when you select "PEM Version 1.0" as the File Type". Note however that some information could be lost.

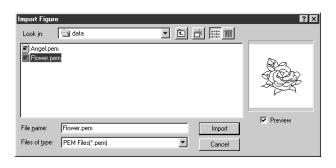
## Import Figure

**Purpose:** Adds a \*.pem file to your Design Page (available only in Stage 3).

Shortcut key: F8

Operation:

Click File, then Import Figure.
A dialog similar to this will display.



- Select the drive, the folder and the file name.
  - Click OK to open.
  - Click Cancel to exit.

The selected pattern will be added to your Design Page.

See also: "Open" on page 75

Exit

**Purpose:** Exits the application.

Shortcut key:

**Alt** + **F4** 

**Toolbar:** No button for this function

Operation:

1 Click File, then Exit.

If the current Design Page is not edited, the application closes immediately.

2 If the current Design Page is edited, you will be asked whether you want to save the changes.

**See also:** "Save" and "Save As" on page 76

# **Edit Menu**

The functions of the Edit menu perform simple actions on selected patterns, such as cutting and pasting.

Undo		Undoes the last operation.	page 79
Redo	]	Cancels the effect of the last Undo.	page 79
Cut		Removes the selected data from the screen while saving a copy in the clipboard.	page 79
Сору		Saves the selected data in the clipboard without removing them from the screen.	page 80
Duplicate	1	Makes a copy of the selected data.	page 80
Paste	]	Pastes the contents of the clipboard on the screen.	page 80
Delete	Removes the selected data from the screen with saving them in the clipboard.		page 80
Mirror	Horizontal	Flips the selected data up/down.	page 81
Willion	Vertical	Flips the selected data left/right.	page 81
Rotate		Allows you to change the direction of the pattern.	page 82
Numerical	Size	Resizes the selection numerically.	page 82
Setting	Rotate	Rotates the selected pattern numerically.	page 83
Select All		Selects all the data.	page 84

#### Undo

**Purpose:** Undoes the last operation.

Shortcut key: Ctrl + Z

Toolbar:

Operation:

# 1 Click Edit, then Undo.

The last operation is automatically undone.

See also: "Redo" below

### Redo

**Purpose:** Cancels the effect of the last **Undo**.

Shortcut key: Ctrl + A

Operation:

# Click Edit, then Redo.

The effect of the last **Undo** is cancelled.

See also: "Undo" above

### Cut

**Purpose:** Removes the selected data from the screen while saving a copy in the clipboard.

Shortcut key: Ctrl + X

Toolbar: D達動局のベメショルのの M第 画面 AA系 A

File Utility

#### Operation:

- 1 Select one or more outline data (Stage 3 only).
- 2 Click Edit, then Cut.

The selected outline data disappear. Since they are saved in the clipboard, you can paste them back using **Edit – Paste**.

See also: "Copy", "Paste" and "Delete" below

### Copy

**Purpose:** Saves the selected data in the clipboard without removing them from the screen.

Shortcut key: Ctrl + C

### Operation:

- 1 Select one or more outline data (Stage 3 only).
- 2 Click Edit, then Copy.

The outline data are copied into the clipboard and are ready to be pasted.

**See also:** "Cut" above, "Duplicate" and "Paste" below

### Duplicate

**Purpose:** Makes a copy of the selected data.

Shortcut key: Ctrl + D

**Toolbar:** No button for this function

### Operation:

- 1 Select one or more outline data (Stage 3 only).
- 2 Click Edit, then Duplicate.

A copy of the outline data appears on the screen.

**See also:** "Copy" above and "Paste" below

#### Paste

**Purpose:** Pastes the contents of the clipboard on the screen.

Shortcut key: Ctrl + V

Toolbar:

### Operation:

1 Click Edit, then Paste (Stage 3 only).

The outline data saved in the clipboard (using Cut or Copy) are pasted on the screen.

See also: "Cut", "Copy" and "Duplicate" above

### Delete

**Purpose:** Removes the selected data from the screen without saving them in the clipboard.

Shortcut key: Delete

**Toolbar:** No button for this function

File Utility

Operation:

- 1 Select one or more outline data (Stage 3 only).
- 2 Click Edit, then Delete.

The selected outline data are removed from the screen. Since they are not saved in the clipboard, the only way to make them reappear is to use **Edit – Undo**.

See also: "Undo" and "Cut" on page 79

#### Mirror – Horizontal

**Purpose:** Flips the selected data up/down.

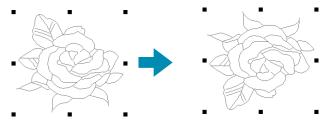
Shortcut key: Ctrl + (H)

Toolbar:

Operation:

- 1 Select one or more outline data (Stage 3 only).
- 2 Click Edit, then Mirror, then Horizontal.

A horizontal mirror image (top and bottom inverted) of the outline data appears on the screen. Two successive executions of this command restores the original image.



See also: "Flipping a pattern horizontally or vertically" on page 61 and "Mirror – Vertical"

#### Mirror – Vertical

**Purpose:** Flips the selected data left/right.

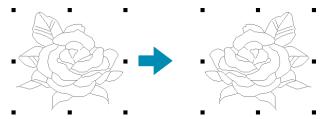
Shortcut key: Ctrl + J

Toolbar: D译见日夕《水陶司》前以照第 9月 AA系A

Operation:

- 1 Select one or more outline data (Stage 3 only).
- 2 Click Edit, then Mirror, then Vertical.

A vertical mirror image (left and right inverted) of the outline data appears on the screen. Two successive executions of this command restores the original image.



See also: "Flipping a pattern horizontally or vertically" on page 61 and "Mirror – Horizontal"

**Purpose:** Allows you to change the direction of the pattern.

Shortcut key:

Ctrl + Y

Toolbar: DE 5 6 0 MR F AAAA

#### Operation:

- 1 Select one or more outline data (Stage 3 only).
- 2 Click Edit, then Rotate.

The handles around a selected pattern are replaced by smaller rectangle on the four corners of the selected area.

3 To rotate a pattern, move the cursor on one of the four rotation handles.

The shape of the cursor changes to as soon as your cursor touches a rotation handle. Click a handle and a lined box appears around the selected pattern.

You can rotate the pattern clockwise or counterclockwise by dragging the mouse.

A simple dragging of the mouse will rotate the pattern by 1° increments. Pressing the Shift key will rotate it by 15° increments.

See also: "Rotating a pattern" on page 61

### Numerical Setting-Size

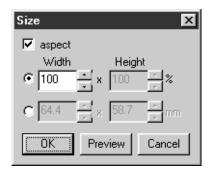
Purpose: Resizes the selection numerically.

Shortcut key: No shortcut key for this function.

**Toolbar:** No button for this function.

#### Operation:

- 1 Select one or more patterns.
- 2 Click Edit, then Numerical Setting, then Size. The Size dialog appears.



- To change the width and height proportionally, check aspect.
- Select the units (% or mm/inch) for the width and height.
- The width and height can be entered by either typing in a value or clicking the arrows to select the desired value. Select 100% to leave the pattern unchanged.

If **aspect** is selected, changing one dimension automatically changes the other so the proportion of the width and height remains unchanged.

File Utility

- Click OK to confirm.
- Click Preview to view the pattern at the new size in the Design Page.
- Click Cancel to exit without making any changes.

#### NOTE:

The maximum value that can be entered is the largest value that will not allow the pattern to exceed the size of the Design Page.

The minimum value is 1 mm (0.04 inch).

### Numerical Setting-Rotate

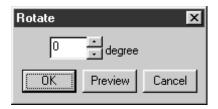
**Purpose:** Rotates the selected pattern numerically.

**Shortcut key:** No shortcut key for this function.

**Toolbar:** No button for this function.

#### Operation:

- 1 Select one or more patterns.
- Click Edit, then Numerical Setting, then Rotate. The Rotate dialog appears.



- The desired rotation angle can be entered by either typing in a value or clicking the arrows to select the desired value.
  - Select **0 degree** to leave the pattern unchanged.
- ◆ Click **OK** to confirm.
- Click Preview to view the pattern rotated the specified angle in the Design Page.
- Click Cancel to exit without making any changes.

#### NOTE:

The range of values that can be entered is between 0 and 359 degrees, in 1-degree increments.

Select All

Purpose: Selects all the data.

**Shortcut key:** No shortcut key for this function

**Toolbar:** No button for this function

Operation:

① Click Edit, then Select All (Stage 3 only).

### Sew Menu

The **Sew** menu allows you to control the way the pattern will be sewn.

Sewing Attributes Sets the sewing attributes for outlines and regions.		page 85
Sewing Order	Allows you to check and modify the sewing order of the dif- ferent colors of a pattern as well as the sewing order of each color individually.	page 88

### Sewing Attributes

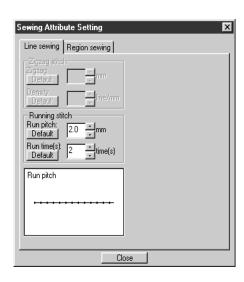
**Purpose:** Sets the sewing attributes for outlines and regions.

Shortcut key: Ctrl + W

### Operation:

1 Click Sew, then Sewing Attribute.

In Line Sewing Mode, the **Sewing Attribute Setting** dialog displays the **Line sewing** tab. Here you can change the settings of the stitch selected in the **Line sew type** selector of the Sewing Attributes bar. The other stitch settings display in gray.



- Enter the desired values for each setting either by clicking on the arrows or by typing the value directly in the edit box window.
- A preview image of the stitch reflects your setting changes each time you click on an arrow, except for the Run time (s) setting.
- ◆ To restore the default value of an individual setting, click its **Default** button.
- Click the outline(s) you want to apply the selected settings to.
- ◆ Click Close to exit.

# Line sewing attribute

#### Zigzag stitch

0 0	
ZigZag width	Sets the width of the zigzag stitch (when <b>Zigzag Stitch</b> is selected for the outline).  Range: 1 ~ 10 mm (0.04 ~ 0.39 inch)  Default: 2 mm (0.08 inch)
Density	Sets the number of lines per mm (inch) (when <b>Zigzag Stitch</b> is selected for the outline).  Range: 1 ~ 7 lines per mm (25 ~ 178 lines per inch)  Default: 4.5 lines per mm (114 lines per inch)

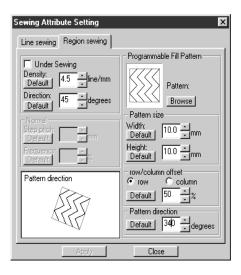
File Utility

### **Running stitch**

Run pitch	Sets the pitch of the line sewing (when <b>Running Stitch</b> is selected for the outline).  Range: 1 ~ 10 mm (0.04 ~ 0.39 inch)  Default: 2 mm (0.08 inch)
Run times	Sets the number of times the border will be sewn (when <b>Running Stitch</b> is selected for the outline).  Range: 2, 4, 6  Default: 2

In Region Sewing Mode, the **Sewing Attribute Setting** dialog displays the **Region sewing** tab. Here you can change the settings of the stitch selected in the **Region sew type** selector of the Sewing Attributes bar. The other stitch settings display in gray.

Example of the **Sewing Attribute Setting** dialog for a Programmed Fill Stitch:



- Enter the desired values for each setting either by clicking on the arrows or by typing the value directly in the edit box window.
- When you click a selector, a preview image of that setting displays.
   The image will change and reflect your setting changes each time you click an arrow.
- ◆ To restore the default value of an individual setting, click its **Default** button.
- Click the region(s) you want to apply the selected settings to.
- ◆ Click Close to exit.

# Region sewing attribute

#### Fill stitch, Satin stitch and Programmed fill stitch:

Under sewing	Sets under sewing on/off. Try to use Under sewing for wide areas, in order to prevent shrinking during stitching. Depending on the shape of the region, however, it may not be possible to make this setting.	
Density	Sets the number of lines per mm.  Range: 1 ~ 7 lines per mm (25 ~ 178 lines per inch)  Default: 4.5 lines per mm (114 lines per inch)	
Direction	Sets the direction of the stitch. Range: $0 \sim 179$ degrees  Default: 45 degrees $135^{\circ}$ $0^{\circ}$	

#### Fill stitch only:

Step pitch	Sets the pitch of the steps. Range: 1 ~ 10 mm (0.04 ~ 0.39 inch) Default: 4.0 mm (0.16 inch)	Step pitch $\frac{1}{1}$
Frequency	Sets the spacial frequency steps. Range: 0 ~ 99% Default: 30%	0%

Note the difference between Fill and Satin stitches: Fill stitch \( \frac{\psi}{\psi} \) Satin stitch

### Programmed fill stitch only:

This stitch type is created by the Programmable Stitch Creator application. The stitch pattern selected will fill a region in a tile-like manner.

Browse		Opens the <b>Browse</b> dialog. Select the directory of the folder containing the <b>pas</b> file you want to open. Scroll through the available stitch patterns and double-click the desired pattern or click <b>OK</b> to select the pattern.
Pattern size	Width	Sets the stitch pattern width. Range: 5 ~ 10 mm (0.20 ~ 0.39 inch) Default: 7.5 mm (0.30 inch)
Fattern Size	Height	Sets the stitch pattern height. Range: 5 ~ 10 mm (0.20 ~ 0.39 inch) Default: 7.5 mm (0.30 inch)
Row/column	Row	Sets the position of the stitch pattern rows when the <b>row</b> radio button is clicked. Range: 0 ~ 99% Default: 0 %
offset	Column	Sets the position of the stitch pattern columns when the <b>column</b> radio button is clicked. Range: 0 ~ 99% Default: 0 %
Pattern direction		Allows you to rotate the angle of the stitch patterns.  Range: 0 ~ 359 degrees  Default: 0 degrees

# Note on the programmed fill stitch:

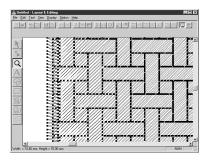
When setting the stitch and pattern directions of a programmed stitch, take note that whenever the stitch and pattern direction settings cause the stitch to be sewn in the same direction as a line in a stitch pattern, that line will not be sewn.

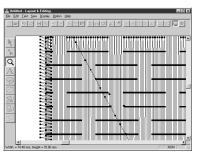
Use the preview function of your application to view exactly how your stitch pattern will be sewn and set the stitch direction and pattern direction according to the selected stitch or to the effect that you want to produce. To get an even better view, make test samples of different settings.

Example of a programmed fill stitch:

Ex. 1: Ex. 2:

Stitch direction: Default: 45° Stitch direction: 90° Stitch direction: 0°







Example 3:

See also: "Preview" on page 91, "Programmable Stitch Creator" on page 191

# Sewing Order

Purpose: Allows you to check and modify the sewing order of the different colors of a pat-

tern as well as the sewing order of each color individually.

Shortcut key: F10

Toolbar: D戶馬日內內水區目內內以機 型學 A然然

Operation:

1 Click Sew, then Sewing Order.

The **Sewing Order** dialog opens and displays the **Color** tab. The embroidery pattern is grayed.

2 To check and review the sewing order of the different colors of a pattern: Make sure the **Color** tab is displayed.



- ◆ Click .The color that will be sewn first displays.
- ◆ Click → or ← to review the colors that will be sewn between the first and last.
- As you click , , , , or , , the corresponding colors display.
- ◆ Click ►► to see the color that will be sewn last.
- ◆ Click if you want the selected color to be sewn last.
- ◆ Click if you want the selected color to be sewn first.
- ◆ Click **oK** to confirm.
- ◆ Click Cancel to exit.
- 3 To check and review the sewing order of the parts of the same color, select a color in the Color tab, then click the Part tab.

The parts to which you attributed the selected color are displayed in gray.



- Click . The part that will be sewn first displays.
- ◆ Click → or ← to review the parts that will be sewn between the first and last.
- As you click ⋈, ⋈, , or ⋈, the corresponding parts display.
- ◆ Click → to see the part that will be sewn last.
- ◆ Click if you want the selected part to be sewn last.
- ◆ Click if you want the selected part to be sewn first.
- ◆ Click **OK** to confirm.
- Click Cancel to exit.

Note that all inside regions are always sewn before the outlines. If you set an outline to be sewn first, it will be the first outline to be sewn, but will still be sewn after all inside regions.

See also: "Preview" on page 91

# **Display Menu**

The Display menu lets you modify the appearance of the screen.

Grid Setup	Allows you to set up the grid, to switch it on or off and to display it with or without the horizontal and vertical lines.	
Preview	Displays a realistic image of how the patterns will look like when embroidered.	
Refresh Window	Updates the screen.	page 91
Realistic Preview  Displays a realistic image of how either selected patterns or all patterns will look after being embroidered.		page 91
Realistic Preview Attribute Setting	Sets the preview attributes for Realistic Preview.	
Toolbar	Turns the Toolbar on/off.	page 92
Status Bar	Turns the Status bar on/off.	page 92

### Grid Setup

**Purpose:** Allows you to set up the grid, to switch it on or off and to display it with or without

the horizontal and vertical lines.

**Shortcut key:** No shortcut key for this function

**Toolbar:** No button for this function

### Operation:

① Click **Display**, then **Grid Setup** (Stage 3 only). This dialog displays.



2 To set the grid interval, click the up and down arrows or type in the value. Setting range: 1 ~ 10 mm (0.04 ~ 0.39 in)

Click OK to confirm or Cancel to exit.

- 3 To switch the grid on or off, click the Show grid check box.

  The grid will display when the Show grid check box is checked.
- To switch the horizontal and vertical lines of the grid on and off, click the with Axes check box. The lines will display when the with Axes check box is checked.

#### NOTE:

When the **Show grid** check box is checked and the **with Axes** check box is not checked, only the intersection points of the grid will be displayed.

See also: "Select System Unit" on page 176

Quik Reference

Preview

Purpose: Displays a realistic image of how the patterns will look like when embroidered.

**F9** Shortcut key:

Toolbar:

Operation:

1 Click Display, then Preview (Stage 4 only).

A preview of your embroidery patterns will appear.

You cannot make any settings while previewing a pattern.

2 To return to the normal working screen, click Display, then Preview again or press the (Esc)

See also: "Sewing Order" on page 88

#### Refresh Window

**Purpose:** Updates the screen.

Shortcut key: Ctrl) + (R)

Toolbar: No button for this function

Operation:

1 Click Display, then Refresh Window.

Use this function when the screen does not seem to update correctly.

### Realistic Preview

Displays a realistic image of how either selected patterns or all patterns will look **Purpose:** 

after being embroidered.

Shortcut key: (Shift) + (F9)

Toolbar: 

Operation:

1 Click **Display**, then **Realistic Preview** (Stage 4 only).

The patterns on the Design Page are displayed realistically according to the settings in the Realistic Preview Attribute Setting dialog.

2 To return to the normal working screen, click Display, then Realistic Preview again or press the

(Esc) key.

#### NOTE:

The Realistic Preview function cannot display a beautiful preview of the pattern if the monitor is set to 256 colors or less. The monitor should be set to at least 16-bit High Color (65536 colors).

See also: "Realistic Preview Attribute Setting" below

# Realistic Preview Attribute Setting

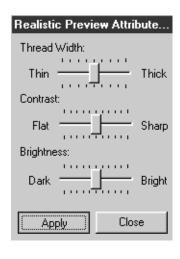
Purpose: Sets the preview attributes for Realistic Preview.

Shortcut key: No shortcut key for this function

Toolbar: No button for this function

#### Operation:

1 Click **Display**, then **Realistic Preview Attribute Setting** (Stage 4 only). The following dialog appears.



- Use Thread Width to set how wide the thread will appear.
- ◆ Use **Contrast** to set the contrast.
- Use Brightness to set how bright the display is.
- Click Apply to display a Realistic Preview of the patterns with the new settings.
- ◆ Click Close to exit.

#### NOTE:

This dialog can only be displayed while **Realistic Preview** appears in the menu. Clicking **Apply** saves the selected settings.

See also: "Realistic Preview" on page 91

#### Toolbar

**Purpose:** Turns the Toolbar on/off.

**Shortcut key:** No shortcut key for this function

**Toolbar:** No button for this function

Operation:

① Click Display, then Toolbar.

The Toolbar will be toggled on/off.

See also: "Status Bar" below

#### Status Bar

**Purpose:** Turns the Status bar on/off.

**Shortcut key:** No shortcut key for this function

**Toolbar:** No button for this function

Operation:

1 Click Display, then Status bar.

The Status bar will be toggled on/off.

See also: "Toolbar" above

# **Option Menu**

The Option menu allows you to select the Design Page size and the unit system.

Layout & Editing	Starts Layout & Editing and displays its window up front.	page 93
Programmable Stitch Creator	Starts Programmable Stitch Creator and displays its window up front.	page 93
File Utility	Starts File Utility and displays its window up front.	page 93
Design Page Property	Allows you to change the size of the Design Page and the color of the Design Page and the Design Page background.	page 93
Select System Unit	Allows you to select the system unit (mm or inch).	page 94

### Layout & Editing

**Purpose:** Starts Layout & Editing and displays its window up front.

Shortcut key: F5

**Toolbar:** No button for this function

Operation:

1 Click Option, then Layout & Editing.

Layout & Editing starts if its window wasn't open and if it was open, the window comes up front.

### Programmable Stitch Creator

**Purpose:** Starts Programmable Stitch Creator and displays its window up front.

**Shortcut key:** No shortcut key for this function

**Toolbar:** No button for this function

Operation:

1 Click Option, then Programmable Stitch Creator.

Programmable Stitch Creator starts if its window wasn't open and if it was open, the window comes up front.

# File Utility

**Purpose:** Starts File Utility and displays its window up front.

**Shortcut key:** No shortcut key for this function

**Toolbar:** No button for this function

Operation:

1 Click Option, then File Utility.

File Utility starts if its window wasn't open and if it was open, the window comes up front.

# Design Page Property

**Purpose:** Allows you to change the size of the Design Page and the color of the Design

Page and the Design Page background.

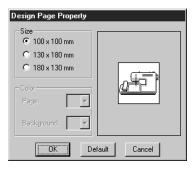
**Shortcut key:** No shortcut key for this function

**Toolbar:** No button for this function

### Operation:

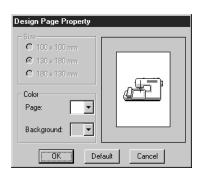
1 Click Option, then Design Page Property.

At the Stage 3 only, the dialog will display as follows.



- Select the size by clicking the appropriate radio button.
  - The preview window allows you to view the selected size.
- Before you select options 130 × 180 mm or 180 × 130 mm, make sure that your sewing machine supports that size.
- The application can display the dimensions either in mm or inches.
- ◆ Click **oK** to confirm.
- Click Default to go back to the default setting.
- ◆ Click Cancel to exit.

At the Stage 4 only, the dialog will display as follows.



- Select the Page color or the Background color by clicking its selector arrow, then by clicking the color.
  - The preview window allows you to view the selected colors.
- ◆ Click **oK** to confirm.
- Click Default to go back to the default setting.
- ◆ Click Cancel to exit.

See also: "Select System Unit" below

### Select System Unit

**Purpose:** Allows you to select the system unit (mm or inch).

**Shortcut key:** No shortcut key for this function

**Toolbar:** No button for this function

Operation:

1 Click Option, then Select System Unit.

This dialog will display.



- Select the unit.
- Click **OK** to confirm.
- Click Cancel to exit.

File Utility

# Stage Menu

The Stage menu allows you to move from one stage to the next or previous one.

To Original Image	Moves back to Stage 1.	page 95
To Line Image	Moves to Stage 2.	page 95
To Figure Handle	Moves to Stage 3.	page 97
To Sew Setting	Moves from Stage 3 to Stage 4.	page 98

# ■ To Original Image

**Purpose:** Moves back to Stage 1.

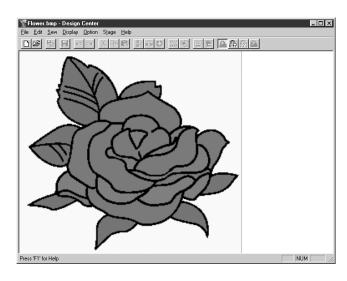
**Shortcut key:** No shortcut key for this function

#### Operation:

### 1 Click Stage, then To Original Image.

You are back to Stage 1 (the original color bitmap image displays and is maximized to fit the Design Page).

Note that you can move back from Stage 2 to Stage 1 only if you have started your work by opening a bitmap file. If you have started with a new file (Stage 2), for example, the function is not enabled.



See also: "To Line Image", "To Figure Handle" and "To Sew Setting" below

# To Line Image

Purpose: Moves to Stage 2.

**Shortcut key:** No shortcut key for this function

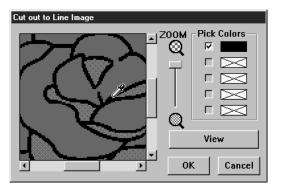
#### Operation:

1 Click Stage, then To Line Image.

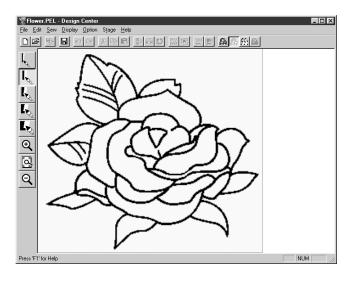
If you were in Stage 3, you are returned to Stage 2, except when you have modified the image in

Stage 3. In that case, a message will ask you to confirm that you want to abandon the changes made in Stage 3.

Note that if you started in Stage 3 by opening a Stage 3 file, you cannot go to Stage 2. If you were in Stage 1, this dialog displays.



- If necessary, scroll and zoom the image.
- Select the color(s) that you want to convert into black. To do this, move the cursor over the image. The shape changes to . Click on a color. The color moves to the upper box under Pick Colors and a . appears in the check box to show that the color is on. You can repeat to select a total of five colors. If you try to select more, colors are scrolled down, and the color that was at the bottom is deselected.
- If you selected a color by mistake, simply click its check box to deselect it.
- Click View to see the effect of your selection.
   You can repeat this step after clicking on the check boxes of the selected colors to toggle them on/off, or after selecting different colors.
- Click **OK** to confirm.
- ◆ Click Cancel to exit.
- ② When you click **ok**, the black and white image is displayed and you are in Stage 2.



Note that all the colors that you selected and turned on are converted to black. It is recommended to select just as many colors as necessary to have a good outline of the image. In the above example, a single color was selected.

In Stage 2, you can edit the image using the pens and erasers and use the zooming tools. Note that if you do not like the result, you can go back to Stage 1 and select different colors.

See also: "To Original Image" above, "To Figure Handle" and "To Sew Setting" below

Alphabetic Index

#### Moves to Stage 3. Purpose:

Shortcut key: No shortcut key for this function

Toolbar:

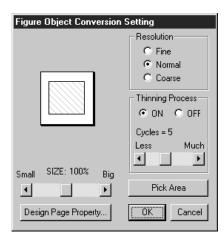
### Operation:

To Figure Handle

### ① Click Stage, then To Figure Handle.

If you were in Stage 4, a message warns you that may lose some data if you go back to Stage 3. If you want to make sure no data is lost, click Cancel in that dialog and save your settings. Otherwise, click **ok** and you are returned to Stage 3.

If you were in Stage 2, this dialog displays.



- Set the resolution. For details, see the following table.
- Set the thinning process. For details, see the following table.
- Set the size as a percentage of the original using the SIZE slider (setting range: 25 % ~ 400 %). You will not be able to enlarge the image beyond the limits of the Design Page area. If necessary, set the Design Page size by clicking Design Page Property and selecting one of the two other Design Page sizes in the dialog that opens.
- The preview window reflects the setting changes you make.
- If necessary, click Pick Area. A cross-shaped cursor will appear. Select the desired area by moving the cursor across the image. You will return to this screen as soon as you release the mouse.
- The preview window reflects the setting changes you make.
- Click **OK** to confirm.
- Click Cancel to exit.

### Resolution

This setting determines how detailed the generated pattern image will be. Basically, the outline of the line image is converted into pieces of broken lines. To make a more detailed pattern, you need more points on the broken lines, which also increases the length of the file.

In general, Normal provides a sufficient resolution without making the file too large. If Coarse gives a satisfactory result for a particular bitmap image, select Coarse in order to keep the file as small as possible.

Select Fine only if the image contains many small details, and Normal does not give a satisfactory result.

Quik Reference

This setting determines how the black lines of the line image are converted into pattern lines.

ON: the black lines are replaced with pattern lines following the center of the black lines. You can set the degree of detailedness with the slider (if the degree is high, even very thick black lines will be replaced with a center line).

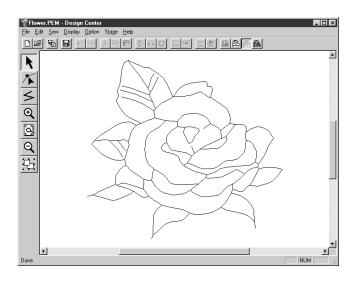
ON

ON

OFF: the black lines are replaced with pattern lines following the border of the black lines.

OFF

② When you click **ok**, the Figure Handle Image displays and you are in Stage 3.



In Stage 3, you can edit the patterns, by moving, deleting and inserting points and by drawing lines. Use the zooming tools available whenever you need to zoom your pattern.

See also: "To Original Image" and "To Line Image" on page 95, "To Sew Setting" below,

"Grid Setup" on page 90 and "Design Page Property" on page 93

# To Sew Setting

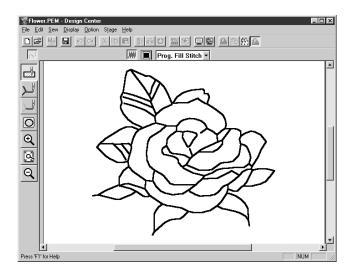
Purpose: Moves from Stage 3 to Stage 4.

Shortcut key: No shortcut key for this function

Toolbar:

Operation:

1 Click Stage, then To Sew Setting. You are now in Stage 4.



You can set the sewing attributes. Use the zooming tools available whenever you need to scale your pattern.

See also: "To Original Image" and "To Line Image" on page 95 and "To Figure Handle" on

page 97

# Help Menu

The Help menu gives you access to the on-screen help information system.

Contents	Starts the on-screen help information for this application.	page 99
Using	Explains how to use the on-screen help system.	page 100
About Design Center	Gives information about the version of this application.	page 100

#### Contents

**Purpose:** Starts the on-screen help information for this application.

Shortcut key: F1

**Toolbar:** No button for this function

Operation:

1 Click Help, then Contents.

A table of contents of the on-screen help information displays.

2 Refer to your Windows manual for the next operation.

See also: "Using" and "About Design Center" below

Quik Reference

Using

**Purpose:** Explains how to use the on-screen help system.

**Shortcut key:** No shortcut key for this function

**Toolbar:** No button for this function

1 Click Help, then Using.

The Windows standard explanation about how to use the help system appears.

2 Refer to your Windows manual for the next operation.

**See also:** "Contents" and "About Design Center" above

### About Design Center

**Purpose:** Gives information about the version of this application.

**Shortcut key:** No shortcut key for this function

**Toolbar:** No button for this function

Operation:

1 Click Help, then About Design Center.

A dialog will display.

Click OK to remove it.

See also: "Contents" and "Using"

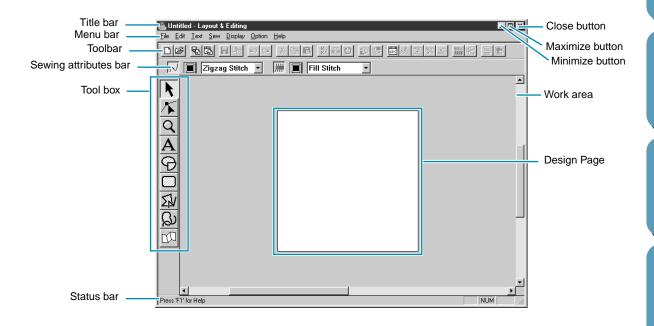
# **Layout & Editing**

Layout & Editing is used to assemble an embroidery Design Page from different elements.

The most complex elements are created with Design Center and imported in the Design Page. You can then add text, boxes, circles, broken lines, curves and manual punching patterns. You can move all the patterns to obtain the best layout, and define sewing attributes (thread color and stitch type, including a stitch pattern created by Programmable Stitch Creator) for the different components of your Design Page.

When you have finished, you can save your work on your hard disk, print it, and transfer it to a card. The card can be inserted in your sewing machine to automatically embroider your creation.

## **The Screen**



Menu bar	Gives access to the functions.			
Toolbar	Shortcut for the menu functions.			
Sewing attribute bar	Sets the sewing attributes (color, stitch) of the patterns			
Tool box	Used to select and create patterns.			
Status bar	Provides short information.			
Work area	You create and handle the patterns in this area.			
Design Page	esign Page The actual part of the work area that can be saved and sewn.			

File Utility

## **Using the Tool Box**

Patterns are created and edited using the Tool Box and the Sewing Attributes bar.

Clicking a button of the Tool Box changes the cursor mode and shape. The left side of the Status bar tells you what you can do in each cursor mode.

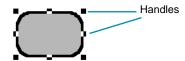
	Sets the cursor in selection mode. When you start the application, the selec-	page 103
7	tion mode is active by default. Cursor shape:	
	Sets the cursor in point edit mode.	page 106
	Cursor shape: \( \sum_{\sum}	
	Sets the cursor in zoom mode.	page 109
4	Cursor shape: $\bigoplus$ or $\bigoplus$	
A	Sets the cursor in text input mode.	page 111
$\mathbf{A}$	Cursor shape:	
$\sim$	Sets the cursor in circle and arc drawing mode.	page 112
B	Cursor shape: — with a miniature of the tool button	
272	Sets the cursor in rectangle drawing mode.	page 115
	Cursor shape: with a miniature of the tool button	
<del>~</del> 44.	Sets the cursor in line drawing mode.	page 115
2 3/	Cursor shape: — with a miniature of the tool button	
$\omega$	Sets the cursor in curve drawing mode.	page 116
80	Cursor shape: — with a miniature of the tool button	
~~	Sets the cursor in manual punching mode.	page 117
	Cursor shape: — with a miniature of the tool button	

**Selection Mode** 

To apply settings to an existing pattern, you must first select it. The cursor selection mode is used to select one or more patterns. Once a pattern is selected, you can move it, scale it, and change its direction by rotating it or inverting it.

### Selecting patterns

- 2 Click the pattern that you want to select. You know that the object is selected when handles are displayed.



The Status bar shows the dimensions (width and height) of the selection.

- 3 To deselect the pattern, select another one, click on the white space or click another tool button of the Tool Box.
- 4 To select an additional pattern, click that pattern while holding the Shift key down. Note that you can also select patterns by dragging the cursor across the Design Page. As you drag, a dotted rectangle appears. When you release the mouse button, all patterns that overlap that rectangle will be selected.

If you select other patterns than you wanted to, click on the white space to deselect all, and start again.

### Selecting patterns 2

With sis selected, press the Tab key to select the next object in the sewing order. Hold down the Shift key and press the Tab key to select the previous object in the sewing order.

If the  $\begin{tabular}{ll} \textbf{Tab} \end{tab}$  key (or the  $\begin{tabular}{ll} \textbf{Shift} \end{tab}$  and  $\begin{tabular}{ll} \textbf{Tab} \end{tab}$  keys) are pressed:

- and no object is selected, the first object (or the last object) in the sewing order becomes selected.
- and multiple objects are selected, all objects become deselected except the soonest (or latest) object within the sewing order.
- and the last (or first) object in the sewing order is selected, the first (or last) object in the sewing order becomes selected.

### Moving patterns

1 Move the cursor over a selected pattern or group of selected patterns.

The shape of the cursor will change to

2 You can now drag the pattern to another location.

Holding down the **Shift** key while dragging the pattern moves the pattern horizontally or vertically.

#### NOTE:

By pressing the arrow keys, the selected pattern can be moved 0.5 mm (about 0.02 inch) to the left, right, up or down.

• If Snap to Grid is selected, each press of an arrow key moves the pattern 1 grid mark in the specified direction.

**Quik Reference** 

The arrow keys cannot be used to move text on a path if just the text is selected. The path must also be selected in order to move using the arrow keys.

### Scaling patterns

1 Move the cursor over one of the handles of a selected pattern or group of selected patterns.

The shape of the cursor will change to  $\longleftrightarrow$ ,  $\updownarrow$ ,  $\checkmark$  or  $\nearrow$ , depending on the handle the cursor is on.

- 2 Drag the handle in the direction of the arrow to scale the pattern.
  - is for scaling the width.
  - is for scaling the height.
  - same are for scaling both dimensions at the same time.

As you drag the handle, you can check the changing size on the Status bar.

Note that some patterns imported from cards cannot be scaled.

When you scale imported patterns, the number of stitches remain the same, resulting in a quality loss. To maintain the quality of the embroidery, you need to adjust the number of stitches after scaling the pattern. This can be done in the **Stitch to Block Sensitivity** dialog, which you open by selecting the **Sew – Stitch to Block** command. For more information on how to select this function, see "Stitch to Block" on page 165.

### Flipping a pattern horizontally or vertically

1 Select the data that you wish to flip horizontally or vertically. The buttons below become active.



2 To flip horizontally, select the command Edit – Mirror – Horizontal or click on the Toolbar.

To flip vertically, select the command Edit – Mirror – Vertical or click on the Toolbar.

#### NOTE:

Images imported from embroidery cards cannot be flipped if they were designed with the mirror function turned off.

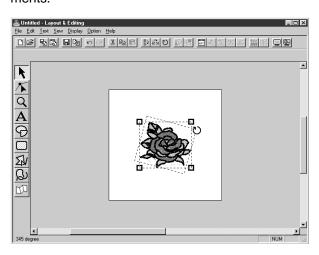
#### Rotating a pattern

① Select the data that you wish to rotate. The button below becomes active.



- 2 Select the menu command Edit Rotate or click on the Toolbar. The handles around the selected pattern are replaced by smaller boxes on the four corners of the selected area.
- 3 To rotate the pattern, move the cursor on one of the four rotation handles.

The shape of the cursor changes to as soon as your cursor touches a rotation handle. Click on a rotation handle and a lined box appears around the selected the pattern. Rotate the pattern clockwise or counterclockwise by dragging the mouse. A simple dragging of the mouse will rotate the pattern by 1° increments. Pressing the **Shift** key will rotate it by 15° increments.



### **Point Edit Mode**

The point edit mode is used to:

- move a point of a broken line, a curve, an arc, fan shape and arc & string or of a manual punching pat-
- reorient the tangent to a point of a curve;
- insert a new point in a broken line, curve or manual punching pattern;
- delete a point in a broken line, curve or manual punching pattern;
- realign the part of a broken line or a curve on both sides of a point;
- select and set a character in a text pattern.

### **Moving points**

① Click / on the Tool Box.

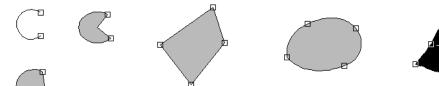
Two buttons appear:



- 2 Click . The shape of the cursor changes to . .
- 3 Click the pattern that you want to edit.

The pattern can be a broken line, a curve, an arc, a fan shape, an arc & string or a manual punching pattern.

The existing points of the pattern are marked with small empty squares



4 Click the point that you want to move.

The selected point is marked with a small black square.

You can select more than one point by clicking them while holding the (Shift) key down, or by dragging the mouse across the area.

#### NOTE:

If you click on the line of the pattern instead of a square, a new point is inserted.

**5** Drag the point to a new position.

All the selected points move in the same direction if more than one is selected.

The point remains selected, so that you can drag it again.

Holding down the **Shift** key while dragging the point moves the point horizontally or vertically.



Note that you must drag a point that is selected. If you start dragging by clicking elsewhere on the outline, a new point will be inserted or the selected point(s) will be deselected.

#### NOTE:

By pressing the arrow keys, the selected point can be moved 0.5 mm (about 0.02 inch) to the left, right, up or down.

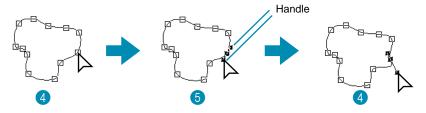
- If Snap to Grid is selected, each press of an arrow key moves the point 1 grid mark in the specified direction.
- The arrow keys cannot be used to move the endpoints of an arc or text on a path if just the text is selected.

### Reorienting a tangent to a point

① Click on the Tool Box.

Two buttons appear:

- 2 Click . The shape of the cursor changes to .
- 3 Click the pattern that you want to edit.
  The pattern can only be a curve.
  The existing points of the pattern are marked with small empty squares.
- 4 Click the point at which you want to reorient the tangent to the curve. The selected point is marked with a small black square and a control handle.
- 6 Click on one end of the handle and drag it without releasing the mouse.



### Inserting points

1 Click on the Tool Box.

Two buttons appear:

② Click . The shape of the cursor changes to .

3 Click the pattern that you want to edit.

The pattern can be a broken line, a curve or a manual punching pattern.

The existing points of the pattern are marked with small empty squares.

4 Click at a point of the contour other than an existing point.

A new point appears and is automatically selected (marked with a small black square and in the case of a curve, with a control handle).

When a manual punching pattern is selected, a pair of new points is inserted.

The new point can be immediately moved. In the case of a new point on a curve, you can also use the handle to reorient the tangent to the new point.



### Deleting points

Click on the Tool Box.

Two buttons appear:

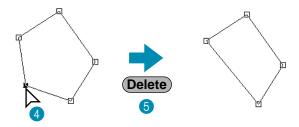


- igspace Click igspace . The shape of the cursor changes to igspace .
- 3 Click the pattern that you want to edit. The pattern can be a broken line, a curve or a manual punching pattern. The existing points of the pattern are marked with small empty squares.
- 4 Click the point that you want to delete.

The selected point is now marked with a small black square.

You can select more than one point by clicking them while holding the (Shift) key down, or by dragging the mouse across the area.

5 Press the **Delete** key to remove the point from the path. When a manual punching pattern is selected, a pair of points is deleted.



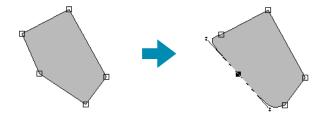
### Realigning

① Click / on the Tool Box.

Two buttons appear:

**Quik Reference** 

- 2 Click . The shape of the cursor changes to \( \sum \) and displays together with a small image of the Tool Box button.
- 3 Click the pattern that you want to edit.
  The pattern can be a broken line or a curve.
  The existing points of the pattern are marked with small empty squares.
- 4 Click the point that you want to realign.
  If the point was on a curved part, it is now on a broken line and vice versa.



#### NOTE:

When the point is on a curved part, you can use the handle to reorient the tangent (see "Reorienting a tangent to a point" on page 107.

### Selecting characters on a text pattern

1 Click on the Tool Box.

Two buttons appear: 

Two buttons appear:

- ② Click . The shape of the cursor changes to . .
- 3 Click the text pattern that you want to edit.
  The existing points of the text are marked with small empty squares.
- 4 Click the square of the character that you want to select.

If you want to select more than one character, hold the **Shift** key while clicking other squares or drag the cursor across.

The selected characters are marked with black squares.

**6** When some characters of a text pattern are selected, you can apply a font, size, color, stitch and other attributes different from the rest of the text pattern.



### **Zoom Mode**

The zoom mode is used to control the scale of the display. You can zoom in to work on details of a pattern with higher precision and you can zoom out again to see and work on parts of your Design Page that is hidden.

### Zooming in

1 Click Q

Five buttons appear: QQ 1:1 🔆 🔯

2 Click 🗨

The shape of the cursor changes to  $\bigoplus$ .

3 Drag the cursor across the area that you want to enlarge.

The area is enlarged as soon as you release the mouse. You can repeat the entire operation.

### Zooming out

1 Click Q.

Five buttons appear: QQ 1:1 🖳 Q.

2 Click Q

The shape of the cursor changes to  $\bigcirc$ .

3 Click a point of the Design Page where you want to do the next work. The image shrinks toward that point.
You can repeat this step until the image has returned to its normal size.

### Zooming to the real size

1 Click Q.

Five buttons appear: (Q Q 1:1 🖳

2 Click 1:1.

Your Design Page now appears in (almost) real size.

### Enlarging selected objects to the screen size

1 Select one or more patterns.

2 Click Q.

Five buttons appear:  $\bigcirc$   $\bigcirc$   $\bigcirc$   $\bigcirc$   $\bigcirc$   $\bigcirc$ 

3 Click 🖳 .

The selected objects now occupy all the available space on the screen.

#### Return to the standard scale

1 Click Q.

Five buttons appear: QQ1:1 🖳 Q.

**Quik Reference** 



The Design Page is zoomed in or out to return to the standard scale.

### **Text Input Mode**

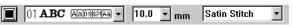
The text input mode is used to enter strings of text in your Design Page. You can enter accented characters for European languages, that are not directly available on your keyboard.

The basic settings for the text strings include font and size.

### Entering text

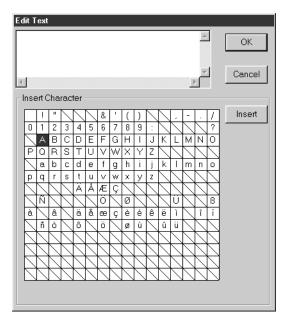
1 Click A on the Tool Box.

The shape of the cursor changes to  $\int$  and this appears on the Sewing Attributes bar:



You can select a color, a font and a size at this step or after creating the pattern. See "Color" on page 127, "Font" on page 121 and "Text size" on page 123. You can also set the sewing attributes using the **Sew** menu (see "Sewing Attribute Setting" on page 159) and the text attributes using the **Text** menu (see "Text Attribute Setting" on page 153).

2 Click at a point where you want the text to appear. The Edit Text dialog displays.

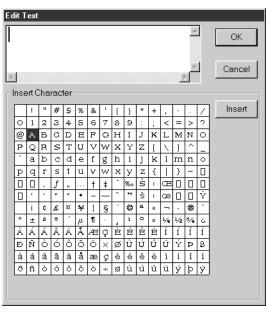


- ◆ Type your text. Press the **Enter** key to enter new lines of text.
- You can also enter a character by clicking it on the character table, then clicking Insert or simply by double-clicking it. This is specially useful if you have to enter accented characters that are not available on your keyboard.
- ◆ Click **OK** to confirm. Your text opens on the Design Page.
- ◆ Click Cancel to exit.
- If a character that you entered is not available for the selected font, a warning message displays. Click OK in that dialog to close it and to return to the Edit Text dialog where you can correct your text.

Alphabetic Index

(If a TrueType Font is selected)

If a TrueType Font is selected, a dialog similar to the one shown below will appear.



Based on the set attributes, all characters for the selected font appear in the **Insert Character** chart.

Enter characters in the same way that you would enter characters with a built-in font (as explained above).

#### NOTE:

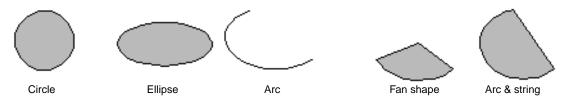
Some TrueType fonts may not convert well into beautiful embroidery data due to their design and shape.

#### NOTE:

If you need to edit the entered text, you can do so in the Edit Text dialog which opens when you execute the Text – Edit Text Letters command. See "Edit Text Letters" on page 152.

### **Circle and Arc Drawing Mode**

The circle or arc drawing mode allows you to create several patterns related to the circle: normal circles (or ellipses), arcs, fan shapes and arc & strings.



All these patterns, except arcs have an outline and a region inside can independently be assigned different sewing attributes. Arcs are simple outlines.

Note that you have to decide which pattern type you want to draw before drawing it. You cannot, for example, draw a normal circle and change it into an arc afterwards.

### Drawing a circle or an ellipse

1 Click on the Tool Box.

- and displays together with a small ellipse. The Sewing The shape of the cursor changes to -Attributes bar now looks like this:



You can select the colors and stitches at this step or after creating the pattern. See "Color" on page 127 and "Stitch" on page 129.

You can also set the sewing attributes using the Sew menu (see "Sewing Attribute Setting" on page 159).

You must decide now which kind of circle-related graphic you need.

- 2 Click the Arc shape selector, then click Circle.
- Move the mouse to a point, click and drag the mouse.

The point where you start dragging is considered a corner of an imaginary rectangle. The point where you release the mouse will be the diagonally opposed point of the rectangle. The ellipse will fit inside the imaginary rectangle (its great axis equal to the larger edge of the rectangle, and it small axis equal to the smaller edge).

Note that you can draw a perfect circle by holding the (Shift) key down while dragging the mouse.

### Drawing an arc

1 Click on the Tool Box.

The shape of the cursor changes to + and displays together with a small ellipse. The Sewing Attributes bar now looks like this:

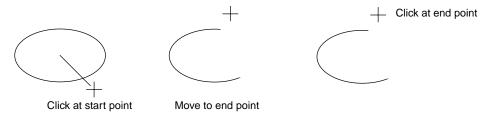


You can select the colors and stitches at this step or after creating the pattern. See "Color" on page 127 and "Stitch" on page 129.

You can also set the sewing attributes using the **Sew** menu (see "Sewing Attribute Setting" on

You must decide now which kind of circle-related graphic you need.

- 2 Click the Arc shape selector, then click Arc.
- 3 Proceed as you would to draw a circle or an ellipse. When you release the mouse, a radial line appears on the ellipse.
- 4 Move the cursor (without dragging) to the start point of the arc and click. The radial line disappears.
- Move the cursor (without dragging) to the end point of the arc and click.



Quik Reference

Drawing a fan shape

1 Click on the Tool Box.

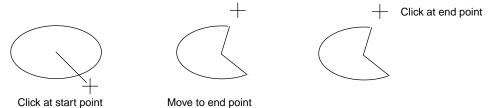
The shape of the cursor changes to —— and displays together with a small ellipse. The Sewing Attributes bar now looks like this:



You can select the colors and stitches at this step or after creating the pattern. See "Color" on page 127 and "Stitch" on page 129.

You can also set the sewing attributes using the **Sew** menu (see "Sewing Attribute Setting" on page 159). You must decide now which kind of circle-related graphic you need.

- 2 Click the Arc shape selector, then click Fan Shape.
- 3 Proceed as you would to draw a circle or an ellipse.
  When you release the mouse, a radial line appears on the ellipse.
- Move the cursor (without dragging) to the start point of the fan shape and click. The radial line disappears.
- **5** Move the cursor (without dragging) to the end point of the fan shape and click.



### Drawing an arc & string

Click on the Tool Box.

The shape of the cursor changes to —— and displays together with a small ellipse. The Sewing Attributes bar now looks like this:

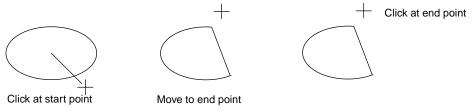


You can select the colors and stitches at this step or after creating the pattern. See "Color" on page 127 and "Stitch" on page 129.

You can also set the sewing attributes using the **Sew** menu (see "Sewing Attribute Setting" on page 159).

You must decide now which kind of circle-related graphic you need.

- 2 Click the Arc shape selector, then click Arc & String.
- 3 Proceed as you would to draw a circle or an ellipse. When you release the mouse, a radial line appears on the ellipse.
- Move the cursor (without dragging) to the start point of the arc & string and click. The radial line disappears.
- 6 Move the cursor (without dragging) to the end point of the arc & string and click.



### **Rectangle Drawing Mode**

With the rectangle drawing mode, you can create rectangles (boxes) with sharp or rounded corners. A box will automatically have an outline and a region inside that can independently be assigned different sewing attributes.

### Drawing a box

1 Click on the Tool Box.

> The shape of the cursor changes to + and displays together with a small rounded box. The Sewing Attributes bar now looks like this:



You can set the edge radius, colors and stitches at this step or after creating the pattern. See "Edge radius" on page 120, "Color" on page 127 and "Stitch" on page 129.

You can also set the sewing attributes using the Sew menu (see "Sewing Attribute Setting" on page 159).

2 Move the mouse to a point, click and drag the mouse.

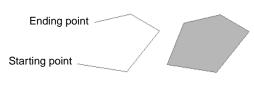
The point where you start dragging is considered a corner of the box. The point where you release the mouse will be the diagonally opposed corner of the box.

Note that you can draw a perfect square by holding the (Shift) key down while dragging the mouse.

### **Line Drawing Mode**

The line drawing mode allows you to add broken lines to your pattern. A broken line is made of one or more contiguous straight lines, the ending point of a straight line being the starting point of the next one. If the broken line is open, the pattern will end at the last end point. An open broken line is considered a simple outline when setting the stitch and color.

If the broken line is closed, the last point will be automatically joined with the first one to form a polygon. A polygon has an outline and a region inside that can be assigned different stitches and colors. However, if two pieces of straight lines cross each other, the application cannot determine a region inside, and the pattern will be a simple outline.



Open broken line Closed broken line



This closed broken line has no region inside

### Drawing a broken line

Click on the Tool Box.

The shape of the cursor changes to  $\frac{1}{2}$  and displays together with a small broken line. The Sewing Attributes bar now looks like this:



You can select the path shape, colors and stitches at this step or after creating the pattern. See

"Path shape" on page 121, "Color" on page 127 and "Stitch" on page 129. You can also set the sewing attributes using the **Sew** menu (see "Sewing Attribute Setting" on page 159).

2 Draw the broken line.

Move the mouse to the start point and click.

Move the mouse to the end point of the first straight line and click again.

#### NOTE:

You can always remove the last-entered point by clicking the mouse's right button.

If needed, use the grid to help you draw the lines. You can set the grid so that each of its vertical and horizontal lines are visible. For more information on the grid, refer to "Grid Setup" on page 169.

If you hold the **Shift** key down while moving the mouse, only vertical or horizontal lines will be drawn.

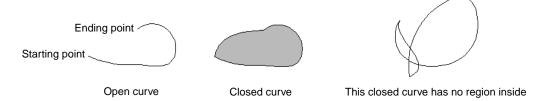
3 Repeat until you arrive at the last end point. At that point double-click.

### **Curve Drawing Mode**

With the curve drawing mode, you can create curved lines. You create curved lines the same way as you create a broken line. Like a broken line, a curved line can be open or closed.

If the line is open, the pattern will end at the last end point. An open line is considered a simple outline when setting the stitch and color.

If the line is closed, the last point will be automatically joined with the first one to form a smooth contour. The contour has an outline and a region inside that can be assigned different stitches and colors. However, if the curved line crosses itself, the application cannot determine a region inside, and the pattern will be a simple outline.



### Drawing a curve

1 Click on the Tool Box.

The shape of the cursor changes to  $\frac{1}{2}$  and displays together with a small curved line. The Sewing Attributes bar now looks like this:



You can select the path shape, colors and stitches at this step or after creating the pattern. See "Path shape" on page 121, "Color" on page 127 and "Stitch" on page 129.

You can also set the sewing attributes using the **Sew** menu (see "Sewing Attribute Setting" on page 159).

2 Draw the curved line.

Move the mouse to the starting point and click.

Move the mouse to the ending point of the first line and click again.

#### NOTE:

You can always remove the last-entered point by clicking the mouse's right button.

3 Repeat until you arrive at the last end point. At that point double-click.

### **Manual Punching Mode**

This mode is used to create patterns that look like manual embroidery. When you use the standard Fill or Satin stitch to fill a region, the thread in the whole region has the same direction. Some patterns, however, look better when the thread direction "follows" the curves of the pattern. The Manual Punching mode provides such a feature.

Letters that you design yourself constitute a typical example of patterns that look better when using the Manual Punching mode. The illustrations below show the preview of two letters "O".

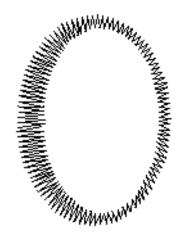
The first one has been designed using two concentric ovals without a line sew setting, filling the larger oval with Fill stitch and turning off the region sew setting inside the small oval. The pair was then set for hole sewing.

The second letter has been redrawn using Manual Punching. To do this, we duplicated the first letter, removed the region inside, and created a manual punching pattern using the outlines of the ovals as guides. The ovals were then deleted.

The stitch density for both letters was set to a minimum in order to make it easier to see the difference between the two patterns on the preview display.



Fill stitch (the thread has a constant direction)



Manual Punching (the direction of the thread follows the curve)

When creating a manual punching pattern, it is easier to use something in the background as a guide. In the above example, we used two ovals that we removed after completing the manual punching pattern. Another possibility is to load a template bitmap image and redraw it using manual punching patterns. The advantage of this method over the automatic conversion provided by Design Center is that you have a better control on the thread orientation.

### Creating a manual punching pattern

- 1 Open a template or prepare a pattern that you will use as a guide.
- 2 Click on the Tool Box.

Three buttons appear: \( \omega \times \cdot \cdot \).

is for creating block-type punching patterns.

is for creating running-type punching patterns (the broken line is sewn).

is for creating feed-type punching patterns (the broken line is not sewn).

While creating a manual punching pattern, you can alternate the types. For example, you can start

Programmable Stich Creator

with a block-type pattern, then switch to a running-type pattern (to draw an outline of the block-type pattern) then switch to the feed type to move to the beginning of the next block-type pattern. The whole pattern, consisting of different types, will be considered a single object (all parts will have the same stitch and color).

In the example below, we start with a block-type pattern, use the feed type to move the cursor, then create a run-type pattern.

3 Click to start creating a block-type pattern.

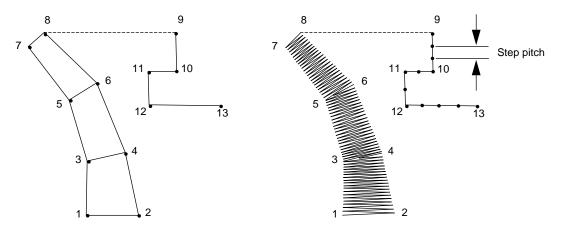
The shape of the cursor changes to —— and displays together with a small image of the block-type button. The Sewing Attributes bar now looks like this:



You can select the color and stitch at this step or after creating the pattern. See "Color" on page 127 and "Stitch" on page 129.

You can also set the sewing attributes using the **Sew** menu (see "Sewing Attribute Setting" on page 159).

4 Click point 1 on the Design Page (start point). Click point 2 and next points referring to the illustration below.



Note that you can always click the mouse's right button to remove the last entered point.

- **6** After clicking at point 8 (the last point of the above block-type pattern), click (feed-type pattern button), then click at point 9 (the start point of the running-type pattern).
- 6 Click (running-type pattern button) and click at points 10, 11, and 12 shown in the above illustration.
- When you reach point 13, (the last point of the entire pattern), double click to complete the pattern.

## **Using the Sewing Attributes Bar**

The Sewing Attributes bar allows you to set the following characteristics:

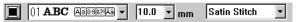
- geometrical attributes (arc shape, rectangle edge radius, and path shape);
- text attributes (font, size, stitch and transformation level);
- embroidery attributes (thread color and stitch, outline and region inside on/off).

The sewing attributes which are available depend on the cursor mode and the type of embroidery pattern selected.

**Example 1**: The cursor is in selection mode, but nothing is selected.



**Example 2**: The cursor is in text input mode, or in selection mode with text selected.



When the cursor is left for a while on an element of the Sewing Attributes bar, a label indicating the function of that element appears. In the following instructions, we will name the components of the Sewing Attributes bar according to these labels, for easier identification.



As a general rule, the different characteristics available for a given pattern can be set either just before creating the pattern, or after the pattern is created. For example, when drawing a rectangle, you can set the colors and the corner radius just after starting the Rectangle Drawing mode. When the rectangle is created, you can select it and change its characteristics.

The only exception to that rule is when you use the Circle and Arc Drawing mode: you must decide what kind of pattern you want (circle, arc, etc.) before actually creating it. And you will not be able to change that once the pattern is created.

#### Geometrical attributes

Circle	Arc type: Selects the type of arc.			
Edge radius: Sets the corners of rectangles.				
Close path ▼	Path shape: Opens and closes broken lines and curves.	page 121		

#### **Text attributes**

01 <b>ABC</b> ABCRAS V	Font: Selects a font for text.	page 121	
Text Size: Selects the size for text.			
Transform level: Selects the level of transformation.		page 123	

Satin Stitch	Text sew type: Selects the stitch type for the text.	page 124
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#### **Embroidery attributes**

~	Line sew: Switches the outline on/off. When the outline is switched off, it is not sewn (and you cannot set its color or stitch).			
<i>MM</i>	Region sew: Switches the inside region on/off. When the inside region is switched off, it is not sewn (and you cannot set its color or stitch).	page 126		
	Line color, Region color, Text color, Punch color: Sets the thread color for outline, region inside, text, manual punching pattern and imported pattern.	page 127		
Running Stitch •	Line sew type: Sets the stitch for the outlines.			
Fill Stitch	Region sew type: Sets the stitch for outline, region inside, text, manual punching pattern and imported pattern (after the Stitch to Block function has been applied).	page 129		

### **Setting Geometrical Attributes**

Arc shape Circle

**Purpose:** Selects the type of arc.

Available: When you click on the Tool Box to start the Circle and Arc Drawing mode.

Operation:

Click the Arc shape selector.

The options display.



2 Click one of the options.

The setting applies to all the patterns that you will create in the Circle and Arc Drawing mode until you change the setting.

See also: "Circle and Arc Drawing Mode" on page 112

Edge radius 🗓 🗖 mm

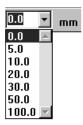
**Purpose:** Sets the corners of rectangles.

Available: When you click on the Tool Box to start the Rectangle Drawing mode.

When you select an existing rectangle with the cursor in Selection mode.

Operation:

 $lue{1}$  Type the desired value on the Edge radius selector (0  $\sim$  100 mm or 0  $\sim$  3 93 inches) and press the **Enter**) key or click on the Edge radius selector to display the available values.



2 Click the desired value.

The setting applies to all the patterns that you will create in the Rectangle Drawing mode until you change the setting.

If a rectangle is selected, the setting also applies to that rectangle.

See also: "Rectangle Drawing Mode" on page 115

■ Path shape Close path ▼

Purpose: Opens and closes broken lines and curves.

Available: When you click or or on the Tool Box to start the Line or Curve Drawing

mode.

When you select an existing broken line or curve with the cursor in Selection

mode.

### Operation:

Click on the Path shape selector. Two options are available.



2 Click the desired option.

The setting applies to all the patterns that you will create in the Line or Curve Drawing mode until you change the setting.

If a broken line or curve is selected, the setting applies to that broken line or curve.

See also: "Line Drawing Mode" on page 115, "Curve Drawing Mode" on page 116

### **Setting Text Attributes**

Font 01 ABC AGGRAG -

Purpose: Selects a font for text.

Available: When you click on the Tool Box to start the Text Input mode.

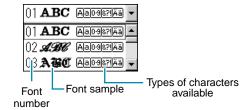
When you select existing text patterns with the cursor in Selection mode.

When you select characters with the cursor in Point Edit mode.

File Utility

#### Operation:

1 Click on the Font selector. A list of fonts displays.



2 Click the desired font.

The setting applies to all the text patterns that you will create in the Text Input mode until you change the setting.

If text patterns or characters of a text pattern are selected, the setting also applies to the selection.

The following illustration shows the fonts available and, for each font, the kind of characters available:

01 <b>ABC</b>	Aa098?!Ää	13 <b>ABC</b>	Aa0982!	25 <b>X BC</b> A
02 <b>ASH</b>	Aa0982!Ää	14.A98C	Aa.0982!	26 <b>≥3€</b> A
03 <b>A WC</b>	Aa0982!Ää	15 A35	Aa098?!	27 <b>ABC</b> 🗚
04 <b>/80</b>	Aa0-982!Ää	16 <b>ABC</b>	Aa098?!	28 <b>ABC</b> 🖹
05 <b>48C</b>	Aa0982!Ää	17 <b>ABC</b>	Aa098?!	29 AIBC A 09
06 <b>ABC</b>	Aa098?!Ää	18 <b>.84.786</b>	A	30 <b>ABC</b> ABGSSÄÄ
07 <b>ABC</b>	Ala.0-982!Ää	19 <b>436</b>	Ā	31 ABC Aalogemää
08 <b>ABC</b>	Aa0982!Ää	A A	Aa098?!	32 <b>ABC</b> Aageriää
09 <b>ABC</b>	Aa0982!Ää	21 <b>&amp;#&lt;/b&gt;€&lt;/td&gt;&lt;td&gt;&lt;u&gt;                                     &lt;/u&gt;&lt;/td&gt;&lt;td&gt;33 ABGABOSENÄS&lt;/td&gt;&lt;/tr&gt;&lt;tr&gt;&lt;td&gt;10 &lt;b&gt;ABC&lt;/b&gt;&lt;/td&gt;&lt;td&gt;Aa0982!Ää&lt;/td&gt;&lt;td&gt;22 &lt;b&gt;#B6&lt;/b&gt;&lt;/td&gt;&lt;td&gt;Aa&lt;/td&gt;&lt;td&gt;34 ABC Aageriää&lt;/td&gt;&lt;/tr&gt;&lt;tr&gt;&lt;td&gt;II ABC&lt;/td&gt;&lt;td&gt;Aa098?!&lt;/td&gt;&lt;td&gt;23&lt;b&gt;A.B.C.&lt;/b&gt;&lt;/td&gt;&lt;td&gt;A&lt;/td&gt;&lt;td&gt;35 &lt;i&gt;A B C&lt;/i&gt; Aaggerää&lt;/td&gt;&lt;/tr&gt;&lt;tr&gt;&lt;td&gt;12 &lt;b&gt;ABC&lt;/b&gt;&lt;/td&gt;&lt;td&gt;Aa098?!&lt;/td&gt;&lt;td&gt;24 &lt;b&gt;24 24 26&lt;/b&gt;&lt;/td&gt;&lt;td&gt;A&lt;/td&gt;&lt;td&gt;&lt;/td&gt;&lt;/tr&gt;&lt;/tbody&gt;&lt;/table&gt;</b>		

Upper case letters of the English alphabet

Upper case and lower case accented letters

Lower case letters of the English alphabet

Punctuation, brackets and other symbols

I-9 Numerals

In addition, the names and samples of installed TrueType fonts appear after the fonts listed in the table above.



If one of these TrueType fonts are selected, the font data is automatically converted to embroidery data. Font settings can be changed in the **TrueType Font Attribute Setting** dialog, which is displayed by clicking **Text - TrueType Font Attribute Setting**.

#### NOTE:

Some TrueType fonts may not convert well into beautiful embroidery data due to their design and shape.

See also: "Text Input Mode" on page 111, "Point Edit Mode" on page 106, "TrueType Font

Attribute Setting" on page 158

### Text size 10.0 mm

**Purpose:** Selects the size for text.

**Available:** When you click  $|\mathbf{A}|$  on the Tool Box to start the Text Input mode.

When you select existing text patterns with the cursor in Selection mode.

When you select characters with the cursor in Point Edit mode.

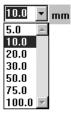
#### Operation:

lacktriangle Type the desired value in the Text size selector (5 ~ 100 mm or 0.20 ~ 3.93 inches) and press the

**Enter** key

or

click on the Text size selector to display the available values.



2 Click the desired value.

The setting applies to all the text patterns that you will create in the Text Input mode until you change the setting.

If a text pattern or characters of a text pattern are selected, the setting also applies to the selection.

See also: "Text Input Mode" on page 111, "Point Edit Mode" on page 106

### ■ Transform level 🔟 🖳 🦠

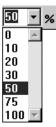
**Purpose:** Selects the level of transformation.

**Available:** When you select an existing transformed text with the cursor in Selection mode.

#### Operation:

Type the desired value in the Transform level selector (0 ~ 100%) and press the (Enter) key

click on the Transform level selector to display the available values.



2 Click the desired value.

The setting applies to all the transformed text patterns that you will create in the Text Input mode until you change the setting.

If a text pattern is selected, the setting also applies to the selection.



See also: "Text Input Mode" on page 111 and "Transform Text" on page 156

### ■ Text Sew Type Satin Stitch



Purpose: Selects the stitch type for the text.

Available: When you click A on the Tool Box to start the Text Input mode.

When you select existing text patterns with the cursor in Selection mode.

When you select characters with the cursor in Point Edit mode.

#### Operation:

1 Click the Text Sew Type selector.

The list of the available stitches displays.



2 Click the desired stitch.

The setting applies to all the text patterns that you will create in the Text Input mode until you change the setting.

If a text pattern or characters of a text pattern are selected, the setting also applies to the selection.

"Text Input Mode" on page 111, "Point Edit Mode" on page 106 See also:

### Setting the Thread Color and Stitch

All patterns can be assigned at least one color. Patterns with an outline and a region inside can be assigned two different thread colors. Characters in a text pattern can be assigned individual thread colors.

All patterns can be assigned at least one stitch type. Patterns with an outline and a region inside can be assigned two different stitch types.

Patterns with an outline and a region inside are: Circle, Fan Shape, Arc & String, Rectangle, Closed Broken Line, and Closed Curve. For these patterns, it is possible to switch the outline and the regions on and off.

Patterns with only an outline are: Arc, Open Broken Line, and Open Curve. For these patterns, it is still possible to switch the outline on and off.

Patterns with only a region are: Text, manual punch patterns and converted imported patterns (to which the Stitch to block function has been applied). For those three types of patterns, it is not possible to switch the region inside on and off.

Manual punch patterns: You can set a color to all three manual punch pattern types (block, running and feed), but you can only set a stitch sew type to the block patterns.

Imported patterns converted with the Stitch to Block function: You can modify globally the sewing attributes of the blocks of the same color.

### ■ Line sew \( \bar{\bar{A}} \)

Switches the outline on/off. Purpose:

When the outline is switched off, it is not sewn (and you cannot set its color or

stitch).

Available: When the cursor is in Selection mode with nothing selected.

When you select a pattern that has an outline (Circle, Arc, Fan Shape, Arc &

String, Rectangle, Broken Line, Curve)

on the Tool Box to start drawing such a When you click

pattern.

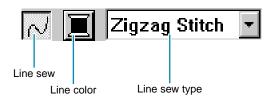
#### Operation:

Click the Line sew button.

This button has two states:

on: the Line color button and the Line sew type selector are displayed off: the Line color button and the Line sew type selector are not displayed.

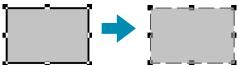
Clicking the button toggles between the two states.



The setting applies to all the patterns with an outline that you will create until you change the setting.

If a pattern is selected, the setting applies to that pattern.

Line sew off:



2 To restore the outline click the Line sew button again.

See also: "Color" on page 127 and "Stitch" on page 129

### Region sew 🎹

**Purpose:** Switches the inside region on/off.

When the inside region is switched off, it is not sewn (and you cannot set its color

or stitch).

**Available:** When the cursor is in Selection mode with nothing selected.

When you select a pattern that has an inside region (Circle, Fan Shape, Arc &

String, Rectangle, closed Broken Line and Curve)

When you click | , | , | , | on the Tool Box to start drawing such a

pattern.

#### Operation:

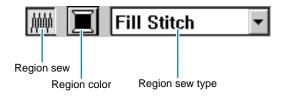
1 Click the Region sew button.

This button has two states:

on: the Region color button and the Region sew type selector are displayed

off: the Region color button and the Region sew type selector are not displayed.

Clicking the button toggles between the two states.



The setting applies to all the patterns with an inside region that you will create until you change the setting.

If a pattern is selected, the setting applies to that pattern.



2 To restore the inside region click the Region sew button again.

See also: "Color" on page 127 and "Stitch" on page 129

**Purpose:** Sets the thread color for outline, region inside, text, manual punching pattern and

imported pattern (after the Stitch to Block function has been applied).

Available: When the cursor is in Selection mode with nothing selected, the Line color and

Region color buttons are displayed (if they have not been turned off with the Line

sew or Region sew buttons).

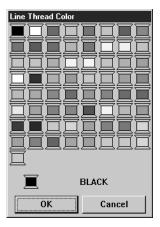
When you start one of the drawing modes or Text Input mode, or select an existing

pattern, the Color button for the corresponding pattern appears.

### Operation:

1 Click the color button.

In Region setting mode, the **RegionThread Color** dialog displays and in Line setting mode, the **Line Thread Color** dialog displays. The same color settings are available in both dialogs.



- Click the desired color.
- The four last spools have a special function.
   See "Special colors" below.
- For a list of the different color names, see page 204.
- ◆ Click **oK** to confirm.
- Click Cancel to exit.

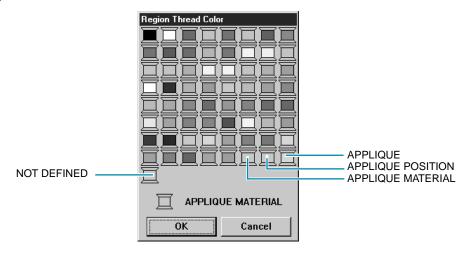
The setting applies to all the patterns of the same categories that you will create until you change it. The color button of each category shows the current color for that category.

If a pattern is selected, the setting also applies to that pattern.

Note that the color name shown on the dialog will be displayed on sewing machines that can display color names.

See also: "Line sew" on page 125 and "Region sew" on page 126

### Special colors



- ▶ NOT DEFINED: Sewing machines that feature automatic thread color display will automatically switch the display to the specified color. If you are using such a machine and if you wish to be able to select manually the color for a monochrome pattern, you can select the "NOT DEFINED" color.
- Colors for creating appliqués: You can create appliqués using the three special colors shown in the above illustration.

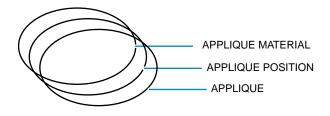
APPLIQUE MATERIAL marks the outline of the region to cut from the appliqué material.

**APPLIQUE POSITION** marks the position on the backing material where the appliqué must be sewn. **APPLIQUE** sews the appliqué on the backing material.

Example:

- 1 Create an oval.
- 2 Duplicate the oval and move it apart from the first one. Repeat this step to obtain a total of three identical ovals.
- 3 Select the ovals one by one and make the following settings:

Oval		Sewing Attributes		
	Region sew button	Line color	Line sew type	Sewing Attributes
1	OFF	APPLIQUE MATERIAL	Running	RUN TIME = 1
2	OFF	APPLIQUE POSITION	Running	RUN TIME = 1
3	OFF	APPLIQUE	Zigzag	_



4 Bring the APPLIQUE POSITION oval and the APPLIQUE oval at the same position as the APPLIQUE MATERIAL oval (using the grid can make this operation easier). You can confirm the appliqué position using the preview function (see "Preview" on page 170).



**6** Add details as you would with a normal embroidery picture.



When sewing, proceed as follows:

- Place the appliqué material on the machine and start sewing. At this step, only the APPLIQUE MATERIAL outline will be sewn.
- Remove the appliqué material from the machine and cut along the outline.
- 3 Place the backing material on the machine and start sewing. At this step, only the APPLIQUE POSI-TION outline will be sewn.
- 4 Affix the appliqué on the marked position with a small amount of fabric glue.
- 6 Restart sewing. At this step, the APPLIQUE outline will be sewn.
- 6 Sew the other details of the picture. Note that the sewing order will be **MATERIAL**  $\rightarrow$  **POSITION**  $\rightarrow$  **APPLIQUE**.



Sets the stitch for outline, region inside, text, manual punching pattern and Purpose:

imported pattern (after the Stitch to Block function has been applied).

Available: When the cursor is in the selection mode, the Line sew type and Region sew type

selectors are displayed (if they have not been turned off with the Line sew or

Region sew buttons).

When you start one of the drawing modes or select an existing pattern, the sew

type button for that pattern appears.

When you are in the text or manual punching mode or after applying a Stitch to

block setting to an imported pattern.

### Operation:

Click the sew type selector.

The available options display.





For outlines, Zigzag and Running stitches are available.

For regions, Text and manual punching patterns, Satin, Fill and Programmed Fill stitches are available.

2 Click the desired stitch.

The setting applies to all the patterns of the same categories that you will create until you change it. If a pattern is selected, the setting also applies to that pattern.

#### NOTE:

You can set the stitch attributes for the selected line and region stitches in the Sewing attribute Setting dialog.

When you select Prog. fill Stitch, you also need to select a programmed stitch in the Sewing Attribute Setting dialog, as there is no default programmed stitch setting.

See also: "Line sew" on page 125, "Region sew" on page 126 and "Sewing Attribute Setting"

on page 159

## **Using the Menu Bar and the Toolbar**

File	Handles file input/output, such as opening, saving and printing.	page 131
Edit	Performs simple actions on selected patterns, such as cutting and pasting.	page 143
Text	Performs actions on text patterns, such as fitting text to a curved path.	page 152
Sew	Defines how each pattern will be sewn.	page 159
Display	Modifies the appearance of the screen.	page 169
Option	Provides additional options.	page 173
Help	Gives you access to the on-screen help information system.	page 177

Most functions available on the menu can also be activated by clicking a button on the Toolbar or by pressing a shortcut key or key combination.

When you leave the cursor for a while on a button of the Toolbar, a label indicating the function of the button displays.



### File Menu

The File menu handles file input/output, such as opening, saving and printing.

New		Creates a new blank Design Page.	page 131
Open		Opens a previously saved Design Page file (*.pes file).	page 132
Import	from File	Imports embroidery patterns from embroidery cards (*.pec), original cards (*.pes) and files created in the Tajima (*.dst), Melco (*.exp), Pfaff (*.pcs) and Husqvarna (*.hus) formats and adds them to your current Design Page.	page 133
	from Design Center	Imports an embroidery pattern from Design Center.	page 135
Template Open		Opens a background bitmap image that can be used as a guide to draw a new embroidery pattern.	page 136
Save		Saves your Design Page on the disk as a Version 3.0 file (default).	page 137
Save As		Saves your Design Page on the disk under a new file name.	page 137
Export		Exports the data shown in the Design Page as a file of a different format (dst, hus, exp, and pcs).	page 138
Write to Card		Writes your Design Page to an original card.	page 138
Print Setup		Allows you to change the printing settings for previewed embroideries.	page 139
Print Preview		Allows you to preview the contents of the Design Page and check the sewing color order, the dimensions and the needle count before printing.	page 140
Print		Prints your Design Page and some sewing information.	page 141
Exit		Exits the application.	page 142

#### New

**Purpose:** Creates a new blank Design Page.

Shortcut key: Ctrl + N

Operation:

### 1 Click File, then New.

If the current Design Page is not edited, a new blank Design Page appears immediately.

**Quik Reference** 

2 If the current Design Page is edited, you will be asked whether you want to save the changes.



- ◆ Click **Yes** to save the Design Page first.
- Click No to abandon the Design Page.
- Click Cancel to do anything else (for example, modify the current Design Page or saving it with another file name).

See also: "Open" below and "Save" and "Save As" on page 137

Open

**Purpose:** Opens a previously saved Design Page file (\*.pes file).

Shortcut key: Ctrl + O

Operation:

Click File, then Open.

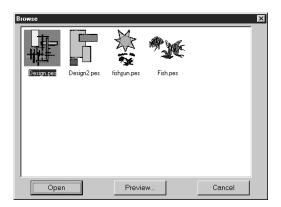
A File Open dialog similar to this will display.



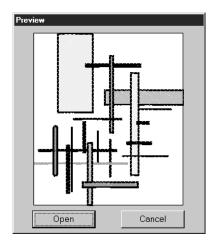
- Select the drive, the folder and the file name.
- Be sure to select a folder containing pes files.
- The contents of the selected file displays in the Preview window, provided its check box is checked.
- Click Open or double click the file name. The file will appear on the Design Page.
- You can also select the drive and folder only and then click Browse to display a graphic contents of the currently selected folder (provided it contains \*.pes files).
- ◆ Click Cancel to exit.

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2 If you choose to browse, a Browse dialog similar to this will display:



- ◆ To select a file, click on its icon.
- To open the file, click Open or doubleclick the icon.
- ◆ To see a more detailed image, click Preview.
- To return to the File Open dialog, click Cancel.
- 3 If you choose to preview, a Preview dialog similar to this will display.



- ◆ Click Open to open the file.
- ◆ Click Cancel to return to the Browse dialog.

4 When you click **Open** while viewing the **File Open**, **Browse** or **Preview** dialog, the selected file opens immediately if your current Design Page is not edited.

If the current Design Page is edited, you will be asked whether you want to save the changes.



- ◆ Click **Yes** to save the Design Page first.
- ◆ Click **No** to abandon the Design Page.
- Click Cancel to do anything else (for example, modifying the current Design Page or saving it with another file name).

Note that parts of the embroidery picture which are not within the Design Page cannot be previewed.

See also: "New" on page 131, "Save" on page 137, "Save As" on page 137

### Import – from File

**Purpose:** Imports embroidery patterns from embroidery cards (\*.pec), original cards (\*.pes)

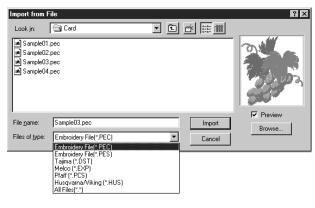
and files created in the Tajima (\*.dst), Melco (\*.exp), Pfaff (\*.pcs) and Husqvarna (\*.hus) formats and adds them to your current Design Page.

Shortcut key: (F8)

#### Operation:

1 Click File, then Import, then from File.

An Import from File dialog similar to this displays.



- Select the drive, the folder and the file name.
- Be sure to select the right type of file extension in Files of Type.
- If the Preview check box is checked, the content of the selected file displays in the preview window.
- Click Open or double-click the file name to display the file on the Design Page.
- You can also select the drive and folder only and then click **Browse** to display a graphic contents of the currently selected file format.
- ◆ Click Cancel to exit.

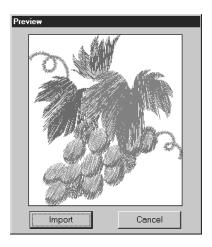
Note that \*.pec files are files installed from a card. See "Reading from an Embroidery Card" on page 180.

2 If you choose to browse, a Browse dialog similar to this will display:



- ◆ To select a file, click on its icon.
- ◆ To open the file, click Import or double-click the icon.
- To see a more detailed image, click Preview.
- ◆ To return to the Import from File dialog, click Cancel.

3 If you choose to preview, a Preview dialog similar to this will display.



- ◆ Click **Import** to import the file.
- ◆ Click Cancel to return to the Browse dialog.

When you import a file, its contents are added to your current Design Page. You can repeat the operation and assemble your Design Page from a library of patterns that you have created.

#### NOTE:

When importing patterns from other makers, make sure to choose a pattern whose size will fit in the Design Page.

When converted for this application, the colors of patterns imported from dst (Tajima), exp (Melco), pcs (Pfaff) and Hus (Husqvarna) files may be slightly changed. When this happens, you can change the color with the Sew – Change colors of a stitch object function.

4 When importing some **pec** files from embroidery cards, the **Select Import size** dialog will display. If this happens, select the import size by clicking the appropriate radio button, then click **OK** to import the data.

See also: "Save As" on page 137

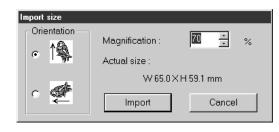
### Import – from Design Center

**Purpose:** Imports an embroidery pattern from Design Center.

Shortcut key: F7

#### Operation:

- ① Start Design Center and open the file that you want to import into Layout & Editing.
- 2 Click File, then Import, then from Design Center. The Import size dialog displays.



- Select the magnification factor. You can type it or increase/decrease it using the arrow buttons.
- The application will not allow you to magnify the embroidery data to a size such that it would not fit in your Design Page area.
  - Select the Orientation by clicking the **Orienta- tion** radio button opposite the appropriate icon.
- Click Import to import the data.
- Click Cancel if you want to exit the function.

3 If you are not running Design Center or if it does not contain a pem file, the first or the second message will appear.





◆ Click **oK** to exit.

See also: "Design Center" on page 55

### Template Open

**Purpose:** Opens a background bitmap image that can be used as a guide to draw a new

embroidery pattern.

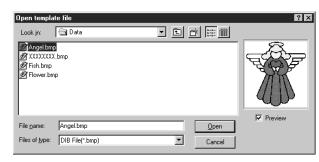
**Shortcut key:** No shortcut key for this function

**Toolbar:** No button for this function

Operation:

1 Click File, then Template Open.

A Open template file dialog similar to this will display.



- Select the drive, the folder and the file name.
  - If the Preview check box is checked, the contents of the selected file displays in the Preview window.
- ◆ Click Open to open the file.
- Double-clicking the file name will also open the file and close the dialog.
- Click Cancel if you want to exit the function.
- This application can handle only uncompressed bitmap files.
- The file name extension must be "bmp".
- Your Design Page will display the bitmap image:



- The bitmap image cannot be directly embroidered. You can only use it as a guide to draw an embroidery pattern (using broken lines, curves or manual punching).
- Design Center allows you to make an embroidery pattern from a bitmap image with more precision.

See also: "Template-On, Faded, Off" on page 171

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#### Save

**Purpose:** Saves your Design Page on the disk as a Version 3.0 file (default).

NOTE:

Saved \*.pes files can be opened with Version 1.x or 2.x of this software when you select "PES Version 1.0 or 2.x" as the File Type. Note however that some informa-

tion could be lost.

Shortcut key: Ctrl + S

#### Operation:

1 Click File, then Save.

If the file already exists on the disk (the file has been saved at least once), the file is saved immediately.

2 If the file name is still **Untitled** or if, for any other reason, the file cannot be found on the disk, the application automatically switches to **Save As**.

See also: "Save As" on page 137, "Write to Card" on page 138

### Save As

**Purpose:** Saves your Design Page on the disk under a new file name.

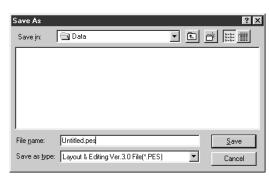
**Shortcut key:** No shortcut key for this function

**Toolbar:** No button for this function

### Operation:

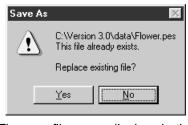
1 Click File, then Save As.

A File Save As dialog similar to this will display.



- Select the drive, the folder and type the file name.
- Click OK to save.
- ◆ Click Cancel to exit.

2 If the new file name already exists, this message will appear:



- Click Yes to overwrite.
- Click No if you do not want to overwrite the existing file.

The new file name displays in the title bar of the Layout & Editing window.

**See also:** "Save" on page 137, "Write to Card" on page 138

### Export

**Purpose:** Exports the data shown in the Design Page as a file of a different format (dst, hus,

exp, and pcs).

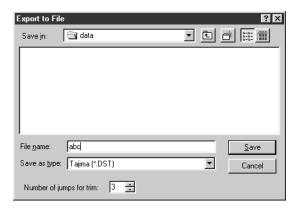
**Shortcut key:** No shortcut key for this function

**Toolbar:** No button for this function

### Operation:

1 Click File, then Export.

A dialog like the one shown below appears.



- Select the drive and the folder, and then type the file name.
- Select the format (DST,EXP,PCS,HUS) in which you wish to export the file.
  - ◆ Number of jumps for trim: With the DST format, jump codes are used to indicate when the thread must be cut in order to change the thread color. Since the number of codes differ depending on the sewing machine being used, this setting allows you to select the appropriate value. (This setting can only be specified if the DST format is selected.)

#### NOTE:

Some patterns installed from a card cannot be exported.

#### Write to Card

**Purpose:** Writes your Design Page to an original card.

Shortcut key: (F4)

#### Operation:

1 Click File, then Write to Card. This message will display.



- If the card is not brand new, make sure that you want to erase the data that is already stored on the card and click OK.
  - Click Cancel to exit.

If the card module is not connected, this message displays.



- ◆ Correct the problem, then click Retry.
  - Click Cancel to exit.

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2 If you click **OK**, your current embroidery patterns will be saved on the card. A **Now writing** message displays while the data is being transferred to the card.

After a while, the following message will appear.



◆ Click **OK**.

**See also:** "Save" on page 137, "Save As" on page 137

### Print Setup

**Purpose:** Allows you to change the printing settings for previewed embroideries.

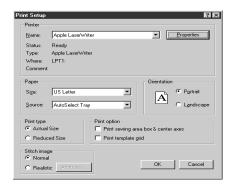
**Shortcut key:** No shortcut key for this function

**Toolbar:** No button for this function

Operation:

① Click File, then Print Setup.

A **Print Setup** dialog similar to this will display.



- Click Properties to set the printer properties.
- Choose the appropriate Paper and Orientation settings.
- Choose the Print type and Print Option of the preview image and sewing information.
- ◆ Click **OK** to confirm the settings.
- ◆ Click Cancel to exit.

You can choose to print the preview image on one or two pages for one pattern or one hoop position.

#### The **Actual Size** will print two pages:

The image in its actual size on the first and the dimensions of the embroidery, the sewing color order and the needle count on the second page. The file name is printed on both pages.

The **Reduced Size** will print a reduced illustration of the image and all the above mentioned items on a single page.

#### NOTE:

If a Design Page for an extra-large embroidery frame (130  $\times$  300 mm, 300  $\times$  130 mm, 100  $\times$  172 mm, or 172  $\times$  100 mm) is selected, each Print type will print the whole image of Design Page on the first page.

And in this case, the number of pages depends on your design.

#### Print sewing area box & center axes

Select **Print sewing area box & center axes** to print black lines to indicate the sewing area (see "Select Sewing Area") and the center axes for the data.

This setting is only available when **Actual Size** is selected.

#### Print template grid

Select **Print template grid** to print green lines to represent the grid printed on the embroidery sheet included with the embroidery frame.

#### NOTE:

The size of the grid that is printed may be slightly different from the grid printed on the embroidery sheets for some embroidering machines.

If **Stitch Image** is set to **Normal**, the pattern is printed as lines and dots.

If **Stitch Image** is set to **Realistic**, the pattern is printed as a realistic image.

#### NOTE:

To change the settings of a realistic image, click **Attributes**.

See "Realistic Preview Attribute Setting" for more details.

These attributes are stored separately from the Realistic Preview attributes

See also: "Realistic Preview Attribute Setting" on page 171

#### Print Preview

Purpose: Allows you to preview the contents of the Design Page and check the sewing color

order, the dimensions and the needle count before printing.

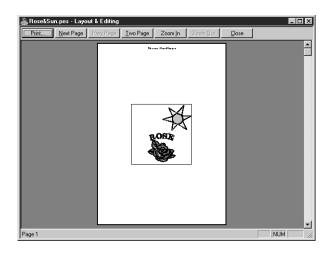
**Shortcut key:** No shortcut key for this function

**Toolbar:** No button for this function

#### Operation:

1 Click File, then Print Preview.

If **Actual Size** was selected in the **Print Setup** dialog, the **Layout & Editing** window changes to the following.



The buttons that are selectable display in black and the other ones are grayed.

- Click Print to open the Print dialog and print.
- Click Next Page to display the next page.
- Click Two Page to display both pages at the same time.
- Click Zoom In and Zoom Out to enlarge and reduce the page.
- Click Close to return to the Design Page.
- 2 Enlarge the image either by clicking **Zoom In** or by clicking directly on the point of the page that you want to enlarge. Scroll the page as needed to view its hidden parts.

When you reach the limit of the zooming in function, the **Zoom In** button becomes inactive and the **Zoom Out** button becomes active. Click the **Zoom Out** button or the image to reduce its size again. One of the zooming function is always active.

3 Click **Next Page** to display page 2 containing the sewing information (not available if **Reduced Size** was selected in the **Print Setup** dialog).

This button becomes inactive and the Prev Page button becomes active.

4 Click Prev Page to go back to the display of the embroidery (not available if Reduced Size was selected in the Print Setup dialog).

This button becomes inactive and the Next Page button becomes active.

6 Click Two Page to display both pages at the same time. The Two Page button is replaced by the One Page button.

Click **One Page** to display one page at a time. The **Next Page** and **Prev Page** become inactive. **NOTF**:

If you need to view an image in detail, displaying only one page at a time allows you to enlarge it more.

If you want to check the sewing information for individual objects composing your embroidery, you can do that by clicking Option – Design Property.

See also: "Print Setup" above, "Print" below and "Design Property" on page 174

#### Print

**Purpose:** Prints your Design Page and some sewing information.

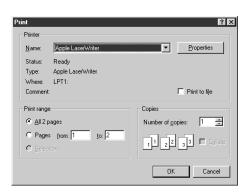
Shortcut key: Ctrl + P

**Toolbar:** No button for this function

Operation:

Click File, then Print.

A Print dialog similar to this will display.



- Make the necessary setting.
- Click **OK** to print.
- Click Cancel to exit.
- Click Properties to change the default settings of the printer.
- 2 Follow the instructions in the Windows manuals and in the manuals of your printer for the next operations.

Depending on the **Print Type** setting, one or two pages will be printed for one pattern or one hoop position.

# Printing a Design Page for an extra-large embroidery frame (130 $\times$ 300 mm, 300 $\times$ 130 mm, 100 $\times$ 172 mm, or 172 $\times$ 100 mm)

If a Design Page for an extra-large embroidery frame is selected, each section of the design is printed on a separate page.

- If a  $130 \times 300$  mm or  $300 \times 130$  mm Design Page is selected, the design is divided into sections of  $130 \times 180$  mm or  $180 \times 130$  mm and each section is printed on a separate page.
- If a 100 x 172 mm or 172 x 100 mm Design Page is selected, the design is divided into sections of 100 x 100 mm and each section is printed on a separate page.

Alphabetic Index

### Printing a Design Page for an extra-large embroidery frame

When **Actual Size** is selected:

- lacktriangledata Prints the entire Design Page at actual size (However, for a 130  $\times$  300 mm or 300  $\times$  130 mm Design Page, a reduced image of the Design Page is printed.)
- 2 Prints the pattern in the section of the Design Page that would be sewn with the first embroidery frame installation position
- 3 Prints the color order for the pattern in the section of the Design Page that would be sewn with the first embroidery frame installation position
- Prints the pattern in the section of the Design Page that would be sewn with the second embroidery frame installation position
- **6** Prints the color order for the pattern in the section of the Design Page that would be sewn with the second embroidery frame installation position

ha aquina da

This continues until all of the sewing data is printed.

When Reduced Size is selected:

- lacktriangled Prints the entire Design Page at actual size (However, for a 130  $\times$  300 mm or 300  $\times$  130 mm Design Page, a reduced image of the Design Page is printed.)
- 2 Prints the pattern and its color order for the section of the Design Page that would be sewn with the first embroidery frame installation position
- 3 Prints the pattern and its color order for the section of the Design Page that would be sewn with the second embroidery frame installation position

:

This continues until all of the sewing data is printed.

#### NOTE:

In addition, when the File Print Preview command is selected, each section of the pattern is displayed as mentioned above.

#### Exit

**Purpose:** Exits the application.

Shortcut key: (Alt) + (F4)

**Toolbar:** No button for this function

#### Operation:

- 1 Click File, then Exit.

  If the current Design Page is not edited, the application closes immediately.
- 2 If the current Design Page is edited, you will be asked whether you want to save the changes. See "Open" on page 132.

See also: "Save" on page 137, "Save As" on page 137

File Utility

### **Edit Menu**

The functions of the Edit menu perform simple actions on selected patterns, such as cutting and pasting.

Undo		Undoes the last operation.	page 143
Redo		Cancels the effect of the last Undo.	page 143
Cut		Removes the selected pattern(s) from the screen while saving a copy in the clipboard.	page 144
Сору		Saves the selected pattern(s) in the clipboard without removing them from the screen.	page 144
Duplicate		Makes a copy of the selected pattern(s).	page 144
Paste		Pastes the contents of the clipboard on the screen.	page 144
Delete		Removes the selected pattern(s) from the screen without saving them in the clipboard.	page 145
Mirror Horizontal		Flips the selected pattern(s) up/down.	page 145
Willion	Vertical	Flips the selected pattern(s) left/right.	page 145
Rotate		Allows you to manually rotate the selected pattern(s) by an arbitrary angle.	page 146
Numerical	Size	Resizes the selected pattern numerically.	page 147
Setting	Rotate	Rotates the selected pattern numerically.	page 148
Align	•	Aligns the selected patterns as indicated.	page 148
Sew First		Sends the selected patterns behind every other patterns. Allows you to set the sewing order of many patterns.	page 150
Sew Last		Brings the selected patterns in the foreground of every other patterns. Allows you to set the sewing order of many patterns.	page 150
Select All		Selects all the patterns.	page 151

### Undo

**Purpose:** Undoes the last operation.

Shortcut key: Ctrl + Z

Toolbar: DI STO BTO STORE STO

### Operation:

1 Click Edit, then Undo.

The last operation is automatically undone. For example, if you have mistakenly deleted an pattern, this function will make it reappear.

See also: "Redo"

#### Redo

**Purpose:** Cancels the effect of the last **Undo**.

Shortcut key: Ctrl + A

### Operation:

### 1 Click Edit, then Redo.

The effect of the last **Undo** is cancelled. For example, you have used **Undo** just after drawing a circle. **Undo** deleted the circle. Using **Redo** will make the circle reappear.

See also: "Undo"

File Utility

Alphabetic Index

Purpose: Removes the selected pattern(s) from the screen while saving a copy in the clip-

board.

Shortcut key: (Ctrl) + (X)

Toolbar: 

Operation:

Cut

Select one or more patterns.

2 Click Edit, then Cut.

The selected patterns disappear. Since they are saved in the clipboard, you can paste them back using Edit - Paste.

See also: "Copy", "Paste" and "Delete" below

Copy

Purpose: Saves the selected pattern(s) in the clipboard without removing them from the

screen.

Shortcut key: (Ctrl) + (C)

Toolbar:

Operation:

Select one or more patterns.

2 Click Edit, then Copy.

The patterns are copied into the clipboard and are ready to be pasted.

See also: "Cut", "Duplicate" and "Paste"

Duplicate

Purpose: Makes a copy of the selected pattern(s).

Shortcut key: (Ctrl) + (D)

Toolbar: No button for this function

Operation:

Select one or more patterns.

Click Edit, then Duplicate.

A copy of the patterns appears on the screen.

See also: "Copy" and "Paste"

Paste

Purpose: Pastes the contents of the clipboard on the screen.

Shortcut key: (Ctrl) + (V)

Toolbar:  Operation:

Click Edit, then Paste.

The patterns saved in the clipboard (using **Cut** or **Copy**) are pasted on the screen.

**See also:** "Cut", "Copy" and "Duplicate" above

Delete

Purpose: Removes the selected pattern(s) from the screen without saving them in the clip-

board.

Shortcut key: Delete

**Toolbar:** No button for this function

Operation:

Select one or more patterns.

2 Click Edit, then Delete.

The selected pattern(s) are removed from the screen. Since they are not saved in the clipboard, the only way to make them reappear is to use **Edit – Undo**.

See also: "Undo" on page 143, "Cut" on page 144

#### Mirror – Horizontal

**Purpose:** Flips the selected pattern(s) up/down.

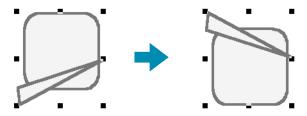
Shortcut key: Ctrl + (H)

Operation:

Select one or more patterns.

2 Click Edit, then Mirror, then Horizontal.

The selected pattern(s) are replaced by their horizontal mirror image (top and bottom inverted). Two successive applications of this function restores the original image.



Note that some patterns installed from a card cannot be flipped.

**See also:** "Mirror – Vertical" on page 145, "Rotate" on page 146

### Mirror – Vertical

**Purpose:** Flips the selected pattern(s) left/right.

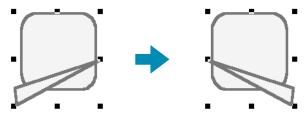
Shortcut key: Ctrl + J

Operation:

1 Select one or more patterns.

2 Click Edit, then Mirror, then Vertical.

The selected pattern(s) are replaced by their vertical mirror image (left and right inverted). Two successive applications of this function restores the original image.



Note that some patterns installed from a card cannot be flipped.

See also: "Mirror – Horizontal" on page 145, "Rotate" on page 146

### Rotate

**Purpose:** Allows you to manually rotate the selected pattern(s) by an arbitrary angle.

Shortcut key: Ctrl + Y

### Operation:

1 Select one or more patterns.



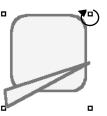
2 Click Edit, then Rotate.

The shape of the handles changes.



**3** Move the cursor to one of the handles.

The shape of the cursor changes.



Programmable Stich Creator

4 Drag the handle to rotate the pattern the desired angle and release the mouse button.



A simple dragging of the mouse will rotate the pattern by 1° increments. Pressing the **Shift** key will rotate it by 15° increments.

See also: "Mirror – Horizontal" on page 145, "Mirror – Vertical" on page 145

### Numerical Setting-Size

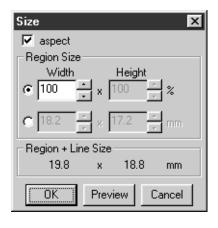
**Purpose:** Resizes the selected pattern numerically.

**Shortcut key:** No shortcut key for this function

**Toolbar:** No button for this function

Operation:

- 1 Select one or more patterns.
- Click Edit, then Numerical Setting, then Size. The Size dialog appears.



- To change the width and height proportionally, check aspect.
- Select the units (% or mm/inch) for the width and height.
- The width and height can be entered by either typing in a value or clicking the arrows to select the desired value. Select 100% to leave the pattern unchanged.

If **aspect** is selected, changing one dimension automatically changes the other so the proportion of the width and height remains unchanged.

The specified size is for the region. If the pattern has a line, the size of the entire pattern can be checked under **Region + Line Size** at the bottom of the dialog.

- Click OK to confirm.
- Click Preview to view the pattern at the new size in the Design Page.
- Click Cancel to exit without making any changes.

#### NOTE:

The maximum value that can be entered is the largest value that will not allow the pattern to

File Utility

exceed the size of the Design Page. The minimum value is 1 mm (0.04 inch).

### Numerical Setting-Rotate

**Purpose:** Rotates the selected pattern numerically.

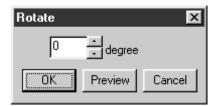
**Shortcut key:** No shortcut key for this function

**Toolbar:** No button for this function

Operation:

Select one or more patterns.

2 Click Edit, then Numerical Setting, then Rotate. The Rotate dialog appears.



- The desired rotation angle can be entered by either typing in a value or clicking the arrows to select the desired value. Select **0** degree to leave the pattern unchanged.
- ◆ Click **OK** to confirm.
- ◆ Click **Preview** to view the pattern rotated the specified angle in the Design Page.
- Click Cancel to exit without making any changes.

#### NOTE:

The range of values that can be entered is between 0 and 359 degrees, in 1degree increments.

### Align

**Purpose:** Aligns the selected patterns as indicated.

**Shortcut key:** No shortcut key for this function

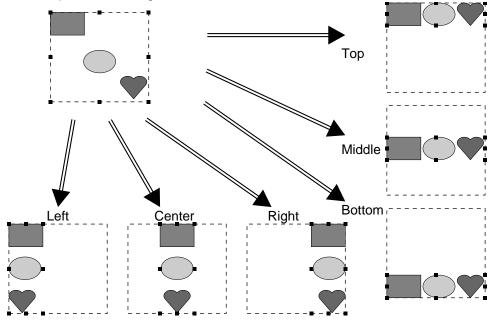
**Toolbar:** No button for this function

Operation:

1 Select the patterns.

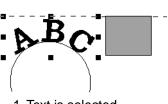
2 Click Edit, then Align, then Left, Center, Right, Top, Middle, or Bottom, depending on how you wish to align the patterns.

The selected patterns are aligned as shown below.

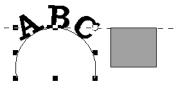


### Text on a path:

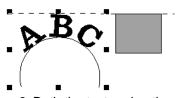
Text on a path can be aligned by selecting just the text, just the path, or both the text and the path. Each selected patterns is aligned on its outline.



1. Text is selected



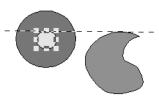
2. Path is selected



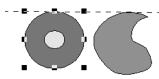
3. Both the text and path are selected

### Objects set for hole sewing:

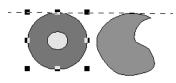
If just the inside of a pattern is selected, the pattern is aligned on the outline of the inside area. If the outside of the pattern is also selected, the pattern is aligned on the outline of the outside area.



 Inside area is selected



2. Outside area is selected



Both the inside and outside areas are selected

#### Sew First

**Purpose:** Sends the selected patterns behind every other patterns. Allows you to set the

sewing order of many patterns.

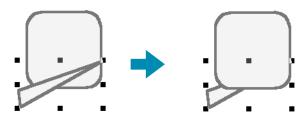
Shortcut key: (Ctrl) + (B)

### Operation:

Select one or more patterns.

2 Click Edit, then Sew First.

The parts of the selected pattern that are overlapping other patterns are now invisible.



To use this function to set the sewing order of, say three overlapping patterns, apply **Sew First** to pattern 1, then pattern 2, then pattern 3.

The patterns will be sewn in order 3, 2, 1.

See also: "Sew Last" on page 150, "Check Sewing Order" on page 163

#### Sew Last

**Purpose:** Brings the selected patterns in the foreground of every other patterns. Allows you

to set the sewing order of many patterns.

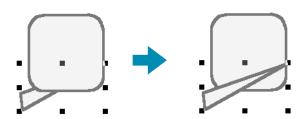
Shortcut key: Ctrl + F

### Operation:

1 Select one or more patterns.

2 Click Edit, then Sew Last.

The parts of the selected pattern that are overlapped by other patterns are now visible.



To use this function to set the sewing order of, say three overlapping patterns, apply **Sew Last** to pattern 3, then pattern 2, then pattern 1.

The patterns will be sewn in order 3, 2, 1.

See also: "Sew First" above and "Check Sewing Order" on page 163

Select All

**Purpose:** Selects all the patterns.

**Shortcut key:** No shortcut key for this function

**Toolbar:** No button for this function

Operation:

1 Make sure that the cursor is in Selection mode.

2 Click Edit, then Select All.

### **Text Menu**

The functions of the Text menu performs actions on text patterns, such as fitting text to a curved path.

Edit Text Letters	Allows you to edit an entered text.	page 153
Text Attribute Setting	Allows for precise control of character attributes.	page 153
Fit Text to Path Setting	Fits a line of text along a path.	page 154
Release Text from Path	Release the text from the path.	page 156
Transform Text	Applies a preset transformation to text.	page 156
Clear Transformation	Restores the original shape of the text.	page 157
True Type Font Attribute Setting	Sets the attributes, such as the style, for TrueType fonts that are converted to embroidery data.	page 158

#### Edit Text Letters

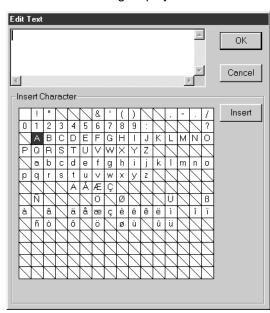
**Purpose:** Allows you to edit an entered text.

Shortcut key: Ctrl + L

**Toolbar:** No button for this function

### Operation:

- ① Select the text you want to edit. You cannot edit more than one text pattern at a time. If you select more than one text pattern, this function is not available.
- 2 Click Text, then Edit Text Letters. The Edit Text dialog displays.



- ◆ The selected text is highlighted in the text field.
- ◆ Edit your text as needed by deleting unwanted characters and typing or entering other characters by clicking them one at the time on the character table, then clicking Insert or simply by double-clicking them. Press the Enter key to enter new lines of text.
- Click OK to confirm.
- ◆ Click Cancel to exit.
- If a character that you entered is not available for the selected font, a warning message displays. Click OK in that dialog to close it and to return to the Edit Text dialog where you can correct your text.

### NOTE:

If text converted from a TrueType font is selected, the list of characters displayed is for the font of the first letter of the text.

If text made from multiple TrueType fonts is selected, the list of characters displayed is for the font of the first letter of the text.

See also: "Entering text" on page 111

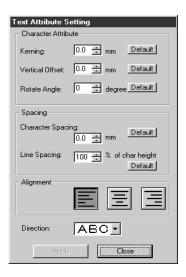
### Text Attribute Setting

**Purpose:** Allows for precise control of character attributes.

Shortcut key: Ctrl + K

### Operation:

- 1 Select one or more text patterns.
- Click Text, then Text Attribute Setting. The Text Attribute Setting dialog displays.



- Enter the desired values for each setting.
- ◆ To restore the default value of an individual setting, click its **Default** button.
- Click Apply to confirm the effect of the setting.
- Click Close to remove the dialog.

Kerning	Sets the spacing between individual characters. Range: -100 ~ 100 mm (-3.94 ~ 3.94	0.0 mm Abcdef	5.0 mm (between "A" and "b")  A bcdef
	inches) Default: 0	Abcuei	A beder
	Moves the text vertically.	0.0 mm	2.0 mm
Vertical Offset	Range: -100 ~ 100 mm (-3.94 ~ 3.94 inches) Default: 0	Abcdef	Abcdef
	Rotates the characters.	0 degree	20 degree
Rotate angle	Range: 0 ~ 359 degrees Default: 0	Abcdef	Abcdef
	Sets the spacing between all charac-	0.0 mm	2.0 mm
Character Spacing	ters. Range: -100 ~ 100 mm (-3.94 ~ 3.94 inches) Default: 0	Abcdef	Abcdef

Line Spacing	Sets the spacing between lines in percents of the character height. Range: 0 – 1000% Default: 0	A b c d e f g h i j k i	Abcdef ghijkl
Alignment	Aligns several lines of text to the left, center or right.	Center  Abcdef ghijkl	Right  Abcdef ghijkl
Direction	Specifies whether characters will be positioned horizontally or vertically.	A B C	Vertical A B C

#### Note:

The vertical letters will be displayed in a vertical manner on design page.

#### Note:

Both Kerning and Character Spacing set the spacing between characters. The difference is that Character Spacing is always applied to the entire text pattern, while Kerning can be applied to individual characters. If you apply Kerning to the entire text pattern, it works exactly like Character Spacing. See "Selecting characters on a text pattern" on page 109 for more details about selecting individual characters in a text pattern.

See also: "Fit Text to Path Setting" and "Transform Text" on page 156

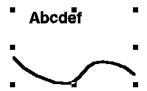
### Fit Text to Path Setting

**Purpose:** Fits a line of text along a path.

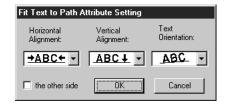
Shortcut key: Ctrl + T

### Operation:

1 Select a line of text and a path.



2 Click Text, then Fit Text to Path Setting.



- Select Horizontal and Vertical Alignment and Text Orientation.
- Check the other side if you want the characters to be reversed.
- Click OK to confirm the setting.
- ◆ Click Cancel to exit.

		,
Horizontal Alignment	Sets the distribution of characters along the path.	ABOCT & March About Abou
Vertical Alignment	Sets the distance between the text and the path.	ABOLE 1 ABOLE
Text Orientation	Sets the orientation of the characters relative to the path.	ABC + b C d d
The other side	Reverses the characters.	☐ the other side

**See also:** "Release Text from Path" below

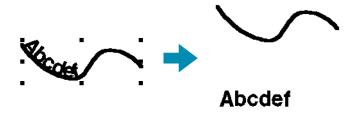
#### Release Text from Path

**Purpose:** Release the text from the path.

Shortcut key: Ctrl + Q

Operation:

- 1 Select a text fitted to a path.
- 2 Click Text, then Release Text from Path.



**See also:** "Fit Text to Path Setting" above

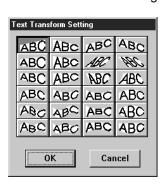
### Transform Text

**Purpose:** Applies a preset transformation to text.

Shortcut key: F2

Operation:

- Select a line of text.
- 2 Click Text, then Transform Text.
  The Text Transform Setting dialog displays.



- Click on the desired transformation.
- ◆ Click **oK** or double-click to apply the transformation.
- ◆ Click Cancel to exit.



3 If necessary, set the level of transformation. See "Transform level" on page 123.

See also: "Clear Transformation" below

Design Center

Clear Transformation

**Purpose:** Restores the original shape of the text.

Shortcut key: (F3)

Operation:

1 Select transformed text.

2 Click Text, then Clear Transformation.



**See also:** "Transform Text" on page 156

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## TrueType Font Attribute Setting

Purpose: Sets the attributes, such as the style, for TrueType fonts that are converted to

embroidery data.

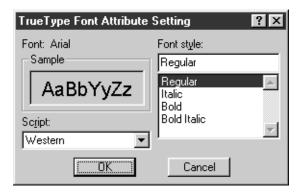
No shortcut key for this function Shortcut key:

No button for this function Toolbar:

Operation:

1 Click Text, then TrueType Font Attribute Setting.

A dialog similar to the one shown below appears.



If any characters converted from a True-Type font is selected, the attributes for the selected characters are displayed.

- The Font attribute indicates the name of the selected font.
- ◆ The Sample box shows a sample of the font with the selected attributes.
- ◆ Use Font Style to select the desired font style.
- ◆ Use **Script** to select the desired character set for the font.
- Click OK to set the attributes and close the dialog. Any entered TrueType font text will be converted to embroidery data with the font's new attribute settings. In addition, selecting text data converted from a TrueType font creates embroidery data based on the new attribute settings.
- Click Cancel to close the dialog without changing any settings.

For details on entering text, refer to "Text Input Mode" (page 111).

#### NOTE:

The settings for Font Style and Script may differ depending on the TrueType font that is selected. NOTE:

If text created from multiple TrueType fonts is selected, this dialog cannot be displayed. In addition, if text of the same font but different font styles or scripts is selected, this dialog appears with the attribute settings for the first letter in the text.

In either case mentioned above, selecting only one character from within text displays a dialog containing only that character's attributes.

"Text Input Mode" on page 111, "Setting Text Attributes" on page 121 See also:

### Sew Menu

The Sew menu allows you to control the way each pattern will be sewn.

Sewing Attribute Setting	Sets the sewing attributes of the regions and the outlines of a pattern.	page 159
Check Sewing Order	Allows you to check the sewing order of patterns.	page 163
Set hole sewing	Sets a pair of patterns for hole sewing (to avoid sewing twice at the same place when a pattern covers another one).	page 164
Cancel hole sewing	Cancels hole sewing setting.	page 165
Stitch to Block	Converts imported stitch patterns into blocks (manual punching data), allowing you to set sewing attributes and to keep the stitching quality when scaling.	page 165
Change colors of a stitch object	Changes the color of imported stitch data.	page 166
Select Sewing Area	Sets the sewing area	page 167
Optimize hoop change	Optimizes the sewing order of patterns in a Design Page for extra-large embroidery frames (100 × 172 mm, 172 × 100 mm, 130 × 300 mm, or 300 × 130 mm)	page 168

### Sewing Attribute Setting

**Purpose:** Sets the sewing attributes of the regions and the outlines of a pattern.

Shortcut key: Ctrl + W

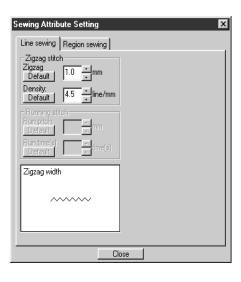
Toolbar: 口戶 引昂 日旬 2 2 3 6 8 8 8 7 8 8 8 8 8 9 8 8 9 8 8 9 8 8 9 8 8 9 8 8 9 8 8 9 8 8 9 8 8 9 8 8 9 8 8 9 8 9 8

### Operation:

- ① Select one of the buttons of the Tool Box used to draw or select an existing pattern.
- 2 Click Sew, then Sewing Attribute Setting.

The **Sewing Attribute Setting** dialog displays the **Line sewing** tab, except when you selected a text pattern or the Text entering mode, where it displays the **Region sewing** tab.

You can only change the settings of the stitch selected in the **Line sew type** selector of the Sewing Attributes bar. The other stitch settings display in gray.



- Enter the desired values for each setting either by clicking on the arrows or by typing the value directly in the edit box window.
- A preview image of the stitch reflects your setting changes each time you click on an arrow, except for the Run time(s) setting.
- ◆ To restore the default value of an individual setting, click its **Default** button.
- Click Apply to confirm the settings.
- ◆ Click Close to exit.

### Line sewing attributes

### Zigzag stitch

ZigZag width	Sets the width of the zigzag stitch (when <b>Zigzag Stitch</b> is selected for the outline). Range: 1 ~ 10 mm (0.04 ~ 0.39 inch) Default: 2 mm (0.08 inch)
Density	Sets the number of lines per inch (when <b>Zigzag Stitch</b> is selected for the outline).  Range: 1 ~ 7 lines per mm (25 ~ 178 lines per inch)  Default: 4.5 lines per mm (114 lines per inch)

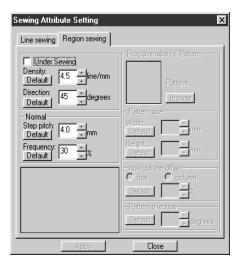
### Running stitch

Run pitch	Sets the pitch of the line sewing (when <b>Running Stitch</b> is selected for the outline). Range: 1 ~ 10 mm (0.04 ~ 0.39 inch)  Default: 2 mm (0.08 inch)
Run times	Sets the number of times the border will be sewn (when Running Stitch is selected for the outline).  Range: 1 ~ 5  Default: 1

To set the region sewing attributes, click the **Region sewing** tab. You can only change the settings of the stitch selected in the **Region sew type** selector of the Sewing Attributes bar. The other stitch settings display in gray. When you select a text pattern or the Text entering mode, the **Region sewing** tab displays automatically.

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When the Fill Stitch is selected in the of the Region sew type selector, the Sewing Attribute Setting displays like this.



- Enter the desired values for each setting either by clicking on the arrows or by typing the value directly in the edit box window.
- When you click a selector, a preview image of that setting displays.
   The image will change and reflect your setting changes each time you click an arrow.
- ◆ To restore the default value of an individual setting, click its **Default** button.
- ◆ Click Apply to confirm the settings.
- ◆ Click Close to exit.

### Region sewing attributes

### Fill stitch, Satin stitch and Programmed fill stitch:

Under sewing	Sets under sewing on/off. Try to use Under sewing for wide areas, in order to prevent shrinking during stitching. Depending on the shape of the region, however, it may not be possible to make this setting.	
Density	Sets the number of lines per mm. Range: 1 ~ 7 lines per mm (25 ~ 178 lines per inch) Default: 4.5 lines per mm (114 lines per inch)	
Direction	Sets the direction of the stitch.  Range: 0 ~ 179 degrees  Default: 45 degrees  135°  179°  90°  45°  0°	

#### Fill stitch only:

Step pitch	Sets the pitch of the steps. Range: 1 ~ 10 mm (0.04 ~ 0.39 inch) Default: 4 mm (0.16 inch)	Step pitch + WW
Frequency	Sets the spacial frequency steps. Range: 0 ~ 99% Default: 30%	0%

Note the difference between Fill and Satin stitches: Fill stitch WW Satin stitch

### Programmed fill stitch only:

This stitch type is created by the Programmable Stitch Creator application. The stitch pattern selected will fill a region in a tile-like manner.

Browse		Opens the <b>Browse</b> dialog. Select the directory of the folder containing the <b>pas</b> file you want to open. Scroll through the available stitch patterns and double-click the desired pattern or click OK to select the pattern.
Pattern size	Width	Sets the stitch pattern width. Range: 5 ~ 10 mm (0.20 ~ 0.39 inch) Default: 7.5 mm (0.30 inch)
Pattern Size	Height	Sets the stitch pattern height. Range: 5 ~ 10 (0.20 ~ 0.39 inch) Default: 7.5 mm (0.30 inch)
Row/column offset	Row	Sets the position of the stitch pattern rows when the row radio button is clicked.  Range: 0 ~ 99%  Default: 0 %
	Column	Sets the position of the stitch pattern columns when the column radio button is clicked. Range: 0 ~ 99% Default: 0 %
Pattern direction		Allows you to rotate the angle of the stitch patterns. Range: 0 ~ 359 degrees Default: 0 degrees

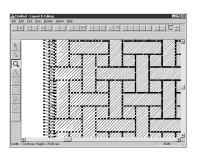
### Note on the programmed fill stitch:

When setting the stitch and pattern directions of a programmed stitch, take note that whenever the stitch and pattern direction settings cause the stitch to be sewn in the same direction as a line in a stitch pattern, that line will not be sewn.

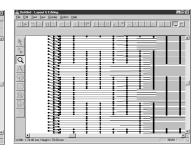
Use the preview function of your application to view exactly how your stitch pattern will be sewn and set the stitch direction and pattern direction according to the selected stitch or to the effect that you want to produce. To get an even better view, make test samples of different settings.

### Example of a programmed fill stitch

Ex. 1: Ex. 2: Example 3: Stitch direction = Default: 45° Stitch direction: 90° Stitch direction: 0°







See also: "Preview" on page 170, "Programmable Stitch Creator" on page 191

Check Sewing Order

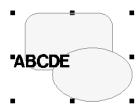
**Purpose:** Allows you to check the sewing order of patterns.

Shortcut key: (F10)

Toolbar: DI 电图 BI DI DI TOOLBAR: DI TOOLB

Operation:

Select a set of patterns.



2 Click Sew, then Check Sewing Order. The Check Sewing Order dialog displays.



- ◆ Click to see the pattern that will be sewn first.
- ◆ Click → to see the pattern that will be sewn last.
- ◆ Click → or ← to see the patterns that will be sewn between the first and last.
- At the beginning, all patterns are grayed. As you click , , , or , or , the corresponding pattern will appear in normal color.
- Click Close to exit.

If you want to modify the sewing order, use Edit – Sew First or Edit – Sew Last.

See also: "Sew First" and "Sew Last" on page 150 and "Set hole sewing" below

### Set hole sewing

**Purpose:** Sets a pair of patterns for hole sewing (to avoid sewing twice at the same place

when a pattern covers another one).

**Shortcut key:** No shortcut key for this function

**Toolbar:** No button for this function

### Operation:

1 Select a pair of patterns, for example, a rectangle included in another rectangle.

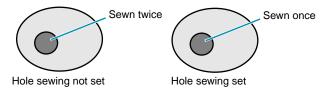
2 Click Sew, then Set Hole Sewing.

This message will display.



◆ Click **oK** to remove the message.

3 Once a pair of patterns has been set for hole sewing, they are grouped and will move together if you try to move one of the patterns. To change their relative position, you will have to cancel hole sewing first.

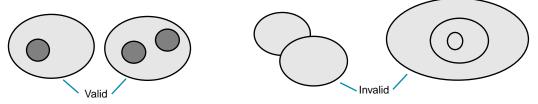


If the selected pair cannot be set for hole sewing, this message displays.



◆ Click **oK** to remove the message.

For a pair to be valid, one of the pattern must be completely enclosed within the other pattern of the pair.



Note that you can see better what the hole sewing setting does by previewing the pair before and after setting the pair for hole sewing (see "Preview" on page 170).

See also: "Cancel hole sewing"

### Cancel hole sewing

Purpose: Cancels hole sewing setting.

Shortcut key: No shortcut key for this function

**Toolbar:** No button for this function

Operation:

1 Select a pattern that has been set for hole sewing.

2 Click Sew, then Cancel Hole Sewing.

The pair of patterns can now be moved independently.

See also: "Set hole sewing" on page 164

#### Stitch to Block

Purpose: Converts imported stitch patterns into blocks (manual punching data), allowing

you to set sewing attributes and to keep the stitching quality when scaling.

**Shortcut key:** No shortcut key for this function

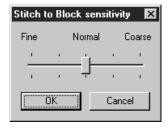
**Toolbar:** No button for this function

Operation:

Select the imported stitch data opened in the Design Page to which you want to apply the setting to.

2 Click Sew, then Stitch to Block.

This dialog displays.



- Select the sensitivity by dragging the slider.
- The normal setting should provide satisfactory results in most cases, but depending on the complexity of a pattern, you may need to select a coarser or a finer stitch density.
- ◆ Click **oK** to confirm.
- ◆ Click Cancel to exit.

#### NOTE:

Applying this function may affect the content of some patterns.

You may further modify the pattern if needed with the help of the Point Edit Mode.

3 After applying this function, the Sewing Attributes bar displays as follows:



You can select and modify the sewing settings of the blocks of the same color.

To do this, select a block whose color or sewing settings you want to change. All the blocks of that color are selected and the block color and stitch type display in the Sewing Attributes bar.

#### NOTE:

The sewing setting changes apply globally to the blocks of the same color.

When you enlarge or reduce a converted pattern with the selection cursor, the number of stitches sewn automatically adapt to the new size of the pattern, allowing you to keep the original embroidery quality.



Without Stitch to Block



With Stitch to block

#### NOTE:

The selected color blocks can be moved or scaled individually, therefore, if you want to move the whole pattern once it has been converted, be sure to select the whole pattern.

See also: "Sewing Attribute Setting" on page 159, "Scaling patterns" on page 104 and "Point

Edit Mode" on page 106

### Change colors of a stitch object

**Purpose:** Changes the color of imported stitch data.

**Shortcut key:** No shortcut key for this function

**Toolbar:** No button for this function

Operation:

- 1 Select the pattern.
- ② Click Sew, then Change colors of a stitch object.
  The Change colors dialog appears, listing and displaying the colors used for the selected pattern.



- Click the color you want to change.
- Click the Change Colors button.
- Select the desired color in the Region Thread Color dialog which displays. The new color displays in the Change Colors dialog and the pattern displays the new setting. Repeat this procedure for each color you want to change.
- Click OK to confirm.
- ◆ Click Cancel to exit.

See also: "Color" on page 127

### Select Sewing Area

**Purpose:** Sets the sewing area

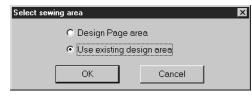
**Shortcut key:** No shortcut key for this function

**Toolbar:** No button for this function

Operation:

1 Click Sew, then Select Sewing Area.

This dialog displays.



- Select Design Page area or Use existing design area.
- ◆ Click **ok** to confirm.
- ◆ Click Cancel to exit.

With **Design Page area**, the patterns will be sewn so that the place where the needle is when you start coincides with the center of your Design Page.

#### NOTE:

When **Design Page** area is selected, the dimension of the pattern matches the size of the Design Page, therefore reducing the ability to move a pattern around the layout screen of your embroidery machine.

With **Use existing design area**, the patterns will be sewn so that the place the needle is when you start coincides with the center of the actual patterns.

#### NOTE:

When **Use existing design area** is selected, the actual pattern size is maintained, therefore allowing greater mobility when using the layout function of your embroidery machine.



Design Page (on your screen)

Sewing area = Design Page

Sewing area = Use existing design

See also: "Design Page Property" on page 175

### Optimize hoop change

**Purpose:** Optimizes the sewing order of patterns in a Design Page for extra-large embroi-

dery frames ( $100 \times 172 \text{ mm}$ ,  $172 \times 100 \text{ mm}$ ,  $130 \times 300 \text{ mm}$ , or  $300 \times 130 \text{ mm}$ )

**Shortcut key:** No shortcut key for this function

**Toolbar:** No button for this function

#### Operation:

### 1 Click Sew, then Optimize hoop change.

This setting can be turned on or off. A check mark appears when this setting is turned on; no check mark is displayed when this setting is turned off.

When the **Optimize hoop change** setting is turned on:

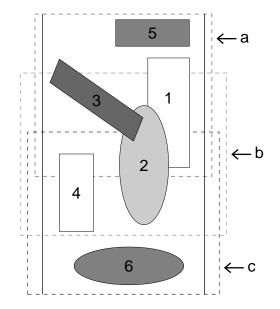
The sewing order that you have set is optimized to reduce the number of times that the embroidery frame installation position is changed.

For the example shown at the right, the sewing order is: a (pattern 1)  $\rightarrow$  b (pattern 2)  $\rightarrow$  a (patterns 3 & 5)  $\rightarrow$  c (patterns 4 & 6)

When the **Optimize hoop change** setting is turned off:

Each pattern is sewn according to the sewing order that you have set. Therefore, since the number of times for changing the embroidery frame installation position is not optimized, it may be changed more often than if it was optimized.

For the example shown at the right, the sewing order is: a (pattern 1)  $\rightarrow$  b (pattern 2)  $\rightarrow$  a (pattern 3)  $\rightarrow$  c (pattern 4)  $\rightarrow$  a (pattern 5)  $\rightarrow$  c (pattern 6)



### NOTE:

Depending on the pattern, turning on the Optimize hoop change setting may reduce the number of times that the embroidery frame installation position is changed. More importantly, it reduces the chances of the embroidery not being sewn correctly or the fabric becoming wrinkled when the embroidery frame installation position is changed too often.

### **Display Menu**

The Display menu lets you modify the appearance of the screen.

Grid Setup	Controls the display and characteristics of the grid.	page 169
Preview	Displays a realistic image of how the patterns will look like when embroidered.	page 170
Refresh Window	Updates the screen.	page 170
Realistic Preview	Displays a realistic image of how either selected patterns or all patterns will look after being embroidered.	page 170
Realistic Preview Attribute Setting	Sets the preview attributes for Realistic Preview.	page 171
Template-On, Faded, Off	Turns on or off the template bitmap image or displays it faded.	page 171
Toolbar	Turns the Toolbar on/off.	page 172
Status Bar	Turns the Status bar on/off.	page 172

### Grid Setup

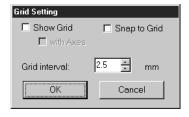
**Purpose:** Controls the display and characteristics of the grid.

**Shortcut key:** No shortcut key for this function

**Toolbar:** No button for this function

Operation:

Click Display, then Grid.
The Grid Setting dialog appears.



- Check Snap to Grid when you want to use the grid for aligning patterns or creating patterns of the same size. The cursor will move by the amount set in Grid Interval.
- The snap feature works whether or not the grid is displayed.
- Check Show Grid to see the grid on your Design Page.
- ◆ Type in the Grid Interval to set both horizontal and vertical steps of the grid. Grid interval range: 1 ~ 10 mm (0,04 ~ 0,39 inch)
- Check with Axes to turn the horizontal and vertical lines of the grid on.
- When the Show grid check box is checked and the with Axes check box is not checked, only the intersection points of the grid will be displayed.

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Click **OK** to confirm.

Click Cancel to exit.

See also: "Select System Unit" on page 176

#### Preview

Purpose: Displays a realistic image of how the patterns will look like when embroidered.

(**F9**) Shortcut key:

Toolbar: 

### Operation:

See also:

1 Click Display, then Preview.

A preview of your embroidery patterns will appear.

You cannot make any settings while previewing a pattern.

"Check Sewing Order" on page 163

2 To return to the normal, working screen, click Display, then Preview again or press the (Esc)

Refresh Window

**Purpose:** Updates the screen.

Shortcut kev: Ctrl) + (R)

Toolbar: No button for this function

Operation:

Click Display, then Refresh Window.

Use this function when the screen does not seem to respond correctly, for example, when residue of a pattern remains on the screen after the pattern has been cut.

#### Realistic Preview

Displays a realistic image of how either selected patterns or all patterns will look Purpose:

after being embroidered.

(Shift) + (F9) Shortcut key:

Toolbar: 

#### Operation:

1 Click Display, then Realistic Preview.

The patterns on the Design Page are displayed realistically according to the settings in the **Realis**tic Preview Attribute Setting dialog.

2 To return to the normal working screen, click **Display**, then **Realistic Preview** again or press the (Esc) key.

#### NOTE:

The Realistic Preview function cannot display a beautiful preview of the pattern if the monitor is set to 256 colors or less. The monitor should be set to at least 16-bit High Color (65536 colors).

See also: Realistic Preview Attribute Setting

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### ■ Realistic Preview Attribute Setting

**Purpose:** Sets the preview attributes for Realistic Preview.

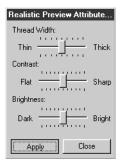
**Shortcut key:** No shortcut key for this function

**Toolbar:** No button for this function

Operation:

1 Click Display, then Realistic Preview Attribute Setting.

The following dialog appears.



- Use Thread Width to set how wide the thread will appear.
- ◆ Use **Contrast** to set the contrast.
- Use Brightness to set how bright the display is.
- Click Apply to display a Realistic Preview of the patterns with the new settings.
- ◆ Click Close to exit.

NOTE:

This dialog can only be displayed while **Realistic Preview** appears in the menu. Clicking **Apply** saves the selected settings.

See also: "Realistic Preview" on page 170

### ■ Template-On, Faded, Off

**Purpose:** Turns on or off the template bitmap image or displays it faded.

Shortcut key: F6

**Toolbar:** No button for this function

Operation:

- ① Click **Display**, then **Template**, then select the desired setting.
- ◆ Click **On** to display the original bitmap image.
- Click Faded to fade the bitmap image before displaying it.
- Click Off to hide the bitmap image.

This function is not available if a template bitmap image is not open.

Press the shortcut key to switch between displaying the template bitmap image to displaying it faded to hiding the image.

**See also:** "Template Open" on page 136

Layout & Editing

Quik Reference

Toolbar

**Purpose:** Turns the Toolbar on/off.

**Shortcut key:** No shortcut key for this function

**Toolbar:** No button for this function

Operation:

1 Click **Display**, then **Toolbar**. The Toolbar will be toggled on/off.

See also: "Status Bar"

Status Bar

**Purpose:** Turns the Status bar on/off.

**Shortcut key:** No shortcut key for this function

**Toolbar:** No button for this function

Operation:

Click Display, then Status bar. The Status bar will be toggled on/off.

See also: "Toolbar"

# **Option Menu**

The **Option** menu provides additional options.

Design Center	Starts Design Center and displays its window up front.	page 173
Programmable Stitch Creator	Starts Programmable Stitch Creator and displays its window up front.	page 173
File Utility	Starts File Utility and displays its window up front.	page 173
Design Property	Opens a dialog containing sewing information for the selected pattern(s).	page 174
Design Page Property	Allows you to change the size of the Design Page and the color of the Design Page and the Design Page background.	page 175
Select System Unit	Allows you to select the unit of length (mm or inch).	page 176

# Design Center

**Purpose:** Starts Design Center and displays its window up front.

Shortcut key: F5

**Toolbar:** No button for this function

Operation:

1 Click Option, then Design Center.

Design Center starts if its window wasn't open and if it was open, the window comes up front. After creating a pattern with the Design Center Application, you can import it in Design Page of Layout & Editing.

See also: "Import – from Design Center" on page 135

# Programmable Stitch Creator

**Purpose:** Starts Programmable Stitch Creator and displays its window up front.

**Shortcut key:** No shortcut key for this function

**Toolbar:** No button for this function

Operation:

1 Click Option, then Programmable Stitch Creator.

Programmable Stitch Creator starts if its window wasn't open and if it was open, the window comes up front.

# File Utility

**Purpose:** Starts File Utility and displays its window up front.

**Shortcut key:** No shortcut key for this function

**Toolbar:** No button for this function

# Operation:

Click Option, then File Utility.
File Utility starts if its window wasn't open and if it was open, the window comes up front.

# Design Property

**Purpose:** Opens a dialog containing sewing information for the selected pattern(s).

**Shortcut key:** No shortcut key for this function

**Toolbar:** No button for this function

Operation:

Click Option, then Design Property. The Design Property dialog displays.



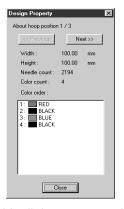
Click Close to close the window.

This dialog allows you to quickly check the dimensions, the needle count, the color count and color order of the selected pattern(s).

You can select and check the properties of individual objects composing your embroidery pattern.

# If a Design Page for an extra-large embroidery frame (130 $\times$ 300 mm, 300 $\times$ 130 mm, 100 $\times$ 172 mm, or 172 $\times$ 100 mm) is selected:

If no object in the Design Page is selected, the following Design Property dialog displays.



- The first line of the dialog shows the position in the embroidery frame installation order for the currently displayed design.
- Only the designs that would be sewn at the current position in the embroidery frame installation order appear in the Design Page. In addition, the embroidering area for the current frame installation position is outlined in red.
- Click Previous or Next to display information for the designs at other positions in the embroidery frame installation order.

When this dialog appears, the Design Page is automatically enlarged or shrunk to fit in the entire window.

The **Previous** button cannot be clicked when the design corresponding to the first embroidery installation position is already displayed. In addition, the **Next** button cannot be clicked when the design corresponding to the last embroidery installation position is already displayed.

### NOTE:

If an object is larger than the embroidering area or if an object is positioned so that it does not completely fit within an embroidering area, the error message "Please change the object size or position." is displayed instead of this dialog. After the object causing the error appears selected, change its size or position. (If more than one object causes the error message to appear, the objects will appear selected in the sewing order.)

# Design Page Property

**Purpose:** Allows you to change the size of the Design Page and the color of the Design

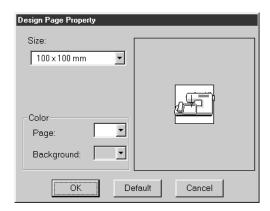
Page and the Design Page background.

**Shortcut key:** No shortcut key for this function

**Toolbar:** No button for this function

### Operation:

Click Option, then Design Page Property. The Design Page Property dialog displays.



- Select the size by clicking the appropriate radio button.
  - Select the Page color or the Background color by clicking its selector arrow, then by clicking the color.
- The preview area allows you to view the setting changes. The sewing machine picture shows the direction of the Design Page (frame) on the machine.
- Click OK to confirm.
- Click Default to go back to the default setting.
- ◆ Click Cancel to exit.

The Design Page sizes  $130 \times 300$  mm,  $300 \times 130$  mm,  $100 \times 172$  mm, and  $172 \times 100$  mm, indicated by "\*", are used to embroider extra-large designs using a special embroidery frame attached to the sewing machine at three installation positions. Check that that you have the extra-large embroidery frame and that these extra-large designs can be embroidered using your sewing machine.

See also: "Select System Unit" on page 176

Select System Unit

Purpose: Allows you to select the unit of length (mm or inch).

Shortcut key: No shortcut key for this function

No button for this function Toolbar:

Operation:

1 Click Option, then Select System Unit. This dialog will appear.



- Select the unit (mm or inch).
- Click OK to confirm.
- Click Cancel to exit.

See also: "Grid Setup" on page 169, "Design Page Property" on page 175

# Help Menu

The **Help** menu gives you access to the on-screen help information system.

Contents	Starts the on-screen help information for this application.	page 177
Using	Explains how to use the on-screen help system.	page 177
About Layout & Editing	Gives information about the version of this application.	page 177

### Contents

**Purpose:** Starts the on-screen help information for this application.

Shortcut key: (F1)

**Toolbar:** No button for this function

Operation:

1 Click Help, then Contents.

A table of contents of the on-screen help information displays.

Refer to your Windows manual for the next operation.

See also: "Using", "About Layout & Editing" below

# Using

**Purpose:** Explains how to use the on-screen help system.

**Shortcut key:** No shortcut key for this function

**Toolbar:** No button for this function

1 Click Help, then Using.

The Windows standard explanation about how to use the help system appears.

2 Refer to your Windows manual for the next operation.

See also: "Contents", "About Layout & Editing"

# About Layout & Editing

**Purpose:** Gives information about the version of this application.

**Shortcut key:** No shortcut key for this function

**Toolbar:** No button for this function

Operation:

1 Click Help, then About Layout & Editing.

A dialog will display.

2 Click OK to remove it.

See also: "Contents" and "Using" above

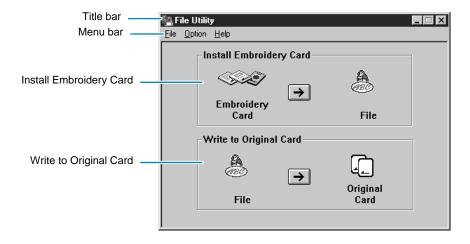
Programmable Stich Creator

# **File Utility**

File Utility has two functions:

- ◆ Install Embroidery Card: Transfers embroidery data from an embroidery card to your hard disk or to another disk.
- Write to Original Card: Transfers embroidery data files created with Layout & Editing to an original card

# **The Screen**



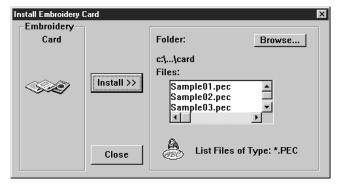
Menu bar	Gives access to the functions.
Install Embroidery Card	Click the arrow button in this area to start the card reading process.
Write to Original Card	Click the arrow button in this area to start the card writing process.

# Reading from an Embroidery Card

# **Operation**

To transfer embroidery data from an embroidery card to your hard disk, proceed as follows:

Click the arrow button in the Install Embroidery Card area. An Install Embroidery Card dialog similar to this displays.



- ◆ The current folder and the \*.PEC files it contains are shown.
- ◆ Click **Browse** to change the folder.
- Click Install to install the data in the current folder.
- Click Close to remove the dialog from the screen.

2 If you click Browse, this dialog will display.



- Select the drive and folder. If necessary, type a new folder name.
- Click OK to confirm the new folder and return to the Install Embroidery Card dialog. (If the folder is new, a message will inform you that the folder is going to be created. Click OK to remove the message.)
- Click Cancel to return to the Install Embroidery Card dialog without changing the folder.
- 3 When you click **Install** on the **Install Embroidery Card** dialog, you are asked to enter a prefix for the file.

The resulting file name will be made of the characters that you input here (the prefix), followed with the three digits. The file name extension **PEC** will be added automatically.



- ◆ Type a name for the file.
- Click **OK** to start.
- Click Cancel to return to the Install Embroidery Card.

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4 If you don't type anything, this message will appear.



 Click **OK** to remove the message and return to the previous dialog.

**6** When you click **OK** on the **Prefix Setting** dialog with a valid prefix, this message displays.



- Check that the card module is connected and powered, and that a card is inserted. If necessary, connect the module and its power adaptor, and insert a card.
- Click OK to start installing.
- ◆ Click Cancel to exit.

Note that it is better to switch your computer off before connecting any peripheral.

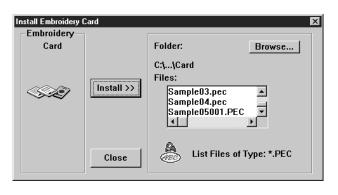
- 6 If the card module is ready and no problems are detected, the application starts transferring the data from the card to the specified folder. The application informs you that the transfer is in progress.
- Wait until the transfer is completed.

  When the transfer is complete, the Installation is completed message displays.



◆ Click **ok** to remove the message.

8 The Install Embroidery Card dialog reappears, showing the new file.



- Check that the new file appears in the Files box.
- Click Close to remove the dialog from the screen.

# **Error Messages**

The application is able to detect problems that may occur before or during data transfer. Here is the complete list of error messages that may appear.

1 If the card module is not correctly connected:



- Correct the connection between the card module and the computer.
   Check that the module is powered.
- Click Retry to start reading.
- Click Cancel to exit.

2 If there is no card in the card module:



- Insert a Embroidery card in the module.
- Click Retry to start reading.
- ◆ Click Cancel to exit.
- If an incorrect or defective card is inserted:



- Insert another Embroidery card in the module.
- Click Retry to start reading.
- ◆ Click Cancel to exit.
- 4 If a defect is detected after reading has already started, or if you remove the card while reading is in progress, reading will stop and this message will display:



◆ Click **ok** to remove the message.

You should never remove a card while the red indicator light in on. If you do so, you will have to restart the operation from the start.

If you did not remove the card and the above message appears, then the card is defective or was not well inserted. Reinsert the card correctly and try reading again. If you get the same message, then the card is defective. Try with another card.

**5** If the data cable between the card module and the computer or the power adaptor is disconnected while reading is in progress, reading will stop and this message will display:



◆ Click **OK** to remove the message.

Check all the connections and correct as necessary, then try again from the start. If the connections are correct, then a cable may be defective. Consult your dealer.

**6** When every COM port is already in use for other peripherals, the following message appears.



 Click Cancel to remove the message.

Disconnect a peripheral connected to your computer and try again.

Quik Reference

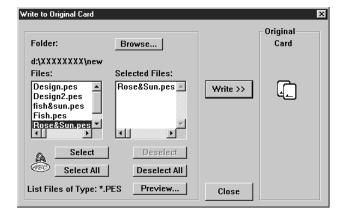
# **Writing to an Original Card**

**IMPORTANT**: If you are using our company's scanner system, use two separate sets of original cards: one for the scanner system, and one for this system.

# Operation

To transfer an embroidery file that you have created or edited with Layout & Editing to an original card, proceed as follows:

Click the arrow button in the Write to Original Card area.
The application will first check that there is no problem with the card module and the card inserted.
If no problem is detected, a Write to Original Card dialog similar to this displays.



 As you select a file to be transferred to the card, its file name moves to the list on the right. However, if the available space on the card is not sufficient, the file is not selected, and this message appears:



The same message appears when you click Select All and there is not enough space on the card. Click OK to remove the message and try with other file(s).

- ◆ The current folder and the \*.PES files it contains are shown.
- Click a file name in the left file box, then click Select. You can repeat this step to select more than one file.
- Click Select All to select all files in the folder.
- To deselect a file, click its file name in the right file box, then click Deselect.
- To deselect all selected files, click Deselect All.
- Click a file name, then click Preview to see the embroidery image. Click OK to remove the preview.
- ◆ Click **Browse** to change the folder.
- Click Write to write the selected file(s) to the card.
- Click Close to remove the dialog from the screen.

Programmable Stich Creator

2 If you click Browse, this dialog will display.



- Select the drive and folder.
- Click OK to confirm the new folder and return to the Write to Original Card dialog.
- Click Cancel to return to the Write to Original Card dialog without changing the folder.
- 3 When you click Write on the Write to Original Card dialog, you are asked whether you want to delete existing data on the card.

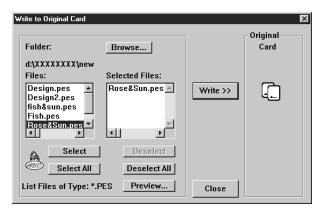


- Click OK if you want to write the selected files and delete old data from the card.
- If you do not want to delete old files on the card, click Cancel to exit.
- The application starts transferring the selected files to the card and informs you that the transfer is in progress.
- Wait until the transfer is completed.
  When the transfer is completed, the Writing is Complete message displays.



Click **OK** to remove the message.

6 The Write to Original Card dialog reappears.



 Click Close to remove the dialog from the screen, or select other files to transfer.

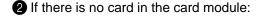
# **Error Messages**

The application is able to detect problems that may occur before or during data transfer. Here is the complete list of error messages that may appear.

1 If the card module is not correctly connected:



- Correct the connection between the card module and the computer.
   Check that the module is powered.
  - Click Retry to start reading.
- Click Cancel to exit.





- Insert an Original card in the module.
- ◆ Click Retry to start reading.
- ◆ Click Cancel to exit.

3 If a read-only card is inserted:



- Insert an Original card in the module.
- ◆ Click Retry to start reading.
- ◆ Click Cancel to exit.
- 4 If an incorrect or defective card is inserted:



- Insert an Original card in the module.
  - Click Retry to start reading.
- Click Cancel to exit.
- **6** If a defect is detected after writing has already started, or if you remove the card while writing is in progress, writing will stop and this message will display:



◆ Click **OK** to remove the message.

Layout & Editing

Quik Reference

You should never remove a card while the red indicator light in on. If you do so, you will have to restart the operation from the start.

If you did not remove the card and the above message appears, then the card is defective or was not well inserted. Reinsert the card correctly and try writing again. If you get the same message, then the card is defective. Try with another card.

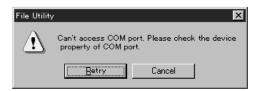
6 If the data cable between the card module and the computer or the power adaptor is disconnected while writing is in progress, writing will stop and this message will display:



Click **OK** to remove the message.

Check all the connections and correct as necessary, then try again from the start. If the connections are correct, then a cable may be defective. Consult your dealer.

• When every COM port is already in use for other peripherals, the following message appears.



 Click Cancel to remove the message.

Disconnect a peripheral connected to your computer and try again.

# **Using the Menu Bar**

# File Menu

The File menu is used only to exit this application.

# Exit

**Purpose:** Exits the application.

Shortcut key: Alt + F4

Operation:

1 Click File, then Exit.

The application closes immediately.

# **Option Menu**

The Option menu is used only to set up the serial port.

# Serial Port Setting

**Purpose:** Allows you to set up the computer serial port connection to the card writer module.

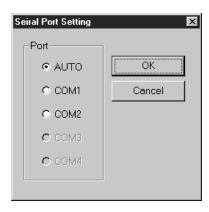
**Shortcut key:** No shortcut key for this function

Operation:

1 Click Option, then Serial Port Setting.

A **Serial Port Setting** dialog similar to this one displays.

The number of **COM** ports selectable depends on your computer settings.



- When the default setting AUTO is selected, the COM port to which the card writer module is connected is automatically recognized.
- ◆ When COM 1 ~ 4 is selected, the data is sent to the selected COM port. Check the port to which your card writer module is connected, then select the appropriate COM port.
- ◆ Click OK to confirm.
- Click Cancel to exit.

# Help Menu

The **Help** menu gives you access to the on-screen help information system.

Contents	Starts the on-screen help information for this application.	page 189
Using	Explains how to use the on-screen help system.	page 189
About File Utility	Gives information about the version of this application.	page 189

## Contents

**Purpose:** Starts the on-screen help information for this application.

Shortcut key: F1

Operation:

1 Click Help, then Contents.

A table of contents of the on-screen help information displays.

2 Refer to your Windows manual for the next operation.

See also: "Using" on page 189, "About File Utility" on page 189

# Using

**Purpose:** Explains how to use the on-screen help system.

**Shortcut key:** No shortcut key for this function

Operation:

1 Click Help, then Using.

The Windows standard explanation about how to use the help system appears.

Refer to your Windows manual for the next operation.

See also: "Contents" on page 189, "About File Utility" on page 189

# About File Utility

**Purpose:** Gives information about the version of this application.

**Shortcut key:** No shortcut key for this function

Operation:

1 Click Help, then About File Utility.

A dialog will display.

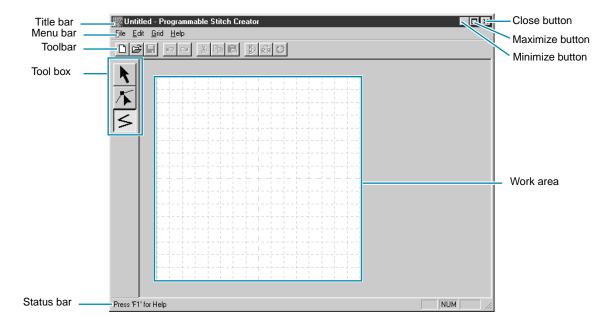
2 Click **OK** to remove it.

**See also:** "Contents" on page 189, "Using" on page 189

# **Programmable Stitch Creator**

This application allows you to design your own fill stitch patterns, which you can set as sewing attributes to enclosed regions of patterns, both in Design Center and Layout & Editing. The fill stitch patterns fill the regions in a tile-like manner, resulting in particularly decorative embroidery patterns. You may create your own fill stitch patterns or use the many stitches delivered with this application with or without editing them.

# **The Screen**



Menu bar	Gives access to the functions.
Toolbar	Shortcut for the menu functions.
Tool box	Used to select and create fill stitch patterns.
Status bar	Provides short information.
Work area	The actual part of the work area that can be saved and sewn.

# **Using the Tool Box**

	Sets the cursor in select mode.	page 192
7	Cursor shape:	
	Sets the cursor in point edit mode.	page 193
	Cursor shape: \( \sum_{\cup} \)	
5	Sets the cursor in line drawing mode. When you start the application, the drawing mode is active by default.	page 194
	Cursor shape: — with a miniature of the tool button	

# **Selection Mode**

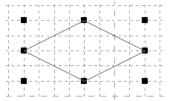
The cursor selection mode is used to select one or more lines. Once a line is selected, you can move it, scale it, and change its direction by rotating it or inverting it.

# Selecting lines

1 Click on the Tool Box. The shape of the cursor changes to

Click the line that you want to select.

You know that the line is selected when handles are displayed.



### Note

Apattern will not be selected if you do not click on a part of it.

- 3 To deselect the line, select another one, click on an empty space or click another button of the Tool Box.
- 4 To select an additional line, click that line while holding the Shift key down.

### NOTE:

You can also select lines by dragging the cursor across the Work Area. As you drag, a dotted rectangle appears. When you release the mouse button, all lines that are completely contained in that rectangle will be selected.

If other lines that you did not want selected are selected, click on an empty space to deselect all lines, and then start again.

# Moving lines

Move the cursor over a selected pattern or group of selected patterns.

The shape of the cursor will change to

2 You can now drag the pattern to another location.

# Scaling lines

Move the cursor over one of the handles of a selected line or group of selected lines.

The shape of the cursor will change to  $\longleftrightarrow$ ,  $\updownarrow$ , or  $\nearrow$ , depending on the handle the cursor is on.

- 2 Drag the handle in the direction of the arrow to scale the pattern.
  - is for scaling the width.
  - is for scaling the height.
  - and are for scaling both dimensions at the same time.

# **Point Edit Mode**

The point edit mode allows you to move, insert and delete points of a stitch pattern.

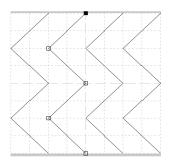
The points you move or insert are positioned at the intersection of the horizontal and vertical lines of the grid. So, regardless on where you drag a point to or insert a point on the line, it will automatically position itself at the nearest intersection.

Depending on the stitch you want to create, you may need to select a different working grid.

For more information on the grids and on how to select them, refer to "Grid Menu" on page 201.

# Moving points

- 2 Click the broken line that you want to edit. You can only select one broken line at a time. The existing points of the selected broken line are marked with small empty squares.



3 Click the point that you want to move.

To select an additional point, click that point while holding the **Shift** key down. You may also click and drag the cursor over the area which includes all the points that you want to select. When you release the mouse, the points included in that area are selected.

The selected points are marked by filled squares.

### NOTE:

If you click on the line instead of a square, a new point is inserted.

4 Drag the cursor to a new position. All the selected points move in the same direction.

# Inserting points

- 2 Click the broken line that you want to edit. You can only select one broken line at a time. The existing points of the selected broken line are marked with small empty squares.
- 3 Click where you want to insert a new point on the broken line. A new point appears, marked by a filled black square. The new point can be edited.

# Deleting points

- ① Click / on the Tool Box. The shape of the cursor changes to \ when you move it over the Work page.
- 2 Click the broken line that you want to edit. You can only select one broken line at a time. The existing points of the broken line are marked with small empty squares.
- 3 Click the point that you want to delete. To select an additional point, click that point while holding the (Shift) key down. The selected points are marked by filled squares.
- 4 Press the (**Delete**) key to remove the selected points from the outline. If the point is composed of a single line, the line is deleted.

# **Line Drawing Mode**

The line drawing mode allows you to draw broken lines to create your stitch pattern. A broken line is made of one or more contiguous straight lines, the ending point of a straight line being the starting point of the next one.

The horizontal and vertical lines that you draw on the work area always follow the grid. The points you create by clicking the mouse are inserted at the intersection of the horizontal and vertical lines of the grid, enabling you to draw diagonal lines as well. So, regardless of where you click, a point will automatically be inserted at the nearest intersection.

Depending on the stitch pattern you want to draw, you may need to select a different working grid. For more information on the grids and on how to select them, refer to "Grid Menu" on page 201.

# Drawing a broken line

- 1 Click | on the Tool Box. When you move it over the Work page, the cursor changes to \_\_\_ and is displayed together with a small image of the tool button.
- 2 Move the mouse to the starting point of your broken line and click.
- Move the mouse to the ending point of the first straight line and click again. NOTE:

You can always remove the last-entered point by clicking the mouse's right button.

A Repeat until you arrive at the last end point. At that point double-click. Repeat the whole procedure if you want to include other broken lines in a stitch pattern.

# **Using the Menu Bar**

# File Menu

The File menu allows you to execute commands regarding the files, such as opening and saving.

New	Creates a new blank work area.	page 195
Open	Opens a previously saved programmed stitch file.	page 195
Save	Saves your work area on the disk.	page 196
Save As	Saves the current stitch pattern under a new file name.	page 197
Exit	Exits the application.	page 197

### New

**Purpose:** Creates a new blank work area.

Shortcut key: Ctrl + N

Toolbar: □ 多日 ドロ メ 国 B B B B D

# Operation:

- Click File, then New.

  If the current work area is not edited, a new blank work area appears immediately.
- ② If the current work area is edited, you will be asked whether you want to save the changes, for example:



- ◆ Click **Yes** to save the work area first.
- ◆ Click No to abandon the work area.
- Click Cancel to do anything else (for example, modify the current work area or saving it with another file name).

A new blank work area appears.

**See also:** "Open", "Save" and "Save As" in this section

# Open

**Purpose:** Opens a previously saved programmed stitch file.

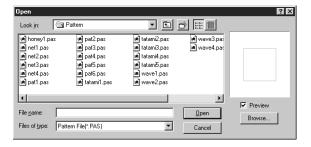
Shortcut key: Ctrl + O

Toolbar:

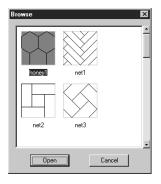
### Operation:

1 Click File, then Open.

A Open dialog similar to this will display.



- Select the drive, the folder and the file name.
- Be sure the folder you select contains pas files.
- If the Preview check box is checked, the content of the selected file displays in the preview window.
- Click Open or double-click the file name to open the file in the work area.
- Click Browse to preview all the available pas files in the selected folder.
- Click Cancel to exit.
- When you click Browse, the Browse dialog opens.



- Browse through the files with the help of the scroll bar.
- Select a stitch pattern by clicking on it.
   The selected pattern is highlighted.
- Double-click the selected pattern or click Open to open the file and to close both the Open and the Browse dialogs.
- Click Cancel to go back to the Open dialog.
- 3 The selected file opens immediately if your current work area is not edited.
  If the current work area is edited, you will be asked whether you want to save the changes.



- Click Yes to save the work area first.
- Click No to abandon the work area.
- Click Cancel to do anything else (for example, modifying the current work area or saving it with another file name).
- 4 The edited stitch pattern is now saved and the selected file opens.

**See also:** "New", "Save" and "Save As" in this section

Save

**Purpose:** Saves your work area on the disk.

Shortcut key: Ctrl + S

Toolbar:

# Operation:

Click File, then Save.
If the file already exists on the disk (the file has been saved at least once), the file is saved immediately.

If the file name is still Untitled, if it is one of the "Read Only" pas files which come with this application or if, for any other reason, the file cannot be found on the disk, the application automatically switches to Save As.

See also: "Save As" below

# Save As

**Purpose:** Saves the current stitch pattern under a new file name.

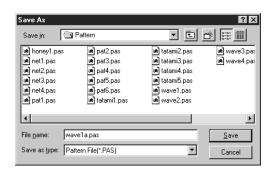
**Shortcut key:** No shortcut key for this function

**Toolbar:** No button for this function

Operation:

1 Click File, then Save As.

A Save As dialog similar to this will display.



- Select the drive, the folder and type the file name.
- The correct extension is automatically set.
- Click Save to save.
- ◆ Click Cancel to exit.

2 If the new file name already exists, this dialog will appear.



- Click Yes to overwrite.
- Click No if you do not want to overwrite the existing file.

See also: "Save" above

### Exit

**Purpose:** Exits the application.

Shortcut key: Alt + F4

**Toolbar:** No button for this function

# Operation:

1 Click File, then Exit.

If the current stitch pattern is not edited, the application closes immediately.

② If the current stitch pattern is edited, you will be asked whether you want to save the changes.

See also: "Save" and "Save As" above

# **Edit Menu**

Undo		Undoes the last operation.	page 198
Redo		Cancels the effect of the last Undo.	page 198
Cut		Removes the selected line(s) from the screen while saving a copy in the clipboard.	page 199
Сору		Saves the selected line(s) in the clipboard without removing them from the screen.	page 199
Duplicate		Makes a copy of the selected line(s).	page 199
Paste		Pastes the lines of the clipboard on the screen.	page 199
Delete		Removes the selected line(s) from the screen without saving them in the clipboard.	page 200
Mirror	Holizontal	Flips the selected line(s) up/down.	page 200
	Vertical	Flips the selected line(s) left/right.	page 200
Rotate		Allows you to manually rotate the selected line(s) by an arbitrary angle.	page 200

### Undo

**Purpose:** Undoes the last operation.

Shortcut key: Ctrl + Z

Toolbar:

### Operation:

# 1 Click Edit, then Undo.

The last operation is automatically undone. For example, if you have mistakenly deleted a line, this function will make it reappear.

See also: "Redo" below

# Redo

**Purpose:** Cancels the effect of the last Undo.

Shortcut key: (Ctrl) + (A)

Toolbar:

# Operation:

# 1 Click Edit, then Redo.

The effect of the last **Undo** is canceled. For example, if you have used **Undo** just after drawing a line, the line is deleted. Using **Redo** will make the line reappear.

See also: "Undo" above

Cut

**Purpose:** Removes the selected line(s) from the screen while saving a copy in the clipboard.

Shortcut key: Ctrl + X

Toolbar: DG日 100 X 100 B 160 V

Operation:

Select one or more lines.

2 Click Edit, then Cut.

The selected lines disappear. Since they are saved in the clipboard, you can paste them back using **Edit - Paste**.

See also: "Copy", "Paste", "Delete" below

Copy

**Purpose:** Saves the selected line(s) in the clipboard without removing them from the screen.

Shortcut key: Ctrl + C

Operation:

Select one or more lines.

2 Click Edit, then Copy.

The patterns are copied into the clipboard and are ready to be pasted.

**See also:** "Cut" above, "Duplicate" and "Paste" below

Duplicate

**Purpose:** Makes a copy of the selected line(s).

Shortcut key: Ctrl + D

**Toolbar:** No button for this function

Operation:

1 Select one or more lines.

2 Click Edit, then Duplicate.

A copy of the lines appears on the screen.

See also: "Copy" above and "Paste" below

Paste

**Purpose:** Pastes the lines of the clipboard on the screen.

Shortcut key: Ctrl + V

Toolbar:

Operation:

1 Click Edit, then Paste.

The lines saved in the clipboard (using **Cut** or **Copy**) are pasted on the screen.

**See also:** "Cut", "Copy" and "Duplicate" above

Delete

**Purpose:** Removes the selected line(s) from the screen without saving them in the clip-

board.

Shortcut key: Delete

**Toolbar:** No button for this function

Operation:

Select one or more lines.

2 Click Edit, then Delete.

The selected line(s) are removed from the screen. Since they are not saved in the clipboard, the only way to make them reappear is to use **Edit - Undo**.

See also: "Undo" on page 198 and "Cut" on page 199

# Mirror-Horizontal

**Purpose:** Flips the selected line(s) up/down.

Shortcut key: Ctrl + H

Operation:

Select one or more lines.

2 Click Edit, then Mirror, then Horizontal.

The selected line(s) are replaced by their horizontal mirror image (top and bottom inverted). Two successive applications of this function restores the original image.

See also: "Mirror-Vertical" and "Rotate" below

### Mirror-Vertical

**Purpose:** Flips the selected line(s) left/right.

Shortcut key: (Ctrl) + (J)

Toolbar:

Operation:

Select one or more lines.

2 Click Edit, then Mirror, then Vertical.

The selected line(s) are replaced by their vertical mirror image (left and right inverted). Two successive applications of this function restores the original image.

See also: "Mirror-Horizontal" above and "Rotate" below

### Rotate

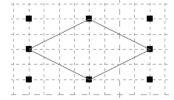
**Purpose:** Allows you to manually rotate the selected line(s) by an arbitrary angle.

Shortcut key: Ctrl + Y

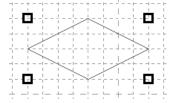
Toolbar: DA MA MA MA BA で

Operation:

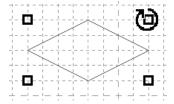
1 Select one or more patterns.



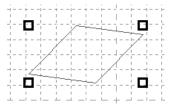
② Click Edit, then Rotate. The shape of the handles changes.



3 Move the cursor to one of the handles. The shape of the cursor changes.



**4** Drag the handle to rotate the pattern the desired angle, and then release the mouse button.



A simple dragging of the mouse will rotate the line by 1degree increments. Pressing the Shift key will rotate it by 15degree increments.

# **Grid Menu**

The horizontal and vertical lines that you draw on the work area always follow the grid. The points you create by clicking the mouse are inserted at the intersection of the horizontal and vertical lines of the grid, enabling you to draw diagonal lines as well. Regardless of where you click, a point will automatically be inserted at the nearest intersection.

Select a different work grid according to the type of stitch you want to draw. Select a narrower grid for drawing finer details or to give curve-like or circle-like looks to your stitch lines and select a wider grid if you want to draw a simpler stitch pattern.

The Grid menu allows you to select the grid setting only. You cannot turn the grid off.

**Purpose:** Selects the work grid.

**Shortcut key:** No shortcut key for this function.

**Toolbar:** No button for this function

Operation:

- ① Click Grid. The selected grid is preceded by a radio button.
- 2 Click the grid setting you need for the stitch pattern that you are creating or editing. You can also switch grids while you are working on a stitch pattern, then continue drawing.

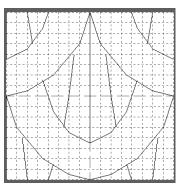
Click Wide: The grid step changes to 1/8 of a work area's side.

Click **Medium**: The grid step changes to 1/16 of a work area's side.

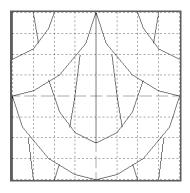
Click Narrow: The grid step changes to 1/32 of a work area's side.

Example 1: Narrow grid

Example 2: **Medium** grid



Example 3: Wide grid



# Help Menu

The **Help** menu gives you access to the on-screen help information system.

Contents	Starts the on-screen help information for this application.	page 203
Using	Explains how to use the on-screen help system.	page 203
About Programmable Stitch Creator	Gives information about the version of this application.	page 203

# Contents

**Purpose:** Starts the on-screen help information for this application.

Shortcut key: F1

Operation:

1 Click Help, then Contents.

A table of contents of the on-screen help information displays.

2 Refer to your Windows manual for the next operation.

See also: "Using" and "About Programmable Stitch Creator" below

# Using

**Purpose:** Explains how to use the on-screen help system.

**Shortcut key:** No shortcut key for this function

**Toolbar:** No button for this function

Click Help, then Using.

The Windows standard explanation about how to use the help system appears.

2 Refer to your Windows manual for the next operation.

See also: "Contents" and "About Programmable Stitch Creator"

# About Programmable Stitch Creator

**Purpose:** Gives information about the version of this application.

**Shortcut key:** No shortcut key for this function

**Toolbar:** No button for this function

Operation:

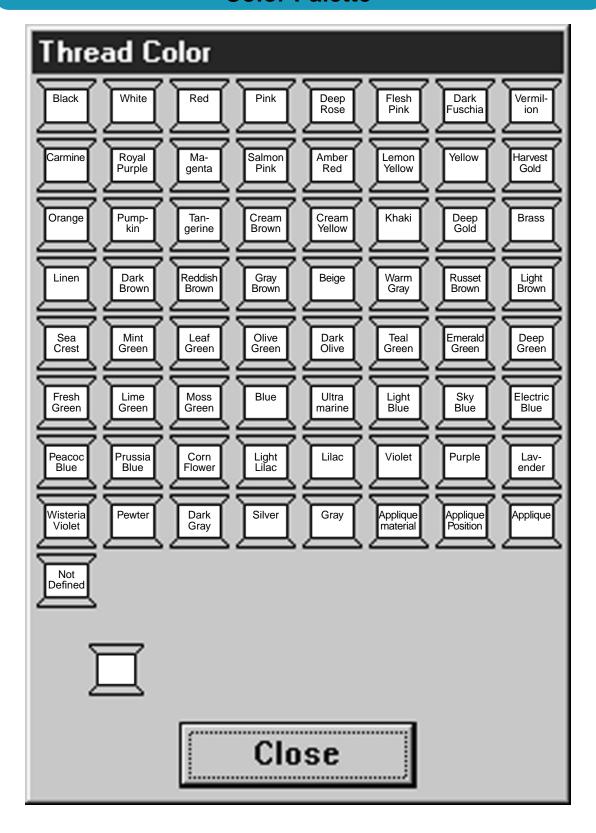
1 Click Help, then About Programmable Stitch Creator.

A dialog will display.

Click OK to remove it.

See also: "Contents" and "Using" above

# **Color Palette**



# **Quick Reference**

# **Design Center**

	Menu	Shortcut key	Toolbar	Page
File	New	Ctrl + N		75
	Open	Ctrl + O	□	75
	Save	Ctrl + S		76
	Save As	-	-	76
	Import Figure	<b>F8</b>		77
	Exit	Alt + F4	-	78
Edit	Undo	Ctrl + Z		79
	Redo	Ctrl + A		79
	Cut	Ctrl + X		79
	Сору	Ctrl + C		80
	Duplicate	Ctrl + D	-	80
	Paste	Ctrl + V		80
	Delete	Delete	-	80
	Mirror – Horizontal	Ctrl + H		81
	Mirror – Vertical	Ctrl + J		81
	Rotate	Ctrl + Y		82
	Numerical Setting-Size	-	-	82
	Numerical Setting-Rotate	-	-	83
	Select All	-	-	84
Sew	Sewing Attributes	Ctrl + W		85
	Sewing Order	<b>F10</b>		88

	Menu	Shortcut key	Toolbar	Page
Display	Grid Setup	-	-	90
	Preview	<b>F9</b>		91
	Refresh Window	Ctrl + R	-	91
	Realistic Preview	Shift + F9		91
	Realistic Preview Attribute Setting	_	-	91
	Toolbar	_	_	92
	Status Bar	_	-	92
Option	Layout & Editing	<b>F5</b>	_	93
	Programmable Stitch Creator	_	-	93
	File Utility	_	_	93
	Design Page Property	_	-	93
	Select System Unit	_	_	94
Stage	To Original Image	_		95
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	To Sew Setting	_		98
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	Using	_	-	100
	About Design Center	-	-	100

# **Layout & Editing**

Menu Shortcut key		_	Toolbar	Page
File	New	Ctrl + N	Dan Ban Von Yee Ben Con Ma Ben Con Ma Ben Con Ma Ben Ma	131
	Open	Ctrl + O	CE PE PA VO X BE PAV SE BAYNA WE DE	132
	Import – from File	<b>F8</b>	DE SIN WEED SHOOF BUT NOT SHE TO SHE	133
	Import – from Design Center	<b>F7</b>	DE F TO PO NOTE BOY OF THE PROPERTY WITH THE	135
	Template Open	_	-	136

	Save	Ctrl + S		137
File	Save As	-	-	137
	Export	_	_	138
	-			
	Write to Card	<b>F4</b>	BE B	138
	Print Setup	-	-	139
	Print Preview	-	-	140
	Print	Ctrl + P	_	141
	Exit	Alt + F4	-	142
Edit	Undo	Ctrl + Z		143
	Redo	Ctrl + A		143
	Cut	Ctrl + X		144
	Сору	Ctrl + C		144
	Duplicate	Ctrl + D	-	144
	Paste	Ctrl + V		144
	Delete	Delete	-	145
	Mirror – Horizontal	Ctrl + H		145
	Mirror – Vertical	Ctrl + J	□   日本   日本   「日本   「	145
	Rotate	Ctrl + Y		146
	Numerical Setting-Size	-	-	147
	Numerical Setting-	_	-	148
	Rotate			
	Align	-	-	148
	Sew First	Ctrl + B		150
	Sew Last	Ctrl + F		150
	Select All	-	-	151
Text	Edit Text Letters	Ctrl + L	-	152
	Text Attribute Setting	Ctrl + K		153
	Fit Text to Path Setting	Ctrl + T		154
	Release Text from Path	Ctrl + Q		156
	•	•		

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	Transform Text	F2	DE PROPERTO SEE DE SON SE DE SON SEE DE SON SE D	156
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	Open	Ctrl + O		195
	Save	Ctrl + S		196
	Save As	_	-	197
	Exit	Alt + F4	-	197
	Undo	Ctrl + Z		198
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